FORMATIVE EVALUATION OF HEARTBEAT NEW ZEALAND

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ABSTRACT

A formative evaluation approach was applied over a 21 month period to Heartbeat New Zealand, an emergent heart disease prevention and health promotion programme. The aim of the research was to constructively influence the development of Heartbeat by providing ongoing evaluation input to the programme. Formative evaluation input involved two major aspects, of information collection and feedback, and consultation. Major data sources were interviews and questionnaires, direct participation and observation, and programme documents. It was found that while formative evaluation was only one source of influence upon the development of the Heartbeat programme, and formative evaluation findings and recommendations were not always accepted or fully implemented by programme personnel, positive outcomes of the formative evaluation input were apparent. In the Heartbeat Awards project, formative evaluation helped answer questions concerning the feasibility, appropriateness and effectiveness of an intervention aimed at creating and supporting behaviour change by altering environmental influences upon health. Formative evaluation of the Heartbeat Community Project identified the need for, and facilitated, the reorientation of the project from a traditional health educative approach to reflect more innovative health promotion strategies. Formative evaluation led to the development of a framework for later outcome evaluation of the overall Heartbeat programme which was tailored to the activities, characteristics and context of the programme. Formative evaluation activities identified problems in overall programme functioning in terms of programme management, planning and coordination, and communication, and action in these areas was recommended. The research both confirmed key points about formative evaluation identified in the evaluation literature, and highlighted further issues relating to the particular approach adopted in the Heartbeat programme. Major implications identified for future programmes were the importance of early and ongoing strategic planning and the importance of programme decision-makers adopting a model of information-based decision-making.

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CHAPTER ONE

INTRODUCTION

This thesis will describe evaluation research carried out over a 21 month period on the Heartbeat New Zealand programme. This programme was a heart disease prevention and health promotion programme funded by the Department of Health, and administered by the National Heart Foundation of New Zealand. The thesis illustrates the application of a formative evaluation approach to an emergent programme. The first chapter of the thesis provides information on the context of Heartbeat New Zealand as a heart disease prevention and health promotion programme, and outlines the factors leading to and influencing its establishment. A review of relevant evaluation literature is provided in Chapter Two, and the methodology used in formative evaluation of Heartbeat New Zealand is described. Chapter Three contains information on the organisational context and participants of the programme, and major areas of programme activity during the first three years of Heartbeat's existence. The next two chapters are intended to illustrate the role of formative evaluation at the level of individual projects, with formative evaluation of the Heartbeat Awards project described in Chapter Four, and formative evaluation of the Heartbeat Community Project covered in Chapter Five. In Chapters Six and Seven formative evaluation input to the overall Heartbeat programme is illustrated, with Chapter Six describing a framework that was developed for outcome evaluation of the programme, and Chapter Seven discussing the influence of formal evaluation recommendations on programme functioning. The thesis concludes with a discussion of what has been learned from formative evaluation of Heartbeat New Zealand.

Section 1: Cardiovascular Disease Prevention and Health Promotion

(i) Cardiovascular Disease

Cardiovascular disease is the leading cause of mortality in western industrialised countries, and is also emerging as a significant cause of mortality in developing countries (Beaglehole, Bonita & Stewart, 1988). It accounts for 30-50% of all deaths in the middle-

aged population of most industrialised countries (Tuomilehto, Kuulasmaa & Torppa, 1987). Cardiovascular disease includes coronary heart disease ("heart attack"), cerebrovascular disease ("stroke"), hypertensive disease, peripheral vascular disease, rheumatic heart disease and congenital heart disease (Advisory Committee to the Minister of Health, 1986). Of these, coronary heart disease accounts for the greatest proportion of the mortality from cardiovascular disease (Tuomilehto et al., 1987).

In New Zealand cardiovascular disease accounts for almost half of all deaths, of which about one third occur in people under the age of 70 years (Advisory Committee to the Minister of Health, 1986). Coronary heart disease is the leading cause of death in New Zealand, and was responsible for 28% of all deaths in 1987 (National Health Statistics Centre, 1990). Cerebrovascular disease is the third most common cause of death, accounting for about 10% of all deaths in 1987 (National Health Statistics Centre, 1990). Ethnic and gender differences exist. Maori mortality is higher than Pakeha for both these causes, and Maori and Pakeha males have higher rates of coronary heart disease mortality than females (Advisory Committee to the Minister of Health, 1986).

Cardiovascular disease mortality rates have been declining in most western, industrialised countries, including New Zealand, over the last two decades (Uemura & Pisa, 1988). Coronary heart disease death rates began declining in New Zealand in 1968, and have declined consistently since (Jackson, Stewart & Beaglehole, 1990). Between 1968 and 1982, for example, coronary heart disease mortality in New Zealand declined by 20% (Beaglehole, 1986). Mortality from cerebrovascular disease has also been declining steadily in New Zealand and elsewhere for several decades (Bonita & Beaglehole, 1986). However, despite the fall in mortality rates for cardiovascular disease, New Zealand rates remain high compared with other western, industrialised countries (Uemura & Pisa, 1988). There is also evidence that the decline in cardiovascular disease mortality in New Zealand is lagging behind that in other countries. For example, the decline in coronary heart disease mortality in New Zealand has not been as great as that in Australia over the same period (Beaglehole, Bonita, Jackson & Stewart, 1986).

The decline in cardiovascular disease mortality rates that has occurred is attributed to a combination of improved medical management, and changes in the underlying risk factor status of the population, with research and debate occurring over the relative importance of these elements (Beaglehole et al., 1984; Beaglehole, 1986; Bonita & Beaglehole, 1986; Jackson & Beaglehole, 1987).

(a) Risk factors for cardiovascular disease.

The importance of lifestyle and environmental influences on levels of cardiovascular disease is well-established. Evidence for this is apparent in a number of ways. For example, population death rates from coronary heart disease are not stable, but may rise or fall substantially over relatively short periods (World Health Organisation, 1982). There is considerable geographic variation internationally in mortality from various forms of cardiovascular disease (Tuomilehto et al., 1988). Migrant populations tend to acquire the disease levels of their adopted cultures (World Health Organisation, 1982). Even within high incidence populations there exist some groups with substantially lower rates (World Health Organisation, 1982).

The three major risk factors for cardiovascular diseases have been identified as cigarette smoking, high blood pressure, and high blood fats (Advisory Committee to the Minister of Health, 1986). Although some of the mechanisms by which these factors operate, and the nature of the relationships between them remain unclear, there is consensus that they are the most important factors influencing risk of cardiovascular disease (Pajak, Copernicus, Kuulasmaa, Tuomilehto & Ruokokoski, 1988). These risk factors are common to both coronary heart disease and cerebrovascular disease, although there are differences in the relative importance of each risk factor for each type of disease (Advisory Committee to the Minister of Health, 1986). It is clear that the influence of the major risk factors on the development of cardiovascular disease begins relatively early in life, and that substantial damage has usually occurred before clinical symptoms are apparent (World Health Organisation, 1982). Other factors which have been found to influence the risk of cardiovascular disease include diabetes, obesity, lack of physical exercise, personality and stress, heavy alcohol consumption and use of oral contraceptives.

There are areas of mutual influence and multiple links between the major risk factors and these less significant factors (Advisory Committee to the Minister of Health, 1986).

(b) Prevention of cardiovascular disease.

The fact that the three major risk factors and several of the other risk factors for cardiovascular disease are substantially affected by diet, smoking and exercise patterns means there is considerable scope for preventive efforts aimed at lifestyle and environmental change. As awareness of the potential for prevention of cardiovascular disease has grown, over the last two decades a number of large scale cardiovascular disease prevention programmes have been implemented internationally. These include the North Karelia project in Finland, the Stanford Three Community Study, Stanford Five City Project, Pawtucket Heart Health Program, and Minnesota Heart Health Program in the United States, and the Welsh Heart Programme in Wales (McAlister, Puska, Salonen, Tuomilehto and Koskela, 1982; Meyer, Nash, McAlister, Maccoby and Farquhar, 1980; Farquhar et al., 1985; Lefebvre, Lasater, Carleton, and Peterson, 1987; Carlaw, Mittlemark, Bracht and Luepker, 1984; Directorate of the Welsh Heart Programme, 1985).

The potential for and importance of prevention of coronary heart disease was reinforced by the World Health Organisation in 1982, with the release of a comprehensive prevention plan and objectives. This acted as a further stimulus for preventive efforts in a number of countries, including New Zealand (Advisory Committee to the Minister of Health, 1986). The World Health Organisation report identified three components to a comprehensive plan for prevention of coronary heart disease: a population strategy (population-wide control of the causes of the disease), a high risk strategy (screening and treatment of people found to have risk factors of the disease), and secondary prevention (treatment of those who have already developed symptoms of the disease) (Advisory Committee to the Minister of Health, 1986). The report stated that in countries with a high incidence of coronary heart disease, the levels of major risk factors are too high in the majority of people, requiring a population strategy for prevention.

The aim of a population approach to prevention is to lower by a small amount the risk factors for the whole population. This is necessary because with mass diseases like coronary heart disease, which have lifestyle and environmental factors as their underlying causes, the majority of cases come not from the small proportion of the population who are at high risk, but from the large proportion of the population who are at moderate risk (World Health Organisation, 1982). A population approach to prevention of cardiovascular disease involves attempting to change patterns of diet, exercise and smoking among the population at large.

(ii) Health Promotion

A population approach is a central feature of the concept of health promotion (Casswell & Duignan, 1989). Health promotion is an area which has developed out of the public health field during the last decade, partly in response to perceived failures of traditional health education, and as better understanding has developed of the factors which shape health, and ways these can be changed (Nutbeam & Blakey, 1990). The context of health is of primary importance in the concept of health promotion, with the underlying rationale that individual behaviour is an outcome of interaction with the physical and social environment (McQueen, 1989).

The shift in emphasis represented by health promotion is summarised by Nutbeam and Blakey as follows:

> ....the health promotion concept has refocused action to promote public health away from simplistic, individually based strategies toward those which support healthy lifestyles through social and environmental change: balancing individual with collective action to promote health. At the core of the concept is personal empowerment and communal action which address underlying, as well as immediate threats to health. (1990, p. 233).

An important event in the development of health promotion was a conference held in Ottawa, Canada, in 1986, under the auspices of the World Health Organisation, which resulted in the publication of the Ottawa Charter for Health Promotion. This document formalised thinking about health promotion and defined health promotion as the process of enabling people to increase control over and improve their health (World Health

Organisation, 1986). The Ottawa Charter stated that health is a positive concept emphasising social and personal resources, as well as physical capacities, and that health should be seen as a resource for everyday life, rather than the objective of living. It stated that to achieve physical, mental and social wellbeing, people must be able to identify and realise aspirations, satisfy needs, and cope with change in the environment. Basic prerequisites for health were identified as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity (Kelly, 1989).

The Ottawa Charter also set out five key strategy areas in which health promotion action needs to occur. These were; building healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. Nutbeam and Blakey (1990) provide the following summary of these key strategies:

> **Promoting health through public policy:** by focusing attention on the impact on health of public policies from all sectors, and not just the health sector.
>
> **Creating a supportive environment:** by assessing the impact on health of the environment and clarifying opportunities to make changes conducive to health.
>
> **Strengthening community action:** by supporting concrete and effective community action in defining priorities, making decisions, planning strategies and implementing them to achieve better health.
>
> **Developing personal skills:** by moving beyond the transmission of information, to promote understanding, and to support the development of personal, social and political skills which enable individuals to take action to promote health.
>
> **Reorienting health services:** by refocusing attention away from the responsibility to provide curative and clinical services towards the goal of good health. (p. 234).

As health promotion has increased its influence, there has been considerable debate in the literature about the distinction between health promotion and health education (e.g., Seymour, 1984; Catford & Nutbeam, 1984). However, it is clear that health promotion as described above embodies an approach which differs from that of traditional health education. Health promotion involves consideration of a range of approaches to improving health, rather than the exclusive focus on the development of personal skills by individuals

which has characterised health education. Health education can thus be regarded as one area within the broader field of health promotion.

In addition, many authors use the term health promotion interchangeably with the term disease prevention, implying that they represent the same concept (e.g., Albino, 1983; Nathan, 1984). While there is substantial common ground between health promotion and disease prevention, there are important conceptual differences. The intention of health promotion as defined by the Ottawa Charter is to improve the physical and psychological wellbeing of the population, while disease prevention attempts to reduce or eliminate particular medically defined conditions. By changing the underlying conditions that influence health, health promotion potentially has a preventive impact upon a range of different diseases. The concept of health promotion thus starts from a different premise, and is broader in its approach and intended impacts than disease prevention. Disease prevention is an important potential outcome of health promotion, but is not the sole criterion on which the success of health promotion would appropriately be judged (since health is defined as being more than the absence of disease).

Despite the conceptual differences between health promotion and disease prevention, in practice the two approaches tend to occur in combination, rather than separately. A major reason for this is that disease prevention approaches are reasonably well-established, whereas health promotion is a relatively recent development in the same field of public health. The growth of a health promotion approach is likely to continue to be incremental as key health promotion concepts and strategies are incorporated by disease prevention programmes to help them achieve their aims. This is exemplified in the case of the Heartbeat New Zealand programme. The timing of Heartbeat New Zealand's establishment coincided with a shift in emphasis toward health promotion in the public health field in New Zealand. As a consequence, attempts were made to incorporate health promotion strategies and concepts as an integral part of the planning and implementation of the programme.

Section 2: Heartbeat New Zealand

Heartbeat New Zealand arose in the context of increasing international recognition that cardiovascular disease is a significant cause of premature death and disability for which there is considerable scope for preventive action. The World Health Organisation played an important role in focusing attention and facilitating action aimed at prevention of cardiovascular disease in the early 1980's, with the release of several expert technical committee reports. The National Heart Foundation of New Zealand published a report in 1983 which endorsed the World Health Organisation (1982) report on the prevention of coronary heart disease, and emphasised the need for a comprehensive population-based approach to prevention of coronary heart disease in New Zealand. The National Heart Foundation report, entitled "Coronary heart disease. A report on prevention and control in 1982" proposed goals and strategies for risk factor reduction in the New Zealand population.

As a result of the World Health Organisation (1982) and National Heart Foundation of New Zealand (1983) reports, the New Zealand Minister of Health appointed an Advisory Committee in October 1985 to examine the recommendations made, and advise on a national programme for the prevention of cardiovascular disease in New Zealand. This committee produced a report in 1986 which, for each of the risk factors of cardiovascular disease, reviewed the existing medical evidence, outlined the present situation in New Zealand regarding that risk factor, identified goals and made recommendations concerning ways these goals could be achieved, and suggested methods of implementing the recommendations and measuring progress. A key proposal for implementing the recommendations of the report was that a "Heartbeat" project team should be established for a five year period, with support from the Division of Health Promotion of the Department of Health, the National Heart Foundation, and other relevant organisations. A modified proposal for a Heartbeat New Zealand programme was developed by the Department of Health (Department of Health, 1987a). It was proposed that the structure of Heartbeat New Zealand would consist of a Board of Management, and

an executive team, both of which would operate within the present structure of the National Heart Foundation. Heartbeat New Zealand would be a small but high profile organisation which would be affiliated to, but maintain a degree of independence from, the National Heart Foundation. It was felt that this would allow for an inter-agency approach, and a diverse range of strategies (National Heart Foundation of New Zealand, 1987).

However, in giving approval in principle to the Heartbeat New Zealand proposal and its funding in October 1987, the Minister of Health suggested that the Department of Health could provide a grant directly to the National Heart Foundation to carry out the mission and objectives of the Heartbeat programme, without any stipulation as to the structural arrangements that should operate within the National Heart Foundation. Decisions as to the structure and administration of the programme would be left to the discretion of the National Heart Foundation. In return for funding from the Department of Health, the National Heart Foundation would provide progress reports and audited accounts. This option was perceived by its supporters to avoid the necessity of spending money on the setting up of a new organisational structure, before any projects could actually be implemented (National Heart Foundation of New Zealand, 1987). The National Heart Foundation favoured the option proposed by the Minister of Health, and the programme was established in December 1987.

In summary, cardiovascular disease is a major cause of premature death in western, industrialised countries, rates of which, although declining, remain relatively high in New Zealand. The three major risk factors for cardiovascular disease are smoking, high blood pressure, and high blood fats, and there is consequently considerable scope for prevention of cardiovascular disease by altering population patterns of smoking, nutrition, and exercise. Heartbeat New Zealand arose from recommendations of an Advisory Committee to the New Zealand Minister of Health on prevention of cardiovascular disease in 1986. Following consideration of possible alternative structural and administrative arrangements, it was decided that funding would be provided to the National Heart Foundation of New Zealand to implement the Heartbeat New Zealand programme. The

establishment of Heartbeat New Zealand coincided with a shift in emphasis toward health promotion in the public health field in New Zealand, with the result that health promotion strategies and concepts were incorporated into the planning and implementation of the programme.

CHAPTER TWO

REVIEW OF EVALUATION AND OUTLINE OF RESEARCH METHODOLOGY

The first section of this chapter provides a review of the evaluation literature relevant to the present study. It defines the term evaluation research, and identifies major trends in this field that have influenced current thought and practice. Definitions and key features of process and formative evaluation are outlined, and the relationship between these two evaluation types is discussed, in order to clarify the meaning and scope of each approach and the differences between them. Section 2 sets out the research procedures used in formative evaluation of Heartbeat New Zealand. Key features of the research orientation are identified, and entry to and involvement of the researcher in the programme are described. The research aims and major activities in formative evaluation are set out, and data sources used in the evaluation are identified. An outline of the timing of major research activities is provided.

Section 1: Evaluation Research

(i) Meaning of Evaluation Research

Evaluation was defined by the Joint Committee on Standards for Educational Evaluation in 1981 as the systematic assessment of the worth or merit of some object (Stufflebeam & Shinkfield, 1985). Definitions of evaluation research provided in the evaluation literature reflect widespread agreement as to the dominant characteristics and concerns of this field. For example, Barnow (1986) used the term evaluation research to refer to

> ... systematic efforts to collect and analyse data, both qualitative and quantitative, on ... programs, their participants, and their outcomes, to better understand what the program is accomplishing and how it is being accomplished. (p. 63).

Patton (1987) provided the following definition of the practice of evaluation research:

> ... the systematic collection of information about the activities, characteristics, and outcomes of programs for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what those programs are doing and affecting. (p. 15).

These definitions, and others in the literature, emphasise that evaluation research involves systematic collection of data, on a range of programme variables, for a variety of programme improvement and decision-making purposes.

(ii) Development of Field of Evaluation Research

Evaluation research had its origins in the field of educational research and testing which began in the United States in the 1930's (Stufflebeam & Shinkfield, 1985). However, the development of evaluation research as a distinct field of professional practice is generally recognised as having occurred over the last two to three decades (Cook & Shadish, 1987; Patton, 1987; Shadish and Reichardt, 1987; Stufflebeam & Shinkfield, 1985).

A feature of the field of evaluation research is its multi-disciplinary nature. Evaluation research has not developed within the confines of any one discipline, but rather, is a field of professional practice which attracts practitioners from a range of different disciplines. The disciplinary backgrounds from which professional programme evaluators come include psychology, education, economics, sociology and political science (Shadish & Reichardt, 1987). The multi-disciplinary nature of evaluation research helps explain the diversity of approaches that is evident in the evaluation literature, reflecting the backgrounds and consequent emphases of groups of practitioners.

There have been a number of shifts of emphasis in the field of evaluation research during its development. Two of the most significant trends have been a move away from the early dominance of quantitative measurement and experimental design, and a related broadening of the focus of evaluation from a concentration on outcomes to programme implementation and development issues. These trends will be discussed in turn.

(a) Reduced emphasis on quantitative measurement and experimental design.

In the early stages of its development as a profession, evaluation research, like most social science, looked to versions of logical positivism to justify methods choices (Cook & Shadish, 1987). As Patton (1987) stated, "good" evaluation research was judged by the same basic research standards as "good" science, which typically meant a preference for quantitative measurement, experimental design, and statistical analysis. The need for "hard" data and statistical proof were paramount (McLaughlin, 1987). However, while the quantitative experimental model dominated the early development of evaluation research, the accuracy of its underlying assumptions, and its relevance and applicability to real social settings have been increasingly questioned by evaluators. Cook and Shadish (1987) discussed the limitations of the traditional approach of using programme goals to formulate causal hypotheses which could be tested in an experiment:

> This strategy assumes that programs are relatively homogeneous, have goals that are totally explicit, postulate effects that can be validly measured, and can be assessed using feasible experimental designs that rule out all spurious interpretations of a treatment effect. All these assumptions have come under attack, not only in evaluation, but in science at large. (p. 55).

The following statement by McLaughlin (1987) summarises key issues in this area:

> The *ceteris paribus* conditions assumed by traditional evaluation design, in short, do not exist. In the fluid, complex, and often random complex reality of the social program setting, scientific proof is not possible. And even if it were possible to "prove" program effects and confidently assign causality, the relevance of this accomplishment would be short-lived from both a scientific and practical perspective. Social systems are not "self-sealing". They are dynamic - open to their environment, random internal fluctuation, unanticipated pressures, and exogeneous pressures beyond their control. The "effects" demonstrated by last year's evaluation, as well as their causes, then, may well be ephemeral. (p. 83).

In response to the perceived limitations of the quantitative experimental paradigm, an alternative paradigm developed, which has been termed naturalistic evaluation. This approach has its roots in social anthropology, and its philosophical base is phenomenology, rather than logical positivism. Approaches which evaluation authors (e.g., Pearsol, 1987) group under the label naturalistic evaluation include those termed qualitative evaluation (Patton, 1980), naturalistic evaluation (Guba, 1978; Guba &

Lincoln, 1981; Lincoln & Guba, 1985), and illuminative evaluation (Parlett & Dearden, 1977).

In contrast to the quantitative experimental approach, in naturalistic evaluation neither dependent nor independent variables are manipulated by the investigator (Guba, 1978). Whereas the quantitative experimental approach emphasises the measurement and prediction of social phenomena, the naturalistic approach emphasises description and understanding of social phenomena (Parlett & Dearden, 1977; Patton, 1980). Naturalistic evaluation emphasises the use of qualitative research methods such as participant observation, depth interviewing, case studies, content analyses of documents, and oral history (Suelzle, 1981). The principle of grounded discovery is central to naturalistic evaluation, in that key evaluation issues emerge from intensive on-site knowledge, rather than being formulated prior to data collection (Cook & Shadish, 1987; Glaser & Strauss, 1967).

It is clear that there are major differences in the assumptions and methods of the two approaches. The rise of the naturalistic approach to evaluation constituted a strong challenge to the dominance of the quantitative experimental approach, which served to highlight its key weaknesses, and provide an alternative model which avoided these. There has been ongoing debate in the evaluation literature about the validity of the two perspectives, and about ways their strengths can be combined (Rossman & Wilson, 1985). An important result of the rise of the naturalistic evaluation paradigm and the consequent shift away from the dominance of quantitative and experimental methods was the emergence of what Patton (1980, 1987) characterised as a "paradigm of choices". This approach emphasises "multiple methods, both qualitative and quantitative, and matching evaluation methods to specific evaluation situations and stakeholder questions" (Patton, 1987, p. 18).

(b) Increased emphasis on programme implementation and development.

A second major trend which can be identified in the development of the field of evaluation research has been a broadening of the focus of evaluation from a heavy concentration on programme outcomes, to include issues of programme implementation

and development. This trend is closely related to and has occurred in conjunction with the move away from the dominance of the quantitative experimental approach to evaluation.

In the past, evaluation research was dominated by an emphasis on measuring programme outcomes, with little attention paid to programme implementation (LeCompte & Goetz, 1984; McLaughlin, 1987; Patton, 1979; Rezmovic, 1984). Evaluators were primarily concerned with measuring programme effects and comparing these to the goals and objectives of the programme, in order to judge how successful the programme had been in achieving its aims. A "black box" approach prevailed, where little attention was paid to the processes by which the programme achieved the results it did (Graham & Birchmore-Timney, 1989; McLaughlin, 1987; Patton, 1979). It was assumed by evaluators that the programme as implemented reflected the programme as planned, and that there was therefore little need to examine how it operated in practice.

The assumption by evaluators that programme plans were always translated into practice, and the resulting lack of attention to implementation issues became increasingly challenged. Tornatsky and Johnson (1983), for example, stated

> ...evaluators often have a rather naive faith in an underlying rationality guiding the creation and evaluation of social programs....In this implicit model it is assumed that an orderly linear process unfolds as programs are designed, evaluated, and as findings from evaluation are incorporated into practice. (p. 193).

Patton (1979) highlighted the difference between this "ideal rational model" and the "day-to-day, incrementalist, and conflict-laden realities of programme implementation" (p. 328). He stated

> ..organizations and decisionmakers do not methodically implement a program as if they had found the best means to achieve top priority goals. Programs take shape slowly as decisionmakers react to multiple uncertainties and emerging complexities...Programs are implemented incrementally by adapting to local conditions, organizational dynamics, and programmatic uncertainties. (pp. 328-9).

Patton (1979) emphasised that programmes operating under field conditions in the real world are usually shaped and modified by people and unforeseen circumstances in ways that cause the actual programme in operation to look quite different to ideal programme plans. The increasing recognition among evaluators that substantial slippage

can and does occur between programme plans and actual operation, depending on decisions and events during the implementation phase of a programme can be seen to have contributed to two important developments in evaluation research. The first concerns greater recognition of the need to document and analyse the process of programme implementation. The second concerns greater recognition of the potential for evaluators to be actively involved in helping to create more successful programmes by providing evaluation input in the early stages of programme development. These two areas will be discussed further under their respective labels of process and formative evaluation, in order to clarify the meaning and scope of, and differences between, these approaches.

(iii) Process Evaluation

Process evaluation fulfills the need for information on programme implementation. The approach takes its name from an emphasis on examining the process of how an outcome or product is arrived at, rather than examining the product itself (Patton, 1979). While there is agreement that process evaluation is concerned with what happens during programme implementation, authors in the evaluation field differ in the emphasis they place on different aspects of process evaluation, and the extent to which they specify the range of aspects that process evaluation should address.

(a) Definitions of process evaluation.

Broad definitions of process evaluation are provided by a number of authors. Hornik (1980), for example, defined process evaluation as an investigation of how a programme achieves or does not achieve its ends. Stufflebeam and Shinkfield (1985) emphasised comparing programme plans to actual operation, stating that process evaluation should be thought of as a way to monitor the degree to which a human service programme is implemented as planned. Altman (1986) stated that process evaluation fosters an understanding of programme implementation, the causal events leading to change, and the specific programme components that most influence outcomes. Patton (1979) defined process evaluation as focusing on the internal dynamics and actual operations of a programme in order to understand its strengths and weaknesses, and changes that occur in it over time, and emphasises the use of qualitative research methods in process evaluation.

Some authors have identified more specifically the aspects that should be included in process evaluation. Norman et al (1990), for example, included diffusion of programmes in the community and community awareness of the programme as two key aspects of process evaluation. Nutbeam, Smith and Catford (1990) stated that process evaluation provides an assessment of how a programme is implemented, what intervention activities are provided under what conditions, by whom, to what audience, and with what level of effort. Hawe, Degeling and Hall (1990) defined process evaluation as measuring the activities of the programme, programme quality, and who the programme is reaching.

(b) Uses of process evaluation.

Two important uses of process evaluation information are assisting in interpretation of programme outcomes, and informing future efforts in similar areas. The insight into programme implementation which process evaluation provides can be seen to be equally important whether a programme successfully achieves its objectives or not. Without knowledge of programme implementation it is impossible to judge whether a programme which fails to show impacts reflects a failure of programme design, or a failure to implement the programme as originally specified (Attkisson, Hargreaves & Horowitz, 1978). Hornik (1980), for example, argued that the greatest variation in success among programmes has to do with the details of their implementation, and relatively little to do with the intrinsic concept. If a programme is shown to be successful, detailed information on how it was implemented and what it consisted of is necessary in order for it to be replicated (Graham & Birchmore-Timney, 1989). In what may be the most common situation, where outcome evaluation shows a programme to have had mixed success in achieving its aims, it will be impossible to identify and adopt in future programme efforts those features which were successful while avoiding those which were not, in the absence of detailed information about programme operation.

A number of authors have commented on the paucity of published material on process evaluation regarding health promotion and disease prevention programmes in the past (e.g., Altman, 1986; McGraw et al 1989; Norman et al 1990; Nutbeam et al 1990). However, while process evaluation models and data have been lacking in the past, there

have been a number of recent publications, with the result that an expanding literature in the area of process evaluation of health promotion and disease prevention programmes is developing (e.g., Blake et al., 1987; Clarkson & Nutbeam, 1987; McGraw et al, 1989; Norman et al, 1990; Perry, Klepp, Halper, Hawkins & Murray 1986).

(c) Summary of process evaluation.

In summary, process evaluation is concerned with documenting and analysing the way a programme operates, to assist in interpreting programme outcomes, and to inform future programme planning. The particular activities carried out under process evaluation that have been reported in the evaluation literature have varied according to factors such as the characteristics of programmes, the questions about programme implementation considered to be of most relevance, and the resources available for evaluation. However, based on strategies reported in the literature, features of process evaluation which are likely to be relevant to a greater or lesser degree in most situations include examination of:

- Programme origins, and the chronological sequence of events in programme planning and implementation
- Programme structure, components, and delivery system
- Contextual factors relevant to programme operation
- Participation rates and participant characteristics
- Perceptions of programme participants
- Levels of community awareness
- Resources utilised for programme operation

(iv) Formative Evaluation

Greater recognition of the need to document and analyse the course of programme implementation through process evaluation has been an important development in evaluation research. However, recognition of the influence of decisions and events during implementation in shaping the form and outcomes of programmes has also contributed to a growing awareness of the potential for evaluators to be actively involved in shaping programme development from an early stage, which is the emphasis of formative evaluation.

(a) Development of formative evaluation.

The term formative evaluation has been recognised since the 1960's, when Scriven (1967) first made the fundamental distinction between "formative" and "summative" roles of evaluation. He identified the purpose of formative evaluation as being to collect information that can be used primarily for ongoing programme development and improvement, and the purpose of summative evaluation as being to make an overall judgement about the effectiveness of the programme (Patton, 1980). Scriven's discussion of the distinction between formative and summative evaluation was in the context of evaluation of educational curricula, and the concept of formative evaluation is well-represented in the educational evaluation literature today (e.g., Carter & Hamilton, 1985; Deno, 1986; Fuchs & Fuchs, 1986; Wolfe, 1981). However, despite the fact that formative evaluation has been recognised for more than two decades, there have been relatively few published studies under the label of formative evaluation in the general evaluation literature.

There are indications that the previous lack of emphasis upon formative evaluation as a particular focus for general evaluation research is changing. There has been increasing discussion in the evaluation literature in recent years of the need for evaluators to become involved in programmes in the early stages of development, when opportunities for influence are greatest. Edwards (1987) pointed out that the early stages of emerging programmes provide an ideal environment for substantial utilisation of evaluation findings, with administrators generally much more willing to make adjustments at this stage than when a programme is well-established. Hornik (1980) argued that by the time a programme has reached the relatively smooth operational stage where outcome evaluation can be conducted, substantial financial and political commitments have been made which are essentially irreversible. He stated:

> The greatest flexibility is to be found when the project is being formulated. While substantial parts of the project design will be constrained by political and financial forces, there is still substantial room at that point for the influence of information. (Hornik, 1980, p. 4).

The value of evaluators providing ongoing evaluation input to programme planning and decision-making processes has also been increasingly discussed. McLaughlin (1987), for example, advocated a shift in the focus of evaluation away from seeking conclusions about overall programme effects, towards emphasising short term control and correction (e.g., providing regular feedback about performance, evidence of success and suggestions for improvement). This shift involves adopting a "regularized strategy for information collection and analysis" and abandoning the notion of "evaluation as event" (McLaughlin, 1987, p. 94).

(b) Definitions and features of formative evaluation.

Several evaluation authors have provided definitions of formative evaluation. Sanders and Cunningham (1974), in extending Scriven's (1967) writing on formative evaluation, viewed it as;

> ...the process of judging an entity, or its components, that could be revised in form, for the expressed purpose of providing feedback to persons directly involved in the formation of the entity. (reported in Patton, 1980. p. 71).

Evans, Raines & Owen (1989) cited the ERIC(20) database definition of formative evaluation as "...evaluation that is used to modify or improve products, programs, or activities and is based on feedback during their planning and development" (p. 230). A more comprehensive definition oriented toward research projects was formulated by their research group, as follows:

> Formative evaluation is an ongoing process that is integrated into the development and implementation of a research project. It provides assessment information within a feedback loop. This assessment identifies the strengths and weaknesses of the project as it progresses. Data obtained from evaluations may be used to modify and redevelop the measurement instruments, the research design and the intervention program during the course of implementing a project. (Evans et al, 1989, p. 230).

A key author in the field of formative evaluation is McClintock (1986), who provided a more general definition of formative evaluation as:

> ...the systematic use of empirical procedures for appraisal and analysis of programs as a way of providing ongoing information to influence decision making and action on policy, resource allocation, and program operations. (p. 205).

McClintock (1986) stated that formative evaluation encompasses elements of a variety of activities in which there has been steady growth in recent years, including programme and performance monitoring, management information systems, action research, decision-support systems, programme and management audits, institutional research, and accountability reviews. The concept of uncertainty is central to McClintock's model, with formative evaluation functioning to decrease uncertainty about programme performance, while increasing uncertainty about programme structure (with the object of encouraging consideration of alternative strategies and structures for programme delivery). He stressed the identification of programme options as a crucial objective of formative evaluation, to help maintain variety in the functioning of the organisation, to enhance its adaptability, and enable it to overcome bureaucratic resistance to change.

An important feature of formative evaluation is that it involves a range of roles that is broader than those traditionally occupied by evaluators. Whereas the traditional role of evaluator can be characterised as that of technician or methodologist, formative evaluation involves a broadening from a primarily technical role to political and advisory roles such as educator, consultant and change agent (McClintock, 1986; Fitzpatrick, 1988). In contrast to traditional conceptions of the evaluator as a neutral, detached observer, formative evaluation requires that the evaluator work closely with programme personnel involved in decisions about the planning, development, and implementation of the programme (Fitzpatrick, 1988; Rossi & Freeman, 1989). Advantages of the broadening of roles of the evaluator in formative evaluation were summarised by Fitzpatrick (1988);

> ...it not only increases the evaluator's opportunity to have input into program design issues based on evaluation findings, but it also greatly improves the evaluator's ability to determine information needs, select measurement strategies, and communicate results in such a way that they are most useful to the decision makers. As the evaluator meets and interacts with decision makers, he or she begins to understand their needs and concerns and to plan the evaluation accordingly. (p. 461).

However, the broadening of roles and close involvement in programme planning and implementation that formative evaluation involves has raised questions for some authors concerning the degree of objectivity the evaluator is able to maintain about the programme. Rossi and Freeman (1989), for example, stated that because the emphasis of formative evaluation is on increasing the success of subsequent intervention efforts, the formative evaluator frequently becomes an advocate and a partisan participant in programme activities. Other authors have cautioned against the evaluator becoming an advocate. McClintock (1986) stated that the formative evaluator must balance difficult role demands, and be careful not to assume responsibility for advocating a particular change. He stressed that it is crucial that the formative evaluator "identify and assess options for programme improvement and thus contribute to the variation process [i.e. maintaining variety] in organizational change and development" (p. 213). Fitzpatrick (1988) also warned that evaluators involved in the planning stage of programmes must protect themselves against personal identification with the design or delivery format. She stated:

> Evaluators may, through involvement in the design stage, begin to identify with the need to resolve the problem, but should always remain open to the investigation of different solutions to that problem. (Fitzpatrick, 1988, p. 459).

A second important feature of formative evaluation which distinguishes it from other forms of evaluation is that it encompasses a range of different strategies and issues. While formative evaluation generally begins in the programme planning stage, it is not limited to questions concerning the design and planning of programmes. Questions about programme implementation and effects also arise. Design, process and outcome questions are relevant in formative evaluation (Carter & Hamilton, 1985; Fitzpatrick, 1988; Rossi & Freeman, 1989; Velasquez, Kuechler, & White, 1986).

(c) Examples of formative evaluation.

A number of examples of formative evaluation of disease prevention, health promotion, and other human service programmes have been reported in the evaluation literature in recent years, and these will be briefly outlined to illustrate the range of evaluation strategies and issues that formative evaluation may address.

The Stanford Five-City Project formative evaluation strategy has been outlined by Farquhar et al. (1985). The Stanford Five-City Project was designed as a nine year field trial of the community control of cardiovascular disease, which extended the scope and objectives of the earlier Stanford Three Community Study. Formative research was conducted on the project's health communication campaign to answer questions of audience size, comprehension, retention, and behaviour change. Definition of objectives, the intended audience, and the intended effect of the intervention occurred as the first stage of formative research. The second stage identified by Farquhar et al. (1985) was termed "concept testing", where issues relevant to the concept were investigated. Following this, the specific content and format of the intervention were evaluated for clarity and effectiveness. Once materials had been introduced, "tracking" occurred, to see whether the materials reached the intended audience, and to assess their effectiveness.

Edwards (1987) described formative evaluation input to the development of a nutrition education programme for use in Red Cross Chapters throughout the United States. The first stage of the formative evaluation process was to undertake a technical review of the proposed programme. This involved analysis by experts of the appropriateness of programme objectives for the client population, the relationship between programme content and programme objectives, and assessment of the technical accuracy and sequencing of materials, size of teaching unit, and vocabulary. In the second stage, the programme was critically examined by a group of potential instructors and potential course participants. A formal pre-test of the programme materials and teaching strategies in six sites occurred as a third step. In the fourth stage the overall programme and evaluation survey instruments were pre-tested in ten sites. The fifth stage involved a national field test of the programme in 51 sites, which aimed to provide comprehensive data on the relationship between participant characteristics, course delivery variables, the implementation system, and programme outcomes. The programme was modified after each stage in this process, based on the data obtained.

Formative evaluation of an intervention designed to reduce passive smoking by infants was described by Strecher et al. (1989). The first aspect of formative evaluation

involved conducting exploratory interviews with mothers of infants to obtain information that would assist in designing the specific components of the intervention. The conceptual framework for the intervention was provided by social learning theory, and the first stage of formative evaluation enabled relevant outcome and efficacy expectations to be determined by the researchers. The second stage of formative evaluation tested the logistics, data collection instruments, and mothers' initial responses to the intervention. The results of the second stage provided support for the conceptual model and measures used in developing the intervention, confirmed the acceptability of the intervention to intended participants, and generated information useful for refining the intervention strategy to increase its effectiveness.

Formative evaluation of a school-based health promotion intervention was reported by Evans et al. (1989). The aim of the intervention was to promote improved adolescent health in the community, through a collaborative approach between a university research group, and a community health clinic. A needs assessment was conducted initially to determine which health-related issues should be included in the project, and the area of substance abuse was identified as a priority. A preliminary version of the prevention programme was pre-tested using groups similar to the target population. Psychometric instruments for later outcome evaluation of the programme were also developed and administered to small groups of adolescents, to ensure that the items were comprehensive, unambiguous, and the right length. Modifications were made to the prevention programme and the psychometric instruments, and they were trialled in school classrooms. Ongoing formative evaluation data were obtained from students, teachers and research project administrators, and used to make further adjustments to the programme as it was trialled. New personnel were trained for the wider implementation of the programme and content of the training was changed according to feedback from participants. An outcome evaluation of the programme was conducted before it was disseminated to other schools for use.

Velasquez et al. (1986) described a formative evaluation system used in the Ramsey County Community Human Services Department in Minnesota since 1981, to

provide regular ongoing information regarding the extent to which programmes achieve their stated objectives. The formative evaluation system was designed to establish accountability for social service and mental health spending, provide information on strengths and weaknesses of programmes to improve performance, and provide information for planning and funding decisions. The information obtained combined traditional process and outcome evaluation questions, including participation rates and participant characteristics, monitoring of service delivery, intended outcomes, and actual results. This information contributed to decision-making at a range of levels in the organisation.

Fitzpatrick (1988) provided formative evaluation input to a new programme to train school administrators in performance appraisal skills for evaluating teacher performance. Formative evaluation input was provided from the early stages of programme planning, with the evaluator working closely with programme planners in a consultative role. Areas of activity included helping to develop the model for the programme, identifying and developing objectives and strategies, and defining the target population. A literature review was conducted to help determine the feasibility of different models. A needs assessment was carried out to determine current performance appraisal practices, and perceived training needs. Evaluation of the pilot programme once developed was concerned with monitoring programme implementation to determine whether and under what conditions it could be implemented, assessing the response of participants to the programme, and assessing whether improvement in relevant skills of participants occurred. The evaluator met regularly with the programme manager to report interim evaluation data and discuss future programme developments.

(d) Summary of formative evaluation.

These illustrations show that formative evaluation involves the ongoing collection and feedback of information relevant to programme planning and operation, for use by decision-makers in developing and improving the programme as it is designed and implemented. In contrast to the traditional focus of evaluation on judging programme outcomes, the primary purpose of formative evaluation is to help create more successful

programmes by providing ongoing evaluation input from the early stages of programme development. This involves a collaborative working relationship between the evaluator and those planning and implementing the programme. The examples also illustrate that formative evaluation may involve a range of evaluation issues and strategies, encompassing questions of programme design, implementation and outcomes, depending on the situation. Common activities in formative evaluation, often carried out in conjunction with programme personnel, include:

- Developing and refining the programme model, objectives and strategies
- Reviewing the research literature
- Conducting needs assessment surveys and other exploratory research
- Pre-testing programme materials
- Piloting of interventions
- Obtaining feedback from programme participants
- Assessing initial programme effects
- Development of programme monitoring and evaluation systems.

(v) Relationship Between Formative and Process Evaluation

Differing conceptions are evident in the evaluation literature of the relationship between formative and process evaluation. Many evaluation authors have not distinguished between process and formative evaluation (e.g., Hawe et al. 1990), or have viewed formative studies as one aspect under the broader umbrella of process evaluation (e.g., McGraw et al, 1989), or have viewed process studies as one aspect under the broader umbrella of formative evaluation (e.g., McClintock, 1986). This apparent overlap and confusion of the two concepts reflects a more general lack of consensus in the evaluation literature regarding the labels and meanings of different types of evaluation (Dehar, 1987).

While there may be considerable overlap between activities conducted under process and formative evaluation, clear distinctions can usefully be drawn between key aspects of the two approaches, based on the evaluation literature reviewed in this chapter. Both approaches are valid and important. Key distinctions that can be drawn include the

primary purpose of each approach, the use made of evaluation findings, and the role of the evaluator.

The major emphasis in process evaluation is upon documenting and analysing the way the programme works in practice, to identify and understand important influences upon its operation and achievements. Although process evaluation may yield information (e.g., on programme strengths and weaknesses) that can be used for programme improvement purposes, the primary purpose of process evaluation as defined in the evaluation literature is to improve understanding of how a programme achieves what it does. Major uses of process evaluation results are in interpreting programme outcomes, and informing others wishing to learn from the experiences of the programme in future. In contrast, the purpose of formative evaluation is to generate information and provide consultation that can be used by programme decision-makers to refine and improve the programme on an ongoing basis from an early stage. For formative evaluation to be most effective, the evaluator needs to work closely and collaboratively with programme personnel, whereas a more detached role is possible and appropriate in process evaluation.

Section 2: Research Procedures

(i) Research Orientation

The formative evaluation of Heartbeat New Zealand reported in this thesis concentrated on issues of programme implementation and development. A naturalistic research design was employed, and the inductive approach of grounded discovery was used (Cook & Shadish, 1987; Glaser & Strauss, 1967), whereby key evaluation questions and issues were identified through intensive on-site knowledge of the programme, rather than being formulated prior to data collection. Qualitative research techniques were usually the most appropriate in this situation.

(ii) Researcher Involvement

The Director of the Alcohol Research Unit in the Department of Community Health at Auckland University was invited to join the Heartbeat New Zealand Committee in November 1988, to provide expertise in health promotion and programme evaluation.

She recommended that Heartbeat New Zealand provide a salary and working expenses for a full-time evaluation researcher from early 1989, to be based in the Alcohol Research Unit. This recommendation was accepted by the Heartbeat New Zealand Committee.

The author was employed to evaluate the Heartbeat New Zealand programme on a full-time basis from April 10 1989. The research reported here was conducted over 21 months, with the research period ending in December 1990. Salary and working expenses for the position were paid from the Heartbeat programme grant by the National Heart Foundation to the University of Auckland, which administered the funding. The author worked under the supervision of the Director and Deputy-Director of the Alcohol Research Unit, and this group identified itself as the "Heartbeat evaluation team".

The Heartbeat evaluation team presented a formal report to each meeting of the Heartbeat New Zealand Committee, which outlined evaluation activities and findings over the preceding period, and made recommendations for consideration by the Committee. Six formal reports were produced during the research period (Dehar, Duignan & Casswell, 1989 a-c; 1990 a-c). The Director of the Alcohol Research Unit remained a member of the Heartbeat New Zealand Committee throughout the research period. Following each Heartbeat New Zealand Committee meeting, an outline of planned evaluation activity over the period until the next Committee meeting was provided to the Heartbeat Programme Director.

(iii) Research Aims and Activities

The aim of formative evaluation of Heartbeat New Zealand was to constructively influence the development of an emergent heart disease prevention and health promotion programme by providing ongoing evaluation input to the programme planning and decision-making process. Formative evaluation input took two major forms:

(a) Information collection and feedback.

Identifying, collecting, analysing, and feeding back information relevant to programme planning to encourage information-based decision-making (e.g., conducting literature reviews; obtaining feedback from programme recipients; obtaining information on short-term project impacts).

(b) Consultation.

Providing consultation to planners and decision makers to help improve programme functioning (e.g., developing and refining programme model, objectives and strategies; developing programme monitoring and evaluation systems; identifying problems facing the programme; suggesting options and alternatives for action).

(c) Data sources.

Formative evaluation of Heartbeat New Zealand involved both responding to information needs of programme personnel for planning and decision-making, and taking a proactive stance in identifying and initiating changes to develop and improve the programme on an ongoing basis. A range of evaluation strategies and data collection techniques were potentially relevant in different situations, depending on emerging needs and opportunities in the programme. Formative evaluation data was obtained from interviews and questionnaires, direct participation and observation, and programme documents.

(iv) Research Timeframe

Overall formative evaluation of the Heartbeat programme, and formative evaluation of the two major projects of Heartbeat Awards and the Heartbeat Community Project, occurred over the 21 month period between the researcher's entry to the programme in April 1989 and the end of the research period in December 1990. A framework for outcome evaluation of Heartbeat was developed between September 1989 and March 1990. Formal evaluation reports were provided to the Heartbeat New Zealand Committee at its meetings in June, September and December 1989, and March, July and November 1990.

To summarise, evaluation research involves the systematic collection of data on a range of programme variables, for a variety of programme improvement and decision-making purposes. It is a multi-disciplinary field of professional practice, and diverse approaches are evident in the evaluation literature. Two significant trends in evaluation research which have influenced current thought and practice are a move away from the

dominance of quantitative measurement and experimental design, and a related broadening of evaluation focus from a concentration on outcomes to include issues of programme implementation and development.

Process evaluation fulfills the need for information on programme implementation. This form of evaluation is concerned with documenting and analysing the way a programme operates, to assist in interpreting programme outcomes, and to inform future programme planning. Formative evaluation emphasises the incorporation of evaluation input into ongoing programme planning and decision-making processes. It involves the early and ongoing application of evaluation resources to help develop and improve the programme. Important differences between process and formative evaluation can be identified in terms of the primary purpose of each approach, the use made of evaluation findings, and the role of the evaluator.

Formative evaluation of Heartbeat New Zealand was carried out by the author over a 21 month period to December 1990, and involved two major roles, of collecting and feeding back information relevant to programme planning and decision-making, and providing consultation to help improve programme functioning. Data sources for formative evaluation were interviews and questionnaires, direct participation and observation, and programme documents.

CHAPTER THREE

ORGANISATIONAL CONTEXT AND OVERVIEW OF PROGRAMME ACTIVITIES

Section 1 of this chapter provides information on the organisational setting and participants of Heartbeat New Zealand, as a programme of the National Heart Foundation of New Zealand. An outline of the aims and operation of the National Heart Foundation is provided, followed by a description of Heartbeat New Zealand's formal aims, structural and administrative arrangements, and major groups of participants. Information is presented on the level and timing of funding for Heartbeat from the Department of Health. Section 2 contains an overview of the different projects and activities which constituted the Heartbeat programme during the research period.

Section 1: Organisational Setting and Participants

(i) National Heart Foundation of New Zealand

The National Heart Foundation of New Zealand is a public charity which was established in 1968. The overall aim of the National Heart Foundation is to promote good health and to reduce suffering and premature deaths from diseases of the heart and circulation, including stroke (National Heart Foundation of New Zealand, 1990a). The five key areas of activity for the National Heart Foundation are research, public education, professional education, rehabilitation, and public affairs, and it has the following goals in these areas:

1. **Research**
   To support research related to the aims of the Foundation.

2. **Public education**
   To develop and promote community educational programmes designed to encourage a healthy lifestyle and to assist in preventing heart disease and stroke.

3. **Professional education**
   To increase the knowledge and improve the skills of health professionals.

4. **Rehabilitation**
   To encourage programmes which will promote the rehabilitation of those suffering from diseases of the heart and circulation including stroke.

5. **Public affairs**
   To influence public policy concerning health, research and other matters related to the aims of the National Heart Foundation. (National Heart Foundation of New Zealand, 1990a, p. 1).

The National Heart Foundation of New Zealand is one of a number of similar organisations throughout the world. The organisation has a fundraising network of volunteers in regional and branch committees throughout the country, which numbered 29 in 1990 (National Heart Foundation of New Zealand, 1990b). The Executive Office of the National Heart Foundation is in Auckland, where the Executive Director and other staff are based. In 1990 there were National Heart Foundation offices in seven other centres, the largest of which was in Christchurch, where the Medical Director of the Foundation was based.

The operation of the National Heart Foundation involves a range of people in different capacities. One group is members of the public who are involved as volunteers in the regional and branch committees of the Foundation. Members of the public are also involved as casual employees of the Foundation, teaching groups in the community about cardiopulmonary resuscitation and heart disease risk factors. A third group consists of medical practitioners and other professionals who have an advisory role as members of its standing committees. A fourth group is the paid administrative and professional staff of the organisation. These include the Executive and Medical Directors, National Coordinators of Communications, Activities and Jump Rope for Heart, Dietitians, regionally based Health Educators, and secretarial, clerical and administrative staff. These full or part-time employees of the National Heart Foundation numbered approximately 30 in 1990 (National Heart Foundation of New Zealand, 1990b).

(ii) Heartbeat New Zealand Programme

The background to the establishment of the Heartbeat New Zealand programme is provided in the second section of Chapter One. The present section outlines important features of Heartbeat New Zealand once established. It sets out the formal aims of the

programme, describes its structural and administrative arrangements, and identifies major groups of participants in the programme.

As Chapter One states, Heartbeat New Zealand was a heart disease prevention and health promotion programme administered by the National Heart Foundation, and substantially funded by the Department of Health. It was established in late 1987, with the following mission and objectives:

> MISSION
>
> To work with other appropriate organisations on the common goal of reducing the incidence of cardiovascular disease in New Zealand as recommended in the 1986 Advisory Committee's report on the Prevention of Cardiovascular Disease.
>
> OBJECTIVES
>
> 1 a) To develop joint programmes aimed at implementing the recommendations of the Advisory Committee on the Prevention of Cardiovascular Disease.
>
> b) To develop promotional activities for the prevention of cardiovascular disease on a national and regional level, e.g. Heart Food Festival, World Health Days, Smoke-Free events.
>
> c) To promote healthy nutrition by such means as developing appropriate contacts with industry, supporting the Heart Food Festival, promotion of healthy eating in schools, media programmes and by working with employers and unions. One of the aims would be to assist people to identify and make healthy food choices in the shops.
>
> 2 To develop a higher media profile on cardiovascular disease prevention and health promotion issues.
>
> 3 To ensure that government departments and other official agencies are aware of the recommendations of the Advisory Committee and to promote the development of any legislative and executive action.
>
> 4 To develop programmes and policies which will assist local authorities, including area health boards, district health offices and hospital boards, to facilitate the prevention of cardiovascular disease.
>
> 5 To develop appropriate liaison with the Hillary Commission, Cancer Society and other relevant bodies.
>
> 6 To seek additional funding and/or sponsorship from other relevant agencies or organisations and private sector business. (Department of Health, 1987b, pp. 1-2).

The first year's funding instalment was made by the Department of Health on December 16 1987, and decisions were made by the National Heart Foundation regarding structural and administrative arrangements for the Heartbeat New Zealand funding in late 1987 and early 1988. It was decided that a Heartbeat New Zealand Committee would be formed to oversee the programme, and this committee would be a sub-committee of the National Heart Foundation's Scientific Committee. While the Heartbeat New Zealand Committee would be ultimately responsible to the Scientific Committee, it would have the independence to approve projects, allocate funds, and appoint staff on a contract basis within the Heartbeat New Zealand budget (National Heart Foundation of New Zealand, 1988). The Heartbeat New Zealand Committee's place in the existing committee structure of the National Heart Foundation from 1988 to 1990 is shown in Figure 3.1.

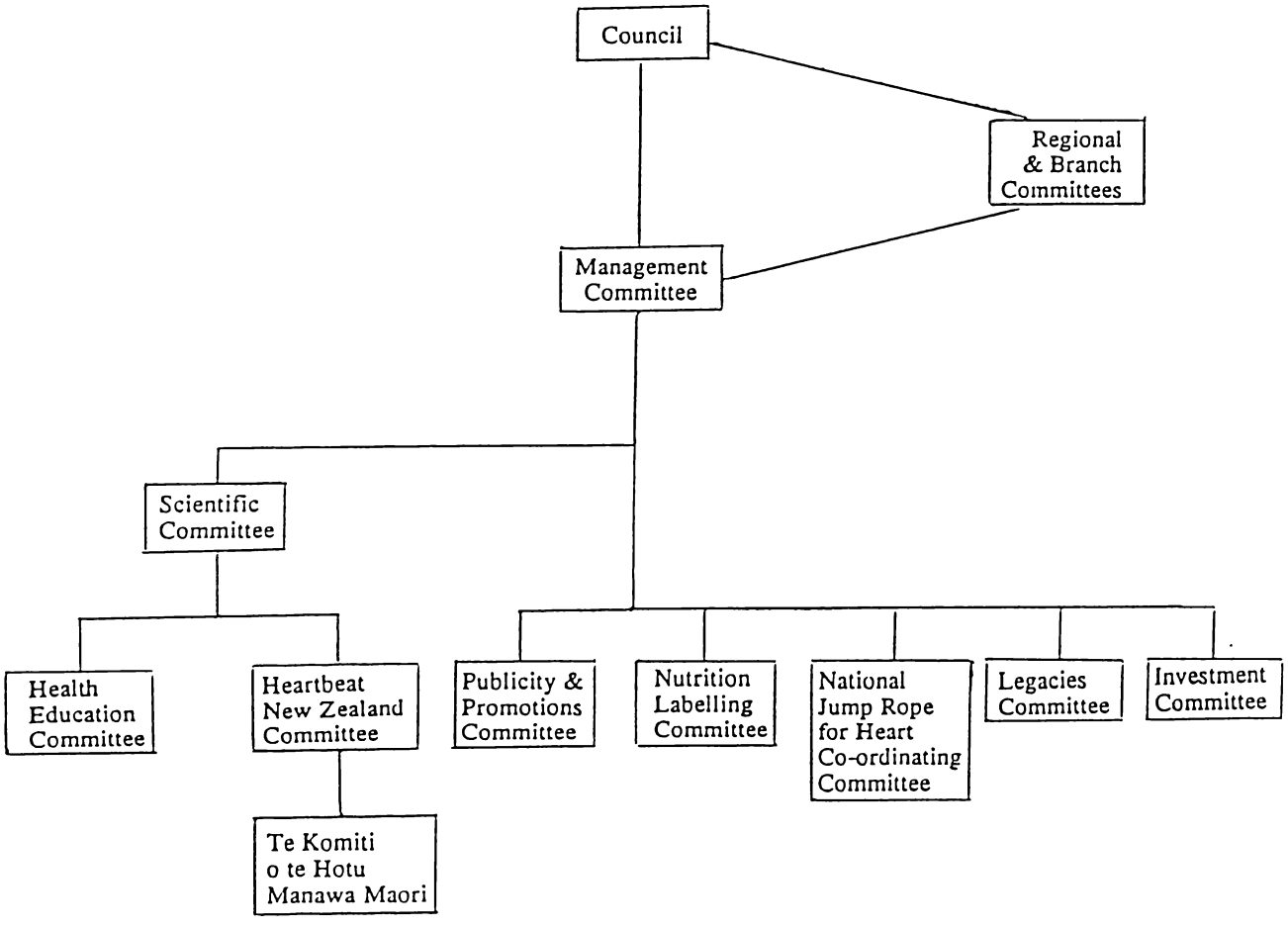

Figure 3.1. Committee structure of National Heart Foundation.

Figure 3.1 shows that the Heartbeat New Zealand Committee was established as one of two sub-committees of the Scientific Committee. A Maori Heartbeat Committee (te komiti o te Hotu Manawa Maori) was established in 1989, as a sub-committee of the Heartbeat New Zealand Committee. Although te Komiti o te Hotu Manawa Maori was formally a sub-committee of the Heartbeat New Zealand Committee, in fact it was substantially autonomous, and operated independently. Arrangements for evaluation of Heartbeat New Zealand did not include evaluation of Te Hotu Manawa Maori, which made its own evaluation arrangements.

The Medical Director of the National Heart Foundation (a 5/10 appointment) assumed the additional role of Programme Director of the Heartbeat New Zealand programme (a 3/10 appointment) from early 1988. Heartbeat New Zealand was formally based in the Christchurch office of the National Heart Foundation, as the Medical Director resided in Christchurch. The two initial priority areas for the Heartbeat New Zealand programme were identified as nutrition and non-smoking, with plans to address a third priority area of rheumatic fever prevention in 1989, through consultation with Maori health leaders. A provisional Heartbeat New Zealand Committee met for the first time on February 25 1988.

The structure and major groups of participants of the Heartbeat New Zealand programme are outlined in Figure 3.2.

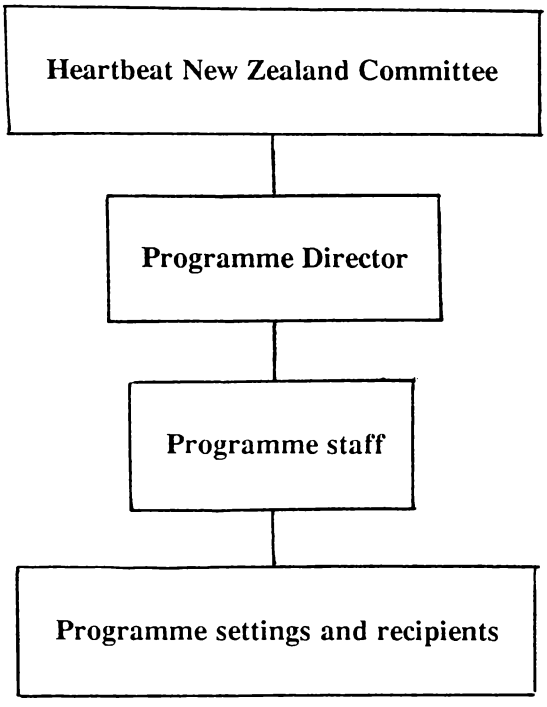

Figure 3.2. Structure and participants of Heartbeat New Zealand programme.

The Heartbeat New Zealand Committee was the steering committee of the Heartbeat programme. The Programme Director reported to the Heartbeat New Zealand Committee, and supervised programme staff, who were responsible for implementing the programme. Different aspects of the Heartbeat programme were implemented in a variety of programme settings, and affected a range of groups and individuals.

(a) Heartbeat New Zealand Committee.

The Heartbeat New Zealand Committee was responsible for overseeing the development and operation of the Heartbeat New Zealand programme. It determined programme policy and directions, and approved major expenditure. The Scientific Committee of the National Heart Foundation appointed an initial Heartbeat New Zealand Committee which met for the first time on February 25 1988. Additional members were

co-opted over the course of subsequent meetings. Heartbeat New Zealand Committee meetings were held on April 22, June 16, September 15 and December 9 in 1988; February 21, June 9, September 12, and December 5 in 1989; and 23 March, 23 July, and 13 November 1990. All Heartbeat New Zealand Committee meetings were held at the Auckland office of the National Heart Foundation, except the second and fourth meetings, which were held at the Christchurch office.

Early members of the Heartbeat New Zealand Committee were mainly cardiologists. Of the six early committee members, four were cardiologists (including the National Heart Foundation Medical Director/Heartbeat Programme Director). Other early members were the Executive Director of the National Heart Foundation, and a lecturer in health education. Additional members were later co-opted with skills in epidemiology, dietetics, health promotion/evaluation research, and Maori health. All seven committee members appointed prior to September 1988 were male, after which four female members were appointed to the committee. All committee members were Pakeha until December 1988 when two Maori representatives were appointed. The majority of committee members were aged between 40 and 65 years.

(b) Programme Director.

As outlined in Section 1 (ii) of this chapter, the Medical Director of the National Heart Foundation, a cardiologist based in Christchurch, also assumed the role of Heartbeat New Zealand Programme Director from early 1988, formally assuming the position on 16 May 1988. The role of Heartbeat Programme Director was initially given an allocation of 3/10, on top of the existing 5/10 position of Medical Director of the National Heart Foundation. However, from January 1990, the allocation of time to the position of Heartbeat Programme Director was increased to 5/10.

(c) Programme staff.

Some of the staff of the Heartbeat programme were employed on contract specifically to work on the programme, while others were existing National Heart Foundation employees who became involved in the Heartbeat programme as part of their work for the Foundation. Early appointments of new staff were made in Auckland and

Christchurch in the nutrition area in August 1988. A full-time Programme Coordinator was appointed in Auckland with responsibility for developing the Heartbeat Awards project in schools. A half-time dietitian was appointed in Christchurch with responsibility for developing the Heartbeat Awards project in workplace cafeterias. Other appointments in late 1988 were a part-time Christchurch-based public relations consultant, and a half-time secretary. In 1989 a full-time worker in the smoking cessation area was appointed, and in 1990 a part-time Heartbeat Columns writer and two full-time Project Assistants for the Heartbeat Awards project were appointed. Changes occurred in the job titles, hours and roles of several contract staff over the course of the research, notably a change in the title and hours of the Christchurch-based half-time dietitian to full-time Programme Coordinator from early 1990.

The National Heart Foundation health education staff were involved in the Heartbeat programme from an early stage, as implementors of the Heartbeat Community Project. Over the course of the research period there were between seven and nine regionally based Health Educators involved, and the project was coordinated by the Senior Health Educator, who was based in Christchurch during 1988 and 1989, and Wellington during 1990. A Christchurch-based National Heart Foundation dietitian was appointed to an additional 3/10 position with Heartbeat in 1988, and an Auckland-based National Heart Foundation dietitian became involved in the Heartbeat programme early in 1989. The Auckland National Heart Foundation Communications Coordinator was also involved from mid-1988. A feature of the involvement of existing National Heart Foundation employees in the Heartbeat programme was that their time commitment to the programme was generally not formally specified. However, this time commitment was formalised for the Auckland-based dietitian and the National Communications Coordinator during 1990, and a proportion of their salaries became a charge on the Heartbeat programme.

In the early stages of the Heartbeat programme most programme staff were based in Christchurch. By the end of the research period there were approximately the same number of staff involved in Heartbeat in the Christchurch and Auckland offices (although the Christchurch office still employed staff for more hours overall than Auckland). All of

the Heartbeat programme staff were Pakeha females, and the majority were aged between 25 and 45 years of age.

(d) Programme settings and recipients.

Activities of the Heartbeat New Zealand programme were implemented in or impacted upon a range of different settings, and a range of groups and individuals in these settings participated in or were recipients of various aspects of the programme. For example, the Heartbeat Awards project in school canteens, reported in Chapter Four, involved several hundred secondary and intermediate schools throughout the country during the research period. Canteen Managers, Home Economics and Health Education teachers, and parent representatives in these schools participated in activities associated with the project. Heartbeat Awards impacted to some degree upon thousands of school pupils buying food from their school canteens. As a further example, during 1990 around 10 000 people were reported to have participated in nutrition education sessions provided through the Heartbeat Community Project, described in Chapter Five, involving groups from community organisations, workplaces, educational institutions, and training programmes. Programme settings and recipients will be described in detail as relevant in later chapters.

(iii) Funding for Heartbeat New Zealand Programme

The Department of Health provided funding to the National Heart Foundation for Heartbeat New Zealand as set out in Table 3.1.

Table 3.1. Heartbeat New Zealand funding from Department of Health.

DATE	AMOUNT	PURPOSE
December 1987	$400 000	Funding for 1987 financial year ending March 31 1988
July 1988	$250 000	Funding for 1988 financial year
December 1988	$250 000	" "
February 1989	$200 000	Supplementary grant
March 1989	$125 000	Funding for transitional quarter (change in Department of Health financial year)
July 1989	$500 000	Funding for July 1 1989 - June 30 1990 financial year
March 1990	$125 000	Additional funding for community grants
July 1990	$550 000	Funding for July 1 1990 - June 30 1991 financial year

Table 3.1 shows that from December 1987 to December 1990, the National Heart Foundation received $2.4 million from the Department of Health to implement the Heartbeat New Zealand programme until June 30 1991. The first payment of $400 000 was made in December 1987 to cover the financial year ending March 31 1988. Two further grants were made in July and December 1988 to cover the April 1988 - March 1989 financial year. Early in 1989 the Department of Health notified Heartbeat administrators of the potential availability of additional funding before the end of the financial year, and Heartbeat applied for and received a supplementary grant of $200 000 in February 1989. The Department of Health's financial year changed from April - March

to July - June early in 1989, and Heartbeat received $125 000 to cover the transitional quarter in March 1989. Heartbeat received $500 000 for the 12 month period from July 1989, and applied for and received an additional $125 000 to fund community grants in March 1990. In July 1990 Heartbeat received $550 000 for the twelve months from July 1 1990.

Section 2: Overview of Heartbeat New Zealand Programme

This section provides an overview of the range of projects and activities that constituted the Heartbeat programme from 1988 to 1990. Each major project or activity is briefly outlined in terms of its aims, key features, and development over the three year period. Information is provided on the scope of projects and activities to December 1990, and the level of allocation of programme resources to each area is indicated. It should be noted that where project objectives are identified, these were generally formulated in early to mid-1990, in accordance with recommendations made by the Heartbeat evaluation team in March 1990, and elaborated on in Chapter Six of this thesis. While figures of actual financial expenditure are provided for some activities, it was not possible to obtain accurate figures of actual expenditure for all projects and activities. This is because changes occurred in the procedures, categories and timing of the presentation of budgetted and actual expenditure by programme administrators during the three year period. These changes meant that accurately and consistently summarising expenditure in all the project areas on the basis of available financial documentation was not possible.

Heartbeat Awards

The Heartbeat Awards project was modelled upon a project of the same name in the Welsh Heart Programme (Health Promotion Authority for Wales, 1989). There were two areas within this project, school canteens and workplace cafeterias, which operated relatively independently. Both areas had the same general aims and structure, although there were certain differences of emphasis in their implementation. The overall aim of Heartbeat Awards was to promote healthy eating in a healthy environment by encouraging the provision of healthy food choices, hygenically prepared, in a smokefree environment.

School canteens and workplace cafeterias which met set criteria in these areas were recognised for their efforts through receiving a Heartbeat Award.

The first phase of the process was to recruit schools and workplaces in an area, and invite representatives to attend a Heartbeat Awards schools or workplace introductory seminar. This seminar introduced the concept of Heartbeat Awards, provided information and resources relevant to making changes in the three focus areas of food choices, hygiene and smoking, and aimed to motivate those present to participate further in the project. Once a school canteen or workplace cafeteria assessed itself as meeting the Heartbeat criteria, a Heartbeat Award covering the following 12 months was presented, with accompanying publicity. Regular newsletters and other information were provided to those participating, to maintain interest and support changes. An important aspect of the project in school canteens was work to influence the manufacturers and suppliers of products used in school canteens. This included encouraging manufacturers and suppliers to increase the range of products offered to schools, achieve competitive pricing of healthier alternatives, improve the product distribution system, alter preparation and cooking techniques, and alter the composition of products. A key aspect of the project in workplace cafeterias was its influence on the availability and course content of food hygiene training for cafeteria staff in New Zealand.

The school canteen aspect of the Heartbeat Awards project was piloted in Auckland during the second school term of 1989, and implemented more widely following that. The workplace cafeteria aspect was piloted later in 1989 in Auckland and Christchurch, and wider implementation began in 1990. A different approach to the school canteen introductory seminar, called an EXPO, which allowed for a greater number of participants, more extensive manufacturer input, and for meeting the needs of both schools which are already involved in the project and new schools in an area, was trialled in Auckland in 1990. Following the Auckland EXPO trial, the EXPO approach was adopted for most areas, with some adjustments to make it feasible in areas other than Auckland. Combined school canteen and workplace EXPO's were trialled in two areas in 1990, but it was decided that the needs of the two sites were sufficiently different to

warrant continued separate approaches. During 1990 investigation began into the possibility of extending the Heartbeat Awards project to boarding schools. Details of the school canteen and workplace cafeteria components of the Heartbeat Awards project are described below.

School canteens.

The project objectives for school canteens formally identified in mid-1990 were:

1. To build healthy public policy

   (a) Heartbeat New Zealand will encourage school Boards of Trustees to include food policy matters in their school charter

2. To create a supportive health environment in schools through

   (a) integrating the school canteen into the school health programme

   (b) providing and promoting food choices that meet the national nutrition guidelines

   (c) ensuring food is prepared and sold in a smoke-free environment

   (d) ensuring a high standard of hygiene is achieved in school canteens.

During 1989 there were 5 Heartbeat Awards school canteen seminars, including the Auckland pilot seminar. In 1990 there were 14 seminars or EXPO's held throughout the country. A school canteen newsletter was sent out to all participating schools in term 3 of 1989, and in terms 1, 2, and 3 in 1990. A "Nibbles Pack" containing practical tips was sent out in term 2 and 3 in 1990. In 1989 Heartbeat Awards seminars were attended by 119 schools, and in 1990 seminars or EXPO's were attended by 329 schools. By December 1989 Heartbeat Awards had been granted to 12 schools, and 47 schools received Heartbeat Awards in 1990.

Workplace cafeterias.

Project objectives for the workplace cafeterias area formally identified in mid-1990 were:

1. To create a supportive health environment in the workplace cafeteria through providing and promoting

   (a) food choices that meet the national nutrition guidelines

(b) food hygiene training for cafeteria staff

(c) a smokefree environment

2. To facilitate the involvement of relevant agencies in a collaborative approach to promoting health in the workplace

3. To develop the commitment of workplace managers to creating a workplace environment that supports health.

In 1989 the workplace cafeteria aspect of Heartbeat Awards was trialled in Auckland and Christchurch, with one seminar in each city. Seminars were held in 18 centres throughout the country from June to December 1990. Two newletters were produced in 1990, and a "Seasonal Snippets" pack of practical hints was provided to participating workplaces in November 1990. In 1989 representatives from 27 companies participated in the Auckland and Christchurch pilot seminars, and 218 workplaces were represented at seminars in 1990. By the end of December 1990 Heartbeat Awards had been presented to 60 workplace cafeterias. An additional feature of the workplace cafeteria aspect of Heartbeat Awards was that from 1990, preliminary meetings of key people were held in each new area, prior to the introductory seminar. The preliminary meetings involved representatives of a range of relevant groups (e.g., Occupational Health Nurses, Employers Association, catering companies), and were used to obtain information on regional characteristics, existing networks and resources, and likely support for the Heartbeat Awards project. Such meetings were held in 10 centres in 1990.

Over the three year period from 1988 to the end of 1990, approximately 20% of Heartbeat's total funding was allocated to the Heartbeat Awards project.

Heartbeat Community Network

This area of the Heartbeat programme predominantly involved the existing health education staff of the National Heart Foundation, and was an extension of their existing health education activities. The Coordinator of the project was the Senior Health Educator, and implementation was the responsibility of the regionally based Health Educators, who numbered seven in 1988 and nine in 1990. The Health Educators coordinated the recruitment, training and deployment of people from their local communities.

There were several phases in the development of this project, which were reflected in different names and emphases at different times. Prior to being called Heartbeat Community Network the project was known as the Heartbeat Community Project, and had as its core strategy the use of trained lay people to provide sessions on healthy nutrition to small groups in the community who requested this. The Heartbeat Community Project concept of using trained lay people as group facilitators developed from the National Heart Foundation's earlier Heart Health Leaders project, which in turn was modelled on the National Heart Foundation's cardiopulmonary resuscitation (CPR) programme, in operation since 1978. The Heart Health Leaders programme was being trialled and developed by the National Heart Foundation in 1987 and 1988 and was seen as an extension of the CPR programme, to cover lifestyle factors in the prevention of heart disease. The concept was adopted by the Heartbeat New Zealand Committee as its community education strategy in 1988, and training of the first "Heartbeat Leaders" occurred early in 1989.

The 1990 project title of Heartbeat Community Network reflected an emphasis on the project as a focus for networking by National Heart Foundation Health Educators at a local community level, assisted by Heartbeat Leaders, to facilitate health promotion activity relevant to heart health. The altered emphasis in the project model, away from a concentration on direct education of members of the public, to incorporate a broader range of community action strategies, followed a report on formative evaluation of the Heartbeat Community Project in September 1989. As a result of this report, a working party was established by the Heartbeat New Zealand Committee to examine the project and make recommendations as to its future direction. The following set of project objectives was developed in mid-1990 as the basis for the future development of the project:

1. To work with other agencies active in health promotion in planning and implementing relevant local activities to ensure an integrated approach and sharing of resources.

2. To establish, train and maintain a network of people from the local community to assist the National Heart Foundation Health Educators in health promotion activity.

3. To support the role of the National Heart Foundation Health Educators in initiating and co-ordinating health promotion activity according to the priorities that exist within their region.

4. To provide opportunities for individuals and groups in the community to participate in a range of activities which will enable them to develop personal skills relevant to promoting heart health.

Monitoring information is available on the nutrition education activities of Heartbeat Leaders from 1988 to the end of 1990. As stated earlier, training of the first Heartbeat Leaders occurred early in 1989, and by April 1989 there were 70 trained Leaders throughout the country. In November 1989 there were 108 Heartbeat Leaders available, based in 16 cities and towns, and 294 Heartbeat sessions had been held, involving approximately 5000 people. Figures for the calendar year of 1990 showed that in December 1990 there were 162 Heartbeat workers available, and that during 1990 a total of 449 Heartbeat sessions had been held in 43 cities or towns, involving more than 9 978 participants.

Monitoring information is not available on the activities of the National Heart Foundation Health Educators and others under the broadened objectives of the project, from mid-1990. The Health Educators' role under the broadened objectives of the project overlapped substantially with the health promotion aspects of their existing role with the National Heart Foundation. The overlap of Health Educator roles under the broadened objectives of the project, and the nature of the community activity undertaken posed difficulties in obtaining monitoring information about the implementation of the new approach which were still being resolved at the end of the research period.

Health Educator salaries, including that of the Senior Health Educator co-ordinating the project, were funded by the National Heart Foundation, while Heartbeat funding covered the other costs of the Heartbeat Community Network project (principally the cost of training and reimbursing Heartbeat Leaders). Overall, this project accounted for approximately 9% of Heartbeat's total funding to the end of 1990.

Other projects

Heartbeat New Zealand also established a number of other projects, which will be briefly described.

Heartbeat funded the expansion of the previously developed Stop-Ourselves-Smoking (SOS) smoking cessation project (Price & Davidson-Rada, 1986). This was a community-based self-help approach to smoking cessation for adults, with a small group format and leadership from ex-smokers, which accounted for approximately 7% of Heartbeat's funding over the three years to December 1990.

Heartbeat carried out a variety of communications activities involving the use of mass media to further its heart disease prevention and health promotion aims, and the production of information and publicity materials to support individual Heartbeat projects and the overall Heartbeat programme. For example, Heartbeat produced regular Heartbeat Columns on health promotion issues for use by newspapers, supported several heart disease prevention-related television advertising campaigns, and produced a range of education and publicity materials, including posters, pamphlets, stickers, and newsletters. Communications activities accounted for approximately 20% of Heartbeat's total funding to December 1990.

Funding was provided to a number of community groups and organisations for activities relevant to heart disease prevention and health promotion. During 1988 and 1989, Heartbeat responded to requests for funding from such groups as they were received, while in early 1990 arrangements were formalised with the creation of the Community Grants Project, where Heartbeat advertised the availability of grants up to $10000 for such groups. Approximately 7% of the total Heartbeat programme budget had been spent in this area by December 1990.

Heartbeat initiated and maintained an ongoing relationship with Area Health Boards throughout the country from early 1989, to encourage an increased awareness and application of health promotion principles in Area Health Board activities, and collaboration between Heartbeat and Area Health Boards in working towards the New Zealand Health Goals and Targets. Meetings occurred during 1990 between a small team of Heartbeat personnel, and staff of each Area Health Board, and this activity accounted for approximately 1% of Heartbeat funding to the end of 1990.

Heartbeat supported the establishment of a Maori Heartbeat programme in 1989, later named Te Hotu Manawa Maori, which was structured within the National Heart Foundation as a parallel programme to Heartbeat New Zealand, and received separate funding from the Department of Health. Heartbeat also obtained funding from the Department of Health for the establishment of a Pacific Island health promotion project, which occurred in 1991, after the research period had ended.

The Programme Director of Heartbeat made a number of submissions to government on policy issues relevant to heart disease prevention and health promotion, and particularly in support of the Smokefree Environments Bill. In addition, about 2% of programme funding to December 1990 was spent on a number of one-off grants by the Heartbeat New Zealand Committee which did not fit in to other project areas. These grants included support for the Department of Health's 1989 Heart Health Survey, development of a kit for Heartbeat cooking classes, and assistance to the Health Promotion Forum in bringing an overseas health promotion expert to New Zealand.

To summarise, the National Heart Foundation of New Zealand is a public charity established in 1968, with heart disease prevention and health promotion aims. The government-funded Heartbeat New Zealand programme was developed within the existing structure and administrative system of the National Heart Foundation from early 1988. A sub-committee of the Foundation's Scientific Committee was formed to oversee the development and operation of the Heartbeat programme. The Christchurch-based Medical Director of the National Heart Foundation became Heartbeat Programme Director, and the two initial priorities of the programme were identified as nutrition and smoking. Heartbeat was staffed through a combination of newly appointed contract staff, and existing staff members of the National Heart Foundation, who implemented the programme in a range of different settings. Between December 1987 and December 1990, the Department of Health provided $2.4 million to the National Heart Foundation to implement the Heartbeat programme until June 30 1991.

From the overview in Section 2, it can be seen that the Heartbeat programme both initiated and supported activity in a range of different areas during the research period. The Heartbeat Awards project influenced and assisted school canteens and workplace cafeterias throughout the country to provide healthy food choices in a healthy environment. In the Heartbeat Community Network, Heartbeat established a community education and health promotion project using the National Heart Foundation's existing network of Health Educators and part-time workers, based on the cardiopulmonary resuscitation training model. In addition to these major projects, Heartbeat was involved in a number of other projects and activities, including the SOS smoking cessation programme, funding for advocacy of non-smoking, communications activities, grants for community-level health promotion activities, liaison with Area Health Boards, the establishment of Te Hotu Manawa Maori, a Pacific Island health promotion project, submissions to government on policy issues related to heart health, and other miscellaneous activities.

CHAPTER FOUR

FORMATIVE EVALUATION OF HEARTBEAT AWARDS PROJECT

As outlined in Chapter Three, the Heartbeat Awards project of Heartbeat New Zealand was modelled upon a project of the same name in the Welsh Heart Programme. The Heartbeat Awards concept aimed to promote healthy eating in a healthy environment. In the Heartbeat Awards project there were two components, school canteens and workplace cafeterias. The project encouraged school canteens and workplace cafeterias to meet Heartbeat criteria for healthy food choices, hygiene, and a smokefree environment, and those which did were presented with a Heartbeat Award, with accompanying publicity.

While both the school canteen and workplace cafeteria components had the same general aims and structure, they functioned as separate sub-projects, with some differences of emphasis in their implementation. Different Heartbeat staff members were responsible for planning and implementing each component of the project, with the school canteen Project Coordinator operating from the Auckland office of the National Heart Foundation, and the workplace cafeteria Project Coordinator operating from the Christchurch office. Two Project Coordinators worked substantially full-time on the project during the research period. Two other Heartbeat staff assisted on a part-time basis in project design and implementation from an early stage. Additional full-time Project Assistants were appointed in early 1990 to work on the project with each of the two Project Coordinators.

The sections which follow describe formative evaluation input provided to the school canteen and workplace cafeteria components of Heartbeat Awards during the research period. Although data collection generated a great deal of detailed information about specific issues, this is not reproduced here for reasons of space. Instead, the intention is to provide an overview of formative evaluation input to the project, summarise key findings, and discuss the contribution that formative evaluation made to the development of the project.

Section 1 covers formative evaluation of Heartbeat Awards in school canteens. Project events and evaluation activities and findings are described for the pilot phase,

followed by a discussion of the contribution of evaluation findings to project decision-making in the pilot project. A similar format is followed in describing the wider implementation phase of the school canteen component of Heartbeat Awards. Section 2 covers formative evaluation of Heartbeat Awards in workplace cafeterias, concerning firstly the pilot phase, and secondly the wider implementation phase. Section 3 discusses issues identified through formative evaluation of both components of the Heartbeat Awards project. The contribution of the evaluation activities and findings to project development, and the issues they highlight in terms of evaluation and health promotion are discussed.

Section 1: Formative Evaluation of Heartbeat Awards in School Canteens

1. Pilot Phase

(i) Overview of Project Events

When the author became involved with the Heartbeat Awards project in April 1989, planning was underway by Heartbeat staff to conduct a pilot study of Heartbeat Awards in Auckland secondary schools. Objectives had been established for Heartbeat Awards in school canteens as follows:

1. To fully integrate the school canteen into the school health programme
2. To have available in school canteens food choices that meet the National Nutrition Guidelines
3. To ensure that food is prepared and served in a smoke-free environment
4. To achieve a high standard of hygiene in school canteens
5. To identify schools which meet these objectives
6. To promote in the community the schools which meet these objectives.

Criteria were set in the three focus areas of (a) healthy food choices, (b) non-smoking and (c) hygiene practices. Participating schools needed to achieve specific standards in each area to be eligible for a Heartbeat Award. The criteria for healthy food choices included the school canteen actively encouraging the consumption of a wide variety of foods, and discouraging consumption of high fat, salt and sugar foods. Specific

stipulations were made regarding the provision of healthier alternatives to existing food choices (e.g., the availability of wholemeal or wholegrain bread products, lean meat, fish and chicken, fresh fruit, unsweetened fruit juice, low fat milk). Food was required to be prepared and served in a smokefree environment, and stipulations were made regarding food storage, preparation and handling.

The Project Coordinator for school canteens personally approached the principals of 20 secondary schools throughout Auckland to seek their participation in the pilot project. Participation was sought from schools with strong, established health programmes. Heartbeat staff considered it important to initially work with schools which were likely to be receptive to health-promoting changes, rather than attempting to convert those which were not. Representatives from each of the participating schools were invited to a Heartbeat Awards introductory seminar to be held on May 30 1989. The three representatives from each school who were invited to attend were the canteen manager, a home economics or health education teacher, and a parent representative.

The aim of the three hour Heartbeat Awards introductory seminar was to inform and motivate participants to make healthy changes in their school canteen by becoming involved in the Heartbeat Awards project. Heartbeat and National Heart Foundation staff and invited guest speakers, presented different aspects of the seminar. The seminar introduced the concept of Heartbeat Awards, and provided information on the need for and ways of making changes in school canteens in the areas of healthy nutrition, hygiene and non-smoking. The involvement of manufacturers of food products which complied with the Heartbeat Awards food choices criteria was an important aspect of the introductory seminar. A display of food ideas for school canteens was provided in a specially arranged manufacturers' display area. Each school received a Heartbeat Awards guidebook containing information about the Awards scheme, and suggestions for making changes. Posters depicting healthy food choices were available free of charge, and many of the manufacturers involved also provided free samples of their products to participants.

It was hoped that participants would leave the seminar motivated and enthusiastic to make changes to their school canteen. The guidebook explained the self-assessment

procedure for applying for a Heartbeat Award. Each seminar participant was sent a follow-up letter in late June thanking them for their attendance, urging them to contact the Project Coordinator for advice if necessary, and listing the other schools participating in the pilot in case they wished to consider forming a buying co-operative for food products. After the seminar the Project Coordinator concentrated on responding to queries and requests from participating schools, developing the manufacturers' aspect of the project, and planning for implementation of the project in other areas in the third term of the 1989 school year.

(ii) Overview of Evaluation Activities

Following attendance by the author at a Heartbeat Awards planning meeting on April 11-12, comment was provided on the objectives of the school canteen component, and evaluation procedures were developed for the pilot project. The author accompanied the school canteen Project Coordinator on recruiting visits to three Auckland schools in April to obtain first-hand knowledge of the situation existing in school canteens.

It was decided to use questionnaires to obtain information from participating schools before, and again several months after, the Heartbeat Awards intervention (which was defined as the May 30 introductory seminar). On May 15 a letter was sent to principals of participating schools by the evaluator, outlining the purpose of the evaluation, and notifying them that evaluation information would be sought from the canteen manager and teacher representative of that school. Shortly afterward, a questionnaire was sent out to the home economics or health education teacher nominated to attend the Heartbeat Awards introductory seminar (see Appendix 1). Respondents were asked to rate the range of food currently sold in their school canteen in terms of healthy nutrition, to rate the perceived degree of consistency between food sold and what pupils were taught in school about healthy nutrition, and to estimate the level of knowledge possessed by the canteen manager about what pupils were taught in the area of healthy nutrition. Information was sought on any changes respondents would like to see made in the range of foods sold in their school canteen, and what the likely reaction of various interest groups (e.g., pupils, Board of Trustees, other teachers) would be to such changes.

Respondents were also asked which parties needed to be involved in decisions about foods sold in the school canteen. Final questions concerned the existence and perceived desirability of a written policy linking foods sold in the school canteen with school nutrition teachings.

At the same time, the canteen manager of each school was sent a canteen checklist (see Appendix 2). This questionnaire listed food items commonly sold in school canteens (e.g., pies, sausage rolls, filled rolls, sandwiches), and food choices and alternatives relevant to the Heartbeat criteria, and asked canteen managers to indicate as accurately as possible the number of each item sold in a "normal" week. The checklist also asked canteen managers to describe the content of any posters currently on the walls of the canteen. Both teachers and canteen managers were asked to bring their completed questionnaires to the May 30 introductory seminar, where they would be collected.

The evaluator attended the May 30 seminar as an observer, and following the seminar, conducted telephone interviews with 24 people who had attended, to obtain feedback that could be used in the planning of future introductory seminars (see Appendix 3 for interview schedule). A form to obtain written feedback from seminar participants was designed by the evaluator for the future use of the Project Coordinator, and this was routinely administered at the end of seminars once the project was implemented more widely (see Appendix 4).

A second questionnaire for teachers and canteen managers was sent out on July 28, approximately two months after the introductory seminar. The second questionnaire for teachers (see Appendix 5) asked the same questions as the first about the range of foods sold in the canteen and their consistency with school nutrition teachings, and the perceived level of knowledge of the canteen manager. It also asked whether any discussions or meetings about the school canteen had been held since the seminar, and whether any action had occurred or was planned to form a canteen committee, incorporate the canteen into school policy, or to make changes in the canteen itself. If changes had occurred, respondents were asked to identify any difficulties experienced, and who was involved in decisions. Information on ongoing parent representative involvement was sought, and

respondents were asked about the reaction of the various interest groups to any planned or actual changes. An indication was sought of likely future demand for Heartbeat Awards by asking about intentions to apply for an award at some stage. Specific feedback was sought on the clarity and relevance of the school canteen guidebook, and any suggested improvements.

The second questionnaire for canteen managers (see Appendix 6) included a copy of the same canteen checklist they had been asked to complete in May, and they were also asked additional questions, many of which were the same questions as teachers were asked. Information was sought on action that was planned or had occurred as a result of the introductory seminar. Respondents were asked to indicate whether any of eleven potential changes in their canteen had been made or were planned (e.g., added new healthier products, increased supply of existing healthier products, reduced supply of some less healthy products). If so, they were asked what problems had been experienced and who was involved in decision-making. Information was sought on involvement of the parent representative, the reaction of pupils to any changes that had occurred or were planned, any effect of changes on canteen sales, and contact with new manufacturers since the seminar. Canteen managers were asked about their future intentions regarding applying for a Heartbeat Award, and were asked to provide specific feedback on the guidebook, as teachers were.

(iii) Summary of Evaluation Findings

Although 20 Auckland secondary schools were recruited for participation in the pilot study, only 16 of these actually attended the Heartbeat Awards introductory seminar, and were thus classified as participating. The other four schools either formally withdrew prior to the introductory seminar, or did not send representatives to the seminar.

(a) Results of first questionnaire for teachers.

Completed questionnaires were obtained from teachers representing the 16 schools which attended the introductory seminar. There was considerable diversity in the results obtained, but some common themes were apparent.

Few teachers viewed their school canteen as either especially bad or especially good in terms of healthy nutrition, or the relationship between the nutrition education curriculum and canteen products. Most teachers were able to identify a number of ways their school canteen could be improved, principally by selling less salty, fried and sweet foods, and a greater variety of healthier foods. Respondents were fairly optimistic about the likely response of interest groups to such changes. Most teachers thought that the Board of Trustees, principal, teachers and parents would show some degree of support, with less consistency in the expected support or opposition from pupils and canteen staff. Shared decision-making about the school canteen was clearly viewed as the most desirable approach. There was strong support for the idea that there should be a written policy about foods to be sold in the school canteen.

Overall, it was clear from the questionnaire results that the teachers recognised a need for change in the school canteen, often had a history of trying with varying degrees of success to facilitate such changes themselves, and thought the school canteen should definitely form an integrated part of the school programme.

The teacher questionnaire results also identified some potentially important issues in achieving change in school canteens. For example; canteen staff in some schools were perceived as likely to be resistant to change; some teachers felt that there would be limited demand for healthier products by pupils, and that consequently the canteen would lose profit if changes were made; a shortage of volunteer labour in school canteens was cited as a factor which limits their ability to provide food prepared on the premises; the need for a better supply system for healthier products was identified.

(b) Feedback from introductory seminar participants.

Telephone interviews were conducted by the evaluator with 12 canteen managers and 12 teachers representing 16 schools who had attended the May 30 introductory seminar, and had handed in completed questionnaires (see Appendix 3 for interview schedule).

Feedback about the seminar was overwhelmingly positive. Common responses were that the seminar was stimulating and inspiring; that useful new ideas were gained

about healthy foods and their presentation; participants had appreciated the opportunity to talk with others who shared similar concerns; support was expressed for the idea that student health should have higher priority than profits; having both teachers and canteen managers present at the seminar was perceived as valuable; some participants felt reinforced in their efforts to ensure healthy foods were provided in the school canteen; some participants reported that the seminar had made them realise that their school canteen needed improving.

Some form of action had occurred or was intended as a result of the introductory seminar in most of the schools represented in the interview results. Actions included arranging a meeting of relevant people to discuss changes (ten schools), reducing the supply of less healthy products in the school canteen (five schools), adding new healthier items to the menu (five schools), incorporating the school canteen into the school policy document (three schools), changing the posters in the canteen (three schools), and introducing breakfast (three schools).

A number of obstacles to action were identified, which included those that teachers had earlier identified. Additional obstacles that were identified were the small size and poor physical facilities of some canteens, the perceived higher cost of healthy food alternatives, the risk that pupils would simply buy "junk food" elsewhere if the canteen did not provide it, and the risk that by changing to healthier alternatives, canteens would lose the use of equipment (e.g., pie warmers, fridges) that existing suppliers provided.

Few unanswered questions were identified, and no major negative aspects of the seminar were apparent. Changes to future seminars were suggested in three areas by respondents. It was felt that more opportunity should be provided during the seminar for participants to discuss issues and share ideas together as a group. Viewing products and talking to product representatives was seen as a very useful aspect of the seminar, and participants would have liked more input from and greater access to product representatives. The availability of more resource materials to take away was also suggested.

Several further issues emerged from the interview results. It was clear from the attendance records of the introductory seminar that not all schools had had a parent representative attend the seminar. Few respondents mentioned the involvement of a parent representative in their planned future activities. It thus appeared that the aim of involving a parent representative at each school in changes was not being fully achieved. It also emerged that for many respondents, and teachers in particular, the most important task and the focus for their activities in the near future was to improve the food sold in the school canteen. The impression given by those who were planning to make changes was that they would be doing this as a result of the seminar whether or not there was a Heartbeat Award to be achieved. Actually obtaining a Heartbeat Award did not seem to be a primary motivator. A third issue which was identified was the need to maintain the momentum generated by Heartbeat Awards. Most of those interviewed had left the May 30 seminar feeling enthusiastic toward and with new ideas for making changes in the school canteen, and action had occurred or was planned in most schools. However, several respondents felt there was a risk that over time enthusiasm would fade, and achievements would be limited.

Based on the feedback obtained, and the author's own observation of the introductory seminar, a number of recommendations were made to the Project Coordinator concerning future seminars. Because no major problems with the seminar were identified, these recommendations concerned relatively minor additions or changes. For example, it was suggested that a map of the venue be sent out with invitations; that information be obtained from participants on entry to the seminar that would enable them to be more easily identified and contacted at a later stage if necessary; that each participant be provided with a copy of the guidebook, rather than one per school; that opportunities for group discussion and sharing be structured into the seminar content and that the seating arrangements facilitate this; that all participants should be provided with a list of relevant manufacturers, products and prices; and that ways of increasing parent representative seminar attendance and involvement should be considered.

(c) Results of canteen manager checklist.

As outlined earlier, the canteen checklist consisted of a list of food items commonly stocked by school canteens, and canteen managers were asked to indicate beside each of the 25 items how many they sold in a "normal" week. The intention of having the canteen managers complete the food items checklist before, and again approximately two months after the Heartbeat Awards introductory seminar was to obtain information on changes in the types and quantities of food items sold over the period which might be attributed to the intervention.

The results of the canteen checklist were of limited usefulness, however. This was partly because of a lower response rate than was required for adequate comparisons to be made. While canteen managers from 14 schools returned the first canteen checklist at the introductory seminar, only eight returned the second checklist, despite repeated mail and telephone requests from the evaluator to do so. One factor in the lower response rate for the second checklist was that it was inadvertantly sent out by the evaluator just prior to the August school holidays, when schools closed down for three weeks. In addition, there was considerable variation in the apparent level of detail and accuracy of those canteen checklists which were returned on both occasions. A further problem was that the reasons for any changes in food items offered and quantities sold could not be determined on the basis of the checklist alone, and additional questioning of each canteen manager would have been required, which was not feasible. Changes could have occurred in many schools because of factors besides the Heartbeat Awards intervention, and information from other sources suggested that this was in fact the case, with the main factor being seasonal changes influencing patterns of both demand and supply.

While the canteen checklist itself proved to be an unsuccessful data collection strategy, the additional questions about changes in the school canteen which canteen managers were asked to complete on the second occasion were useful. The responses of the eight canteen managers who completed and returned these questions, and an additional four canteen managers who were asked the questions by the author over the telephone, are

considered in combination with responses to the second questionnaire from the teacher representative in each school in (d) below.

(d) Results of second questionnaire for teachers and canteen managers.

As stated above, this section will outline the results of the second questionnaire obtained from 12 canteen managers (including four interviewed over the telephone) and 12 teachers. The lower response rate for the second questionnaire from teachers (down from 16 to 12) made comparing their responses as a group to the same questions in the first questionnaire difficult, and meant analysis of change had to occur on an individual basis. Like canteen managers, the lower response rate for teachers in the second questionnaire was influenced by the fact that the questionnaires were sent out just prior to the August holidays. The 12 completed teacher questionnaires were obtained only after written, and in some cases telephone reminders. Overall, 16 schools were represented in the results.

There was little change in teachers' ratings of food sold in the canteen, or their ratings of the consistency between what was sold in the canteen and what pupils were taught about healthy nutrition, with most perceiving a fair to high degree of consistency. A perceived increase in canteen manager knowledge of what pupils were taught in school about healthy nutrition was evident with almost half the teachers.

Discussions or meetings about the school canteen as a result of the seminar were reported to have been held in 13 of the 16 schools which were represented in the results of the second questionnaire. These discussions or meetings generally involved consideration of the foods presently offered by the school canteen, and potential improvements that could be made. A school canteen committee had been formed in eight of the 16 schools since the seminar. Respondents from only two of the 16 schools explicitly mentioned the three representatives who had attended the May 30 seminar as having had ongoing contact. Action on incorporating the school canteen into school policy was said to have been taken in seven schools, with four of these schools currently formulating a policy statement on the school canteen.

Canteen managers were asked to indicate which of a series of specific changes had been made in the canteen since the May 30 seminar, and to provide detail on what each of

those changes consisted of, while teachers were simply asked to identify changes that had been made in the canteen since the seminar. The majority of schools reported that the canteen had added new healthier products or increased the supply of existing healthy products since the seminar, and identified these. Half the schools reported having reduced the supply of some less healthy products, and just under half stated they had removed some less healthy products. Just under half the schools reported changing the display of food in the canteen. The posters had changed in half the schools since the seminar. No changes in hygiene or smoking practices had been made in most canteens, and it was clear that these were generally considered unnecessary.

The most common difficulty in making changes, which was encountered in a quarter of the schools represented, was resistance from one or more key individuals or a group. The canteen manager had either acted alone in making changes, or, more commonly, in conjunction with a teacher and representatives of other school groups. In addition to changes already introduced, a number of schools planned further changes, with the most common (in about a third of the schools represented) being upgrading the physical facility.

Nine schools reported that a parent representative had attended the introductory seminar, and in eleven a parent representative was reported to have been involved since the seminar. However, the continuity of this involvement was not clear, since a number of respondents commented in relation to this question that parents helped to run the canteen (four schools), or that parents had been involved as members of the Parent-Teacher Association or Board of Trustees (two schools).

In general, teacher predictions of how particular interest groups would react to changes in the school canteen had been confirmed. By far the most common response across groups was that they had been fairly or very supportive, as predicted. There was a clear trend that pupils were perceived by teachers to have been more supportive of changes than expected. Similarly, when canteen managers were asked to rate the reaction of pupils to changes in the canteen, most reported a fair to high degree of support from pupils.

The majority of canteen managers reported that changes in the canteen since the Heartbeat Awards seminar had had no effect on canteen sales. Only one manager reported a marginal drop in sales, and another stated that it was too early to tell. Two thirds of the canteen managers reported having contacted new food manufacturers since the Heartbeat Awards seminar, with delivery arrangements cited most commonly as a difficulty arising from this contact. One third of canteen managers planned to contact new manufacturers in future.

Both teachers and canteen managers were asked about their school's intentions regarding applying for a Heartbeat Award. At the time of questionnaire completion, two schools had applied for and received a Heartbeat Award, and three others had applied for an award and were waiting to receive it. A further eight schools intended to apply for a Heartbeat Award at some point, while the remaining two schools did not intend to apply for an award. The significance of a Heartbeat Award was most commonly seen as in raising the awareness of pupils about the importance that was placed upon healthy eating by the school. Other common elements in the significance of a Heartbeat Award were that it represented support for people's efforts to change the school canteen, and that it provided a boost for the school's public image.

The provision of only one Heartbeat Awards school canteen guidebook per school had resulted in difficulties in gaining access to the guidebook for some respondents. Most of those who had read it had found it fairly or very clear on what Heartbeat Awards was about, with slightly fewer finding it fairly or very clear on how to achieve a Heartbeat Award. Almost all who had read the guidebook found it fairly or very relevant to the situation in their school. A range of aspects were identified as having been most useful, with the suggestions for new food ideas most commonly mentioned. Nothing was identified as least useful, or as what there should have been less of. A number of minor suggestions for improvements to the guidebook were made.

(iv) Contribution of Pilot Phase Evaluation Findings to Project Decision-making

Overall, the evaluation results showed that there was considerable support for the concept of Heartbeat Awards among the Auckland secondary schools involved in the pilot

project. The response to the Heartbeat Awards introductory seminar was enthusiastic. It was clear that involvement in Heartbeat Awards had stimulated examination of the range of foods sold in school canteens, and had led to participants thinking about, talking about, and making changes in the canteen in most pilot schools. The nutrition focus of Heartbeat Awards clearly outweighed that of hygiene and smoking. While the actual nutritional impact of the various changes toward "healthier" food made by pilot schools was uncertain, Heartbeat Awards appeared to play a significant role in raising awareness and creating an interest and readiness to move in a healthy direction. No major changes to the Heartbeat Awards approach were identified as necessary.

(a) Factors influencing use of evaluation findings.

The evaluator consulted the Project Coordinator in all major evaluation decisions, and sent draft questionnaires to her for comment prior to these being finalised. Once evaluation results were obtained and analysed, they were generally discussed with the Project Coordinator verbally prior to the writing of a formal report.

There were several factors which influenced the use made of evaluation findings in the school canteen pilot project. A direct link between evaluation findings and decisions made by the Project Coordinator was not always apparent. One factor in this was the attitude of the Project Coordinator toward the evaluation when it began. The Project Coordinator made it clear to the evaluator early on that she viewed evaluation as a "necessary evil", something the Heartbeat New Zealand Committee deemed essential, but which she herself doubted would prove very useful. She felt the employment of a full-time evaluator was a case of "overkill", and that she would rather the money had been used to employ someone to help her implement the project. It was clear that the Project Coordinator felt that her project was being singled out unfairly for evaluation scrutiny. She was also concerned that asking canteen managers and teachers to complete questionnaires before attending the introductory seminar might discourage them from participating in the pilot. Several telephone conversations and letters between the evaluator and the Project Coordinator were necessary to obtain the latter's consent to the use of the first questionnaire.

The fact that the Project Coordinator initially viewed evaluation as independent of and not particularly relevant to project planning meant that she did not allow time for analysis, reporting and incorporation of evaluation results in the planned development and expansion of the project. The Project Coordinator did appear to change her perception of the role of evaluation after the evaluator obtained and reported on feedback on the introductory seminar. However, by this stage the timeframe for further development of the project had been set. Ideally decisions relevant to the wider expansion of the project would have been finalised only after the second set of evaluation questionnaires was analysed and reported upon. However, inadequate time was available for this, and unexpected delays in obtaining the follow-up questionnaires back from respondents worsened the situation.

An additional factor which influenced the contribution that pilot project evaluation findings made to project decision-making was the level of relevant skills and experience of the Project Coordinator. The Project Coordinator was a former Home Economics teacher who had actively worked to change the school canteen in the schools she had taught in, and she consequently had considerable practical experience and background knowledge relevant to the project. Her personal visits to the 20 Auckland schools which were to be involved in the pilot also alerted her to potentially important issues, which she addressed in her planning. In hindsight, it is clear that the school canteen Heartbeat Awards concept and operation was appropriate and well-grounded, as a result of the Project Coordinator's knowledge and experience of the situation in school canteens, with the result that the evaluation findings were generally in line with her expectations. Had the Project Coordinator not had the confidence in decision-making that her background provided, the evaluation findings may well have played a stronger role in influencing decisions.

These issues highlight the fact that the attitude of the Project Coordinator toward evaluation was an important factor in the school canteen pilot project. Formal evaluation findings were only one of a number of different influences upon project decision-making. Information and feedback obtained informally by project staff was also a major influence

on decision-making. However, within this context, the formal evaluation findings can be seen to have contributed to project decision-making in a number of ways.

(b) Implications of pilot project evaluation results.

The school canteen pilot phase evaluation results revealed that there was considerable diversity among schools, which the project needed to take into account. In some schools there was already a close relationship between the school canteen and the health programme, while in others there was little or no such relationship. Some schools needed to make very few or no changes in order to qualify for a Heartbeat Award, while others required substantial change. This finding reinforced the fact that to achieve the widest possible impact, the Heartbeat Awards project needed to offer something for schools at both ends of the spectrum, and led project staff to emphasise in subsequent communications that each school needed to work at its own pace, and that even small changes were worthwhile making.

The pilot evaluation results also showed that some aspects of the project model needed strengthening. For example, it was clear that the envisaged three person team in each school who would attend the seminar and maintain an ongoing role in facilitating changes was in fact not feasible in most pilot schools. The ongoing involvement of a parent representative, in particular, did not seem to occur routinely. As a result, more emphasis was placed on all three representatives attending the seminar and maintaining ongoing involvement in preliminary communications with schools. It was also stipulated by project staff that the parent representative must be a member of the Parent Teacher Association, or Board of Trustees, in order to maximise the likelihood of their continued involvement, and to hopefully increase support for a policy linking the school canteen with the health programme.

The pilot project confirmed the importance that the Project Coordinator had placed on linking the school canteen and the school health programme as part of the school policy. It was clear from the difficulties some participants described that the existence of a formal commitment to placing student health ahead of canteen profits was likely to make it much easier to introduce changes to the school canteen. Following the pilot project, the

criteria for achieving a Heartbeat Award were altered to include a requirement that each school applying for an Award must provide a copy of a written policy statement indicating that the school canteen was required to support the aims of the school health programme.

The pilot project evaluation results revealed the need for greater education of participants in some areas. For example, it became clear that canteen manager perceptions of what constituted "healthy foods" were often based on limited or inaccurate information. Reports were received of canteens stocking new products in the belief that they were healthier than existing alternatives, when in fact their composition was similar in terms of total fat, sugar, or salt to what they were replacing. Examples of such products were muesli bars, carob bars, quiches, muffins, and potato crisps cooked in polyunsaturated oil. Even where changes were made that were consistent with Heartbeat Awards' messages, there was often misinformation about the nutritional reasons behind this. For example, some respondents thought that milk and pure fruit juices were healthier than soft drinks because they contained substantially fewer calories. In fact, the reason Heartbeat Awards recommended the availability of milk and pure fruit juices was that unlike "empty energy" soft drinks, these substances, while generally not substantially lower in calories, also contribute nutrients to the diet. The need for additional nutrition education was addressed in future introductory seminars, and also in the Heartbeat Awards newsletters and "Nibbles Packs" which were sent out each term to schools which had attended an introductory seminar, as the project was implemented nationally.

The evaluation results helped answer queries which arose during the course of the pilot. For example, an issue which emerged early in the pilot project was that demand for receipt of Heartbeat Awards was much slower than had been anticipated by the Project Coordinator based on her knowledge of the situation in the pilot school canteens. This led to suspicions that, while healthy changes were supported, there was actually little interest in the Awards system itself. This was not confirmed by the evaluation results, however, which found that the majority of pilot schools expressed an intention to apply for a Heartbeat Award at some point.

Some commonly held assumptions relevant to changing school canteens were identified and tested through the evaluation results. For example, a number of participants expressed the view that pupils were not interested in buying healthy products, and that if healthier products were stocked, the canteen would lose profit as a result of lower demand. The evaluation results showed that pupils had generally been supportive of changes, and in almost all schools which had made changes, no effect on canteen sales was apparent. Project staff were able to use these findings in future seminars to allay fears of profit losses as a result of changes, in conjunction with stressing the importance of marketing new products to achieve sales.

The evaluation results provided project staff with feedback as to the relevance and usefulness of project resource materials, and as a result, minor modifications were made to these resources prior to their wider use. For example, although feedback on the school canteen guidebook was generally very positive, the need was identified for a greater degree of multiculturalism in its content, which was addressed by project staff. The feedback also identified what aspects were found most valuable by different groups of participants. For example, it was clear that canteen managers particularly valued practical ideas and suggestions for new food items, and this finding was reflected in decisions about the content of the school canteen newsletters and Nibbles Packs.

The Project Coordinator's emphasis on the importance of working with manufacturers and suppliers of school canteen products was confirmed by the evaluation results. A number of canteen managers reported problems in identifying and obtaining alternative products from suppliers. Choice of products was restricted for many schools because only some suppliers were willing to deliver to the school. Those suppliers who were prepared to deliver to schools often stipulated that a minimum quantity of goods must be ordered, and these quantities were often too large for school canteen purposes. The Project Coordinator was instrumental in the establishment of a distribution company supplying products to school canteens, called School Canteen Distributors Ltd. An Auckland entrepreneur heard of the school canteen initiative shortly after the introductory seminar, and with the Project Coordinator's assistance, achieved financial help from a

producer board to set up a business supplying a wide range of school canteen food products which complied with the Heartbeat Awards criteria. The Project Coordinator also worked with major food manufacturers to increase the range of food products offered to schools, improve the product distribution system, achieve competitive pricing of healthier alternatives for school canteens, alter preparation and cooking techniques, and alter product composition to lower fat, salt and sugar content.

2. Wider Implementation Phase

(i) Overview of Project Events

Wider implementation of the school canteen Heartbeat Awards project began during the third school term of 1989. Wider implementation of the project followed the basic model used in the Auckland pilot, except that recruiting new schools in other areas was done by mail rather than personal approach by project staff. Wherever possible, the Project Coordinator enlisted the help of workers in the local area (e.g., Public Health Nurses, Health Educators, Community Dietitians) with an interest in nutrition, who were prepared to coordinate activities (e.g., seminar arrangements). In addition, the project began to include intermediate as well as secondary schools where there was a demand for this. As outlined in Chapter Three, by the end of 1989, 105 schools had attended a Heartbeat Awards introductory seminar. A Project Assistant was appointed to work with the Project Coordinator in Auckland in March 1990. In the second term of 1990, a different approach to the introductory seminar, called an EXPO, was trialled in Auckland to establish whether it was possible to cater for a larger number of schools, comprising both new schools and schools already involved in the project, at one event. Following the trial, the EXPO approach was modified and adopted for use. During 1990 seminars or EXPO's were attended by 329 schools, meaning that by the end of the research period the project had involved 434 schools, of whom 59 had received Heartbeat Awards. School canteen newsletters and Nibbles Packs were distributed to participating schools each term, and the Project Coordinator's involvement with manufacturers of products used in school canteens continued.

(ii) Overview of Evaluation Activities and Summary of Main Findings

Once wider implementation of the project began, the author's role changed from the intensive evaluation input provided during the pilot phase, to a more detached consultative role, only providing intensive evaluation input where new aspects of the project warranted this (e.g., the trial EXPO). The author met with the Project Coordinator on a regular basis, usually once every four to six weeks, to discuss progress in the project, and identify and advise on any issues relevant to evaluation. An exception to this was a period of three months in late 1989 and early 1990 when the Project Coordinator was on leave. From early 1990, in line with the framework for evaluation of Heartbeat that is outlined in Chapter Six, the Project Coordinator was encouraged to view evaluation as a joint responsibility of herself and the evaluation team, rather than solely the responsibility of the evaluation team, as had previously been the case. Five areas of evaluation input during the second phase of the school canteen Heartbeat Awards project are outlined below.

(a) Advice on monitoring and information collection.

During March 1990, the Project Coordinator sought advice from the evaluator on obtaining information from schools which had participated in a Heartbeat Awards seminar. Once the project was implemented more widely, there was no mechanism in place for finding out what was happening in those schools which had attended seminars but had not applied for an Award. A combination of basic information obtained at the seminar or EXPO, and a follow-up questionnaire some time afterward was used to obtain ongoing monitoring information from schools. The Project Coordinator and Project Assistant drafted a questionnaire entitled "How is progress in your school canteen?". The evaluator and Project Coordinator also discussed procedures to obtain a basic level of information from all schools at the time of their attendance at the introductory seminar or EXPO, which would remove the need to obtain this information at a later stage.

In August 1990 Heartbeat Awards project staff began preliminary investigation into the feasibility of extending the project to cover boarding schools. An interview schedule was used to obtain information about the current situation in boarding schools

which could be used to plan their involvement. Based on the information obtained from boarding schools it was decided that they should be considered within the workplace cafeteria rather than school canteen component of Heartbeat Awards. No further action occurred in the boarding schools area during the research period.

(b) Evaluation plan.

An evaluation plan was formulated for the school canteen component of the Heartbeat Awards project in mid-1990. The formulation of evaluation plans for all Heartbeat projects was recommended by the evaluation team in March 1990, as part of the framework for overall evaluation of the Heartbeat programme (see Chapter Six). The format for the evaluation plans was developed by the evaluator and set out the key features of the project, its history and current status, relevant Heartbeat programme objectives, project objectives, strategies and targets, previous evaluation activity, and proposed future evaluation activity. The evaluation plan for school canteens (see Appendix 7) was developed jointly by the Project Coordinator and evaluator.

(c) Manufacturers and suppliers.

The evaluation team considered the Project Coordinator's work with manufacturers and suppliers of school canteen products to be an important aspect of the Heartbeat Awards project that should be recognised and strengthened. The strategy was innovative, focusing as it did on changing environmental factors influencing foods sold in school canteens (e.g., price, promotion and availability of products). The evaluation team considered that the work of the Project Coordinator in this area was a useful direction for the Heartbeat programme to develop in, and could provide a valuable model for other health promotion programmes to follow. The second evaluation report to the Heartbeat New Zealand Committee contained recommendations that the work with manufacturers and suppliers of food products should continue, and that consideration should be given to employing additional project staff to allow the further development of this area. The evaluator also encouraged the Project Coordinator to keep records and fully document her activities with manufacturers and suppliers, which had not been occurring. This would enable the work to be written up as part of the programme record so that others could benefit from her

experience. As a result, the Project Coordinator established a manufacturers file with a standard form for recording dealings with each firm, and began to keep records of all meetings and discussions and their outcomes. It was intended that the evaluator and Project Coordinator would write a joint publication on the work with manufacturers and suppliers, as part of process evaluation of Heartbeat, but this did not occur during the research period.

(d) Trial school canteen EXPO.

During May 1990 the school canteen Heartbeat Awards Project Coordinator consulted the evaluator about planning for a trial school canteen EXPO, to be held in Auckland on July 12 1990. The need for an altered approach to the introductory seminar for school canteens arose from the need to cater for both new schools and schools which were already involved in the project, in areas where an introductory seminar had previously been held. The EXPO was planned as a promotional event involving those with a role in decision-making about food and nutrition in schools. The five hour EXPO would feature continuous workshops, food displays, samples, tasting, posters, brochures, product information, distribution details, and nutrition information, relating to foods sold in school canteens.

The evaluator and Project Coordinator worked through the new evaluation plan format to develop objectives for the trial EXPO, and identify appropriate procedures for evaluating it. The objectives of the trial EXPO were identified as follows:

1. To maintain the interest and motivation of those schools already involved in the school canteen project, and to update and extend the information provided to them through their involvement in the project thus far.

2. To enable schools which have expressed interest in becoming involved in the project but have not had the opportunity of participating in an introductory seminar to do so.

3. To generate interest in the Heartbeat Awards school canteen project and recruit schools which are presently not involved in the project.

It was decided that evaluation of the trial EXPO would involve four aspects. Project staff would monitor staff time and project money involved in the EXPO, keep

records of EXPO attendance, and track the progress of schools attending the EXPO in conjunction with existing project monitoring procedures. The evaluator would develop an interview schedule for telephone interviews with a sample of EXPO participants, with the interviews themselves to be shared between the evaluator and project staff. It was planned that the telephone interviews would be conducted with both schools that were already involved in the project, and new schools. It was aimed to interview 30 respondents, comprising the canteen manager and teacher representative of 15 randomly selected schools.

After monitoring resource input to the trial EXPO, project staff decided that events on a similar scale would not be feasible in centres outside of Auckland. It was decided that future EXPO's would need to be run on a smaller scale, involving a seminar for new schools, and a workshop for existing schools in each area, rather than the five workshops which the trial EXPO had involved. Attendance figures kept by project staff showed that of the 130 secondary and intermediate schools invited to the trial EXPO, 140 representatives of 65 schools attended the EXPO. Thirty-four of these were schools which were already involved in the Heartbeat Awards project, and 31 were not. Twenty food manufacturers provided displays at the trial EXPO. The results of tracking the progress of schools involved in the trial EXPO were not available by the end of the research period.

The plan for selecting and conducting telephone interviews with a sample of 30 EXPO participants was not fully implemented. The evaluator was on conference leave at the time of the trial EXPO, and discussed with the school canteen Project Assistant over the telephone before she left the way that respondents should be selected from the list of participants, so that the Project Assistant could begin interviewing respondents within a few days of the event. However, there was confusion over these instructions, with the result that the sample was not randomly selected, and was not limited to teachers and canteen managers. In addition, fewer interviews were conducted than originally intended. The sample that was eventually obtained comprised 19 respondents from 13 schools, and included teachers, canteen managers, other school staff, and parent representatives.

Despite the problems that occurred because of the evaluator's absence, useful feedback was obtained from participants about the EXPO. Overall, the EXPO was considered by participants to have been very well organised, with high quality presentations. People were particularly impressed with the manufacturers' display in the main hall, and appreciated seeing the wide range of food products on display and sampling them. New food ideas were frequently mentioned as a major benefit of the EXPO. A number of people commented that they were pleased to find a supplier (School Canteen Distributors) who would supply everything they needed at a reasonable price, and in small quantities if necessary.

The telephone interview results indicated that in terms of participants' response to the trial EXPO, it could be judged a success. Participants were very enthusiastic about what they had seen and heard at the EXPO, and it appeared to fulfill its major objectives, of recruiting and briefing new schools, and maintaining the motivation and commitment of schools already involved in the project. The trial EXPO provided good information for Heartbeat project staff about what could realistically be provided in other centres in the future, and this information was applied in their planning of future EXPO's.

Section 2: Formative Evaluation Input to Heartbeat Awards in Workplace Cafeterias

1. Pilot Phase

(i) Overview of Project Events

When the author became involved in the Heartbeat programme the workplace cafeteria component of Heartbeat Awards was still in the early planning stages.

The objectives of the workplace cafeteria component of Heartbeat Awards were defined in May 1989, along similar lines to the school canteen component, as follows:

1. To have available in all workplace cafeterias food choices that meet the National Nutrition Guidelines.
2. To identify food choices that meet these criteria.
3. To actively promote the provision of a smokefree environment in workplace cafeterias.

4. To achieve higher standards of food hygiene in all workplace cafeterias.

5. To identify workplace cafeterias which meet these objectives.

The same three focus areas of food choices, non-smoking and hygiene were identified, with similar criteria to be met. In the area of food choices, the criteria required that healthy alternatives be available (e.g., wholemeal or wholegrain bread products, salad and non-fried vegetables, lean meat, fish and poultry, fresh fruit, milk, water and fruit juice), and that food items meeting these criteria be identified as Heartbeat Awards choices in some way. The food hygiene criteria were that the cafeteria manager and at least 50 % of the cafeteria staff were required to have completed a basic course in food hygiene, and that any required health inspections of the cafeteria must be current. To meet the non-smoking criteria, there was required to be a policy within the workplace of providing a smokefree area in the cafeteria, and steps taken to implement this policy.

Unlike the school canteen component of Heartbeat Awards, where the Auckland-based Project Coordinator worked largely independently, there were several Heartbeat staff involved in the planning and development of the workplace cafeteria component. A Christchurch-based Project Coordinator took responsibility for overall coordination, but she worked closely with the part-time public relations consultant in Christchurch till mid-1989. An existing National Heart Foundation dietitian who had experience of working with catering chains was given responsibility for implementing the project in the Auckland area from an early stage. The first half of 1989 was spent by project staff finding out about the situation in workplace cafeterias, and consulting with a range of relevant groups as to the best means of implementing the project (e.g., dietitians, Occupational Health Nurses, Health and Safety Co-ordinators, union representatives, catering chains, cafeteria managers and staff).

It was decided to pilot the workplace cafeteria project in Auckland and Christchurch, and to include both cafeterias which were run by a catering chain (e.g., Spotless Catering, Fisher Catering), and those run by independent operators. The purpose of the pilot project was to establish a process which could be used long term in different

situations. Project staff recruited 10 workplaces to participate in the Christchurch trial, and 15 workplaces for the Auckland trial. Recruitment of workplace cafeterias was carried out largely by mail and telephone contact with Occupational Health Nurses and catering firms.

Introductory seminars were held on August 21 and 23 1989 in Christchurch and Auckland respectively. The format and content of these seminars was similar to that of the school canteen introductory seminars, except that there was no input from manufacturers. Three representatives from each workplace were invited to the seminar, comprising the cafeteria manager or supervisor, a health representative (e.g., Occupational Health Nurse), and a workplace representative (e.g., Personnel Officer, union delegate). These three representatives were termed the "assessment team" for each workplace, as they would be responsible for assessing whether the cafeteria complied with the Heartbeat criteria, and if so, applying for an award. Representatives of other interested groups were also invited to the seminar, including the Employers' Association, Council of Trade Unions, and Area Health Board Health Development Units.

Two months after the introductory seminar, workplace pilot participants were invited back to a follow-up session to provide feedback on the project to Heartbeat staff. Follow-up sessions were held in Auckland on October 30, and Christchurch on November 6. Decisions regarding the wider implementation of the project were made following these sessions.

(ii) Overview of Evaluation Activities and Summary of Main Findings

(a) Planning meetings.

The development of the workplace cafeteria component of the Heartbeat Awards project differed from that of the school canteen component in that a team approach was adopted, with regular team meetings, and ongoing consultation with team members on decisions. The evaluator was regarded as a team member, and received all correspondence and planning documents, as well as participating in general project planning meetings and being consulted on evaluation issues in particular. Five team meetings were attended by the evaluator during 1989.

(b) Questionnaire for Occupational Health Nurses.

To obtain background information relevant to project planning, the Project Coordinator developed a questionnaire for Occupational Health Nurses in March 1989. Questions were asked about the patronage and management of workplace cafeterias in the Occupational Health Nurse's area, whether health-related activities or promotions had occurred in the past in the cafeteria, which parties would need to be involved in making decisions about any changes to the cafeteria, and what the existing situation was regarding food choices, non-smoking and hygiene in the cafeteria. The evaluator was asked to comment on this questionnaire soon after commencing her involvement with the project. The questionnaire was rewritten and extended by the evaluator, and these changes were agreed upon by the Project Coordinator, who administered the questionnaire and collated the results, with advice from the evaluator. One of the uses of the information obtained was to identify workplace cafeterias in Auckland and Christchurch which were suitable for inclusion in the pilot project.

(c) First questionnaire for cafeteria managers.

Following discussions between the Project Coordinator and evaluator, it was decided that a more focused approach to information collection would be taken in the workplace cafeteria pilot project than had been the case in the school canteen pilot project. It was decided that only cafeteria managers would be asked to complete a questionnaire before and sometime after the Heartbeat Awards intervention. The first part of the questionnaire consisted of a food items checklist, similar to that used in the school canteen pilot questionnaire. The second part of the questionnaire asked directly about compliance with Heartbeat criteria in the three focus areas of food choices, non-smoking and hygiene practices (see Appendix 8).

Cafeteria managers participating in the pilot project were sent a first questionnaire in early August 1989 and asked to complete it and bring it with them to the introductory seminar. Not all did so. Of the 25 Christchurch and Auckland workplaces involved, first questionnaires were eventually obtained from 19 cafeteria managers.

The results of the first questionnaire showed that none of the 19 workplaces represented complied with all the Heartbeat criteria at the time of questionnaire completion, although several missed out by only one or two criteria. In terms of the food choices criteria, the availability of wholemeal or wholegrain bread and other products, fresh fruit, and unsweetened fruit juice were met by most cafeterias, while fewer cafeterias met criteria relating to the availability of alternatives to fried or roasted foods, low fat milk, and low fat salad dressing and mayonnaise.

Questions about food hygiene training revealed considerable variation between workplaces as to how many staff had received such training. About one third of the cafeterias met the Heartbeat criterion that 50% of cafeteria staff should have completed a basic course in food hygiene. In addition, nine workplace cafeterias were required to be inspected by a health agency, and about half of these had been inspected within the last twelve months. About half the cafeterias complied with the Heartbeat criterion that they make provision for a smokefree area within the cafeteria.

In addition to determining the extent of compliance with Heartbeat criteria, the first questionnaires provided some useful background information for project staff about the characteristics of workplace cafeterias in the three focus areas. For example, the questions relating to food choices provided background information on patterns of food use by workplace cafeterias (e.g., how often fried and roasted foods were actually served in most cafeterias). They also suggested that the criteria for provision of wholemeal and wholegrain products and fresh fruit could be made more rigorous, since almost all cafeterias met these criteria before exposure to the Heartbeat Awards project.

The questions relating to hygiene training included finding out how many people worked in each cafeteria. It was found that staff numbers ranged from 1 to 13, with a mean of six people. The hygiene questions also helped clarify for project staff the type of food hygiene courses attended by cafeteria workers (e.g., technical institute-based, Department of Health courses).

The questions on smoking revealed how many cafeterias sold cigarettes, how many provided ashtrays on tables, and the extent of use of signs to discourage smoking in the

cafeteria. There was more support than project staff expected from cafeteria managers for the provision of a smokefree area in the cafeteria, and this suggested that Heartbeat could increase its requirements in this area (e.g., ceasing or reducing the sale of cigarettes in the cafeteria) to encourage further change.

The first questionnaire also identified some potential problems with the wording and content of some of the Heartbeat criteria. For example, it was not clear whether respondents included deep fried potato chips in the category of fried and roasted vegetables. It was decided to address this issue in the follow-up sessions, to find out what respondents had in fact understood by the wording of these criteria. It also became apparent that clarification was required as to what was meant by the phrase "basic course in food hygiene". While the intention of project staff was that this refer to a formally organised course run by a recognised authority, the responses showed that this was not clear to all respondents, some of whom cited on-the-job or other informal training. The criterion that where a cafeteria was required to be inspected by a health agency, this inspection should be current, was also found to be problematic. A number of inspecting agencies were mentioned, and the period covered by such inspections was not clear. The appropriateness of this criterion also came into question because it was not clear whose responsibility it was to ensure that such inspections were current (i.e., the cafeteria manager, or the health agency charged with inspecting the cafeteria).

Based on these findings the evaluator recommended that the whole list of workplace cafeteria criteria be examined after the follow-up session and analysis of the second questionnaire, to enable adjustments to be made prior to wider implementation, and that this examination should take into account the wording, feasibility, relevance and difficulty level of each criterion.

(d) Seminar feedback sheet.

The planning of the workplace cafeteria introductory seminars took into account the findings of telephone interviews with school canteen introductory seminar participants reported earlier in this chapter. Each person attending the seminar was asked to complete and return the feedback sheet developed folowing the school canteen pilot phase. Eighteen

feedback sheets were returned by Christchurch seminar participants, and 16 by Auckland seminar participants, comprising approximately half of those attending each seminar.

The feedback sheets showed that most participants had found the seminars to be interesting, relevant and clear, and thought it likely that their cafeteria would apply for a Heartbeat Award at some stage. A variety of positive comments were made, and some minor negative features were identified, including difficulty hearing speakers, poor air conditioning, and insufficient material to take away.

Based on participant feedback and her own observation of each seminar, the evaluator made suggestions for changes that could be made in future seminars, and these were acted upon by project staff.

(e) Follow-up session.

The evaluator played a major role in planning the structure and content of the two follow-up sessions for workplace cafeteria pilot project participants, which were held in Auckland and Christchurch. The purpose of these sessions was for Heartbeat staff to obtain detailed feedback on the project, and to provide an opportunity for pilot project participants to share ideas and information with others. All those who had attended the introductory seminars were invited to the follow-up session in each city.

The sessions were organised so that Heartbeat staff could obtain information from the assessment team of each workplace, each occupational group represented (i.e. cafeteria managers, health representatives and workplace representatives), and from those workplaces which had already, and had not, applied for a Heartbeat Award. The two hour session alternated between large group and small group discussion of prepared questions. Participants were asked to discuss what action had been taken in their workplace since the introductory seminar, what problems had been experienced in taking this action, what positive outcomes there had been, and what the reaction to changes had been from various groups. Members of the assessment team from each workplace were asked what their role had been and how much contact they had had with other members of the team. Specific feedback was sought on the usefulness or otherwise of the resource kit and other Heartbeat materials which had been distributed to each workplace at the introductory seminar. Those

workplaces which had already applied for a Heartbeat Award were asked how the assessment process had gone, whether their expectations of Heartbeat Awards had been met, and what effect their involvement had had. Those who had not applied for a Heartbeat Award were asked whether they intended to and what this would depend on, and also whether their expectations of Heartbeat Awards had been met.

Although attendance at both the Auckland and Christchurch seminars was low (only about one quarter of those invited attended), useful feedback was obtained from those who did attend. This feedback, combined with all other information available about the pilot was discussed at a meeting of project staff in Christchurch on November 7 1989, where decisions were made about the future form and direction of the workplace cafeteria arm of Heartbeat Awards.

(f) Second questionnaire for cafeteria managers.

The second questionnaire for workplace cafeteria managers was posted out in mid-October, and participants were asked to complete it and bring it along to the follow-up session. The second questionnaire was almost identical to the first, but requested more detailed responses in several areas. While the nineteen participants who had completed the first questionnaire were asked to complete the second questionnaire, only eleven second questionnaires were eventually returned, and several of these only after a number of written and telephone reminders. Five of the nineteen workplaces were eventually confirmed as having withdrawn from the pilot (mainly because of staff changes).

As was the case with the school canteen pilot, both the first and second questionnaires for workplace cafeteria managers contained a food items checklist, which was intended to show whether there had been any change in the type and quantity of foods sold as a result of the Heartbeat Awards intervention. The decision to use a food items checklist in the workplace cafeteria pilot was made before it was clear from the school canteen pilot evaluation results that this was unlikely to be a successful data collection strategy. The response rate for the second questionnaire was too low to allow useful comparisons across time to be made, and it was not possible to attribute any changes to the Heartbeat Awards intervention on the basis of the questionnaire alone.

For managers who completed both the first and second questionnaires, change was apparent for most of the criteria. For example, reported changes included provision of an alternative to fried or roasted meat by four cafeterias, provision of an alternative to fried or roasted vegetables by three cafeterias, provision of low fat milk by three cafeterias, provision of a low fat salad dressing by four cafeterias, provision of a smokefree area by four cafeterias, and increases in the number of staff having attended a food hygiene course in three cafeterias. When asked at the end of the questionnaire to list all of the changes that had been made in the cafeteria as a result of involvement in Heartbeat Awards, nine cafeteria managers reported having increased the range of bread products, eight reported having substituted lower fat products in the preparation or presentation of food, and six reported having increased the range of fruit and vegetable dishes available.

Although the results of the second questionnaire were of limited usefulness, other information made it clear that the Heartbeat Awards workplace pilot project had achieved its objectives to some extent. At the time of completion of the first questionnaire, none of the nineteen cafeterias complied with all of the Heartbeat criteria. In contrast, at follow-up seven cafeterias had successfully applied for a Heartbeat Award, and one other had been asked to tighten up its smokefree area provisions, in order to qualify.

(iv) Contribution of Pilot Phase Evaluation Findings to Project Decision-making

Overall, the evaluation findings for the workplace cafeteria pilot project suggested that there was sufficient support for the concept to warrant its wider implementation, and that the model adopted for running the project was generally sound. Less detailed evaluation findings were obtained for the workplace cafeteria pilot project than the school canteen pilot project. Despite this it was apparent that the project had acted as a stimulus for change in many of the participating cafeterias.

The workplace cafeteria pilot project was characterised by close collaboration between the Project Coordinator, the other staff involved, and the evaluator. The Project Coordinator perceived the evaluation as an important source of information for planning and decision-making. This reflected her own background, since in previous positions she had been required to undertake formal planning and evaluation procedures herself, and had

found these valuable. In the workplace cafeteria pilot project, the evaluator was offered a brief slot during the introductory seminar to explain the evaluation procedures to pilot project participants. The Project Coordinator structured opportunities to examine evaluation findings and plan ahead accordingly into the project development process. A meeting was held on November 7 1989 to discuss the evaluation findings relating to the pilot project and plan the wider implementation of the project. Although the results of the second questionnaire for cafeteria managers were not available at the time of this meeting, project staff considered they had sufficient information, and that it was essential, to begin planning the wider implementation of the project at this time.

As a result of the evaluation findings and other information obtained by project staff, changes were made to the criteria in each of the three focus areas of; food choices, hygiene and non-smoking. For example, it was agreed that several of the criteria relating to food choices that the evaluation findings had identified as ambiguous needed to be reworded to make them clearer. It was agreed that a clearer definition was required of what constituted a "basic course in food hygiene". Project staff agreed on action to be taken to identify the full range of courses available, and decide upon minimum requirements to establish as the Heartbeat criteria. It was decided that inspection by a health agency should be deleted, principally because this area was seen as likely to be outside of the cafeteria manager's control. The criteria relating to provision of a smokefree area within the cafeteria was also reworded, and what had been suggested steps in implementing a smokefree area (e.g., use of smokefree area signs, removal of ashtrays, no cigarettes for sale in the cafeteria) were changed to become requirements for a Heartbeat Award.

Several important issues were identified which needed attention prior to wider implementation of the project. A number of workplaces in the pilot project identified problems in availability of and access to food hygiene training courses. It was agreed that while Heartbeat could not take responsibility for providing food hygiene training courses, project staff should encourage existing agencies providing such training to make their courses more flexible and accessible, and action was planned to do so. Difficulties were

also identified in the pilot project in terms of how food choices complying with the Heartbeat Awards criteria were to be identified. Heartbeat had printed and made available to cafeterias Heartbeat food stickers to be attached to appropriate food choices. However, it became clear that there was considerable potential for these stickers to be used inappropriately, and that Heartbeat could exercise little control over this. Several options for dealing with this were discussed, including discontinuing the use of the stickers, but it was eventually decided that a set of guidelines would be developed for use of the stickers, which participating cafeterias would need to agree to comply with.

The evaluation findings indicated the need for some revision of the content of the handbook for caterers, and indicated that a regular newsletter, as was used in the school canteen component of Heartbeat Awards, would be of value to most participants. Changes to the introductory seminar were agreed upon, based on the feedback obtained from pilot participants. The November 7 meeting also examined projected workloads of project staff, and agreed that an increase in staffing levels should be requested. A need for greater administrative support was identified, as was the need for greater access to National Heart Foundation computer facilities. It was agreed that a further planning meeting would be held on December 6, by which time changes were to be actioned, and targets were to be set for the following twelve months.

Like the school canteen pilot project, in hindsight it can be seen that one reason the workplace cafeteria Heartbeat Awards model required only minor modifications prior to wider implementation was that the concept and operation were well-grounded to start with. This can be partly attributed to the fact that, because it was implemented after the school canteen pilot project, the workplace cafeteria pilot project was able to benefit from the information obtained through the former. In addition, while the Project Coordinator had no prior first-hand experience in changing workplace cafeterias, the early development of the workplace pilot project was characterised by extensive consultation with relevant groups, which helped ensure the pilot project was appropriate and relevant. Project staff commented that in general, the evaluation findings confirmed features about the project that they had become aware of over the course of the pilot project.

2. Wider Implementation Phase

(i) Overview of Project Events

The first few months of 1990 were used by project staff to finalise resource materials for the project (e.g., promotional brochure, "Information for managers" booklet, cafeteria manager's folder, smokefree materials), plan the first newsletter, and establish project monitoring procedures. A Project Assistant was appointed in March 1990, and worked with the Project Coordinator in the Christchurch office of the National Heart Foundation.

Based on experience gained in the pilot, it was agreed that an important feature of the wider implementation of the project should be preliminary meetings in each new region between Heartbeat staff and representatives of a range of relevant groups (e.g., Occupational Health Nurses, catering companies, Employers Association, union representatives). These meetings would be used to obtain information on regional characteristics, existing networks and resources, and likely support for the Heartbeat Awards project. Occupational Health Nurses and catering companies would be asked to recruit workplaces in each region, and once the required number of workplaces had agreed to participate, an introductory seminar would be held.

Between March and December 1990, preliminary meetings were held in ten cities. Heartbeat Awards introductory seminars began in early June 1990, and by December 1990, 18 seminars had occurred throughout the country. During 1990, two workplace cafeteria Heartbeat Awards newsletters were distributed to companies which had attended a seminar, and a "Seasonal Snippets" pack of practical hints for cafeteria managers was distributed in November 1990. As stated in Chapter Three, 218 workplaces attended Heartbeat Awards introductory seminars during 1990, and by the end of December that year, 60 workplaces had received Heartbeat Awards.

(ii) Overview of Evaluation Activities and Summary of Main Findings

As had occurred in the school canteen component of Heartbeat Awards, once the workplace pilot project was completed, the evaluator's role changed from providing intensive ongoing evaluation input, to providing consultation as requested by project staff.

The Heartbeat Project Coordinator continued to send the evaluator regular information on progress in the project's development, and asked for input on particular questions or issues as these arose. In addition, progress in the project was discussed at the regular Project Coordinators' meetings, which the evaluator attended. Three areas of evaluation input during the second phase of the workplace cafeteria Heartbeat Awards project are outlined below.

(a) Advice on monitoring and information collection.

The Project Coordinator began developing procedures for obtaining monitoring information from participating cafeterias in early 1990, and asked for assistance from the evaluator in terms of identifying relevant information to be obtained, and ways of obtaining this information. Information was to be gathered from workplace cafeteria managers at the stage of introductory seminar attendance. A form for this purpose was developed by the Project Coordinator which sought information about each cafeteria prior to seminar attendance (e.g., type of workplace, number of employees, type of cafeteria meal service, number of cafeteria staff, average number of customers daily, compliance with Heartbeat criteria). A second questionnaire was attached to the assessment form completed by each workplace seeking a Heartbeat Award, which sought information on the changes which had been made in order to achieve a Heartbeat Award (e.g., attendance at food hygiene training courses, changes relating to smoking and food choices, parties involved in Heartbeat Awards changes, whether and how cafeteria users were to be informed of Heartbeat Awards). In addition, project staff subsequently contacted workplace cafeterias which had attended an introductory seminar and had sought no further contact with Heartbeat Awards, to find out whether any action had occurred, and to offer assistance if appropriate.

The evaluator's role in establishing monitoring procedures involved discussing options with the Project Coordinator, and offering suggestions on how the draft questionnaires formulated by the Project Coordinator could be improved. The evaluation team also offered advice as to which data management and word processing packages would be suitable for the purposes of the Heartbeat Awards project.

(b) Evaluation plan.

An evaluation plan was formulated for the workplace cafeteria component of Heartbeat Awards in mid-1990, as recommended by the evaluation team for all Heartbeat projects in March 1990. The evaluator was involved in a planning session in which the project's objectives were revised, and collaborated with the Project Coordinator in completing the remainder of the evaluation plan. A copy of the 1990 evaluation plan for Heartbeat Awards in workplace cafeterias is contained in Appendix 9.

Section 3: Discussion

(i) Contribution of Evaluation Findings to Project Development

The major contribution of formative evaluation to development of the Heartbeat Awards project was clearly the evaluation input provided at the pilot stage of the project. The pilot studies attempted to answer three important questions: (1) was the proposed method of operation of the project workable in terms of existing staff levels?, (2) was there interest in and enthusiasm for this approach from the target groups?, and (3) what changes were reported as a result of participation in the project? The information-gathering and consultation activities that were involved in formative evaluation of the pilot phase of the project assisted in answering these questions.

More extensive evaluation information was obtained during the school canteen pilot project than the workplace cafeteria pilot project, but the findings were incorporated into decision-making in both areas of the project. The evaluation findings fulfilled a number of purposes. They provided important information on the extent of variability that existed in participating sites. They helped identify aspects of the project model that needed strengthening, and identified areas of confusion or misinformation among participants which should be corrected. The findings confirmed the importance placed by the Project Coordinators on seeking a policy commitment to relevant changes, and confirmed the importance of the emphasis they placed on addressing environmental influences upon change (e.g., access to and availability of healthier products in school canteens, hygiene training courses in workplace cafeterias). The evaluation findings helped answer queries

which project staff developed during the course of the pilot phase, and valuable feedback was obtained on the relevance and usefulness of the project resource materials that had been developed. The evaluation findings also identified and tested certain commonly held assumptions about the likely outcomes of making changes in school canteens and workplace cafeterias, which could influence participants' willingness to attempt to make such changes.

In the wider implementation phase, the contribution of evaluation to project development changed to that of a support role, where advice and guidance was provided as requested, and where information gathering procedures initiated by project staff were refined and improved.

It is difficult to judge how the Heartbeat Awards project would have developed if there had not been formative evaluation input as provided. The author's impression is that the project would probably have proceeded with reasonable success. This is based on the fact that Heartbeat Awards followed the general model of an existing project in the Heartbeat Wales programme, which had demonstrated success, and that the Project Coordinators either possessed relevant skills and experience, or conducted extensive consultation and fact-finding during the planning phase which ensured the project was well-grounded. However, if systematic evaluation had not occurred there would have been much less certainty as to the response of participants and the impact of the project at the pilot phase, when this information was most needed in terms of forward planning. The formative evaluation input helped ensure that project staff had access to a range of relevant information about the implementation of the project which resulted in a degree of fine-tuning of the project as it proceeded, that otherwise would probably not have occurred to the same degree.

While the workplace cafeteria Project Coordinator appeared to have the skills and motivation to conduct a basic level of formal evaluation herself if the evaluator had not been involved, the school canteen Project Coordinator did not appear to. Because of the evaluator's level of evaluation knowledge and skills, it can probably be assumed that the evaluation that was conducted was of a higher standard than if a specialist evaluator had

not been involved. An important role for the evaluator that emerged during the wider implementation phase, once Project Coordinators were involved in planning and carrying out monitoring and evaluation activities, was to improve the technical quality of data collection instruments developed by project staff.

The formative evaluation input that was provided had an important function in terms of helping to establish the credibility of the project in the eyes of Heartbeat administrators and funders. The fact that evaluation input was built into the development of the project from an early stage meant that project staff were equipped with information that allowed them to deal with challenges about the validity of the project. The evaluator observed over the course of time that the Heartbeat Awards project developed the reputation among administrators and funders of being well-planned and evaluated, which had implications in terms of both continuation of base funding for the project, and the allocation of additional resources when these were identified as necessary by project staff. What seemed to be important in this was not necessarily what the particular results of the evaluation had been, but the fact that the project had undergone a comprehensive and co-ordinated evaluation process during the pilot phase.

(ii) Evaluation Issues

A number of problems can be identified which occurred in formative evaluation of Heartbeat Awards, and it is useful to consider ways of avoiding such problems in future evaluation efforts. A lesson that was learned in the early stages of evaluating the school canteen pilot project was the importance of making sure that provision for evaluation is built into the timing for project development. If forward planning by project staff does not take into account the time necessary to obtain, analyse and report on evaluation findings, it is unlikely that these findings will be able to be utilised in decision-making at the stages when they are most relevant.

This point relates to a more general issue concerning the importance of orienting project staff to evaluation, in order to obtain their commitment and support for evaluation activities from an early stage. In the school canteen pilot project, the evaluator was faced with a Project Coordinator who initially did not see any value in formative evaluation of

her activities, and in fact perceived evaluation as a threat to what she was trying to accomplish. While not directly blocking evaluation activities, she did not facilitate them either. In contrast, the workplace cafeteria Project Coordinator had a positive perception of evaluation, and facilitated its occurrence. This illustrates the importance of the way in which evaluation of projects is introduced. In hindsight, it would have been useful for the evaluator to have held an introductory seminar on evaluation for all Heartbeat programme staff, to help establish the worth of evaluation, clarify the purpose and procedures of the different types of evaluation, define the roles of the evaluator and project staff in monitoring and evaluation, and provide an opportunity for staff to voice their concerns about evaluation and have these addressed, before any project-level evaluation was commenced. Although the school canteen Project Coordinator subsequently began to perceive the merits of evaluation, and eventually actively sought further evaluation input to her project, it may have been possible to avoid the problems which occurred at the start of the relationship if the evaluator's entry to the research setting had been handled differently.

There were obvious problems with completion of the food items checklist which was used in both the school canteen and workplace cafeteria pilots. It is clear that canteen and cafeteria managers were often not motivated to fill in the checklist, and even when it was completed, there were problems with the level of detail and accuracy, and with attributing any apparent change to Heartbeat Awards. These difficulties were compounded by a more general problem in data collection. The sample size involved was small to begin with, and the drop off in response rates that occurred made reliable before and after comparisons on anything but an individual site basis impossible. It was fortunate that data collection did not consist solely of the food items checklist, and that additional qualitative information was collected which meant useful results were still obtained. From this experience it became clear that questionnaires should be as brief and to the point as possible, especially where respondents are not highly motivated to complete the questionnaires.

A more general issue which is also relevant concerns the relative usefulness of the different data collection strategies used in evaluation of the Heartbeat Awards project. For

example, telephone interviews gave a higher response rate and were better for use with the small sample sizes involved. Although telephone interviews were more time consuming for the evaluator, better quality information was obtained from more respondents more quickly using this technique than was possible with the mail questionnaire approach. A further finding was that, contrary to project staff expectations, attendance at the follow-up sessions for pilot project participants was poor, despite good attendance at the introductory seminars. While project staff were able to obtain detailed feedback from those who did attend the follow-up session, numbers were so low that the feedback could not be considered to adequately represent the initial sample.

There are a number of more general methodological issues on which the evaluation of Heartbeat Awards could be criticised. First, evaluation of the impact of the pilot project on changes in the three focus areas was based entirely on self-report measures. This was partially addressed in the school canteen evaluation where an attempt was made to obtain information on changes from both canteen managers and teachers to establish the degree of convergence that existed between the responses of these two groups, which was generally high. While other strategies were considered during the planning of the evaluation, such as the use of photographic evidence, and unobtrusive observation by the evaluator, these were rejected for reasons of feasibility, in view of limits on resources and time available for the Heartbeat Awards evaluation. The predominant use of self-report measures was in line with the underlying philosophy of Heartbeat Awards, which relied entirely on self-assessment procedures.

A second issue concerned the focus of the Heartbeat Awards evaluation upon the perceptions and behaviour of canteen and cafeteria managers rather than the end-consumer of canteen and cafeteria products. Obtaining information directly from canteen and cafeteria customers about the effects of Heartbeat Awards upon them was not seen as a priority in evaluation of the pilot project. Since the primary focus of Heartbeat Awards was upon creating a supportive environment for health, the key project participants were regarded as those people in each organisation who would be primarily involved in making and implementing decisions about the food choices, hygiene, and non-smoking practices in

the canteen or cafeteria. This was based on the rationale that creating a supportive environment can be viewed as a necessary but not sufficient condition for individual behaviour change in end-consumers, in which case the extent to which the project impacted upon the cafeteria environment was appropriate as the primary focus of evaluation. An indication of behaviour change in consumers was sought by the questions relating to changes in sales figures following changes.

An important development in evaluation of Heartbeat Awards was the gradual change in the way evaluation was perceived, from being viewed as the sole responsibility of the evaluator in the early stages, to being viewed as a joint responsibility of Project Coordinators and the evaluator. This change was considered necessary because it became apparent that the level of intensive evaluation input that characterised evaluation of the pilot project could not be sustained during wider implementation, in the light of other competing demands for the evaluator's time. The development of evaluation plans for school canteen and workplace cafeterias was an important part of this transfer of responsibility, since the Project Coordinators were required to establish performance indicators/targets, against which they could assess their own progress, and were encouraged to view other evaluation activities as a joint responsibility. There were problems that accompanied this change, however, as was illustrated by the confusion by project staff over procedures for selecting and interviewing school canteen EXPO participants. In retrospect, it would have been helpful if, as part of the transition to joint responsibility for evaluation, the evaluator had provided project staff with some formal training in relevant areas of evaluation.

(iii) Health Promotion Issues

The Heartbeat Awards project was significant in health promotion terms, because it exemplified an attempt to (ultimately) create and support behaviour change in consumers, by altering environmental influences. A traditional health education approach to altering consumer behaviour in making food choices in school canteens and workplace cafeterias would have involved providing consumers with information about good nutrition, and urging them to use this in making food choices. The Heartbeat Awards

approach, however, was based on the premise that what people choose to buy and eat is strongly influenced by what is available, how much it costs, and how it is promoted. The three factors of availability, price and promotion of food choices were central to the Heartbeat Awards approach. Heartbeat Awards also embodied a recognition that to provide a health-promoting environment in school canteens and workplace cafeterias involves attention to other important influences upon health such as smoking and hygiene, as well as the nutritional value of the food available.

The emphasis of Heartbeat Awards on creating a supportive environment for health involved action at a number of levels. As stated above, from the point of view of consumers of canteen and cafeteria products, it involved making sure that healthy food choices were available and were attractively priced and promoted, and that other important influences upon health were attended to. To achieve this, a major emphasis of the project was upon educating and motivating those controlling the canteen and cafeteria environment, so that they would make changes in the three focus areas, and providing the incentive of achieving a Heartbeat Award to encourage them to do so. However, it was recognised that there were also important environmental influences on the behaviour of those controlling canteens and cafeterias, hence the additional emphasis on ensuring that a policy commitment was put in place supporting changes, and that access to healthier alternatives was improved where necessary.

Evaluation of the Heartbeat Awards project showed that there was support for the health promotion approach adopted among the target groups, that health-promoting changes were made in school canteens and workplace cafeterias as a result of involvement in the project, and that consumers were generally reported to be receptive to the changes made. The evaluation results also revealed that the Heartbeat Awards initiative reinforced an existing trend toward promoting health in schools and workplaces, and that it helped focus the efforts of people in these sites who were already working toward such change.

The development of the Heartbeat Awards project illustrates the value of having key programme staff in health promotion who possess practical skills and experience in relevant areas, and/or are prepared to consult widely with relevant groups as part of

planning such an intervention. The Heartbeat Awards project also illustrates the substantial influence that the particular background and skills of Project Coordinators can have on the direction and content of the project. For example, while the school canteen Project Coordinator worked extensively with manufacturers and suppliers of school canteen products, the evaluation team's recommendation that this work be extended to the workplace cafeteria component of the project was never actioned. This was principally because workplace cafeteria staff did not have the same interest and experience in the area of working with manufacturers and suppliers. Other than food choices, the aspect that received most development in the workplace cafeteria project was the availability of food hygiene training for cafeteria staff, which was not an emphasis in the school canteen component. It is also clear that nutrition received by far the greatest emphasis of the three focus areas in both projects, which reflected the nutrition backgrounds of both Project Coordinators. This was in contrast to the Heartbeat Wales Heartbeat Awards project, where food choices appeared to receive no more attention than hygiene or smoking, probably reflecting the implementation of the project by Environmental Health Officers, rather than nutritionists, in that programme.

To summarise, the Heartbeat Awards project of Heartbeat New Zealand aimed to promote healthy eating in a healthy environment, and was implemented in school canteens and workplace cafeterias from early 1989. Extensive formative evaluation input was provided during the pilot phase of the project, in the form of both information collection and feedback, and consultation. In collaboration with project staff, the evaluator coordinated the identification and collection of a range of information relevant to the development of the project. This included information on the situation that existed in school canteens and workplace cafeterias prior to the Heartbeat Awards intervention, the views and perceptions of project recipients about Heartbeat Awards, and the short term impacts of the project. During the pilot phase the evaluator was also closely involved as a participant in the project planning process, attending all major planning meetings, and providing advice and suggestions on a range of aspects of project design and

implementation. Evaluation activities during the pilot provided information that assisted in answering questions of project feasibility, appropriateness, and effectiveness. During the wider implementation of the Heartbeat Awards project, evaluation input to project development was less intensive, with the evaluator providing advice and guidance as requested, and refining and improving planning and information gathering procedures initiated by project staff. The evaluation input to Heartbeat Awards can be seen to have contributed to project development in a number of different ways, and the experience gained provides insights relevant to the development and evaluation of similar health promotion activities in future.

CHAPTER FIVE

FORMATIVE EVALUATION OF HEARTBEAT COMMUNITY PROJECT

This chapter outlines formative evaluation input provided to the Heartbeat Community Project by the evaluator during the research period. Section 1 describes evaluation activities and findings during an initial four month period of intensive formative evaluation input to the project. Section 2 describes the sequence of events and decisions in reorientation of the Heartbeat Community Project which occurred from October 1990 and led to the formulation of broadened objectives and strategies for the renamed Heartbeat Community Network project. Section 3 discusses the contribution of the evaluation activities and findings to project development, and the issues they highlight in terms of evaluation and health promotion.

The Heartbeat Community Project was already established when the evaluator entered the research setting in April 1989. The project was coordinated by the Senior Health Educator of the National Heart Foundation, who was based in Christchurch, and it operated through the National Heart Foundation Health Educators based in seven regional offices throughout the country.

Section 1: Intensive Formative Evaluation Input to Project

1. Identification of Evaluation Priorities

Initial discussions were held between the evaluator and the Senior Health Educator in May 1989 to familiarise the evaluator with the project, and to identify evaluation needs which should be addressed. Based on the Project Coordinator's description, it appeared that the project consisted of the delivery of one-off nutrition education sessions to groups from the community by trained "Heartbeat Leaders", under the auspices of the National Heart Foundation Health Educator in each region.

The evaluator found it difficult to obtain clarification from the Senior Health Educator as to the rationale for the project, what it actually consisted of, or its perceived contribution to the overall Heartbeat programme. It became clear that there was little

documentation of the project's origin or development. It emerged that objectives for the project had not been formally specified during planning, and monitoring information on the project's implementation throughout the country was also limited.

The Senior Health Educator indicated to the evaluator that her highest priority for evaluation of the Heartbeat Community Project was to assess whether long term behavioural change occurred in participants as a result of the intervention, and she suggested obtaining such information by following up participants twelve months after attendance at a nutrition education session. It was agreed that the evaluator would meet the Auckland National Heart Foundation Health Educator to discuss the project further, and would then formulate an evaluation strategy in conjunction with other members of the evaluation team.

The evaluation team agreed that it was important to obtain a clearer picture of the Heartbeat Community Project's origin and development, what it actually consisted of in practice, and how it fitted in within the broader Heartbeat programme. Outcome evaluation as suggested by the Senior Health Educator was considered inappropriate at this stage, both because of the lack of clarity about the project, and because it seemed unlikely that the intervention, which appeared to consist of a 60 minute discussion about healthy nutrition, could be expected, on its own, to lead to long term behaviour change among participants. The evaluation team considered that a much higher priority was to ascertain what an approach like the Heartbeat Community Project could be expected to achieve, and to set realistic objectives for the project accordingly.

In their June 1989 report to the Heartbeat New Zealand Committee, the evaluation team proposed that evaluation of the Heartbeat Community Project would concentrate on three areas initially. These areas were

1. Obtaining information on project implementation
2. Conducting a review of the research literature to ascertain the project's likely outcomes
3. Interviewing Heartbeat New Zealand Committee members to clarify their aims, objectives and expectations for achievement of the project.

Activity occurred in these three areas from June to September 1989, and the September evaluation report contained the findings in each area.

2. Formative Evaluation Findings

(i) Information on Project Implementation

(a) Origin and development of project.

The evaluator collated information on the origin and development of the Heartbeat Community Project from a range of sources, including meeting minutes, reports, correspondence, and further discussion with the Senior Health Educator. It emerged that the Heartbeat Community Project concept of Heartbeat Leaders had developed from the National Heart Foundation's earlier Heart Health Leaders programme, which in turn was modelled on the National Heart Foundation's cardiopulmonary resuscitation (CPR) programme, which had operated since 1978. The Heart Health Leaders programme was initially proposed by the Foundation's health education staff, as an extension of the CPR programme to cover lifestyle factors in the prevention of heart disease.

The Heart Health Leaders programme was initiated by the National Heart Foundation prior to the establishment of Heartbeat New Zealand, and was being trialled and developed as Heartbeat was in the early stages of being set up (late 1987 and early 1988). The Health Education Committee of the Foundation agreed in principle to the development of the Heart Health Leaders concept in March 1988, and guidelines for the recruitment, training and reimbursement of Leaders were developed. From June 1988 trained Heart Health Leaders began providing sessions on healthy nutrition for community groups in Auckland, under the name of "Eat to Beat", which was the National Heart Foundation's current nutrition campaign.

During 1988, however, the Heartbeat New Zealand Committee began its own negotiations with the Lifestyle Resource Centre of Auckland University to develop a Heartbeat community strategy. The Lifestyle Resource Centre proposed that a Heartbeat community strategy be developed utilising the National Heart Foundation Health Educators, and based on self-help healthy lifestyle kits which had been developed previously by the Centre. In areas other than Auckland, the development of the Heart

Health Leaders concept was put on hold during mid-1988 as these negotiations proceeded. The Lifestyle Resource Centre proposal was eventually withdrawn in October 1988, when agreement could not be reached between the Centre and National Heart Foundation Health Educators about details of the proposal. The Heartbeat New Zealand Committee agreed in December 1988 to proceed with the original Heart Health Leaders concept, under the name of Heartbeat Leaders and the Heartbeat Community Project.

An initial budget allocation of $100 000 was made by the Heartbeat New Zealand Committee for the development of the project, with the likelihood of an additional $150 000 for the second year of the project. The Health Educators held planning meetings in November and December 1988, and developed a Heartbeat Leaders resource kit. The kit explained that Heartbeat Leaders were expected to outline to groups why good nutrition is important to health, and give practical ideas on how to apply the Nutrition Guidelines for New Zealanders and the National Heart Foundation's Healthy Food Pyramid to everyday eating. The ideal group size was regarded as 8-10 people, and it was considered that the approach would not work effectively with larger groups. The sessions were intended to be simple, practical and participant-centred.

Heartbeat Leaders were recruited from the local community, and underwent a two day training course. The activities of the Heartbeat Leaders were coordinated by "Heartbeat Coordinators", under the supervision of the National Heart Foundation Health Educator. The Heartbeat Coordinators relayed requests from community groups for nutrition speakers to the Heartbeat Leader considered most appropriate for each group. Although the Heartbeat Leaders were often referred to by Health Educators as volunteers, both they and the Heartbeat Coordinators were paid for their time at an hourly rate.

The National Heart Foundation Health Education Committee, to which the Health Educators reported, agreed that development of the Heartbeat Community Project would be the top priority for Health Educators during 1989. Training of the first new Heartbeat Leaders occurred in early 1989, with 70 trained Leaders available throughout the country in April 1989, many of whom were existing CPR instructors. The Auckland "Eat to Beat"

leaders were officially retitled Heartbeat Leaders. By June 1989 the Senior Health Educator reported that 1000 people had participated in a Heartbeat community session.

(b) Monitoring information.

The evaluator attended two Heartbeat Community Project sessions in Auckland in July 1989 in order to observe firsthand what occurred, and eventually obtained monitoring information from the Senior Health Educator in August 1989, after repeated requests for this from May 1989. It became clear from the information obtained from these two sources that the project was not in fact being implemented as formally intended, particularly in terms of group size, but also in terms of content and focus. For example, the first Heartbeat Community Project session that the evaluator attended was held at a womens' service club in Remuera, Auckland. In contrast to the intended small group emphasis of the project, there were approximately 50 people present. The speaker identified herself as an "Eat to Beat" leader, despite intentions that this title be formally changed to Heartbeat Leader some time previously. The presentation style was formal rather than informal as intended, and focused upon provision of information rather than group participation and practical skills. More emphasis was given to heart attacks and the risk factors for these, than healthy nutrition, and a video about the achievements of the National Heart Foundation of New Zealand was shown. At the conclusion of the presentation, donations for the National Heart Foundation were collected.

The second Heartbeat Community Project session that the evaluator attended was more in line with stated intentions for the sessions, since it focused on healthy nutrition and included a video on this topic, emphasised practical changes that the third form girls attending could make in their eating patterns, and encouraged participation from group members. However, group size at 22 was larger than the 8-10 recommended size.

The monitoring information obtained from the Senior Health Educator in August 1989 confirmed that the intended small group emphasis of the Heartbeat Community Project, which was considered to be crucial to its success, was not occurring as the project was implemented throughout the country. Figures for the months from January to July 1989 indicated that about three quarters of the 148 sessions held had more than the

recommended maximum number of 10 people attending, and about half had more than 20 people attending.

The evaluator reported on these findings in the September 1989 evaluation report, and pointed out that this type of departure from formally stated programme intentions was not uncommon. In the light of the findings, however, consideration was required as to whether earlier stated intentions should be adhered to, adjusted, or some other action taken.

(ii) Research Literature Findings

No systematic review of the relevant literature had occurred during the planning phase of the Heartbeat Community Project, and no formal evaluation of the CPR programme upon which the project was modelled had been undertaken. The evaluation team considered that conducting a literature review was an important step in project planning, to enable the project design to incorporate previous findings, and to assist in setting relevant and realistic objectives.

(a) Major community-based heart disease prevention projects.

As the first step in answering the question "What outcomes can be expected from the Heartbeat Community Project based on experience elsewhere?", the evaluator examined the research literature describing major community-based heart disease prevention projects that had occurred over the previous two decades. This would enable identification of any programmes similar to the Heartbeat Community Project, and a study of their structure and outcomes.

Eleven major programmes were reviewed, but none was sufficiently similar to the Heartbeat Community Project to allow direct inference about the likely outcomes of the Heartbeat Community Project. Where programmes did contain elements similar to the Heartbeat Community Project (e.g., small group sessions on nutrition, use of lay leaders), there were important differences (e.g., a much higher intensity intervention, explicit focus on practical skills rather than information-giving) which prevented clear comparisons being made. In addition, outcomes of the programme elements similar to the Heartbeat Community Project could not be discerned from general outcomes reported. This was

because the programmes typically involved a multi-faceted approach that integrated a number of different, but inter-related components. The focus of reported evaluation of these programmes was on overall outcomes, assessing changes in levels of awareness, physiological risk factors, and morbidity and mortality. The outcomes of separate programme components were not distinguishable under such an approach, so were not reported in the literature.

(b) Nutrition education literature.

The nutrition education literature was examined to attempt to identify the effects of any individual programmes similar to the Heartbeat Community Project. A small number of programmes were identified which had varying degrees in common with the Heartbeat Community Project. It was found that these programmes consistently resulted in improved knowledge of nutrition, and participants usually reported some changes in eating behaviour in the desired direction. However, assessment of knowledge and behaviour change was typically carried out a relatively short time after the programme only, so it was not clear how long such changes lasted.

The duration of change was identified as an important issue, in the light of research findings in other areas that suggest that face-to-face instruction to influence diet, smoking and physical activity typically leads to some initial success, followed by recidivism. In addition, changes in eating behaviour were typically assessed by simple self-report means such as dietary history interview, food frequency checklist, or completion of a food diary. Very few studies attempted to validate such data by other means (e.g., physiological measures, monitoring food intake), presumably because of the difficulty of doing this. Overall, it was found that the particular nutrition education programmes examined resulted in increased knowledge, and self-reported behaviour change in the short term, with little investigation as to whether such changes extend past the short term, or the validity of the self-report measures used.

(c) Meta-analysis of nutrition education outcomes.

A relatively recent review of the nutrition education literature was obtained by the evaluator, which described a meta-analysis of 303 studies from the early 1900's to 1984,

on the effects of nutrition education on participant knowledge, attitudes and behaviour (Johnson & Johnson, 1985). The authors reported that, overall, nutrition education can be effective in increasing knowledge about nutrition, developing positive attitudes about good nutrition, and improving consumption of nutritious foods.

However, while the meta-analysis supported the overall effectiveness of nutrition education in these areas, it was not possible for Johnson and Johnson (1985) to determine the relative effectiveness of different methods or approaches to nutrition education. The 303 studies varied widely in terms of important features such as participant characteristics, duration, instructional procedures, activities, group size, and means of assessing behaviour change, and specific information on the nature of this variability was not available. This meant that conclusions specifically relevant to the Heartbeat Community Project could not be drawn.

(d) Other issues identified.

A number of other issues were identified from the review of the research literature, and these were included in the September 1989 evaluation report. For example, there was clear consensus in the nutrition education literature that simply disseminating nutrition information was ineffective in changing behaviour. Authors stressed the importance of not only providing people with information, but also influencing them to want to change, and providing opportunities to learn specific behavioural skills in order to successfully achieve and maintain change. While there was agreement that the three components of knowledge, attitudes and behaviour must be addressed in nutrition and other health education, there was seen to be a complex interplay between these components that was as yet poorly understood. It was well-recognised that neither increased knowledge alone, nor increased knowledge combined with attitude change, would necessarily lead to lasting behaviour change.

The importance of environmental influences (i.e. influences external to the individual), on nutrition behaviour was a dominant theme that recurred throughout the literature examined in the review. There was clear recognition that in addition to individual knowledge and attitudes, the social, physical and economic environments have a

significant influence on determining eating behaviour. Environmental factors which were seen as particularly important in determining what people eat were food availability, price and promotion. The perceived importance of environmental factors in determining eating behaviour had led some authors to criticise health and nutrition education programmes for their emphasis on individual rather than environmental change. Recent major nutritional reports were quoted in the literature which recognised the need to effect changes at the level of food production, manufacture and retail, and recommended changes in regulations regarding the grading, content, labelling and pricing of food products. A number of authors also, while supporting the basic principle of nutrition education, considered that health educators should take an active role in helping groups within the community to influence food policies through collective action.

(iii) Interviews with Heartbeat New Zealand Committee Members

Members of the Heartbeat New Zealand Committee were interviewed by the evaluator in July and August 1989. Questions about the Heartbeat Community Project were included in this interview, because it was considered important to find out what committee members wanted and expected from the Heartbeat Community Project, in the light of the lack of clarity about its aims and objectives, and its place within the broader Heartbeat programme. Committee members were asked what they saw as the aims and objectives of the Heartbeat Community Project, how these related to the broader aims of Heartbeat New Zealand, what they thought the project was likely to achieve, and what they perceived the project to consist of in practice.

It was clear from the interviews that there was a commonly held perception among committee members of the broad aim of the project, which was to deliver the cardiovascular disease prevention and health promotion message of Heartbeat New Zealand to New Zealanders at a local community level. Emphasis was on providing information and raising awareness, with no explicit expectation expressed that the Heartbeat Community Project would lead to behaviour change. While most committee members were aware that the project consisted of a network of trained leaders available to provide sessions on healthy nutrition to groups requesting this, the view was expressed

that little information had been provided to committee members about the project's specific objectives and its implementation, other than a six monthly report from the Project Coordinator.

Some committee members made positive comments about aspects of the Heartbeat Community Project. Comments included the observation that there seemed to be a growing demand for the service, that the project was a valuable means of integrating the National Heart Foundation Health Educators into Heartbeat New Zealand, and that utilising lay leaders was likely to be effective if they were established community leaders, as they would take the messages into their own lives, and influence other people in this way.

However, on the whole, committee members were either uncertain, or pessimistic about the Heartbeat Community Project's likely achievements, and the number of negative comments far outweighed positive comments. About half the committee members expressed concern that the Lifestyle Resource Centre proposal for a Heartbeat community strategy had not proceeded, and attributed this to opposition to the proposal from National Heart Foundation Health Educators. There was criticism of the way in which this occurred, with the Health Educators being perceived to have had more influence than Heartbeat New Zealand Committee members, which was regarded as inappropriate.

Concern was expressed that the decision to commit Heartbeat New Zealand funds to the Heartbeat Community Project was made without full consideration of its aims and likely achievements (e.g., it was suggested that the project should have been trialled first, that too much money was spent before the project's effectiveness was considered, and that the project proceeded before there was community awareness of the overall Heartbeat programme). There was concern that it would in fact be very difficult to assess the project's achievements, and that it was unlikely to reach the sectors of the population that it should (e.g., that it would be preaching to the converted, that it would reach mainly women, and that it would not have sufficient scope to reach the vast majority of the population).

There was criticism from some committee members of the perceived educational approach taken. For example, it was commented that a focus on information-giving such as the project entailed was outdated, that the material covered was not challenging enough, and that more emphasis should be given to practical activities. There was also more general criticism of the traditional behaviour change focus of the project (e.g., that face-to-face approaches are not cost effective, that the project was not sufficiently innovative, and that influencing food producers was a higher priority).

There was concern that the Heartbeat Community Project was operating too much as a discrete activity, and that a more integrated approach was necessary (e.g., with other Heartbeat activities, with Area Health Boards, and with National Heart Foundation Regional Committees). Some committee members also had doubts about the likely public appeal of the project.

(iv) Conclusions and Recommendations

Based on the information obtained in the three areas outlined above, of project implementation, research literature findings, and interviews with Heartbeat New Zealand Committee members, the evaluation team identified the following four points as important issues for consideration, in the September 1989 evaluation report on the Heartbeat programme:

- The Heartbeat Community Project was planned and based on the concept of a small group approach but was generally being implemented with groups about twice the envisaged size.
- The research literature was unable to answer the question of whether the specific intervention involved in the Heartbeat Community Project was likely to result in long term behaviour change. However, there were indications that short term behaviour change was a possible outcome, based on similar programmes elsewhere.
- It was being increasingly argued in the literature that the emphasis of health education should be away from individual educative approaches,

and onto environmental issues of the production, manufacture and retailing of food.

- Heartbeat New Zealand Committee members perceived the Heartbeat Community Project as Heartbeat's link with local community activity, but at the same time were rather pessimistic about its likely outcomes.

The evaluation team identified the central issue facing the Heartbeat Community Project as being questions of its relative effectiveness and efficiency. It was stated that while the Heartbeat Community Project might be effective (i.e., might produce behaviour change in participants), this did not necessarily mean it was the most efficient way of using resources to achieve improved eating behaviour in the whole population. Focusing on the effectiveness of the project led to thinking about evaluating its outcomes in terms of behaviour change, as the Project Coordinator originally had. However, the evaluation team considered that it was underlying questions of relative efficiency which had most likely led to:

- the pessimism of Heartbeat New Zealand Committee members
- the arguments in the research literature about individual educative versus environmental change-focused interventions
- the natural inclination of those implementing the project to respond to the demand in the community to run groups of a large size.

The evaluation team stated that the decision for the Heartbeat New Zealand Committee at this point was whether it wished to pursue the question of the effectiveness or the question of the efficiency of the Heartbeat Community Project. To pursue the effectiveness question would involve providing extensive formative evaluation input to the project to clarify its educational objectives, and then funding a rigorous outcome evaluation of its effectiveness in achieving behaviour change. It was pointed out that in order to go beyond the outcome evaluations reported in the literature which indicated that the project might achieve short term self-reported behaviour change, such an outcome evaluation should attempt to validate the self-reported dietary changes by physiological means such as urine composition and bodyweight analysis, and have an extended follow-up

period. This would involve a long and expensive piece of research which would not address the question of the efficiency of the project.

To pursue the question of the efficiency of the Heartbeat Community Project, the Heartbeat New Zealand Committee would need to consider the number of people it was realistic to expect the project to reach, and at what cost, and to compare this with the financial and political costs of alternative strategies directed at production, manufacturing and retailing of foods. The evaluation team pointed out that if the emphasis of the project was altered toward achieving change in the food environment, the people currently involved with the Heartbeat Community Project could be redeployed in various ways.

Based on the evaluation findings and conclusions, the following recommendation was made:

> That the Heartbeat New Zealand Committee establish a working party with evaluation input to examine the issues raised by the evaluation findings in this report regarding the Heartbeat Community Project, and decide upon appropriate future action. Specifically it should examine:
>
> - the question of the relative efficiency of the Heartbeat Community Project in bringing about long term widespread behaviour change
>
> - opportunities for those involved in the programme to be reorientated towards influencing the food environment through involvement in other Heartbeat and National Heart Foundation activities (e.g., Heartbeat Awards, Heart Food Festival), and collaboration with other relevant organisations (e.g., Area Health Boards, National Heart Foundation Regional Committees) in promoting discussion of heart health issues in the community. (Dehar, Duignan & Casswell, 1989b, p. 34)

The Heartbeat New Zealand Committee accepted this recommendation.

3. Response of Health Educators to Formative Evaluation Findings

The material on the Heartbeat Community Project in the September 1989 evaluation report elicited a strong negative reaction from the National Heart Foundation Health Educators, who were meeting in Auckland at the same time as the Heartbeat New Zealand Committee meeting was held. The Senior Health Educator/Project Coordinator of the Heartbeat Community Project received a copy of the evaluation report prior to the Heartbeat meeting, and communicated its contents and her reaction to these to the other

Health Educators. The Health Educators requested an urgent meeting with the Heartbeat evaluation team, to communicate their concerns about the report.

In response to questions and challenges from the Health Educators, the evaluation team outlined the reasons why the three areas of initial evaluation activity had been identified as important, and described what activities had occurred in each area, what the findings had been, and how these led to the conclusions and recommendations that had been made in the report. A number of issues were identified by the Health Educators during this discussion, which were responded to by the evaluation team where relevant. The concerns of the Health Educators were also communicated to the Heartbeat New Zealand Committee in writing by the Senior Health Educator in October 1989.

The Health Educators had a number of criticisms of the report, and the evaluation process involved. In their comments on the evaluation report to the Heartbeat New Zealand Committee, they pointed out that they had been implementing the Heartbeat Community Project under considerable difficulty, since a recommendation that cardiopulmonary resuscitation activities be scaled down to allow development of the Heartbeat Community Project had been rejected by the National Heart Foundation, as had their request for a mid-year meeting in 1989 to discuss the project.

The Health Educators felt strongly that the Heartbeat New Zealand Committee had shown a lack of support for and interest in the Heartbeat Community Project. They considered that the interview comments made by committee members were ill-informed, and showed a lack of understanding of the project. The Senior Health Educator considered that the comments strongly suggested that committee members had not in fact read information on the project which had been provided to them. It was stated that no feedback, comment, dialogue or questions about the project had been forthcoming from committee members to this point, and committee members were criticised for not having provided constructive criticism or input to the project at an earlier stage.

The evaluator's decision to interview Heartbeat New Zealand Committee members to determine aims and expectations of the project was disagreed with by the Health Educators, on the grounds that committee members were ignorant of the project. The

Health Educators felt they themselves would have been the most appropriate group to interview about these issues, since they were the ones actively involved in implementing the project.

The Health Educators felt that Heartbeat New Zealand Committee members had shown a lack of recognition of the skills and expertise of Health Educators, in criticising their opposition to the Lifestyle Resource Centre's proposal, preferring to side with academically qualified "experts".

The evaluator was criticised for an apparent assumption that the Heartbeat Community Project focused on information dissemination. The Health Educators regarded this assumption as completely faulty, and as showing a lack of understanding of the project. It was also stated that the community sessions attended by the evaluator were not representative of what was happening nationally.

A major complaint was that, whereas the Heartbeat Awards project was perceived to have received full evaluation support and input from the evaluator, the Heartbeat Community Project was believed to have been denied such support. The Project Coordinator complained that she had been forced to carry out time-consuming monitoring and record-keeping activities herself, which she saw as the evaluator's responsibility.

The Health Educators resented the perceived implication of the report that they were out of touch with developments in the health education field, and with world trends in health promotion. They felt this was completely untrue, and were insulted by the perceived suggestion.

Overall, it was clear that the Health Educators felt that they and their project had been attacked by the evaluation team and Heartbeat New Zealand Committee members. They clearly felt isolated and unsupported, and considered that they had been treated unfairly. They responded to the report by both vigorously defending their activities, and criticising the evaluation team and Heartbeat New Zealand Committee members. They questioned the validity of aspects of the evaluation procedure and to some extent rejected its findings and conclusions, and they rejected the comments made by Heartbeat New Zealand Committee members as biased and ill-founded.

The evaluator and other members of the evaluation team responded to the points raised about the evaluation procedure, firstly at the September meeting with the Health Educators, again in October 1989 in response to a letter from the Heartbeat Programme Director in which he repeated the concerns of the Health Educators, and finally in the third report to the Heartbeat New Zealand Committee, in December 1989.

The evaluator stressed that the evaluation findings should not be interpreted as a criticism of the work of the Health Educators in the Heartbeat Community Project. While the evaluation findings raised some important questions and issues about the project which needed to be addressed, the identification of these issues did not necessarily reflect negatively on the performance of individual Health Educators.

In response to the criticism that Heartbeat New Zealand Committee members were not the most appropriate group to interview regarding aims and expectations of the project, the evaluator explained that the committee members were chosen because they were responsible for policy and funding decisions relating to the Heartbeat programme. The evaluator considered she had obtained the perspective of the Health Educators through her consultation with the Senior Health Educator. The evaluator stated that, while utilising National Heart Foundation staff to a large degree, the Heartbeat Community Project was technically a part of the broader Heartbeat New Zealand programme, and needed to be considered in this context.

In response to the criticism that the report revealed a faulty assumption that the Heartbeat Community Project focused on information dissemination rather than practical skills, the evaluator agreed that the sessions were not intended to consist solely of information dissemination. However, she considered that this was a major element of the approach. The evaluator stated that she agreed that the two Auckland sessions attended could not be assumed to be representative of what was happening nationally. However, they did serve to illustrate, in combination with the other monitoring information, that the project was not being uniformly implemented as planned, and that further attention to this was warranted.

The evaluator considered that a number of issues underlay the complaint that the Heartbeat Community Project had not received evaluation support and input comparable to that received by the Heartbeat Awards project. One issue was the apparent expectation that the approach to formative evaluation of both projects should have been the same. The evaluator's response was that a range of formative evaluation strategies were available and appropriate, depending on the perceived needs and opportunities of a particular situation. The approach chosen for formative evaluation of Heartbeat Awards reflected, amongst other things, the fact that when the evaluator entered the research setting, the project was about to be piloted, and intensive formative evaluation input was warranted to make sure the pilot yielded the best possible information. In contrast, when the evaluator entered the research setting, the Heartbeat Community Project was already established, and was being implemented nationally. The reasons why outcome evaluation of the project was considered inappropriate were explained, as were the reasons behind the identification of the three initial areas of evaluation activity.

It became clear to the evaluator that the Health Educators perceived evaluation as a one-off occurrence. Their perception was that the Heartbeat Community Project had been "evaluated" and found wanting, and they were justifiably concerned about the scope and focus of evaluation activities that had led to this. The evaluator pointed out that the evaluation activities and findings contained in the September 1989 evaluation report represented just the first phase of what would be an ongoing evaluation process. So far the evaluation had identified some issues of concern for consideration by programme decision-makers, and suggested a working party as an appropriate means of addressing these. The form that the next phase of evaluation of the project took would depend on the decisions reached by the working party.

A final issue concerned the question of who should have responsibility for different levels of project evaluation, including the establishment and maintenance of basic record-keeping and monitoring systems. While it was clearly the Senior Health Educator's view that the Heartbeat evaluation team should take responsibility for all aspects of project level monitoring and evaluation, the view of the evaluation team differed. They

considered that a basic level of evaluation should be built in to every project, and that record-keeping and monitoring were essential requirements for evaluation to occur. Record-keeping and monitoring were part of good management practice, and should be the responsibility of the project manager, in this case the Senior Health Educator. While the evaluation team considered it was not its role to initiate and maintain record-keeping and monitoring systems, it could offer advice in the area, and identify gaps in current systems. The view of the evaluation team was based partly on the fact that it would simply not be feasible for the evaluator to have the level of involvement that the Senior Health Educator wished in each Heartbeat project or activity, and also on the belief that that this would encourage an inappropriate dependence upon external evaluators for what the evaluation team considered should be regarded as a normal function of project management.

While there was no further dialogue with the evaluation team on the points discussed above following the reply to the Heartbeat Programme Director in October 1989, the episode was to have a lasting effect on the relationship between the evaluator and the National Heart Foundation Health Educators, and the Senior Health Educator in particular.

Section 2: Reorientation of Heartbeat Community Project

(i) Working Party

(a) Membership and terms of reference.

As stated earlier, the evaluation team's recommendation that a working party be established to examine the issues raised by the Heartbeat Community Project evaluation findings was accepted by the Heartbeat New Zealand Committee. After some discussion, the Committee decided that the purpose of the working party should be to review the overall nutrition plans of Heartbeat New Zealand, and in particular, how the Heartbeat Community Project related to this. The six member working party was to be chaired by the Director of the Alcohol Research Unit, who was a member of the Heartbeat New Zealand Committee, and was supervising the Heartbeat evaluation. Other members were the Heartbeat Programme Director, the Senior Health Educator/Project Coordinator of the

Heartbeat Community Project, a Heartbeat New Zealand Committee member with expertise in health education, and a person from outside of Heartbeat and the National Heart Foundation nominated for her expertise in community-based health promotion work. The evaluator herself was not formally designated as a member of the working party, but was responsible for organising and reporting on the working party meetings, and attended these meetings. The evaluation team was asked to prepare the terms of reference for the working party, which were as follows:

1. To review the overall plan of action of Heartbeat New Zealand in the nutrition area.
2. To consider, in the context of the overall plan of action, the role of activity aimed at influencing the food environment.
3. To examine the efficiency of the Heartbeat Community Project relative to other alternative approaches.
4. To recommend the Heartbeat Community Project's future direction and form.
5. To formulate a set of aims and objectives that reflect the Heartbeat Community Project's role within the overall Heartbeat New Zealand programme.
6. To recommend strategies for productively utilising existing Heartbeat Community Project personnel if changes are made to its design and emphases.
7. To recommend appropriate future evaluation input into the Heartbeat Community Project.

(b) Activities and findings.

The first meeting of the working party was held on October 27 1989. Discussion focused upon the range of nutrition activities currently being undertaken by the National Heart Foundation and Heartbeat, and possible future nutrition activities for Heartbeat. In the course of the discussion a number of other issues were identified. These included the need for clear criteria for making funding decisions about the possible future development

of health promotion television programmes and other media activities; the desirability of Heartbeat encouraging local community groups to initiate heart disease prevention and health promotion activity by providing seeding funding; and the need for greater communication and coordination between the National Heart Foundation and Heartbeat New Zealand, including clarifying the roles and responsibilities of different committees, and examining the issue of the respective public identities of Heartbeat and the National Heart Foundation.

Outcomes of the first meeting of the working party included a list of 30 potential future nutrition activities for Heartbeat, and a letter to all Health Educators expressing appreciation for their efforts in developing the project thus far. A number of recommendations were developed as a result of the first meeting. These were:

> That Heartbeat New Zealand adopt the following criteria as a basis for deciding upon the allocation of funds for the development of health promotion television programmes and other paid media activities and supporting initiatives:
>
> - Heartbeat New Zealand should support only media productions which form an integrated part of a broader approach
> - Content should reflect a strong focus on the promotion of health and not focus on the treatment of disease
> - The range of health promotion strategies identified in the Ottawa Charter should be addressed where possible, rather than an exclusive focus on developing personal skills
> - The health promotion principles of equity in gender, age and culture should be respected
> - Those involved in programme design should identify and seek to maximise opportunities for audience participation and involvement (e.g., incorporating self-completion questionnaires for home audiences, publicising relevant local community activities).
>
> That Heartbeat New Zealand develop a brief and invite applications from community groups throughout New Zealand for funding of health promotion activities relevant to heart disease prevention at a local level.
>
> That the role of the National Heart Foundation Regional Committees in facilitating and participating in such community level activity be explored.
>
> That discussions be held between the Heartbeat New Zealand Committee and other relevant National Heart Foundation committees about ways to ensure greater coordination between the activities of different committees working in similar areas.

That such discussions include examination of the issue of public identity of Heartbeat New Zealand and the National Heart Foundation, and give consideration to commissioning a study to determine the public response to existing and any alternative logos.

That in such discussions Heartbeat New Zealand seek the continued involvement of the National Heart Foundation Health Educators in the Heartbeat Community Project.

The second meeting of the working party was held on December 1 1989, a few days before the December 5 meeting of the Heartbeat New Zealand Committee at which the working party recommendations were required. Most of the day was taken up with further discussion of potential future nutrition activities for Heartbeat, and other broader issues, with the specific issues relating to the Heartbeat Community Project being briefly examined prior to the close of the meeting. There was discussion of the need to extend the Heartbeat Community Project from its present focus on Heartbeat Leaders providing small group nutrition education sessions, to include a range of other community level strategies. The title Heartbeat Community Project would then include all of Heartbeat's existing community level initiatives (e.g., Heartbeat Awards, SOS, Heartbeat Leaders), as well as some new approaches (e.g., funding heart health activities of existing community groups, involving National Heart Foundation Regional Committees in community level activities, and implementation of new nutrition activities identified by the working party). It was agreed that the Heartbeat Programme Director should proceed to develop objectives for a more broadly based Heartbeat Community Project.

The following were the main recommendations to the Heartbeat New Zealand Committee arising from the second meeting of the working party.

That Heartbeat New Zealand formulate a set of objectives for the Heartbeat Community Project which reflect a broad-based community approach consistent with community action strategies of the Ottawa Charter.

That training of Heartbeat Leaders emphasise the health promotion philosophy and strategies of the Ottawa Charter and be contracted out to a health promotion agency.

That ongoing evaluation input to the Heartbeat Community Project be based on clearly specified objectives.

That Heartbeat New Zealand influence Area Health Boards to give higher priority to health promotion activities and allocate a proportion of their budget to this area.

The Chairperson of the working party concluded her presentation of the recommendations of the working party at the December 5 1989 Heartbeat New Zealand Committee meeting by stating that the consensus among working party members was that the proposals recommended would mean a pronounced change in the role of the Heartbeat Leaders, and that the first step would be to train present Leaders in order to broaden their approach.

The Heartbeat New Zealand Committee accepted all of the recommendations made by the working party. In summarising the response of the Heartbeat New Zealand Committee to the working party recommendations, the Committee Chairperson stated that the Heartbeat New Zealand Committee was agreed that the Heartbeat Leaders should be encouraged to proceed and that there should be no significant checks on the development of the programme. Heartbeat Leaders should be encouraged to take part in training activities with emphasis on the Ottawa Charter approach to health promotion, and this should result in a change in emphasis of the project, and a different perception of nutrition health promotion. The committee agreed that the Heartbeat Programme Director should convey the views of the working party to the Health Educators, and stress that the proposals outlined were to be part of an evolving process and did not indicate that the present strategies were wrong.

In his letter to Health Educators explaining the outcome of the working party, the Heartbeat Programme Director stated that the Heartbeat New Zealand Committee would like to see a change in direction in the project, to reflect Ottawa Charter principles. While the emphasis of the project to date had been upon developing personal skills, the Committee would like to see the inclusion of other aspects of the Ottawa Charter. The example was provided that, in talking about the Healthy Food Pyramid and Nutrition Guidelines, the Heartbeat Leaders could stimulate ideas about food labelling or advertising, which could be relevant to the Ottawa Charter strategy areas of influencing healthy public policy or strengthening community action. He stated that the working party had come up with a variety of activities which might be developed and which would all

form part of a more broadly based Community Project of which Heartbeat Leaders were one part.

(c) Outcomes of working party.

It can be seen that the working party considered and made recommendations on a wide range of issues pertaining to Heartbeat New Zealand's role in fostering health promotion activity, its place within the National Heart Foundation, and its future nutrition activities, in addition to issues identified by the evaluation team in relation to the Heartbeat Community Project. The working party did not fulfill all of its terms of reference, however, and in particular, did not make clear decisions about the future of the Heartbeat Community Project. The terms of reference stated that the working party should recommend the Heartbeat Community Project's future direction and form, formulate aims and objectives for the project, recommend strategies for productively utilising existing project personnel if changes were made to its design and emphases, and recommend appropriate future evaluation input to the project. The working party addressed these particular issues only briefly toward the end of its deliberations, and made fairly general recommendations on them. The central recommendation pertaining to the future of the Heartbeat Community Project was that its objectives, when formulated, should reflect a broad-based community approach consistent with community action strategies as set out in the Ottawa Charter.

The recommendations of the working party which required further action following the December 1990 meeting of the Heartbeat New Zealand Committee were implemented to varying degrees over the next few months, and the evaluation team reported on the current status of these recommendations in their March 1990 report to the Heartbeat New Zealand Committee.

In response to the recommendation that objectives be formulated for the Heartbeat Community Project that reflected a broad-based community approach, the Heartbeat Programme Director had produced a draft set of objectives in January 1990. However, rather than formulating objectives for a more broadly based project which incorporated all of Heartbeat's existing and potential new community level activities as discussed by the

working party, the new objectives concentrated on the existing focus of the project, the use of Heartbeat Leaders for nutrition education activities. As a result of his work in drafting the objectives, the Programme Director recommended in February 1990 that the title "Heartbeat Community Project" should be changed to "Heartbeat Leader's Project", to more accurately reflect the actual emphasis of the project. He suggested that there was no useful purpose to be served by developing objectives for a more broadly based Heartbeat Community Project, since all of Heartbeat's activities could be considered to involve the community.

The Health Educators disagreed that training of Heartbeat Leaders should be contracted out, and thought instead that they themselves needed to clarify how the training of Heartbeat Leaders could be reorientated. As a result, they planned a one day "Ottawa Charter" workshop with a Department of Health Senior Health Educator in Wellington to consider the issue of how to incorporate the Ottawa Charter into the Heartbeat Community Project.

(ii) Resignation of Senior Health Educator

The National Heart Foundation Senior Health Educator and Project Coordinator of the Heartbeat Community Project announced her resignation in February and left the Foundation in March 1990. The position of Senior Health Educator was offered to the Wellington National Heart Foundation Health Educator, who informally assumed the role in April, and formally accepted the position in May 1990.

(iii) Ottawa Charter Workshop

All Heartbeat New Zealand and National Heart Foundation staff members involved in health promotion were invited to attend the April 18 1990 Ottawa Charter workshop, and two members of the Heartbeat evaluation team also attended and participated in the meeting. It was agreed between the new Senior Health Educator and the workshop facilitator prior to the workshop that the focus of discussion should be upon ways of incorporating Ottawa Charter principles into all health promotion work carried out under Heartbeat and the National Heart Foundation, as well as focusing specifically upon the Heartbeat Community Project and the recommendations of the working party.

By the end of the day, agreement had been reached among those present that the draft project objectives as formulated by the Heartbeat Programme Director did not reflect any real change from the previous emphasis upon Heartbeat Leaders providing small group nutrition education sessions. It was felt that the project objectives should be rewritten to emphasise a broader definition of health promotion, and that a wider range of strategies than direct education to develop personal skills needed to be identified. Within the present activities of Heartbeat Leaders, it was agreed that the focus on nutrition was too restrictive, and that other topics relevant to heart disease prevention such as smoking and exercise should also be covered. Participants agreed that the project should be renamed, since neither "Heartbeat Community Project" nor "Heartbeat Leaders Project" was considered to capture the new emphasis of the project. Specific guidelines for the reorientation of Heartbeat Leaders were not developed at the workshop, since it was considered necessary to wait until new objectives and strategies had been formulated.

During the course of the workshop, a number of broader organisational issues were identified as impinging upon the Heartbeat Community Project and the other activities of the Health Educators, which it was felt needed to be addressed. One such issue was a perceived conflict between conservative and progressive factions in the National Heart Foundation, in relation to attempts to move beyond the traditional health education emphasis of the Health Educators' work, into other health promotion activities. It was reported that there was considerable pressure on Health Educators and those they supervised to be as active and visible as possible in direct education of members of the public at local community level, regardless of whether this was an efficient use of resources, because it was seen as important in maintaining the National Heart Foundation's public image. The Health Educators and other staff agreed that there was some opposition within the National Heart Foundation to activities by Health Educators and others which it was perceived might alienate the major contributors of donations to the Foundation, who were cited as white middle class conservatives. The example was provided of opposition to Health Educator and Heartbeat Leader involvement in advocating for the Smokefree Environments Bill in some regions. These and other factors were felt to be potential

barriers to broadening the range of strategies under the Heartbeat Community Project. One strategy which it was felt might assist in this area was to ensure that all paid staff and volunteers of the National Heart Foundation participated in educative activities aimed at increasing their understanding of health promotion and Ottawa Charter principles.

The Health Educators also identified other difficulties arising from their dual role as National Heart Foundation Health Educators and Heartbeat Community Project implementors. One perceived problem was that they had been expected to add implementation of the Heartbeat Community Project to their existing full-time workloads, without additional assistance, or corresponding reduction in other areas of their work. Consequently, some Health Educators were feeling overloaded, and it was agreed that a clear job description for their role in the Heartbeat programme would be helpful. In addition, it was considered that, rather than coordination of the Heartbeat Community Project being added to the existing workload of the Senior Health Educator, provision should be made for a full-time Project Coordinator. Being responsible to two committees (the Health Education Committee and the Heartbeat New Zealand Committee) was also identified as a problem for Health Educators. The need for peer support and training for Health Educators was identified, as most Health Educators worked individually in regional offices of the National Heart Foundation, with limited opportunity to interact with Health Educators in adjacent districts. The relationship between the National Heart Foundation Health Educators and the Heartbeat programme staff members was discussed, and it was agreed that this group should be referred to in future as the Health Promotion Team of the Foundation.

Major issues identified during the workshop and recommendations arising from them were communicated to the Heartbeat Programme Director and the Executive Director of the National Heart Foundation following the workshop. The two Directors accepted the need for further work on the objectives and strategies of the project, and for a new project title. They disagreed that a full-time Project Coordinator was necessary, and instead offered to establish an additional half-time position for a Health Educator in the Wellington

Regional Office, to enable the Senior Health Educator to assume the role of Heartbeat Community Project Coordinator.

(iv) Formulation of Broader Objectives and Strategies

The outcomes of the April 18 Ottawa Charter workshop were discussed at a Heartbeat Project Coordinators meeting of May 14 1990. It was agreed that a group comprising the Senior Health Educator, the evaluator, an Auckland-based Health Educator, and the Project Coordinator of Heartbeat Awards in workplace cafeterias should meet to decide upon broadened objectives and strategies, and a new title for the Heartbeat Community Project.

Prior to this group meeting, the Heartbeat Programme Director sent out a memorandum to those attending setting out his views on many of the issues identified at the Ottawa Charter workshop. He urged the group to confine itself to specifying objectives and strategies, rather than addressing wider issues such as project coordination. He reported that he and the Executive Director of the National Heart Foundation would be meeting with the Department of Health to discuss funding for the Heartbeat programme the following week, and that they were planning to request sufficient funding for reimbursement based on 70 Heartbeat Leaders presenting four sessions per month for nine months at up to $30 per session. Based on the figure of an average of ten people attending each session, the Programme Director reported that the Heartbeat Community Project could reach 25 000 people. He stated that if a target such as this was not reached in the following year, then serious thought would need to be given to the continuation of the project.

A meeting was held on May 28 1990 to draft new objectives for the newly titled Heartbeat Community Network project. The Senior Health Educator drafted a comprehensive set of strategies and targets relating to the new objectives and these were circulated among National Heart Foundation and Heartbeat programme staff for comment in June 1990, prior to being finalised. This set of draft objectives, strategies and targets was submitted by the Heartbeat Programme Director to the Department of Health in June 1990 as part of Heartbeat New Zealand's application for funding. The new objectives and

strategies, and the feedback obtained on them from various sources were discussed by the Health Educators at a meeting of the Health Promotion Team in early August 1990.

In addition to being involved in formulating the first draft of the new objectives, the evaluation team provided further suggested refinements to the objectives, strategies and targets in July 1990, and developed a draft evaluation plan for the Heartbeat Community Network project in August 1990 which incorporated the new objectives. One problem identified by the evaluation team was that there remained a great deal of emphasis in the project strategies and targets formulated by the Senior Health Educator on expansion and promotion of the Heartbeat Leader small group nutrition education approach, despite clear agreement among the working group formulating the objectives that this should be regarded as just one strategy available to the project. It was also reported to the evaluator by Heartbeat staff not directly involved in the Heartbeat Community Network project that while lip service was being paid by Health Educators and others to the proposed change of emphasis in the project, little change was actually occurring in practice.

In their July 1990 evaluation report to the Heartbeat New Zealand Committee, the evaluation team commented that good progress had been made in clarifying the particular contribution the Heartbeat Community Network project could make to the overall Heartbeat programme, and formulating appropriate strategies and targets for it. They stated that the role of the National Heart Foundation Health Educators in initiating and coordinating relevant health promotion activity in collaboration with other agencies and community members was likely to be pivotal to the success of the new approach. The evaluation team noted that, while the new objectives of the project allowed for a more flexible and proactive approach to health promotion at a local community level, there was a danger that it would continue to be narrowly focused on the Heartbeat Leader small group education approach, despite the intended reorientation. This was because the Heartbeat Leader model that had developed to this point was administratively relatively straightforward, and fitted in well with accountability requirements such as the need to describe in detail exactly what would be done over a particular period, specify targets for the number of people likely to be affected by such a project, and so on. It was considered

that the Health Educators might feel pressured to promote and expand the small group education aspect of the project, which was easy to plan, implement, monitor and report on, at the expense of other activities which were somewhat less familiar, but possibly more significant in the long term. The evaluation team also noted that the success of the new approach was heavily dependent upon individual Health Educators having the time and enthusiasm to devote to it. While these issues were acknowledged as being unlikely to be resolved in the short term, the evaluation team stated that in their view the aspect of the project that most needed development at present was that of the pivotal role of the Health Educator as a facilitator of community action for health promotion and heart disease prevention, using a range of relevant strategies, rather than solely the promotion and expansion of the existing small group education approach. The need for ongoing training and support for Health Educators to facilitate the reorientation of the project was identified, and the following recommendation was made:

> That the needs of National Heart Foundation Health Educators for ongoing training and support in their reorientation of the Heartbeat Community Network project be examined, and plans formulated by the Project Coordinator for meeting these needs.

While the Heartbeat New Zealand Committee accepted this recommendation, the Senior Health Educator/Heartbeat Community Network Project Coordinator expressed the view that the Health Educators did not require further training. She stated that the existing twice yearly meetings of Health Educators incorporated staff training, and were a source of support and ongoing development for the project, although she favoured having a third meeting each year specifically to address the needs of the Heartbeat Community Network project. She considered that if any group connected with the National Heart Foundation required further training in health promotion principles, it was the Regional Committees, particularly if they were to be more involved in health promotion in future, as had been proposed. As a consequence of her response, no specific action was taken on this recommendation during the research period.

Following further discussion with the evaluator, aspects of the strategies and targets of the Heartbeat Community Network were restructured by the Senior Health Educator in December 1990, in preparation for a meeting of Health Educators in February 1991 to plan ahead for the next twelve months.

The final version of Heartbeat Community Network project objectives and strategies developed in late 1990 was as follows:

Aim

The Heartbeat Community Network project aims to contribute to the promotion of health and the prevention of cardiovascular disease by facilitating the development of health enhancing attitudes and skills, and the strengthening of community action.

Objectives

1. To work with other agencies active in health promotion in planning and implementing relevant local activities to ensure an integrated approach and sharing of resources.

2. To establish, train, and maintain a network of people from the local community to assist the Health Educators in health promotion activity.

3. To support the role of the National Heart Foundation Health Educators in initiating and coordinating health promotion activity according to the priorities that exist within their region.

4. To provide opportunities for individuals and groups in the community to participate in a range of activities which will enable them to develop personal skills relevant to promoting heart health.

Strategies

To keep close liaison with other health promotion agencies by meeting regularly and exchanging information on programmes and resources, and promoting opportunities for working jointly at a local level.

To identify organisations and groups in each region warranting high priority in terms of Heartbeat Community Network activity.

To actively market Heartbeat New Zealand and other cardiovascular health promotion programmes and resources in each regional community using local radio, community newspapers, notice boards, libraries and community groups.

To stimulate groups to apply for Heartbeat Community Grants and provide ongoing liaison and advice to such groups where necessary.

To select and train new, and update existing community networkers/leaders in cardiovascular risk factors and health promotion according to Ottawa Charter concepts.

To conduct training sessions promoting cardiovascular health for trainers from other health agencies to enable wider dissemination of information and optimal use of resources.

(v) Implementation of Changes in Project

The Heartbeat Community Network project continued in all regions during 1990, while all of the various meetings, discussions and refinement of formal statements of project objectives and strategies outlined above occurred. While it was difficult to obtain comprehensive information about the current status of the project throughout the country during 1990, it was clear that there was some change and reorientation of the project in most regions, and that this change was slow and incremental rather than dramatic. The difficulty in obtaining systematic and comprehensive monitoring information on the project is discussed under (vi) below.

Monitoring information obtained in late 1990 revealed that there had been both expansion of the original Heartbeat Leaders approach, and involvement of Heartbeat Leaders in a broader range of community action strategies in most regions. As stated in Chapter Three, whereas in November 1989 there had been 108 Heartbeat Leaders based in 16 towns and cities, and 294 nutrition education sessions had occurred involving approximately 5000 people, by December 1990 there were 162 trained Heartbeat Leaders available, and a total of 449 nutrition education sessions had occurred in 43 cities or towns, involving more than 9978 participants. Limited information was available about involvement of Heartbeat Leaders in other community action strategies, but the Senior Health Educator provided examples of Leaders attending marae health days and hui, conducting heart disease risk factor screening at health fairs, being involved in advocacy activity around the Smokefree Environments Bill, writing letters to the editors of local newspapers on nutrition and smoking issues, supporting other Heartbeat projects such as Heartbeat Awards, providing healthy cooking demonstrations in supermarkets and shopping malls, encouraging restaurants to provide healthier alternatives, assisting with Maori Women's Welfare League Netball Tournaments, and a range of other activities.

The evaluator provided consultation on evaluation to the Auckland Health Educator responsible for implementing the Heartbeat Community Network project, and so observed first hand the change in orientation that occurred in Auckland. The Auckland Health Educator held a training day on August 22 1990 for all existing Auckland Heartbeat Leaders. Leaders were briefed on the project's broadened objectives and strategies, and potential changes in their role were discussed at this meeting. The Health Educator obtained advice from the evaluator on how to obtain feedback on the training day from those participating. The Auckland Health Educator also launched the broader orientation of the Heartbeat Community Network project by holding and publicising four breakfast meetings for community groups and organisations throughout Auckland during the National Heart Foundation's Heart Week, in October 1990, and was assisted by the evaluator in evaluating the impact of these. A further initiative in Auckland was the formation of a nutrition action group. The Auckland Health Educator identified several existing Heartbeat Leaders with particular skills in the nutrition field, and held regular meetings with them to strategise on activities aimed at changing the food environment. An example of the activities of this group was to conduct a small survey of supermarkets to determine the price differential between normal and low fat dairy products, and to disseminate the results with the aim of encouraging manufacturers and retailers to examine their pricing policies. Thus, while small group nutrition education sessions continued under the Heartbeat Community Network project in Auckland, there were also efforts by the Health Educator to broaden the range of health promotion strategies involving Heartbeat Leaders.

By November 1990, the Senior Health Educator reported that retraining/updating sessions for existing Heartbeat Leaders had been held or were planned in all regions. She had begun rewriting the Heartbeat Leaders resource kit to reflect a range of cardiovascular disease risk factors rather than just nutrition, to emphasise the need for skills in group facilitation rather than imparting knowledge, and to include a range of practical activities for groups. A standard training model for Heartbeat Leaders for use by Health Educators

was also identified as a priority during 1990, but this was not completed during the research period.

Several difficulties were noted by the Senior Health Educator in implementing the broader objectives and strategies of the project during 1990. One area of difficulty was that of project coordination. The Senior Health Educator reported that she had insufficient time to do an adequate job of coordinating the project during most of 1990, because the role of Project Coordinator was in addition to her other tasks as Senior Health Educator, and the additional half-time Health Educator in Wellington was only appointed in mid-September. A further issue was that several Health Educators experienced difficulty in obtaining approval from the National Heart Foundation Executive Director for payment of Heartbeat Leaders for activities outside of nutrition education sessions. It was reported to the evaluator that on a number of occasions, Health Educator applications for payment for Heartbeat Leaders for activities such as attending hui or health fairs were queried or initially refused by the Executive Director. This occurred despite the Heartbeat New Zealand Committee having agreed to the broadened objectives and strategies of the project, and was not resolved during the research period. It was reported that one factor in this situation was the question of overlap between the broadened activities of paid Heartbeat Leaders, and the traditional activities of National Heart Foundation volunteers.

(vi) Monitoring Information

As mentioned above, it proved difficult to obtain comprehensive information on how the broadened objectives and strategies of the Heartbeat Community Network project were being implemented during 1990. While figures for the number of nutrition education sessions held by Heartbeat Leaders were available throughout the period, there was no systematic reporting of Heartbeat Leader or Health Educator activities in other areas. One reason for this identified by the evaluator was that much of what the Health Educators might do under the broadened objectives of the project overlapped substantially with the health promotion aspects of their existing role as National Heart Foundation Health Educators (e.g., liaising with other health promotion agencies, marketing heart disease prevention and health promotion programmes and resources in their region). While they

reported upon all of their activities at two monthly intervals, a distinction was not drawn in these reports between activities carried out as part of their traditional National Heart Foundation role, and those carried out as part of the Heartbeat Community Network project. There was no stipulation as to the proportion of their time that should be spent on the Heartbeat Community Network project as opposed to their other activities. This would have required a somewhat arbitrary distinction for some activities.

Obtaining monitoring information on project implementation was regarded by the evaluation team as the responsibility of Project Coordinators, and this was accepted by Heartbeat personnel. The Senior Health Educator recognised that there was a lack of descriptive information on what was actually occurring in each of the regions under the broadened objectives and strategies of the project, but stated that she would be unable to adequately address this until early 1991, when she would be able to fully concentrate upon her project coordination role.

In order to obtain a better picture of what was actually happening in the regions under the Heartbeat Community Network project, the evaluator suggested in November 1990 that she travel to each region and spend time with each Health Educator, discussing project implementation, and examining project records and other information. It was hoped that this would provide better information on the range and frequency of alternative activities to the small group sessions, which could be reported to the Heartbeat New Zealand Committee at their next meeting, and that it would provide a basis for the evaluator to formulate advice for the Senior Health Educator on the establishment of an adequate monitoring system for future use. It would also enable the evaluator to formally identify problems that were anecdotally reported to her as being experienced by Health Educators in implementing the broader objectives, which would allow these to be raised with and addressed by the Heartbeat New Zealand Committee.

The Senior Health Educator opposed the planned visits, however, on the grounds that it was in fact her role as Project Coordinator to collect the information the evaluator had identified, and that the visits would pre-empt the results of a meeting of Health Educators planned for February 1991, where they would discuss project implementation.

She was concerned that if the evaluator conducted the visits and reported on the information obtained it would appear that she had not done her job as Project Coordinator properly, and that this would disrupt the process of the Health Educators themselves identifying and discussing important issues and making decisions as to how to proceed. The evaluation team decided not to proceed with the planned visits in the light of this opposition.

Section 3: Discussion

(i) Contribution of Evaluation Findings to Project Development

It can be seen that the formative evaluation input provided to the Heartbeat Community Project during the research period was driven by the particular orientation of the Heartbeat evaluation team. When the evaluator entered the research setting, the Heartbeat Community Project was already established, and was being implemented on a national basis. The demand from programme staff was for outcome evaluation of the project, to establish whether it led to long term behaviour change in participants. However, rather than uncritically accepting this as the priority for evaluation of the project, and in the apparent absence of adequate project planning and documentation, the evaluation team considered it a higher priority to clarify the project's origins and development, what its likely outcomes were, how it actually operated in practice, and how it fitted in as a strategy within the overall Heartbeat programme. This reflected the aspect of the evaluation team's orientation as external evaluators to the overall Heartbeat programme, which included adopting a critical perspective on activities occurring under the programme. Following a period of intensive investigation of the Heartbeat Community Project in the areas outlined above, the evaluation team considered that a careful re-examination of the project by Heartbeat decision-makers was warranted.

The establishment of a working party to consider the Heartbeat Community Project's future direction and form, within the broader context of Heartbeat's nutrition activities, was recommended by the evaluation team, and was chaired by the head of the evaluation team. However, this working party did not fulfill its terms of reference in

regard to the Heartbeat Community Project, as greater emphasis was placed on considering the broader nutrition picture within Heartbeat. The question of the relative efficiency of the Heartbeat Community Project, which the evaluation team had identified as important, was not directly addressed. While a number of positive developments occurred as a result of the working party's attention to the broader nutrition area, clear direction was not provided to the Heartbeat Programme Director, or the National Heart Foundation Health Educators, as to specific changes which should be made in the project. Somewhat differing interpretations of the implications of the working party's recommendations for the Heartbeat Community Project were apparent, with some parties considering that the recommendations spelled a pronounced change in direction for the project, and others considering they represented only an upgrading of the training of Heartbeat Leaders. Because the working party was established for a limited time only, there was no formal provision for seeing that its recommendations were in fact implemented as intended.

The Heartbeat Programme Director drafted a set of objectives for the Heartbeat Community Project, but concluded that the focus of developing objectives should be specifically on the Heartbeat Leaders aspect of the project, rather than a more broadly based project which incorporated all of Heartbeat's existing and potential new community activities, as recommended by the working party. He developed a set of draft objectives for a renamed Heartbeat Leaders project to reflect this focus. The Health Educators rejected the recommendation of the working party that training for Heartbeat Leaders should be contracted out to a health promotion agency, and instead organised their own workshop to discuss how the Ottawa Charter could be incorporated into the Heartbeat Community Project, and other areas of the Heartbeat programme. This workshop can be seen as an attempt by the Health Educators to take back ownership and control of the Heartbeat Community Project, and it had a number of positive outcomes, including the development of consensus on the need for and type of change to occur in the project, and the strengthening of bonds between the Health Educators and Heartbeat staff members, with the formation of the "Health Promotion Team" of the National Heart Foundation. Reorientation of Heartbeat Leaders eventually occurred on a regional basis and was

directed by the Health Educators themselves. As a result of developments from the Ottawa Charter workshop, a small working group devised a new set of broader objectives and strategies for the renamed Heartbeat Community Network project, which was accepted by key project participants, and was progressively refined during the remainder of 1990. The need identified by the evaluation team in mid-1990 for ongoing training and support of Health Educators in their reorientation of the project was not acted upon, however. Changes to the project were implemented to varying degrees by Health Educators throughout the country during 1990, with the exact nature of the changes occurring proving difficult to ascertain, because adequate provisions for project monitoring were not in place.

The specific contribution of evaluation findings to project development in the case of the Heartbeat Community Project was difficult to gauge. Certainly, the intensive formative evaluation input provided during mid-1990 established the need to critically re-examine the project, and established a structure by which this re-examination could occur, in the working party. Following the working party, action was taken by Heartbeat programme participants to clarify and broaden the objectives and strategies of the project, although action taken was slow and incremental, and the degree of change that actually occurred on the ground was difficult to systematically assess during the research period. The project certainly did not change rapidly or dramatically, as some participants in the decision process probably intended that it should. However, the broadened objectives and strategies that were eventually developed did appear to provide opportunities for those Health Educators who wanted to involve themselves and Heartbeat Leaders in more innovative health promotion activities. The question of whether the project became more effective as a result of the evaluation input to it is impossible to answer definitively, as this depended both on which criteria for effectiveness were used, and on the availability of accurate information about project implementation. The major role of formative evaluation of the Heartbeat Community Project can be seen as identifying potential areas for change, and setting up structures and opportunities for such changes to be planned and implemented by programme participants.

The intensive formative evaluation input that was provided to the project in the early stage of involvement of the evaluation team predominantly involved challenging past decisions and existing assumptions and practices, with the aim of enhancing the effectiveness of the overall Heartbeat programme, rather than accepting and concentrating on developing and improving the actual project that existed. If this evaluation input had not occurred, the project itself would no doubt have proceeded in the original direction, and would probably have operated relatively smoothly, in an administrative sense. However, the approach adopted by the evaluation team, and supported by some programme participants, was that the Heartbeat programme should be aiming to develop "state of the art" health promotion activities relevant to heart disease prevention, which the individual educative approach of the original project model did not represent. By the end of the research period, while moves had been made to broaden the project, it had certainly not been transformed.

(ii) Evaluation Issues

The approach to formative evaluation of the Heartbeat Community Project that was adopted by the evaluation team gave rise to a number of evaluation issues. One issue that arose concerned differing expectations held by the evaluation team, and key programme staff, as to the role of evaluation in the Heartbeat programme. As stated above, the evaluation team considered that part of their role in formative evaluation of the overall Heartbeat programme was to critically examine strategies implemented under the programme, and evaluate them in terms of whether they represented good health promotion practice. Project staff, on the other hand, expected that the role of the evaluation team was to work to make whatever activities the Heartbeat programme implemented more effective. Both of these forms of evaluation input to programmes exist, and the differences between them can be seen in terms of the differences between external and in-house evaluation. The model of formative evaluation adopted by the evaluation team combined elements of both approaches. Because of the different expectations that existed, questions arose concerning which party had the right to make decisions regarding the form of the evaluation. The first Project Coordinator clearly felt the role of the

evaluation team should be to provide evaluation services to the project that she identified the need for, including basic record-keeping and monitoring functions. She appeared to view formative evaluation input to the Heartbeat Awards project as the model that should be applied to her own project. She communicated this view to the Heartbeat Programme Director, who on several occasions questioned the evaluator as to why she was not providing "equal time" to the Heartbeat Community Project (as compared to Heartbeat Awards), when in fact, the evaluator was devoting somewhat more of her time to the Community Project.

These issues of the role of evaluation, authority to make decisions about the form that evaluation input should take, and responsibility for carrying out different levels of evaluation activity, were prominent during the phase of intensive formative evaluation input to the Heartbeat Community Project. The major reason they arose was that the evaluators adopted a critical formative evaluation perspective with a project that was already established. These sorts of issues may not have arisen to the same degree had the evaluation team become involved in the project at an earlier stage. In this case there would have been opportunities to constructively influence the development of the project (e.g., by considering the likely effectiveness and efficiency of the health promotion strategies proposed, by ensuring that clear, specific and realistic objectives were developed, by piloting the intervention, by ensuring that adequate monitoring procedures were in place), before it got to the stage where it was difficult to introduce and implement changes. However, in the situation that did exist, it may have been helpful if the evaluation team's perspective on, for example, responsibility for carrying out different levels of evaluation activity, had been clarified and discussed early on in the relationship.

The attitude of key staff members to evaluation emerged as an important issue in formative evaluation of the Heartbeat Community Project, as it did in the Heartbeat Awards project. The first Senior Health Educator that the evaluator dealt with was fairly resistant to the notion of formal planning and objective-setting, considering that this was unnecessarily bureaucratic, and of little practical value. She was also resistant to the Health Educators in each region being asked to provide more comprehensive information

about implementation of the project in their area. The evaluator's suggestion that Health Educators should be sent a brief questionnaire to obtain current monitoring information was rejected by the Senior Health Educator on the grounds that Health Educators were already overworked.

The appointment of the second Senior Health Educator in mid-1990 marked a change in the relationship between the evaluation team and the Health Educators. Whereas the first Senior Health Educator had attempted to avoid being responsible for any project-level monitoring or evaluation, the new Senior Health Educator appeared to accept these activities as part of her role as Project Coordinator, while reiterating that until she had assistance with her other health education responsibilities she would be unable to adequately fulfill the coordination role. Whereas the first Senior Health Educator had essentially rejected the need for a change in orientation of the Heartbeat Community Project, the second Senior Health Educator was prepared to consider and facilitate making changes. During 1990, consensus could be seen to develop among the Health Educators and others involved in the project about the need for change, and the Senior Health Educator herself recommended change on some of the issues raised in the September 1990 evaluation report which the previous Senior Health Educator had rejected (e.g., the need to avoid an approach based primarily on dissemination of information). However, on two occasions, recommendations of the evaluation team that were intended by them to be supportive of the Health Educators and the project (i.e. the need for ongoing training and support of Health Educators, and the suggestion that the evaluator visit each Health Educator to obtain information on project implementation) were interpreted as unhelpful by the Senior Health Educator, and consequently not actioned.

The response of the Health Educators to the September 1990 evaluation report on the Heartbeat Community Project illustrates the potential for evaluation activities to create controversy. In retrospect it is clear that by directly challenging the value of the existing Heartbeat Community Project model, the evaluation team unintentionally alienated staff working on the project. As a result, there was hostility and suspicion on the part of many of the Health Educators toward the evaluation team following the September report and

surrounding discussions. The resignation of the first Senior Health Educator after eleven years service with the National Heart Foundation was anecdotally reported to the evaluator to have been a direct consequence of the formative evaluation findings in the September 1990 evaluation report and their aftermath. It was reported to the evaluator that the Senior Health Educator had considered resigning in September 1990, but decided to delay this till early 1991. In retrospect, the evaluation team could have handled the situation in a less confrontative and challenging way. For example, rather than addressing their recommendations for change to and placing responsibility for decisions about change on the Heartbeat New Zealand Committee, they could instead have addressed their recommendations directly to the Health Educators, and suggested the formation of a Health Educator working party to consider these. By engaging the Health Educators in a joint re-examination of objectives and strategies, there may have been greater potential for achieving lasting change in the project. The more "top down" approach which was adopted meant that programme policymakers made decisions which were imposed upon those implementing the programme. However, such an alternative approach would not have fitted with the evaluation team's view that their primary client was the Heartbeat New Zealand Committee, rather than those implementing Heartbeat activities. There was clearly an issue of relative project "ownership", between the Health Educators and the Heartbeat New Zealand Committee.

The outcomes of the working party recommended by the evaluation team to examine the Heartbeat Community Project illustrate the potential for such structures, set up as a result of evaluation findings in a specific area of the programme, to be used by programme participants as an attempted means of addressing a range of broader programme issues. While some useful developments did arise from the working party's consideration of Heartbeat's broader nutrition activities, insufficient time was allocated to consideration of specific issues relating to the Heartbeat Community Project, with the result that the working party was rather ineffectual as a means of establishing the future direction of the project. Both the working party, and the Ottawa Charter workshop illustrate the fact that many programme participants saw the apparent problems with the

Heartbeat Community Project as symptomatic of perceived deeper problems with the overall Heartbeat programme, and considered that the former could not be dealt with isolation. In the case of the working party the perceived deeper problem was the apparent lack of strategic planning by Heartbeat in relation to its nutrition activities, and in the case of the Ottawa Charter workshop, the major problem was perceived to relate to problems experienced by Health Educators within their own organisation, the National Heart Foundation.

The process of developing a set of agreed upon objectives and strategies for the Heartbeat Community Project illustrates the complexity and importance of this task, when there are a number of different groups involved in a project or activity, with differing agendas (e.g., the Health Educators, the evaluation team, Heartbeat New Zealand Committee members, National Heart Foundation administrators). The preparation and circulation of successive drafts of the objectives and strategies, while a time-consuming and long-winded process, can be seen to have been important as a focus for negotiation and developing consensus among the different groups involved as to the project's appropriate emphasis and methods. This was in contrast to the Heartbeat Programme Director's earlier unilateral and somewhat hasty attempt at specifying new objectives and strategies for the project in order to comply with the working party's recommendation that this occur. This statement of objectives and strategies was rejected by key project participants, as it was considered that it did not capture the essence of the new approach being sought. In the evaluator's observation, the objectives and strategies that were eventually developed for the project provided a strong and agreed upon basis for the project's future development.

A further issue that was illustrated in evaluation of the Heartbeat Community Project is that there are often pressures operating on projects which may work against the implementation of evaluation findings and recommendations, even when there is support for the latter among those implementing the project. This was exemplified in the case of the Heartbeat Community Project, when Health Educators found that, despite the fact that the Heartbeat New Zealand Committee had endorsed the broader objectives and strategies

of the project, National Heart Foundation administrators blocked attempts to move beyond the traditional health education focus of the project (e.g., by refusing or withholding payment for Heartbeat Leaders engaged in alternative activities). This will be discussed further below. The important point for evaluators is that even when there is formal agreement on the need for change arising from evaluation activities, there may be informal pressures which effectively prevent such changes from being fully implemented. In this situation, an appropriate role for the evaluator may be to highlight the fact that this is occurring, so that alternative pressure can be brought to bear.

It can be seen that in evaluation of the Heartbeat Community Project, the evaluation team approach was much more salient than it was in the Heartbeat Awards project. While the evaluator carried out the actual evaluation work in both projects, the other two members of the evaluation team were much more visible in the case of the Heartbeat Community Project. This partly reflected the fact that evaluation of the Heartbeat Community Project was more contentious than that of Heartbeat Awards, hence the perceived need to present a united front, and add to the weight of evaluation findings and recommendations by stressing that these were the outcomes of consideration by a team of evaluators rather than one individual. The other two members of the evaluation team also brought their previous experience and knowledge of the health promotion field to bear on evaluation of the Heartbeat Community Project, which contributed to the critical formative evaluation approach that was adopted. However, the dual role of the Director of the Alcohol Research Unit as supervisor of the Heartbeat evaluation, and a member of the Heartbeat New Zealand Committee, led to a lack of clarity at times as to which role she was assuming in various situations (e.g., in her chairing of the working party), and whether she was presenting her own views and preferences as a member of the Heartbeat Committee, or the views of the evaluation team based on their activities and findings.

A number of other general issues relevant to evaluation can be identified as having been learned or confirmed by evaluation of the Heartbeat Community Project. For example, the importance of evaluators not assuming that projects are always implemented as planned or formally stated was confirmed by this experience. Had the evaluator not

attended the two Heartbeat Community Project sessions in Auckland, or noted the inconsistency in monitoring information regarding the actual versus intended group size, this important issue would not have been raised and addressed. In addition, while reviewing relevant literature and previous experience is clearly an important step in project planning and decision-making, the results of the Heartbeat Community Project literature review show that this does not always result in clear and unequivocal directions being identified for project development. There were a number of limitations in the health education and health promotion literature reviewed, which made it difficult to state categorically what the effects of an approach like the Heartbeat Community Project would be. What this suggests is that evaluators should not necessarily expect the research literature to provide all the answers when considering issues of the likely outcomes of activities, and that there will still be a need for programme decision-makers and others to make decisions based on "best guesses" in many cases. A further evaluation issue identified in evaluation of the Heartbeat Community Project is the difficulty of adequately monitoring implementation of a national programme, and the importance of establishing comprehensive monitoring systems from an early stage.

(iii) Health Promotion Issues

An ongoing tension and debate can be identified from events in and around the Heartbeat Community Project over the research period, relating to the relative merit of traditional health education approaches compared to the broader range of strategies embodied in the developing field of health promotion. Two opposing points of view were evident in this debate. One position, adopted by the evaluation team and some Heartbeat New Zealand Committee members previously unconnected with the National Heart Foundation, was that Heartbeat had a responsibility to use the government funding provided to develop innovative health promotion activities which would reflect a population approach to prevention. The adherents of this position felt that strategies aimed at changing individual knowledge, attitudes and behaviour through face-to-face educative approaches were likely to be much less effective and efficient in the long term than strategies aimed at changing the food environment, which, while new and unfamiliar, had

the potential to impact upon the whole population, for the same or lower cost. The other position, adopted by many of the participants connected with the National Heart Foundation, was that the health education approach embodied in the Heartbeat Community Project was perfectly legitimate as a familiar, "tried and true" strategy, which was administratively straightforward and easy to implement.

Part of the debate around the Heartbeat Community Project can be seen to concern different standards held by participants for the performance of the Heartbeat New Zealand programme. Some participants clearly had high standards for Heartbeat's performance as a population-based health promotion and disease prevention programme, expecting it to provide an exemplary model of what they felt a "state of the art" programme should embody. Others appeared not to share such expectations, and instead to have been more interested in developing a workable, smooth-running programme.

The original project model fitted well within the National Heart Foundation, following as it did the established approach adopted in teaching members of the public cardiopulmonary resuscitation skills, and utilising the Health Educators as major implementors, most of whom were committed to face-to-face education as a consequence of their professional background and previous experience. Face-to-face education also fitted well in terms of the National Heart Foundation's public image needs. The evaluator observed that, as a public charity, a great deal of emphasis was placed by National Heart Foundation administrators on Foundation workers being as visible as possible at local community level, in order to promote the image of the Foundation as being busily engaged in worthwhile activities. This had implications for the Heartbeat Community Project in that the National Heart Foundation's criteria for project effectiveness (e.g., high visibility of Health Educators and other Foundation workers leading to positive public image of the Foundation) could perhaps be seen to differ somewhat from potential health promotion criteria for effectiveness (e.g., creation of or support for health-promoting change in the greatest possible number of people, regardless of the level of visibility of the health promotion workers involved).

As noted earlier, the fact that the small group educative approach was relatively easy to plan, implement, monitor and report on made it very attractive in terms of ease of administration and accountability, both for individual Health Educators, and for National Heart Foundation administrators, who were anxious to show the Department of Health that the project was having an impact. Some of the early reluctance to consider amending the approach was almost certainly because adopting a different and less well-defined approach would have implications for both administration and accountability, which in fact it did.

It can be seen that there were strong pressures operating to keep the project the way it was originally, even once the need for reorientation appeared to be accepted by many of the major players. A major influence in this, referred to above, was the desire of National Heart Foundation administrators to be seen to be achieving results with Department of Health funding, and their stipulation that this be in terms of numbers of sessions held, and number of people reached by the project. The programme administrators saw it as crucial that the project achieve good coverage in order for it to continue to be funded. This led to the situation whereby the Health Educators were being told by National Heart Foundation administrators in May 1990 that project performance would be judged on the basis of the number of people participating in small group nutrition education sessions, at the same time as the new broader objectives and strategies, supported by the Heartbeat New Zealand Committee, were emphasising "quality not quantity", and that small group nutrition education sessions should be viewed as just one strand among others of the project.

It is clear that the dual role of the Health Educators, as National Heart Foundation employees and Heartbeat project implementors, created difficulties for them. A major problem for many Health Educators was coping with the workload from the Heartbeat Community Project, on top of their existing National Heart Foundation responsibilities. While some Health Educators wished to work more actively in a broader range of health promotion strategies, others resisted any change to their traditional health education role in an effort to keep their workloads manageable. In addition, with the advent of Heartbeat New Zealand, and their involvement in the Heartbeat Community Project, the Health

Educators were required to report to two committees, the Health Education Committee, to which they had traditionally reported, and the Heartbeat New Zealand Committee. This led to some resentment, and to the perception, initially at least, that the Heartbeat New Zealand Committee, a group of relative newcomers, were interfering in their work.

Overall, it is clear from the issues identified above that the Heartbeat Community Project was strongly shaped by organisational influences. The important point that emerges is that locating a new health promotion/disease prevention programme within an existing organisation means it will inevitably be shaped by prevailing attitudes and practices within that organisation. While there are obviously some strong advantages in making use of the existing infrastructure of an organisation like the National Heart Foundation, it must be recognised that this has implications for the types of activities that will be seen as possible and desirable to develop within such an organisation. In the case of the Heartbeat Community Project, this meant that the expectations of those who identified development of innovative, exemplary health promotion strategies as Heartbeat's primary mission were not fully met.

To summarise, the Heartbeat Community Project of Heartbeat New Zealand was being implemented nationally when the evaluator entered the research setting. The project consisted of the use of trained Heartbeat Leaders to run small group nutrition education sessions for groups in the community on request, under the auspices of the National Heart Foundation Health Educator in each region. While the Senior Health Educator responsible for coordinating the project identified outcome evaluation as the top priority for the project, the evaluation team identified a greater need to obtain information on project implementation, the likely outcomes of the approach, and its perceived place within the overall Heartbeat programme. Based on a four month period of intensive formative evaluation input by the evaluator, the evaluation team identified a number of problems with the approach taken, and recommended the establishment of a working party to critically examine the project, and make recommendations as to its future direction and form. The formative evaluation findings elicited a strong negative reaction from the

National Heart Foundation Health Educators. A number of recommendations were made by the working party, but it did not fulfill its terms of reference in relation to the Heartbeat Community Project, and there was a lack of clear direction as to the future of the project. An April 1990 workshop for Health Educators on Ottawa Charter principles and the Heartbeat Community Project produced substantial agreement among this group as to changes that should be made in the project, and new broader objectives and strategies were developed and refined during the remainder of 1990. While some changes to the project were implemented during 1990, this change tended to be slow and incremental rather than rapid or dramatic. It was difficult to obtain comprehensive and systematic monitoring information on the level and extent of changes throughout the country. While evaluation input to the project throughout the research period did affect its development, it is difficult to judge the extent to which this input resulted in a more effective project. A number of lessons and issues relevant to evaluation and health promotion generally can be identified from the Heartbeat Community Project experience.

CHAPTER SIX

FRAMEWORK FOR OUTCOME EVALUATION OF HEARTBEAT NEW ZEALAND

The Heartbeat evaluation team turned its attention to outcome evaluation of the overall Heartbeat programme in September 1989, once the time commitment of the evaluator to formative evaluation of the Heartbeat Awards and Heartbeat Community Projects lessened. The evaluation team's outline of planned evaluation activities for the period from September to December 1989 included an initial investigation of possibilities for impact/outcome evaluation of Heartbeat.

Section 1 of this chapter outlines the proposal for outcome evaluation of Heartbeat which existed when the evaluator entered the research setting, and problems that were identified with this approach. Section 2 discusses the development of an alternative approach to outcome evaluation, which aimed to provide a more appropriate basis for judging programme performance. The process of adoption of the new framework for outcome evaluation is described in Section 3, and Section 4 identifies and discusses the contribution of the evaluation activity to programme development, and issues which arose from it that are of relevance to evaluation and health promotion.

Section 1: Examination of Existing Proposal for Outcome Evaluation

(i) Trends in Cardiovascular Disease Risk Factors, Morbidity and Mortality

The supervisor of the Heartbeat evaluation identified the first task of the evaluator in considering outcome evaluation as being to identify all available sources of data on rates of cardiovascular disease risk factors, morbidity and mortality in the New Zealand population. This would establish whether baseline data were available to enable the identification of changes during and after the period of intervention, and whether relevant data were being collected periodically by New Zealand researchers as part of ongoing population surveys or other research. This was based on the assumption that an outcome evaluation of Heartbeat New Zealand should focus on changes in the New Zealand population (since it was intended that the programme adopt a population-based approach) in these indicators over a specified

period. This was the approach that had consistently been taken in outcome evaluation of the major overseas community cardiovascular disease prevention programmes. It was also based on the assumption that Heartbeat could not afford to fund its own research in these areas, so would be reliant on collating data gathered by others. The Heartbeat New Zealand Committee had developed a document entitled "Heartbeat New Zealand Aims, Objectives, Goals and Targets" which included specification of the degree of change in various population risk factors for cardiovascular disease that Heartbeat should achieve, and intended that this should form the basis for outcome evaluation of the programme.

The evaluator conducted a literature search which identified past, current and planned research on cardiovascular disease risk factors, morbidity and mortality in New Zealand. From this, it became clear that identification of population trends in cardiovascular disease risk factors over time in New Zealand would be problematic, due partly to the complex and multi-factorial nature of cardiovascular disease risk, in combination with design limitations of the available research. No study was identified which measured levels of the three established major risk factors for cardiovascular disease, of cigarette smoking, high blood fats and high blood pressure, in the New Zealand population on an ongoing longitudinal basis. Some information on the prevalence of each of these three risk factors was available, but from largely cross-sectional studies carried out by different researchers, at different times, using different methodologies, and based on different sampling frames, which made comparing or combining the results to build up a coherent picture difficult. While information relevant to the behavioural inputs to cardiovascular disease of cigarette smoking, diet, and exercise patterns in the New Zealand population would become available through the Department of Health's (1989) Heart Health Survey, and the Hillary Commission's (1990) Life in New Zealand Survey, both of these were conducted after Heartbeat was operating, so could not provide baseline data, and it was not clear whether longitudinal data would be obtained through future administration of the same surveys.

However, even apart from the difficulties outlined above, the evaluator, after considering the issue of outcome evaluation of Heartbeat, began to question whether an approach that focused primarily upon changes in risk factors, morbidity and mortality on a

population basis would actually be valid. She identified the need to address the overall strategy that should be adopted for outcome evaluation of Heartbeat as a higher priority than further addressing the question of available data, and this is covered in the following sections.

(ii) Heartbeat New Zealand Aims, Objectives, Goals and Targets

The February 1989 document setting out Heartbeat's aims, objectives, goals and targets, development of which occurred before the evaluator's entry to the research setting, was examined. The document cited Heartbeat's aim as being to prevent premature illness and death from cardiovascular disease in all New Zealanders. It then identified an objective, goals and targets for each of the five areas of nutrition, cigarette smoking, high blood pressure, exercise and rheumatic fever. The objective for each area was a statement of what Heartbeat ultimately wanted to achieve in that area, as follows:

1.1 To change the New Zealand diet away from its traditional dependence on fatty meals and full fat dairy products towards more cereal and vegetable foods, lean meat, poultry and fish and low fat milk products.

2.1 To reduce the health consequences of smoking in New Zealand.

3.1 To reduce the health consequences of raised blood pressure in New Zealanders.

4.1 To reduce the health consequences of physical inactivity in New Zealanders.

5.1 To abolish rheumatic fever and rheumatic heart disease in New Zealand. (Heartbeat New Zealand, 1989, p. 2-5).

Goal statements for each area were then made, which further explicated the objective. For example, the nutrition area had the following six goal statements:

1.2.1 To reduce the contribution of fat to the total energy of the New Zealand diet.

1.2.2 To reduce the prevalence of overweight.

1.2.3 To encourage a varied and balanced diet.

1.2.4 To increase the dietary fibre contribution of the diet.

1.2.5 To reduce the intake of dietary salt.

1.2.6 To reduce alcohol consumption. (Heartbeat New Zealand, 1989, p. 2).

The smoking area had only one goal statement, which was:

2.2 To make New Zealand a smoke-free society by the year 2000 i.e. a society in which non-smoking is the norm; there is no smoking in closed public places and there is no promotion of tobacco products. (Heartbeat New Zealand, 1989, p. 3).

A number of detailed targets were provided for each of the five areas, and the document stated that all targets should be considered to be for the year 2000, unless otherwise specified. These targets fell into two main categories. The first and largest category specified changes which should be achieved on a range of variables that are, or contribute to, risk factors for cardiovascular disease. For example:

1.3.2 To reduce saturated fat to 15% of total energy by 1995 and to 10% by the year 2000 with at that stage a ratio of 2:3:1 of saturated, monounsaturated and polyunsaturated fatty acids.

1.3.3 To reduce the prevalence of overweight (body mass index >25-30) to less than 25% of the general population.

2.3.1 To reduce the proportion of smokers in those aged 15-64 years in Maoris and non-Maoris by 1% per annum.

3.3.1 To reduce the average salt intake by 20% so that the average daily sodium output is reduced to about 140 mmol for men and 110 mmol for women by 1990 and to 120 mmol and 95 mmol respectively by 1995.

3.3.5 To reduce the population mean diastolic blood pressure by 2mmHg. (Heartbeat New Zealand, 1989, p. 2-5).

The second major category of targets concerned specific, identifiable activities that Heartbeat should accomplish itself, or support. For example:

2.3.2 To implement legislation on restricting smoking in public places by 1990.

2.3.3 To implement a ban on cigarette advertising and promotion by 1992.

2.3.4 To increase the price of cigarettes annually by taxation at a rate equivalent to the annual inflation rate plus 5%. To use some of the revenue for health promotion and sponsorship of sport.

2.3.5 To reintroduce the question on smoking habits into the 1991 Census.

3.3.4 To identify all persons with diastolic pressure over 100 mmHg so as to enable these people to receive advice and/or treatment.

4.3.2 To ensure that the National Heart Foundation Jump Rope for Heart project is held in at least 1000 schools annually for the next five years. (Heartbeat New Zealand, 1989, p. 2-5).

A June 1989 adaptation of the February document to include it as the basis of Heartbeat's 1989-1991 strategic plan included only the sections on nutrition and smoking, reflecting the fact that these two areas had by then been identified as priorities for these years by the Heartbeat New Zealand Committee.

(iii) Problems with Existing Proposal for Outcome Evaluation

The evaluator identified a number of problems or issues with the Heartbeat New Zealand Committee's intention of using the above targets as the basis for assessing the Heartbeat programme's effectiveness at some future point. Some of these were relatively minor issues. For example, there was the question of when the Heartbeat programme should be considered to have begun. The first funding instalment was provided by the Department of Health in December 1987, while the first meeting of the Heartbeat New Zealand Committee occurred in February 1988. Funding was used for a range of purposes during 1988, with project development in several areas occurring in the latter months of that year. The document setting out Heartbeat's aims was not finalised until February 1989. It was not clear when the programme could be considered to have formally commenced, for the purposes of outcome evaluation. Another issue concerned the time span of the specified targets, in view of the expected lifespan of the Heartbeat programme. While some short term targets were set, most targets were for the year 2000. Heartbeat had been funded initially for a three year period, with the expectation that, like Heartbeat Wales, it would probably have a five year lifespan, at least in terms of being substantially funded by government. If Heartbeat were wound up after three or five years, the grounds for expecting a continued effect from its activities to the year 2000 were not clear. A related issue was the time it might take for the effects of a cardiovascular disease prevention programme to be evident in population risk factor levels, let alone in morbidity and mortality. In view of these questions, it was not clear at which point an outcome evaluation of the Heartbeat programme would most appropriately occur. A further issue which required clarification was the extent to which outcome evaluation of Heartbeat should take into account the targets set for all five areas of

programme activity, as outlined in the document of February 1989, or just the two priority areas of nutrition and smoking, as outlined in the strategic plan for 1989 - 1991, produced in June 1989.

The evaluator considered that it would be fairly straightforward to assess achievement of those targets which specified particular activities Heartbeat New Zealand should accomplish or support (although the relative contribution of Heartbeat compared to other agencies working in the same areas would be difficult or impossible to determine). It would also be possible to assess change in the targets relating to population risk factors and related variables if the statistical information needed to do this was available (although again, the relative contribution of Heartbeat compared to other influences would be difficult or impossible to determine). The main question with assessing achievements in terms of changes in population risk factors that was identified by the evaluator concerned the validity of the expectation that the Heartbeat programme in its present form was likely to lead to observable changes in the New Zealand population in the target areas. Based on the evaluator's knowledge of the functioning and activities of the programme to that point, it seemed unlikely that it would have a measurable impact on population risk factors and related variables.

In the evaluator's view, the *formal statement* of Heartbeat's aims suggested that the programme was a carefully planned, comprehensive, well-coordinated intervention (as may have been intended). In *practice*, however, she considered that the Heartbeat New Zealand programme presented a somewhat different picture. The programme that had developed to date could be considered to have been relatively poorly planned and coordinated. For example, a strategic plan for the programme was not developed until June 1989, when Heartbeat had been established for 18 months, and had already received funding from the Department of Health of more than $1.2 million. This funding had been applied to a range of different initiatives, some of which were ongoing projects. Others were one-off events or activities. Some projects and activities were initiated and fully funded by Heartbeat (e.g., Heartbeat Awards), while others were developed by another agency and then adopted and either fully or partially funded by Heartbeat (e.g., Heartbeat Community Project, SOS). The

decision-making rationale for the types of projects and activities that Heartbeat agreed to provide funding for was not explicit during 1988 and early 1989, when major funding decisions were made. Heartbeat-funded projects and activities had operated in different geographical areas, over differing periods, aimed at different target groups/audiences, at differing levels of intensity, and with different personnel involved.

A number of groups had applied to Heartbeat for funding and been given one-off grants. However, Heartbeat had, to that point, not publicised the fact that it had funding available for heart health projects. Those groups which had applied had generally been associated in some way with members of the Heartbeat New Zealand Committee, or been referred to Heartbeat by the National Heart Foundation or the Department of Health. Applications for funding were received by Heartbeat on an ad hoc basis, rather than systematically sought, and they were also dealt with on an ad hoc basis, in the absence of explicit criteria for making funding allocation decisions. (This situation changed during 1990, however, with the creation of the Community Grants Project by Heartbeat).

The evaluation team had identified poor planning and a lack of coordination and integration as deficits in the Heartbeat programme at an early stage of their involvement with the programme, and some changes had been made as a result (see Chapter Seven). However, the evaluator considered that, while these changes would improve the functioning of existing and some future Heartbeat activities, they were essentially remedial in nature, and unlikely to achieve the same results as if they had been built in from the start of the programme.

Overall, the evaluator considered that the major issue in outcome evaluation of Heartbeat New Zealand was the extent of congruence between formally stated programme intentions, desired outcomes, and actual programme implementation. Based on her knowledge of the programme, it seemed unrealistic to expect the activities that Heartbeat had implemented would, at the time of the evaluation, have had the sort of impact upon population levels of risk factors or variables related to risk factors that the formal aims envisaged. Even if the programme could be expected to impact on a population basis in these areas, it would be difficult or impossible to attribute any observed change specifically to the activities of Heartbeat New Zealand, because the intervention was not set up in a way that

would allow clear conclusions to be drawn about this (e.g., with a quasi-experimental design). The non-experimental design of the Heartbeat programme was an important difference between it and major overseas cardiovascular disease prevention programmes. Application of the typical approach to outcome evaluation of programmes with an experimental design would have been inappropriate in Heartbeat's case.

The evaluator considered that the approach to outcome evaluation of Heartbeat suggested in the formal aims and desired outcomes of the programme would embody a typical "black box" approach (Patton, 1986), where a great deal of effort and energy was spent on developing specific measurable targets for overall programme performance, with little or no consideration given to the means by which the programme would supposedly achieve these. The evaluator perceived a need to design an approach to outcome evaluation that would incorporate a much more direct focus on the effects of what was actually implemented under the programme, and that would take account of important characteristics of the programme and the context within which it operated.

(iv) December 1989 Evaluation Report to Heartbeat New Zealand Committee

The evaluation team addressed the question of outcome evaluation of the Heartbeat programme in its third report to the Heartbeat New Zealand Committee, in December 1989. The report stated that, while it would be possible to assess Heartbeat's performance on the basis of the formal aims, objectives, goals and targets specified, this might not be appropriate. The reason given was that the formal aims largely set out what should be achieved in New Zealand as a whole by the year 2000, by all cardiovascular disease prevention and related health promotion efforts, rather than what Heartbeat itself could reasonably be expected to achieve, or what, if it was achieved, could be directly attributed to Heartbeat's activities. The evaluation team stated that it would be unrealistic to expect that the activities that Heartbeat had funded or initiated to date would, on their own, have a major impact on population risk factors or variables contributing to risk factors. Even if this did occur, it would be impossible to directly attribute any observed change to Heartbeat New Zealand, because the programme was not taking place in a context that would allow such attributions to be made (e.g., through the use of a quasi-experimental design).

The evaluation team stated that it would be useful to monitor trends in cardiovascular disease risk factors in New Zealand where possible, since this would help to clarify the context within which the Heartbeat programme was operating, and identify any improvements to which it may have contributed. However, this should not be viewed as the sole or primary focus of outcome evaluation. Instead, the major focus of outcome evaluation of Heartbeat should be an examination of the impact of the programme at a more immediate level. This would include examining the extent to which Heartbeat carried out the specific functions and activities which were identified when it was first established, taking into account modifications that occurred as the programme developed. The statement of mission and objectives for Heartbeat New Zealand developed by the Department of Health when the programme was first set up (see Chapter Three) was identified as an appropriate starting point for identifying a suitable basis for outcome evaluation of Heartbeat New Zealand. The mission and objectives specified the functions and activities that the programme should carry out. The evaluation team recommended that it give further consideration to the nature of outcome evaluation of Heartbeat New Zealand, and develop a framework for this, to be presented at the next meeting of the Heartbeat New Zealand Committee. This recommendation was accepted by the Committee.

Section 2: Developing a Framework for Outcome Evaluation

(i) Need to Incorporate Range of Related Aspects

Developing a framework for outcome evaluation of Heartbeat New Zealand proved to be a complex task, as there were a number of different aspects which needed to be taken into account. The framework needed to incorporate the statement of mission and objectives developed by the Department of Health and agreed upon by the National Heart Foundation in late 1987 (see Chapter Three), which set out the Department of Health's expectations at that time regarding use of the Heartbeat funding. The framework also needed to take account of the range of different projects and activities that Heartbeat had implemented or been involved with to that time. Although the evaluation team had identified the formal aims and desired outcomes of Heartbeat developed in February 1989 and utilised in the June 1989 Heartbeat

strategic plan as inappropriate for use as the sole basis of judging Heartbeat's performance, these documents still needed to be considered as part of the new framework for outcome evaluation. Also relevant were the *New Zealand Health Goals and Targets* produced by the Department of Health in December 1989. Of the ten national health goals identified as top priorities for the next decade, four were relevant to the work of Heartbeat and the National Heart Foundation (nutrition, smoking, high blood pressure, coronary heart disease and stroke). In addition, at the time that work began on formulating a framework for outcome evaluation of Heartbeat, it was envisaged that new objectives would soon be developed by the Programme Director for the Heartbeat Community Project which reflected a broader-based approach and incorporated all of Heartbeat's existing community-level activity, and these would clearly be of relevance to an outcome evaluation. A further concurrent development which substantially influenced consideration of the framework for outcome evaluation was that it had been announced in late 1989 that the committees of the National Heart Foundation were to be restructured. It was proposed that the present Heartbeat New Zealand Committee would be combined with the present Health Education Committee, to form a new committee to be responsible for all of the health promotion work of the Foundation. As part of this development, work began in the National Heart Foundation to formulate a health promotion policy for the Foundation, and the first draft of this was circulated for comment at the same time as the framework for outcome evaluation was being developed.

(ii) Specific Evaluation Issues

In addition to the need to take account of the factors outlined above, there were a number of specific questions and issues which needed to be addressed in deciding upon the most appropriate basis for outcome evaluation of Heartbeat.

(a) Hierachy of outcomes.

One of the problems with the February 1989 document outlining Heartbeat's formal aims and desired outcomes that was identified was that it concentrated too much upon what can be termed ultimate outcomes or endpoints, rather than considering more intermediate steps or outcomes which would be necessary for the desired final or longer term outcomes to

occur. A possible hierachy of outcomes for population-based cardiovascular disease prevention programmes was identified by the evaluator as follows:

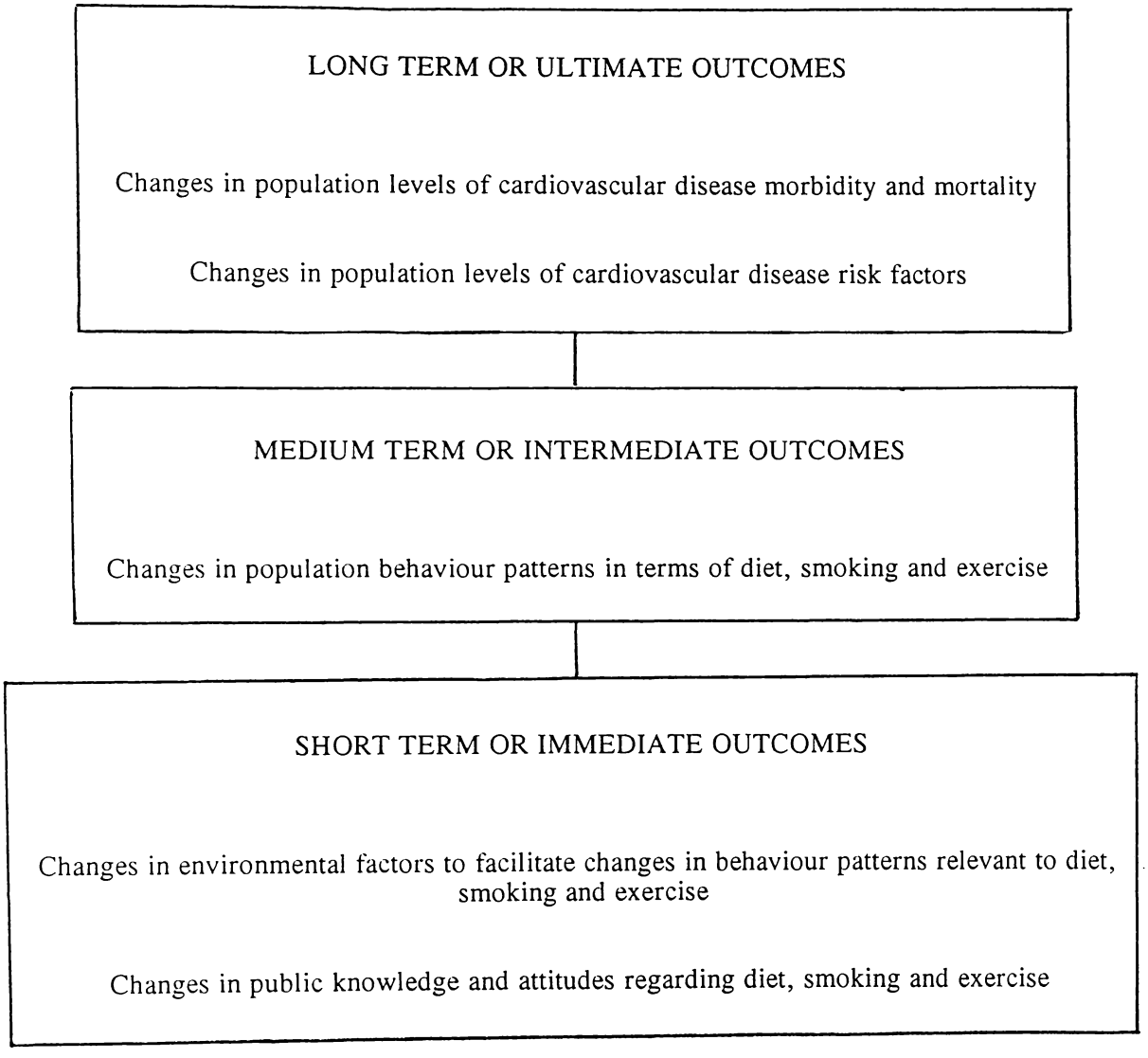

Figure 6.1. Possible hierachy of outcomes for population-based cardiovascular disease prevention programmes.

The links between and order of some of these steps or levels of outcomes could be debated. For example, the amount of influence of changes in the risk factor status of individuals (e.g., by stopping smoking, and lowering blood fats and blood pressure) upon eventual cardiovascular disease morbidity and mortality is debated in the cardiovascular

disease prevention literature. The links between attitude and behaviour change are debated in the psychological literature. The respective influence of changes in individual knowledge and attitudes compared to changes in environmental factors influencing behaviour is debated in the health promotion literature. However, these questions aside, it was clearly important that the framework for outcome evaluation be capable of taking into account short term outcomes as well as medium and longer term outcomes, in view of the likely sphere of influence of activities implemented under the programme, and Heartbeat's likely timeframe.

(b) Impact and outcome evaluation.

A question which needed to be dealt with emerged from the evaluation literature on outcome evaluation, where a distinction is often made between the terms *impact* and *outcome* evaluation. These terms are used in different and often opposite ways by programme evaluators and other researchers (Flay, 1986). Some authors use the term impact evaluation to refer to changes in knowledge, attitudes, behaviours, and environmental factors, and the term outcome evaluation to refer to changes in risk factor levels and disease states (e.g., Green, 1979; New South Wales Department of Health, 1988). Other authors use the term outcome evaluation to refer to assessment of the extent to which a programme has met its objectives, and impact evaluation to describe assessment of the broader or longer term effects of the programme (e.g., Clarkson & Nutbeam, 1987). The evaluation team needed to decide whether it was useful to distinguish between impact and outcome evaluation in the Heartbeat context, and after discussion, concluded that to do so would probably not serve any useful purpose.

(c) Programme and project level outcomes.

A further issue which was identified as being of some importance was the extent to which project and programme level outcomes should be differentiated in outcome evaluation of Heartbeat New Zealand. It was necessary to consider whether the purpose of outcome evaluation was to examine the effects of the overall Heartbeat programme, the effects of individual programme components (i.e., projects and activities), or both. The evaluation team decided that where possible, outcomes needed to be examined at both the level of individual projects, and the programme as a whole, to obtain a comprehensive picture.

Addressing outcomes at project level would avoid the problems experienced with utilising the research findings related to overseas heart disease prevention programmes, where the effects of individual programme components were generally not separately evaluated. Project level outcomes might also be the only real means of assessing Heartbeat's achievements in future, in view of the programme's non-experimental design and heterogeneous nature, and the consequent difficulty of attributing broader outcomes specifically to the actions of Heartbeat.

(d) Objective-setting formats.

An important issue which the evaluation team needed to resolve was how best to define, label and set out statements of what the Heartbeat programme aimed to achieve. A brief review of the literature was conducted by the evaluator to identify commonly accepted ways of doing this. It was found that different authors and sources advocated a range of different formats, often with quite complex rules for how this should be done. For example, whereas Heartbeat's February 1989 statement of aims and outcomes used a format involving aims, objectives, goals and targets with an ordering from general to increasing specificity, other authors and sources used the same terms in quite different ways, or used different formats altogether. For example, the Heartbeat Wales programme recommended that participating agencies identify goals/aims, objectives, targets and operational statements moving from general to increasing specificity (Clarkson & Nutbeam, 1987). The New South Wales Department of Health (1988) advocated that health promotion programmes set out their goals, target/intervention groups, objectives and strategies. A lack of consensus was evident among the sources reviewed regarding questions such as whether goals/aims should be measurable, the amount of detail that should be contained in statements of objectives, and whether specification of activities and results additional to objectives was required. Of particular relevance to Heartbeat New Zealand was the New Zealand Department of Health requirement in 1990 which identified inputs, outputs, outcomes and performance indicators as the key aspects to be specified in funding contracts. The evaluation team concluded that there were a variety of ways in which statements about what a programme sought to achieve could be set out and labelled, and that it was not particularly important which format was adopted, provided that it was simple and clear, and that there was consistency in use of the

format within the programme. The evaluator identified two important purposes of specifying goals, aims, objectives, strategies and targets, which were:

- to provide a basis for programme planning (i.e., clarifying what the programme aimed to achieve could help programme personnel focus their thinking about what should be done in future)
- to provide a basis for measuring achievement (i.e., for judging to what extent the programme was doing what it set out to do).

(iii) National Heart Foundation Health Promotion Policy

As stated earlier, work began in late 1989 in the National Heart Foundation to develop a health promotion policy for the Foundation, in anticipation of committee restructuring to occur during 1990, which would involve combining the existing Heartbeat New Zealand and Health Education Committees to form one committee with oversight of all the Foundation's health promotion activities. The proposed restructuring would clearly have implications for decisions about objectives and outcome evaluation of Heartbeat New Zealand, since in future Heartbeat would be subject to the health promotion policy of the Foundation.

A draft health promotion policy document was circulated within the National Heart Foundation for comment in early February 1990. The contents of this document raised some important questions in regard to the extent of separation of Heartbeat-funded and other National Heart Foundation health promotion activities under the proposed new structure. The health promotion policy stated, for example, that the Foundation's health promotion programmes would be called the Heartbeat programme of the National Heart Foundation. This raised the question of whether Heartbeat-funded activities should in future be evaluated as a separate entity, as had been intended, or whether the Health Promotion Committee's activities as a whole should be the focus of future outcome evaluation.

In view of the concurrent development of and overlap of issues between the health promotion policy and a framework for outcome evaluation of Heartbeat, the evaluation team decided to structure its proposal for a framework for outcome evaluation around the draft health promotion policy document. The framework was developed by the evaluation team in

a way that made it applicable both to the proposed broader health promotion programme of the National Heart Foundation, and to the currently defined Heartbeat New Zealand programme, since the scope of the outcome evaluation was not clear at that point.

The section of the health promotion policy of most direct relevance to outcome evaluation contained a set of health promotion goals and targets. Four of these statements of goals and targets were taken directly from the *New Zealand Health Goals and Targets* developed by the Department of Health in December 1989. Two additional areas, exercise and rheumatic fever, were added as being of particular relevance to the work of the National Heart Foundation. These goals and targets were similar to or the same as the previously developed aims, objectives, goals and targets of Heartbeat New Zealand, which the evaluation team had identified as inappropriate as the sole basis for outcome evaluation of a programme such as Heartbeat New Zealand.

(iv) March 1990 Evaluation Report to Heartbeat New Zealand Committee

The fourth evaluation report to the Heartbeat New Zealand Committee, of March 1990, set out a framework for outcome evaluation which examined aspects of the draft health promotion policy, and suggested an alternative approach. The evaluation team reiterated that the earlier stated Heartbeat aims, objectives, goals and targets, and the more recent *New Zealand Health Goals and Targets*, which were very similar, were not appropriate for use as National Heart Foundation health promotion goals and targets, for the same reasons as were set out in the third evaluation report. This was because both the earlier Heartbeat document and the *New Zealand Health Goals and Targets* set out health outcomes that were aimed to be achieved in New Zealand as a whole by all relevant agencies in the time periods specified. They were *national* goals and targets, outcomes to which all relevant agencies would contribute in varying degrees, rather than outcomes which any one organisation should be responsible for, or could be assessed as achieving. The evaluation team considered that for an organisation like the National Heart Foundation, its presently stated health promotion goals and targets did not fulfill either the purpose of programme planning, or the purpose of providing a basis for measuring programme achievements, which were the two major reasons for developing such statements.

The report stated that while it was very appropriate to focus on health outcomes and their measurement at a national policy level, as the *New Zealand Health Goals and Targets* did, what an organisation like the National Heart Foundation needed to do in response to this was to consider how it could contribute to achieving the national health outcomes, and set its own goals and targets accordingly. The evaluation team then set out a suggested alternative format for the National Heart Foundation statement of health promotion goals and targets, as follows.

(a) Overall programme goal.

It was suggested that the document should begin with a statement that the overall goal of the National Heart Foundation's health promotion programme was to *work towards* the achievement of the New Zealand Health Goal and Targets for coronary heart disease and stroke, which were:

> **Goal**
>
> To reduce avoidable illness and death from coronary heart disease (CHD) and stroke in all New Zealanders.
>
> **Targets**
>
> To reduce the death rate from CHD by 10% or more by 1995 and by 20% or more by the year 2000.
>
> To reduce the death rate from stroke by 15% or more by 1995 and by 25% or more by the year 2000.

(b) Programme objectives.

The evaluation team considered that following the overall programme goal and targets, it was important to specify a set of programme objectives for the National Heart Foundation's health promotion programme which would help define the unique contribution that the organisation could make to achieving the overall goal. This level of programme objectives had not been adequately dealt with previously in any of the formal documents outlining what Heartbeat or the Foundation sought to achieve. The evaluation team stated that the programme objectives should indicate in general terms what it was that the programme aimed to do that would help achieve the overall goal, and that specifying

programme objectives was important in terms of giving direction for decisions about which types of programme activities were appropriate (thus fulfilling the planning function of statements of formal aims). Based on her consideration of Heartbeat and National Heart Foundation documents and activities, the evaluator had developed the following draft set of programme objectives which were included in the fourth report for consideration by the Heartbeat New Zealand Committee:

1. To *advocate* for legislative and other public policy change that will facilitate the prevention of heart disease.

2. To *collaborate* with other agencies working in the heart health and health promotion field to ensure an integrated approach to preventing heart disease.

3. To develop and maintain a *high media profile* for heart disease prevention and health promotion issues and action, to stimulate debate and influence the climate of opinion to support healthy public policy.

4. To develop and support activities aimed at *organisational and institutional change* relevant to heart disease prevention and health promotion.

5. To develop and support activities which facilitate *access to information and development of personal skills* by the New Zealand public relevant to heart disease prevention and health promotion.

6. To facilitate and support *community organisation* aimed at influencing environmental factors relevant to heart disease prevention and health promotion.

7. To run an *efficient* programme, maintain a *positive public profile* for the programme, and develop a *broad funding base* to ensure the programme's continuation. (Dehar, Duignan & Casswell, 1990a, p. 18-19).

It was suggested that once such broad objectives had been established, they could be further developed if necessary.

(c) Project objectives and targets.

The next level in the framework developed by the evaluation team was that of projects, with the term "project" covering all of the actual activities implemented as a means of meeting programme objectives. The evaluation team stated that as new projects were developed, careful consideration should be given to how they would help meet programme objectives, and that each project should then have its own specific objectives and targets formulated. It was at the project level that the evaluation team considered that the

specification of targets was most relevant and important, since this was the level that reflected what actually occurred under the programme, and therefore was the basis upon which the programme's performance should be measured in the first instance. A diagram illustrating the various programme levels identified as important by the evaluation team was set out, as follows:

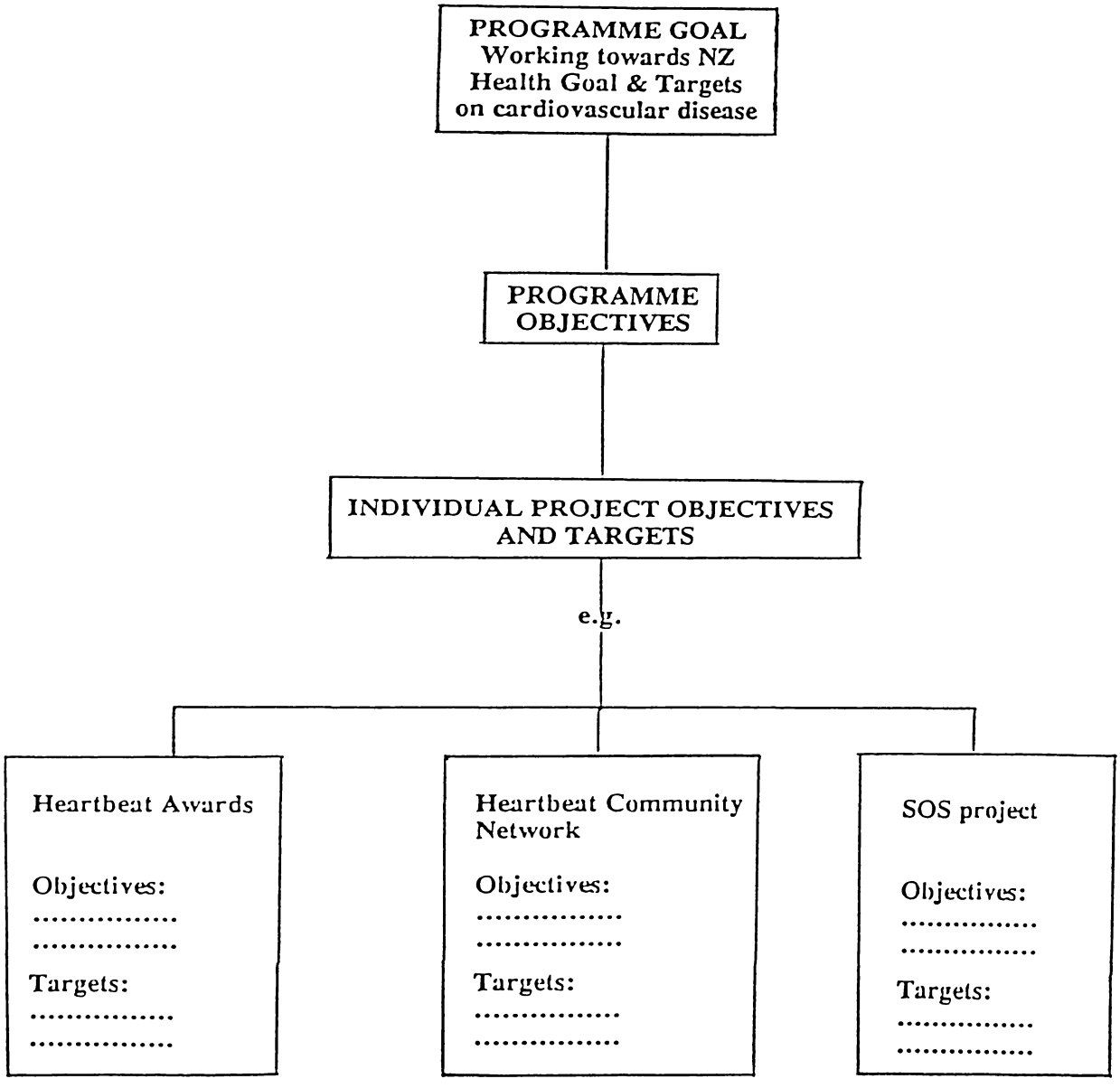

Figure 6.2. Suggested framework for Heartbeat programme goal, programme objectives, and project objectives and targets.

(d) Focus for outcome evaluation of Heartbeat New Zealand.

Having presented the suggested framework for setting out different levels of objectives as the basis for outcome evaluation of Heartbeat and the National Heart Foundation's health promotion programme, the evaluation team described the form that such outcome evaluation should take. It was stated that there were a range of possible strategies for outcome evaluation, depending, for example, upon the programme's characteristics, the needs of decision-makers, availability of relevant information, and resources allocated for the evaluation.

Three key areas were identified as relevant in outcome evaluation of Heartbeat New Zealand. These were:

1. Evidence of achievement of project objectives and targets.
2. Relationship between programme objectives and projects implemented.
3. Population trends in relevant risk factors and behaviours.

Because of the nature of the programme, the evaluation team considered that outcome evaluation should initially focus on evaluating the specific effects of each of the different projects and activities implemented under the programme. Each major project or activity would therefore be subject to outcome evaluation at an appropriate stage in its development.

It was also considered important to examine the programme in terms of decisions made by the steering committee about what activities to initiate and fund, in the light of the programme's objectives. This examination would include consideration of the degree of consistency between programme objectives and activities implemented to achieve these objectives, and assessment of the quality of decision-making in the light of available alternative strategies for achieving the programme objectives.

The evaluation team also considered that although Heartbeat's achievements should not be judged on the basis of impact upon population rates of heart disease risk factors and related behaviours, it would still be of interest to monitor these variables where possible, to help clarify the context within which the programme was operating.

Outcome evaluation based on the three sources of information noted above would therefore combine consideration of the outcomes of individual projects and activities under the programme, the extent to which the activities implemented under the programme were consistent with programme objectives, and any available information on changes in population rates of heart disease risk factors and related variables.

Rather than collecting new data on programme achievements, such an outcome evaluation would constitute an in-depth appraisal of the Heartbeat programme's activities and achievements over the preceding period. The emphasis would be on bringing together and examining the range of existing relevant information about the programme, in order to draw conclusions about its performance. This approach was considered appropriate, in particular, because of the programme's non-experimental design, and the heterogeneity of the activities consituting the Heartbeat programme.

The evaluation team identified the timing of outcome evaluation of Heartbeat New Zealand as a matter for discussion by representatives of Heartbeat New Zealand, the Department of Health, and the evaluation team. However, they suggested that as part of formative evaluation of the overall Heartbeat programme it would be useful if an interim review were carried out by the evaluation team in early 1991 that examined the relationship between the Heartbeat programme objectives and the projects that had been implemented at that point to achieve those objectives. Early 1991 was considered an appropriate time to conduct such an interim review, because by then the Heartbeat programme would have been operational for three years. It was felt an interim review would be useful as part of formative evaluation in order to identify any problems and make constructive changes to improve the programme in the meantime, rather than waiting until full-scale outcome evaluation was conducted at a later stage.

The evaluation team also considered that discussions should be held with the Department of Health as the major funder of the Heartbeat programme, to ensure that the proposed design of outcome evaluation of Heartbeat would meet their needs.

(e) Importance of building in ongoing evaluation of projects.

The fourth report pointed out that the usefulness of the approach to outcome evaluation outlined above depended to a large extent on ensuring that an appropriate level of ongoing evaluation was built in to all projects implemented under the programme. This was necessary to ensure that sufficient information would be available on each project's progress and achievements at the time that outcome evaluation of the overall programme was conducted.

The evaluation team considered that arrangements for ensuring an appropriate level of ongoing evaluation input to all Heartbeat activities could usefully be formalised at this stage in the programme's development. Previously, evaluation of Heartbeat had largely been seen as a discrete activity carried out by the evaluation team. While this was appropriate for evaluation at the level of the overall programme, there was a need for project-level evaluation to be viewed as a joint responsibility of project managers and the evaluation team. By early 1990 it had become clear to the evaluator that she could not single-handedly take care of all aspects of evaluation within the Heartbeat programme, and that responsibility for project-level record-keeping, monitoring and basic evaluation tasks needed to be accepted by Project Coordinators. This would mean that project managers would need to become actively involved in planning and implementing project evaluation activities, in conjunction with the evaluation team. The need was also identified for appropriate evaluation arrangements to be made concerning situations where Heartbeat provided funding to outside groups for activities relevant to the programme.

The evaluation team suggested that as a means of ensuring ongoing evaluation input to Heartbeat projects, an evaluation plan should be established for each project, jointly prepared by the project manager and the evaluation team. This would set out the project objectives and targets, how the project related to the overall programme objectives of Heartbeat, and what evaluation tasks needed to be completed and by whom, taking into account the characteristics of the project, and the resources available for evaluation.

(f) Recommendations on outcome evaluation.

The following recommendations regarding outcome evaluation were made in the fourth evaluation report to the Heartbeat New Zealand Committee:

1.1 That the Heartbeat New Zealand Committee accept in principle the framework for outcome evaluation outlined in Section 8 of this report.

1.2 That if necessary, aspects of the framework be further refined by the evaluation team in conjunction with the Heartbeat Programme Director.

1.3 That the framework be brought to the attention of other members of the National Heart Foundation sub-committee responsible for formulating the National Heart Foundation health promotion policy with a view to their adoption of the framework.

1.4 That discussions be held between the evaluation team and the Heartbeat Programme Director with a view to implementing the system of an evaluation plan for each Heartbeat project.

1.5 That discussions be held between the evaluation team and the Heartbeat Programme Director regarding evaluation requirements that should be met by outside groups applying to Heartbeat New Zealand for funding.

1.6 That the evaluation team conduct a review in early 1991 of the relationship between the programme objectives, and the projects implemented to achieve those objectives.

1.7 That discussions occur between representatives of Heartbeat New Zealand, the Department of Health, and the evaluation team regarding the timing of outcome evaluation of Heartbeat New Zealand. (Dehar, Duignan & Casswell, 1990a, p. 22-23).

These recommendations were agreed to by the Heartbeat New Zealand Committee.

Section 3: Adoption of Framework for Outcome Evaluation

(i) Implementation of Recommendations

Once the framework as set out in the fourth evaluation report was accepted by the Heartbeat New Zealand Committee, action was taken by the evaluation team and Heartbeat Programme Director to put its stipulations in place. In relation to recommendation 1.2, the Heartbeat Programme Director indicated that he agreed with the programme objectives as set out in the fourth report, and that he did not see the need for changes to or further refinement of the framework. The evaluation team suggested the addition of a programme objective addressing the Treaty of Waitangi and issues of biculturalism, but after discussion at the

Heartbeat New Zealand Committee meeting of July 1990, it was agreed that this issue was adequately dealt with elsewhere in the Foundation's health promotion policy.

In relation to recommendation 1.3, the framework was discussed at the June 22 1990 meeting of the National Heart Foundation sub-committee developing a health promotion policy. The Heartbeat Programme Director reported that the sub-committee accepted the points made by the evaluation team, and a further draft of the health promotion policy produced later in June 1990 contained only policy statements, omitting reference to quantitative targets for performance. The framework as set out by the evaluation team was adopted for use by Heartbeat administrators in their June 1990 application for funding for Heartbeat New Zealand to the Department of Health for the twelve months from July 1 1990.

Recommendation 1.4 was implemented shortly following the March 1990 Heartbeat New Zealand Committee meeting, when work began on formulating evaluation plans for Heartbeat projects. This is further discussed below. Recommendation 1.5 was implemented later in 1990, when criteria were developed by the evaluator for evaluation requirements to be met by groups applying for Heartbeat Community Grants. An interim review of the Heartbeat programme was scheduled for early 1991, as recommendation 1.6 stipulated. A Department of Health representative indicated that the framework for outcome evaluation of Heartbeat would meet the Department's needs. The issue of the timing of outcome evaluation of the overall Heartbeat programme was discussed with the Department of Health as recommendation 1.7 suggested, and it was agreed that 1994 would be an appropriate time for this to occur.

(ii) Development of Evaluation Plans

The development of evaluation plans for Heartbeat projects was the major area of activity arising from the recommendations of the fourth evaluation report. As stated earlier, the original intention of the evaluation plans was to formalise arrangements for ensuring an appropriate level of ongoing evaluation input into all Heartbeat projects, and to more actively involve project managers in planning and implementing evaluation at project level. In order to adequately plan evaluation input, there was a need for all projects to have clearly specified objectives, and for these objectives to be set out in a consistent way across the programme,

neither of which was currently the case. Some Heartbeat staff members had not been using any planning or objective-setting format, and a range of different formats were in use by those staff members who were using such formats. This made comparison across projects difficult.

It was also important to clarify how each project related to the overall programme objectives of Heartbeat. Because the plans were to be developed for established as well as new projects, there was a need to include a brief description of the development of the project to date. It was intended that the completed evaluation plans would include all of the information necessary for an outsider unfamiliar with Heartbeat to obtain an adequate grasp of what each project consisted of, and what evaluation input was being provided or planned.

The evaluator developed the following format for the evaluation plans, and circulated this to Heartbeat staff members for comment in May 1990:

1. Project title
2. Key features
3. History and current status
4. Relevant Heartbeat programme objectives
5. Project objectives
6. Project targets
7. Evaluation issues and activities

This format was agreed to, with the addition of a category of "Project strategies" between project objectives and targets. This suggestion was made by a Heartbeat staff member after she had applied the format to her project, and found that specifying project strategies as well as objectives and targets was helpful.

In May 1990 the evaluator began a series of meetings with Heartbeat Project Coordinators and other staff members responsible for implementing projects or activities, to work through each section of the evaluation plan for each project. In these meetings the evaluator and the staff member concerned first spent time formulating objectives, strategies and targets where these did not exist, and identifying the relevant Heartbeat programme objectives. It was often necessary to meet on a number of occasions to finalise objectives,

strategies and targets, and once this was achieved, consideration was given to identifying areas and issues requiring evaluation input, and discussing responsibility for these. By July 1990, evaluation plans had been completed for five existing Heartbeat projects, and draft plans had been developed for a further five areas. Examples of evaluation plans for Heartbeat projects are contained in Appendices 7 and 9.

The development of evaluation plans coincided with the need for the Heartbeat Programme Director and others to submit an application for funding from the Department of Health for the twelve months from July 1 1990. It was found that the format of project objectives, strategies and targets utilised in the evaluation plans was readily transferable to the Department of Health's requirement that the funding application set out inputs, outputs, and performance indicators for each project area. An issue which arose from the preparation of the application for funding and which was relevant to the development of evaluation plans was the question of how a "project" should be defined. As well as the identifiable major projects of Heartbeat, there were a number of smaller scale activities, some of which were one-off occurrences, and others of which were ongoing, and there was discussion over whether these activities should be regarded as projects, and have evaluation plans formulated for them. An example of such an activity was Heartbeat's liaison with Area Health Boards, which consisted of the Heartbeat Programme Director and several Project Coordinators visiting each Area Health Board throughout the country and discussing heart disease prevention and health promotion issues with key staff members. The evaluation team considered that where identifiable activities required significant resources in terms of staff time or funding, it would be helpful to develop objectives, strategies and targets for them, and to consider appropriate evaluation input, and this suggestion was made to and accepted by the Heartbeat Programme Director.

By November 1990, evaluation plans were completed or were in the final stages of completion for all Heartbeat projects. The evaluation team considered it important to ensure that the evaluation plans were actually used as a basis for assessing project performance, and for carrying out project-level evaluation, since there was a risk that the time and effort put into developing the plans would be wasted if they were put aside and forgotten about. In

their sixth evaluation report to the Heartbeat New Zealand Committee, the evaluation team recommended that Project Coordinators report on the achievement of project targets periodically, and that the evaluation plans should be updated at least annually, to ensure that stated objectives and strategies continued to be relevant, and to revise the targets for each strategy. It was also pointed out that the timing of these reports and the updating of evaluation plans should coincide with the timing of the annual application for funding by Heartbeat to the Department of Health, since the information contained in the evaluation plans was needed for the funding application.

The first evaluation plans for Heartbeat projects which were developed in 1990 varied between projects in the extent that they set targets on an annual basis, or used a shorter timeframe. It was found that where projects were in a state of transition, such as the Heartbeat Community Project in 1990, it was difficult to plan ahead and set annual targets, so targets tended to be over a shorter timeframe (e.g., a few months). The evaluation team pointed out in their sixth report that where targets had been set over a shorter timeframe than twelve months, they would need to be reviewed more frequently.

(iii) Monitoring of Cardiovascular Disease Risk Factors

Following the acceptance of the March 1990 framework for outcome evaluation of Heartbeat by the Heartbeat New Zealand Committee, the evaluator continued to keep a watching brief on the situation regarding research on trends in cardiovascular disease risk factors and related behaviours in New Zealand. An example of activity in this area was an unsuccessful attempt to obtain the data disks of the 1989 administration of the New Zealand Heart Health Survey from the market research firm which conducted the survey, as deficiencies in the reporting of data from the survey made interpretation of some results difficult. When an approach for funding for a repeat administration of the Heart Health Survey was made to the Heartbeat Programme Director by the Department of Health in 1990, the evaluation team identified important unanswered questions about the 1989 data, and recommended that Heartbeat should only consider contributing funding for a further administration of the survey if satisfactory answers were provided to these questions.

Section 4: Discussion

(i) Contribution of evaluation activities to programme development

The evaluator's consideration of outcome evaluation of Heartbeat New Zealand can be seen to have led to a pronounced change in the proposed approach to outcome evaluation that had been developed prior to her entry to the research setting. Whereas the original approach had involved the development by Heartbeat decision-makers of a detailed set of quantitative targets for programme performance which emphasised medium and long term disease prevention outcomes on a population basis, the evaluator identified a lack of congruence between these desired outcomes and the characteristics of actual programme implementation. Consequently, an alternative approach was proposed and accepted which was directly tailored to the Heartbeat programme as it was perceived by the evaluator to operate in practice. This approach emphasised directly focusing on the effects of what was actually implemented under the programme, and took into account important characteristics of the programme, and the context within which it was operating. The framework for outcome evaluation aimed to ensure that the programme's performance would be judged on an appropriate basis, and that the information necessary to make such judgements would be available when it was needed.

In addition to providing a basis for measuring programme achievements, the framework also had an important function of providing a basis for programme planning. Whereas a great deal of time and effort had been devoted in the earlier approach to outcome evaluation to developing measurable targets, the evaluation team considered that negligible consideration had been given by programme administrators to the processes of programme planning which would result in the sort of activities being implemented that would be likely to achieve those targets. The new framework identified and distinguished between programme and project level operation and objectives. A set of programme level objectives was developed which could help guide decisions about the types of activities which should be implemented under the programme in future. A major theme embodied in the framework was that greater effort needed to be put into planning and evaluating the projects and activities which were implemented under the programme, as these provided the link between overall

programme aims and achievements. The framework introduced a standard format for project level planning and evaluation, which was applied to all existing and new activities.

The development of evaluation plans for Heartbeat projects and activities was the main tangible outcome of the evaluator's work on developing a framework for outcome evaluation during the research period. Use of the evaluation plan format can be seen to have had a number of positive results. It formalised the process of both general project and specific evaluation planning, achieved consistency across the programme in terms of setting out objectives, strategies and targets, provided a basis for periodic checks by project staff and programme administrators on project performance, and helped clarify the respective responsibilities in project monitoring and evaluation of the evaluator and project staff. The format ensured that consideration was given to the role of the project or activity in helping to meet Heartbeat programme objectives.

While the original intention of the evaluation plans was primarily to provide a basis for identifying project evaluation tasks and assigning responsibility for these, in practice the evaluator and project staff found the completion of the evaluation plans most useful in terms of clarifying and setting out project objectives, strategies and targets. It proved difficult in practice to accurately predict likely evaluation tasks up to twelve months in advance. Many of the Heartbeat projects were in a state of ongoing development and change, and new evaluation issues arose periodically. The benefits of using the format were therefore found to be substantial in terms of planning project activities, but less significant in terms of planning evaluation, with the result that the term "evaluation plan" became something of a misnomer. However, as a result of introduction of the evaluation plans, project staff did appear to accept that they should take greater responsibility for monitoring and evaluating their own activities, and the establishment of quantitative targets for performance at project level provided a basis for them to do this.

(ii) Evaluation Issues

The development of an appropriate basis for later outcome evaluation can be seen as an important aspect of formative evaluation of programmes such as Heartbeat New Zealand. It is clearly important that consideration be given to outcome evaluation at an early stage of

programme development, to ensure that the programme as implemented will be capable of achieving the desired outcomes, and to ensure that relevant information is systematically collected on an ongoing basis, so that it will be available when required. In some circumstances (e.g., programmes incorporating an experimental research design for outcome evaluation) consideration must be given to outcome evaluation before the programme is implemented, to allow the collection of baseline information, and to ensure that the programme as implemented complies with the conditions required by such designs. This was the case with the Welsh Heart Programme, Heartbeat Wales, which incorporated a quasi-experimental research design. Surveys were conducted to obtain data on relevant variables in both the intervention and reference areas prior to the commencement of the intervention to provide a baseline for measuring change, and to assist in programme planning (Nutbeam & Catford, 1987).

If the expectations for Heartbeat's performance as contained in the February 1989 formal aims document were to be met, and if these were to be able to be attributed to the actions of the Heartbeat programme, these expectations would have needed to be formulated prior to programme implementation, the availability of baseline information ascertained, and the programme designed in such a way as to meet the necessary conditions. However, even in circumstances where outcome evaluation is planned prior to programme establishment, there is still an important role for the formative evaluator in examining the relationship between desired outcomes and programme implementation, and commenting on any inconsistency. The evaluator brings important knowledge to bear to this, such as an awareness that there is often substantial slippage between programme plans and actual operation, that programme objectives may change over time in response to a range of influences, and that expectations regarding programme outcomes and their assessment may need to change accordingly. The most carefully planned outcome evaluation research designs may not work out in practice, as exemplified by the Heartbeat Wales experience. Contamination of the reference region occurred during the research period when elements of the Heartbeat Wales intervention were included in a broader United Kingdom "Look After Your Heart" programme, coverage of which included the reference region (Nutbeam, 1990).

In the case of Heartbeat New Zealand, the evaluator's involvement in formative evaluation meant she was in fact more familiar with the programme as it operated in practice than members of the steering committee, and was thus able to identify the gaps between formal expectations and actual practice. To someone unfamiliar with the operation of the Heartbeat programme, the formal aims document of February 1989 would appear quite a reasonable basis upon which to judge the programme's performance, following on as it did from the 1986 Advisory Committee report which recommended the establishment of Heartbeat New Zealand as a population-based approach to heart disease prevention, and providing as it did a comprehensive, specific, and potentially measurable set of quantitative targets. The supervisor of the Heartbeat evaluation herself initially assumed that focusing on endpoints in terms of changes in cardiovascular disease risk factors and related behaviours was the appropriate approach to outcome evaluation of Heartbeat.

An alternative position to that taken by the evaluator in this research might be to argue that it is for programme funders and decision-makers to decide the basis upon which the programme should be judged, as the Heartbeat decision-makers had, and that programme evaluators should assist them in collecting the necessary information to do this, and give the programme the opportunity to show these effects, however unlikely it is that this will occur. Some would argue that the Heartbeat programme was established and funded on the basis that it was to be a population-based heart disease prevention programme, that the only true measure of its performance was therefore how it influenced population rates of heart disease risk factors and related behaviours, and that it should therefore be assessed on that basis, whatever the reality of programme practice. However, even if this position were taken in outcome evaluation of Heartbeat New Zealand, the problems of inadequate baseline data and an inability to attribute any effects directly to the programme would still exist, and would in fact largely prevent useful interpretations being made from any data collected. The position taken by the evaluator in this research was that it is part of the responsibility of a formative evaluator to ensure that programme objectives and desired outcomes are realistic, and to avoid wasting evaluation resources on costly outcome evaluation approaches which are unlikely to yield good quality data. The suggestion that a programme review occur in early

1991 reflected the view of the evaluation team that in addition to judging programme outcomes at a later date, emphasis should continue to be given to enhancing the programme's effectiveness in the interim.

A further possible criticism of the model developed by the evaluation team is that the programme objectives should have been written to fulfill both the purpose of providing a basis for programme planning, and a basis for measuring programme achievements. It is clearly desirable for such programme objectives to fulfill both purposes if possible, However, in the situation that existed, the evaluator was required to develop a framework that would incorporate early programme intentions, the range of existing projects and activities, and any new projects or activities to be implemented. This occurred when the Heartbeat programme had already been established for a period of almost two years. Attaching measurable targets to each of the programme objectives could appropriately have occurred if these objectives had been formulated at a much earlier stage of programme development, when programme activities could have been tailored toward achieving such targets. However, it seemed inappropriate to impose such programme-level targets when the programme was in fact substantially already implemented, and when projects and activities had not been initiated and funded on the basis of clear and measurable programme objectives. In this situation, it seemed most appropriate to confine measurement of programme achievements to the level of project objectives and targets.

A number of other evaluation issues of relevance to health promotion and disease prevention programmes can be identified from consideration of outcome evaluation of Heartbeat New Zealand. One such issue is the importance in planning outcome evaluation of clearly identifying a hierachy of outcomes in the programme focus area, and identifying the likely reach of the programme in question, in the light of its resources, activities, and likely timeframe. There is little point in measuring medium or long term outcomes of a programme which, because of its likely timeframe and sphere of influence can only be expected to impact on more immediate variables in the shorter term.

The distinction between programme and project-level operation and objectives is one that is likely to be of relevance to other multi-faceted programmes, as may the question of

whether it is useful to distinguish between programme impacts and programme outcomes, as a number of evaluation authors do. Arising from experience with the Heartbeat programme, it is clearly desirable for evaluators to recommend the use of standard formats for project planning and evaluation purposes at an early stage, and to ensure that these are regularly reviewed and updated. The usefulness of evaluating the separate components of a multi-faceted programme like Heartbeat should be recognised, not only because this may in fact be the best obtainable information about programme effects, but also in terms of others wishing to learn from what has occurred previously.

A point which was highlighted in the development of a framework for later outcome evaluation of Heartbeat New Zealand was Heartbeat's place as a programme within a broader organisation. This meant it could not be considered in isolation. Organisational influences impinging upon the programme, such as the development of a health promotion policy by the National Heart Foundation, with its possible implications for the scope and focus of Heartbeat, had to be taken into account. As it turned out, the proposed integration of Heartbeat with the National Heart Foundation's other health promotion activities did not occur during the research period, but had this occurred it clearly would have influenced the scope of the proposed outcome evaluation of Heartbeat.

An important question faced by the evaluation team in outcome evaluation of Heartbeat concerned who should conduct the proposed outcome evaluation of the overall Heartbeat programme timed for 1994. It could well be argued that because of the extensive involvement of the team in formative evaluation of Heartbeat, and particularly in view of the fact that the evaluator herself formulated the Heartbeat programme level objectives, it would be inappropriate for the evaluation team to be involved in the outcome evaluation of the overall Heartbeat programme. Support for this view comes from the fact that the proposed design of outcome evaluation of the overall programme would rely not just on interpretation of empirical data collected about the programme, but would also require the outcome evaluator to consider aspects such as the quality of decision-making by the steering committee, and make judgements as to the appropriateness of the activities initiated and funded by Heartbeat in the light of possible alternatives. In the evaluator's view, it would be

both inappropriate for the existing Heartbeat evaluation team to take on the role of outcome evaluation of the overall programme, and difficult for them to execute this successfully. The approach to outcome evaluation that was advocated would lend itself more to involving a person or persons previously unconnected with the programme, who had a good knowledge of the field of health promotion and disease prevention, who could bring a fresh perspective to the available data, and whose findings would be perceived to have credibility by Heartbeat personnel and programme funders.

(iii) Health Promotion Issues

Of the points raised in (i) and (ii) above, perhaps the major point of relevance to health promotion to emerge from consideration of outcome evaluation of Heartbeat New Zealand is the importance of establishing realistic objectives, and ensuring that sufficient attention is given early on to addressing and putting in place the means by which these should be achieved.

There are clearly pressures upon health promotion planners and implementors to "promise too much" from their programmes, in order to secure and maintain scarce funding. It is probably often the case that it is programme funders rather than those seeking funding who may have unrealistic expectations about what a programme should achieve. This does not appear to have been the case in the Heartbeat New Zealand situation, however, since the functions and activities for Heartbeat originally set out by the Department of Health in their December 1987 statement of mission and objectives were much less ambitious than the February 1989 document outlining formal aims and desired outcomes that was developed by the Heartbeat steering committee.

It is clear that expectations for achievement of the Heartbeat programme were influenced to a large extent by the membership composition of the programme steering committee. Several Heartbeat New Zealand Committee members had been members of the Advisory Committee to the Minister of Health which published its report in 1986, and from which Heartbeat New Zealand arose. These committee members, who were epidemiologists or cardiologists, brought with them to the Heartbeat situation a particular set of assumptions about what the programme should be attempting to achieve. The formal aims and desired

outcomes document was a significant achievement in some respects, in that its development represented the establishment of academic consensus among some of the country's foremost authorities in heart disease prevention on what were appropriate population targets. However, while the document emphasised ends, what was needed in the Heartbeat programme was more attention to the means by which such ends might be achieved.

The issue identified in Chapter Five, of differing expectations about standards of performance for the Heartbeat programme seems relevant here. The main architect of the formal aims and desired outcomes document was an epidemiologist who believed strongly that Heartbeat should provide an exemplary model of a population-based approach to heart disease prevention. The document can be seen in some respects as an attempt to impose order on a disorderly programme, and to lift its performance by setting clear targets. However, as stated earlier, while the document emphasised *what* results should be achieved, it did not provide those implementing the programme with guidance on *how* these results should be achieved, and the gap between expectations and actual operation remained. A lack of skills among committee members in terms of bridging the gap between plans and practice can perhaps be identified. The Heartbeat experience points to the need to devote at least as much attention to planning how a health promotion programme should operate in order to achieve the desired outcomes, as to specifying what those outcomes should be. This needs to occur before or in the very early stages of programme establishment, in order to ensure that programme implementation is consistent with programme aims.

In summary, consideration was given by the evaluator to the approach to be adopted in later outcome evaluation of Heartbeat New Zealand from September 1989 to March 1990. A plan for outcome evaluation of Heartbeat developed prior to the evaluator's entry to the research setting was examined, and was judged inappropriate. A lack of congruence was identified between formally stated programme intentions and desired outcomes, and actual programme implementation, and it was observed that the conditions necessary to attribute observed changes in the outcome variables to the activities of the Heartbeat programme were not met. An alternative framework for outcome evaluation of the overall Heartbeat

programme was developed, which focused upon examining the effects of what was actually implemented under the programme, rather than longer term outcomes relating to population levels of cardiovascular disease risk factors and related variables. This involved specifying a programme goal and targets, programme objectives, and project objectives and targets. Outcome evaluation of Heartbeat under the new framework would involve examining evidence of achievement of project objectives and targets, consideration of the relationship between programme objectives and projects implemented, and examination of population trends in cardiovascular disease risk factors and related behaviours. This approach was considered appropriate in view of the programme's non-experimental design, and the heterogeneity of activities occurring under the programme. Steps were taken to ensure that information relevant to outcome evaluation would be available when required. The work on developing a framework for outcome evaluation of Heartbeat highlights the importance of considering programme objectives and outcome evaluation at an early stage of programme development. This makes it possible to tailor the implementation of the programme toward achievement of the desired outcomes, and to ensure that relevant information is identified and systematically collected.

CHAPTER SEVEN

FORMATIVE EVALUATION INPUT TO OVERALL HEARTBEAT PROGRAMME

This chapter discusses formative evaluation input to the functioning of the overall Heartbeat programme, provided in the form of recommendations contained in the formal evaluation reports prepared for meetings of the Heartbeat New Zealand Committee during the research period. Recommendations relevant to specific project areas have been covered in previous chapters. In this chapter, recommendations aimed at improving the operation of the overall Heartbeat programme are discussed.

In Section 1, procedures for formal reporting by the evaluation team to the Heartbeat New Zealand Committee are outlined, and the basis on which recommendations on overall programme operation were made is described. Section 2 sets out the issues identified and the recommendations made by the evaluation team, and the outcome of these recommendations. Section 3 discusses the contribution of the formative evaluation activity outlined in this chapter to programme development, and identifies what was learned from the experience with regard to evaluation and health promotion issues.

Section 1: Evaluation Reports and Basis for Recommendations

(i) Evaluation Reports

The evaluator prepared a formal evaluation report for each meeting of the Heartbeat New Zealand Committee. Six reports were prepared during the research period. The formal evaluation reports documented the evaluator's activities and findings over the preceding period, and identified issues for consideration by the Heartbeat New Zealand Committee, with recommendations for action. The reports covered evaluation activity in each of the individual project areas, as well as commenting on overall programme operation where this was identified as necessary and appropriate by the evaluation team.

Each formal evaluation report took between two and three weeks to prepare, and preparation began approximately four weeks prior to the scheduled meeting of the Heartbeat New Zealand Committee, to allow the reports to be completed and circulated to

members a week before the meeting. The evaluator wrote the first draft of each report, and the other two members of the evaluation team read and suggested improvements to it. The format that was established for the evaluation reports was that the first section contained a summary of the report and its recommendations; the second section was an introduction to the report, which outlined the evaluation arrangements for Heartbeat New Zealand; the third section outlined the current status of previous recommendations by the evaluation team; the fourth section covered issues of relevance to the overall programme; and the fifth and subsequent sections outlined evaluation activities and findings relevant to individual project areas. Each report contained appendices where material referred to or summarised in the main body of the report was presented in full (e.g., questionnaires and interview schedules, detailed reports on evaluation findings).

As stated previously, the overall supervisor of the Heartbeat evaluation was a member of the Heartbeat New Zealand Committee. She attended four of the six Committee meetings during the research period. The other two members of the evaluation team attended each meeting at a specified time to present the findings and recommendations of the evaluation report to the Committee. This usually involved the evaluator presenting a 5 - 10 minute verbal summary of the contents of the report, followed by her immediate supervisor presenting the recommendations of the report. The report and its recommendations were then discussed by the Committee and any questions answered by the evaluation team. At this point the evaluator and her immediate supervisor left the meeting, and there was usually further discussion by the Committee. The decisions of the Committee regarding the evaluation team's recommendations were formally recorded in the Heartbeat New Zealand Committee meeting minutes, written by the Heartbeat Programme Director, which were usually circulated the following week.

(ii) Basis for Recommendations on Overall Programme Operation

The focus of this chapter is upon recommendations made by the evaluation team in their role of providing formative evaluation input to the overall Heartbeat programme. These recommendations were made on the basis of information obtained from the evaluator's own observation and analysis of programme functioning, in conjunction with

information and comment obtained from other programme participants. The Heartbeat evaluation supervisor's role as a member of the Heartbeat New Zealand Committee also provided an important perspective for formative evaluation input to the overall programme.

The evaluator was in a position to observe and obtain information about a wide range of aspects of programme functioning. The formative evaluation role involved developing a close working relationship with key programme staff, and participating in important programme meetings (e.g., project planning meetings, Project Coordinators' meetings). Interviews with programme participants provided a further important source of information about issues currently affecting programme development where action could be taken to improve the situation. The evaluator had access to all programme documents received by Heartbeat New Zealand Committee members and Project Coordinators, as well as copies of a range of other papers and correspondence originating from the Heartbeat Programme Director. Recommendations concerning overall programme functioning were based on these sources.

Section 2: Issues Identified and Outcome of Formal Recommendations

Formal recommendations as part of formative evaluation input to the overall Heartbeat programme during the research period were made in a number of content areas. The three major areas were programme management, programme planning and coordination, and organisational communication. Two further areas where recommendations were made concerned the relationship between Heartbeat and Te Hotu Manawa Maori, and procedures for appointing new committee members. These areas are discussed in turn.

(i) Programme Management

(a) Executive sub-committee.

The evaluation team identified a potential problem in programme functioning in early 1989. While the Heartbeat New Zealand Committee met once every few months, there was no formal decision-making structure or procedure between meetings. It was

clear from speaking to the Heartbeat Programme Director that he did not consider he had the authority to make funding decisions without consultation with other committee members. While some funding decisions had in the past been made between committee meetings after discussion between the Programme Director, the Chairperson of Heartbeat New Zealand, and one or more committee members, other important decisions had been held off until the next committee meeting. The criteria for deciding whether to wait for the next full Committee meeting or to deal with the issue in the interim were not clearly apparent. This issue was of concern to some programme staff, who stated that they could potentially spend three to four months developing a particular area of work, only to be told at the next meeting of the Heartbeat New Zealand Committee not to pursue it. The evaluation team was also affected, since it was not clear who they should report to on evaluation issues or findings which required action before the next full meeting of the committee. This situation seemed likely to be exacerbated in 1989 because the next meeting of the Heartbeat New Zealand Committee after the June 9 1989 meeting was scheduled for October 31 1989, a period of approximately five months. The evaluation team considered that it would be helpful if procedures for programme decision-making between Committee meetings were clarified and formalised. They therefore recommended in June 1989 that an executive sub-committee of the Heartbeat New Zealand Committee be established with authority to act on behalf of the full committee between meetings.

The June 1989 minutes of the Heartbeat New Zealand Committee meeting stated that the Committee agreed with the evaluators that formation of an executive sub-committee was probably desirable, but that a paper should be prepared on the structure and function of the sub-committee. An interim executive sub-committee was named, comprising the National Heart Foundation Executive Director, the Heartbeat Programme Director, and two other Heartbeat New Zealand Committee members. The next full meeting of the Heartbeat New Zealand Committee was brought forward to September 12 1989, rather than October 31 as previously scheduled. In fact, no paper was prepared on the structure and functions of the executive sub-committee, and the interim sub-committee continued to fulfill this role throughout the research period.

(b) Programme Manager's Position.

In the first few months of contact with the Heartbeat programme the evaluation team identified the need for an intermediate level of management in the programme, between the Programme Director and Heartbeat New Zealand Committee, and programme staff. The team perceived the need for a full-time appointment of a programme manager to whom the programme staff would report, and who would in turn report to the Programme Director and Heartbeat New Zealand Committee. This was based on the observation that the 3/10 availability of the Heartbeat Programme Director appeared to be insufficient to meet the supervision requirements of programme staff, or the coordination requirements of a relatively large programme. This situation was considered likely to worsen as the Heartbeat programme expanded its activities. The evaluation team also noted that the Programme Director's background as a cardiologist did not equip him with skills in programme planning and development, or knowledge of the field of health promotion, that seemed to be needed at that stage in the programme.

Programme staff had identified a number of problems with the existing arrangement in interviews conducted by the evaluator during May 1989, including limited access to the Programme Director, and the need to approach him on a range of minor matters which they felt did not really warrant his attention, but about whom there was no one else to approach. The Heartbeat New Zealand Committee was not generally considered to be a major source of guidance or supervision for programme staff, who expressed the view that the committee did not meet often enough or for long enough to provide managerial input, and that the committee often made important decisions hastily and on the basis of insufficient information.

There were previously plans to appoint a Programme Manager for Heartbeat New Zealand. The Heartbeat New Zealand Committee had agreed to establish a Programme Manager's position in April 1988. The position was advertised, and by June 1988 40 applications had been received. A sub-committee of the Heartbeat New Zealand Committee was formed to consider the applications, conduct interviews, and recommend an appointment. However, while two applicants for the Programme Manager's position

were appointed to other positions within the programme (as Heartbeat Dietitian, and Programme Coordinator) no appointment of Programme Manager was made, ostensibly because the calibre of the applicants was not high enough. An alternative interpretation, expressed to the evaluator by a programme staff member who had applied for the position of Programme Manager, was that there was resistance from key National Heart Foundation representatives to the creation of a new management position within the organisation, which it was felt would disrupt existing power relationships. The Programme Director reported to the evaluator in May 1989 that the appointment of a Heartbeat Programme Manager was perceived to pose the risk of too great a separation between Heartbeat and the National Heart Foundation. He stated that integration of the two jobs of Heartbeat Programme Director and Programme Manager was considered necessary to keep Heartbeat closely linked in with the function of the National Heart Foundation.

The evaluation team recommended in their report of June 1989 to the Heartbeat New Zealand Committee that the position of Heartbeat Programme Manager be readvertised. The evaluation team expressed their view that the appointment of a Programme Manager would enable the supervision and coordination requirements of the programme to be met. The concerns expressed by programme staff in interviews during May 1989 were outlined. While the evaluation team suggested that experience and awareness of public policy matters would be useful in a Programme Manager, they did not explicitly state their perception that the Programme Director lacked skills in programme planning and development, or health promotion.

The recommendation that the Programme Manager's position be re-advertised was not adopted by the Heartbeat New Zealand Committee. The issue was discussed after the evaluator and her immediate supervisor had left the meeting. The overall supervisor of the Heartbeat evaluation was not present at the June 1989 meeting. The minutes stated that various committee members, while accepting that appointment of a Programme Manager may have been desirable at an earlier stage of the programme's development, were less sure of the need to do so at this stage. It was decided to continue the present management

structure, subject to the provision of regular meetings of Project Coordinators (discussed below).

At their September 1989 meeting, the Heartbeat New Zealand Committee agreed to a request from the Heartbeat Programme Director that his time allocation to the Heartbeat programme be increased from 3/10 to 5/10 from January 1990. The evaluation team did not have the opportunity to provide formal comment on this proposal before it was accepted by the Committee, but they had reservations about whether increasing the Programme Director's time allocation to the programme was a good use of resources. These reservations included the fact that the extra 2/10 would not contribute new skills or expertise to the programme that the evaluation team thought would be more valuable than the present primarily administrative function of the Programme Director. In addition, because of the salary level payable to the Heartbeat Programme Director, the funds deployed on the 2/10 increase could alternatively make a substantial contribution toward the salary of a full-time Programme Manager. This was seen as likely to be a much better use of resources by the evaluation team.

Although the decision to increase the Programme Director's time allocation to Heartbeat had already been made, the evaluation team raised the issue of the Programme Manager's position with the Heartbeat New Zealand Committee again in their December 1989 evaluation report. The evaluation team stated that based on their evaluation activities to date, they considered that the need for middle management activities within Heartbeat identified in their report of June 1989 still existed. While the regular Project Coordinators' meetings that had been instituted were seen as essential, the evaluation team considered these were not a substitute for a full-time middle management position to fill what was presently a gap in the Heartbeat New Zealand structure. In contrast to their June 1989 report, in the December 1989 report the evaluation team provided a detailed specification of the responsibilities and expertise required of such a person. It was stated that she or he would have responsibilities in:

- day-to-day guidance and supervision of project staff

- monitoring, co-ordination and planning of Heartbeat activities
- exploring and initiating areas of activity in which Heartbeat New Zealand presently has limited involvement (e.g., liaising with producer boards, retailers, major nutrition bodies, marketing and advertising bodies, media groups, Area Health Boards, etc)
- raising the profile of Heartbeat New Zealand as a major heart health promotion initiative (Dehar, Duignan & Casswell, 1989c, p 8-9).

The evaluation team identified the following areas of skill and expertise required by the Programme Manager:

- management and programme planning skills and experience
- a thorough understanding of health promotion principles and their application to the heart health area
- marketing and media skills and experience
- knowledge of and commitment to evaluation principles and procedures
- strong interpersonal skills (Dehar, Duignan & Casswell, 1989c, p. 9).

The evaluation team referred to the increase in the Programme Director's time allocation to Heartbeat from 3/10 to 5/10, and stated that the potential of this change needed to be taken into account. Important questions were identified when considering the need to appoint a Programme Manager for Heartbeat, including the proportion of the programme's budget that should be spent on administration, and which management functions were appropriately performed by personnel at different levels of the organisation. The recommendation was made that a working party be established to examine the management structure of Heartbeat New Zealand, and specifically, to consider the appointment of a Programme Manager. This recommendation was accepted by the Committee, though not unanimously. A four member working party comprising the Heartbeat New Zealand Committee Chairperson, the National Heart Foundation Executive Director and two other members of the Committee was formed, and asked to report back to the next meeting.

The Executive Director of the National Heart Foundation provided a memorandum reporting on the activities of the working party to the Heartbeat New Zealand Committee

meeting of March 1990. The memorandum stated that the working party had agreed that the appointment of a Programme Manager would be inappropriate at present, on the grounds that the existing staffing levels and management structure were sufficient to meet current requirements. The working party had considered ways of addressing the need identified by the evaluation team of exploring and initiating areas of activity in which Heartbeat New Zealand presently had limited involvement. It was thought that the possibility of employing a person to be based in Wellington to undertake advocacy activities on Heartbeat's behalf should be investigated, and the Executive Director had obtained a quote for a preliminary investigation of the possibilities of this role from a Wellington consulting group.

When the memorandum was tabled at the Heartbeat New Zealand Committee meeting, one of the four members of the working party expressed surprise at its content, stating that he had not been consulted about the approach to the Wellington consulting group. Other committee members expressed the view that the working party had not really fulfilled its brief of examining the management structure of Heartbeat. The Executive Director stated that it was necessary for the working party to take a broad view of the issues involved in a possible Heartbeat Programme Manager appointment, and that such an appointment could not be considered in isolation. Various staffing changes would be necessary when the present Heartbeat Programme Director and Medical Director of the Foundation retired in 1992. The Executive Director expressed the view that the Heartbeat programme was working well at present, and there was no need for any management changes. Following this discussion, the matter was left in abeyance. When the matter was identified as business arising from the minutes of the previous meeting in the Heartbeat New Zealand Committee meeting of July 23 1990, the Executive Director stated that it had not been possible to have further discussions on the management structure of Heartbeat, and no further discussion or action eventuated.

(ii) Programme Planning and Coordination

(a) Importance of project planning.

Project planning was identified as an issue during the first few months of the evaluator's involvement with the Heartbeat programme, in relation to the Heartbeat Awards project, and the workplace cafeteria component of the project in particular. As stated in Chapter Four, there were two components of the Heartbeat Awards project, of school canteens and workplace cafeterias, and the two staff members primarily responsible for the development of these two areas were based in the Auckland and Christchurch offices of the National Heart Foundation respectively. Two other Heartbeat staff members assisted on a part-time basis, one in each office, and the Heartbeat public relations consultant also assisted the Christchurch-based staff.

From an early stage the school canteen component of the project was planned and implemented largely by one Auckland staff member who operated relatively independently of other staff members. In contrast, the Christchurch-based staff member responsible for the workplace cafeteria component of the project attempted to adopt a team approach to planning this component of the project, seeking input to decision-making from all those involved in Heartbeat Awards.

It became clear to the evaluator in April and May 1989 that there was some conflict between the Auckland and Christchurch-based members of the Heartbeat Awards staff group in their planning of the workplace cafeteria component as to the relative importance to be given at this stage to planning, as opposed to action. The Christchurch-based staff members emphasised the need to proceed cautiously in planning the workplace component, and to use the pilot phase to thoroughly investigate all aspects that might be relevant to longer term implementation of the project. They saw it as important that the workplace pilot accurately reflect the project model that was likely to be implemented more widely at a later stage, in order to test out as many factors as possible. The Auckland-based staff members, in contrast, expressed frustration at the time that was spent discussing, researching and planning aspects of the pilot, and expressed a wish for heavier

emphasis on actually getting something operational and producing results in the short and medium term, whether it be fully representative of the likely future project model or not.

It emerged from interviews conducted by the evaluator with Heartbeat Awards staff members in May 1989 that Auckland-based staff members were receiving quite different messages from senior National Heart Foundation staff compared with those received by Christchurch-based staff members. The Auckland-based National Heart Foundation Executive Director had impressed upon staff members in his office the urgency of implementing the pilot phase of the project and producing successful outcomes, in order to show that the money allocated to Heartbeat by the Department of Health was being actively put to use and producing results, as a basis for ensuring continued funding. The same message was not being conveyed by the Christchurch-based Heartbeat Programme Director to Heartbeat Awards staff in his office, who were therefore proceeding on the assumption that priority should be given to careful planning rather than speedy implementation.

The Christchurch-based staff members expressed concern to the evaluator that communication between Auckland and Christchurch-based Heartbeat Awards personnel was poor, with people operating on different assumptions and having different priorities. Regular meetings of all Heartbeat Awards staff were felt to be essential to remedy this, but a schedule of regular meetings had not been built into the process of project development to date. When the need to schedule regular project planning meetings had been raised by Christchurch-based staff with the Heartbeat Programme Director, he had not supported this, on the basis that the cost of such meetings would be excessive. Top management support for project planning was therefore perceived to be lacking.

In the absence of any evidence of pressure from the Department of Health for speedy implementation, the evaluation team supported the position taken by the Christchurch-based staff members that careful planning of the project was warranted. They also supported the view that regular project planning meetings were essential if a coordinated approach was to develop. The following recommendation was made to the

June 1989 meeting of the Heartbeat New Zealand Committee on the basis of the concerns identified:

> That recognition should be given to the importance of planning projects, and provision made for regular meetings of Heartbeat Awards staff for forward planning.

This recommendation was accepted by the Heartbeat New Zealand Committee, and when formal plans for the workplace cafeteria component of the project were developed shortly afterward, these included a schedule of regular meetings of Auckland and Christchurch project staff. However, rather than joint planning meetings as envisaged by the evaluation team, as the project as a whole developed, greater separation of the school canteen and workplace cafeteria components occurred, and the planning meetings that were held tended to involve only staff members working on one or other of the two areas.

(b) Need for greater coordination of projects.

An early observation by the evaluation team about the functioning of the overall Heartbeat programme was that there was a general lack of coordination between the different Heartbeat projects. As identified in Chapter Six, when the evaluator entered the research setting in 1989, Heartbeat funding had been applied to a range of different initiatives, some of which were ongoing projects (e.g., Heartbeat Awards, Heartbeat Community Project, SOS), and others of which were one-off events or activities. The evaluator observed in the first few months of her contact with the programme that each of the ongoing projects operated as a discrete activity, and that there was little or no overlap between projects. The programme staff responsible for each project area worked largely in isolation from one another and from programme administrators, planning and implementing their own projects. They had little contact with and little knowledge of each others' activities.

The evaluator considered that there was considerable scope for overlap and sharing of resources between different Heartbeat projects (e.g., use of Heartbeat Leaders to provide nutrition input to school canteens and workplace cafeterias involved in Heartbeat Awards). It was felt that this could have a strengthening effect on the programme overall.

In addition, through working with individual Project Coordinators, it became clear to the evaluator that as well as expertise in their particular project area, each of them had useful skills, experience and networks which could benefit the programme as a whole. This did not appear to be receiving adequate recognition from programme administrators, since Project Coordinators were generally not asked to comment on or contribute to decision-making outside of their project area, and they were not brought together to meet as a group. The relative isolation of Project Coordinators appeared to be a symptom of insufficient coordination and integration within the Heartbeat programme as a whole, and also of the Auckland-Christchurch geographical split.

As a result of having identified these factors, the evaluation team recommended in June 1989 that procedures for ensuring greater coordination of Heartbeat New Zealand projects be investigated, including regular meetings of Project Coordinators. The Heartbeat New Zealand Committee accepted this recommendation, and regular meetings of the Project Coordinators were instituted. No other procedures for ensuring greater coordination between Heartbeat projects were identified or implemented.

The first Project Coordinators' meeting was held on July 26 1989 in Christchurch, and they were held every two to three months after this in either Auckland or Christchurch for the remainder of the research period. Further meetings occurred on September 13 and November 20 1989, and February 26, May 14, July 24 and November 12 1990. The evaluator attended all Project Coordinators' meetings. The meetings were chaired by the Heartbeat Programme Director, and were attended by the Project Coordinators of Heartbeat Awards, the Heartbeat Community Project, and the SOS smoking cessation project, as well as by the National Communications Coordinator of the National Heart Foundation. The meetings were usually held shortly before or after the Heartbeat New Zealand Committee meetings.

At the Project Coordinators' meetings, each Project Coordinator provided a brief report on activities and progress within her project area, and identified any issues where input from the group was sought. Project-related issues discussed included questions such as the suitability of draft project resource materials (e.g., posters, certificates, pamphlets),

ways of publicising project activities, ideas for obtaining sponsorship for additional project activities (e.g., to produce training videos or host meetings or seminars), and ways to increase interaction between different Heartbeat projects (e.g., by arranging local level meetings of SOS and Heartbeat Community Project Leaders). Future plans and likely staffing needs in each project area were also discussed at times.

The Project Coordinators generated ideas for new Heartbeat initiatives (e.g., Smokefree Award, Heartbeat Gold Award, exercise video, Heartbeat programme newsletter) and developed further ideas which were suggested by other sources (e.g., visits to Area Health Boards, Heartbeat community grants, nutrition activities suggested by Heartbeat Community Project working party). Agreement was reached on issues such as guidelines for accepting sponsorship from commercial firms for project activities, and guidelines for charging for project resource materials (e.g., Heartbeat Awards resource manuals and stickers). Financial and budgetary matters were discussed at each meeting.

In addition to project-level matters, the Project Coordinators identified and discussed a range of issues of relevance to the overall Heartbeat programme, and their role within it. For example, they suggested strategies for publicising and promoting the Heartbeat programme and its projects (e.g., hosting regional meetings of influential groups and individuals to update them on Heartbeat's activities; speaking at conferences and writing journal articles on Heartbeat's activities). They identified a need for greater liaison between Heartbeat and the Department of Health, and regular meetings were instituted to achieve this. They discussed the need for and content of submissions to government (e.g., on the Smokefree Environments Bill, nutrition labelling), and identified areas where public statements or formal letters from Heartbeat would be useful and timely (e.g., in response to current nutrition controversies, in response to activities in schools by manufacturers of high fat and salt products). They sought input to decisions about and provided comment upon current organisational changes (e.g., National Heart Foundation committee restructuring). They identified problems in terms of their access to a range of programme-related information, and ways these could be addressed. Plans were made at

the Project Coordinators' meetings for joint meetings of all Heartbeat and National Heart Foundation staff concerned with health promotion on a yearly basis.

The relationship between the Project Coordinators and the Heartbeat New Zealand Committee was discussed, and ways of increasing liaison with committee members identified (e.g., by inviting them to seminars in their regions, by seeking advice on issues in committee members' specialty areas). Where Project Coordinators' meetings were held prior to a meeting of the Heartbeat New Zealand Committee, the Programme Director sought comment from Project Coordinators on issues on the agenda of the latter meeting, and communicated this to committee members. Where Project Coordinators' meetings were held after a Heartbeat New Zealand Committee meeting, the Programme Director updated Project Coordinators on decisions by the committee, and identified any action required by Project Coordinators as a result of committee decisions. The Programme Director prepared and circulated minutes for each Project Coordinators' meeting, which summarised discussion and decisions.

The evaluator obtained feedback about the Project Coordinators' meetings both informally and formally, from Project Coordinators themselves, and from other programme participants. For example, individual Project Coordinators commented to the evaluator on a number of occasions that they found the meetings very worthwhile. The Heartbeat Programme Director commented in March 1990 in a report to the Heartbeat New Zealand Committee that the previous month's Project Coordinators' meeting had been a "useful and essential planning exercise". A number of positive comments about the Project Coordinators' meetings were also made in interviews conducted by the evaluator with programme participants in September and October 1990. Comments included the observation that the meetings had assisted in improving the flow of information through the programme; that the opportunity to exchange ideas with other Project Coordinators was valuable; that Project Coordinators were now being consulted about all major programme decisions; and that regular meetings had allowed Project Coordinators full opportunity to discuss issues relating to the programme as a whole. One Project Coordinator stated that the Project Coordinators' meetings had cleared up a lot of

difficulties which had arisen before their introduction as a result of the lack of a Programme Manager. Three other respondents also referred to the Project Coordinators increasingly fulfilling a programme management function.

The Project Coordinators' meetings can be seen to have been important in terms of information sharing and planning. They enabled Project Coordinators to obtain feedback and input from others to assist in their own project planning, and to contribute to decision-making at the broader programme level. From the evaluator's perspective, the Project Coordinators' meetings fulfilled a number of valuable purposes within the Heartbeat programme. They helped achieve greater clarity and consensus about programme aims, activities and future directions. They facilitated access to information by Project Coordinators about the functioning of the programme and the broader organisation. They encouraged a greater degree of consistency in operating procedures at project level. They resulted in increased interaction between different Heartbeat projects. They provided a formal voice and channel of communication for Project Coordinators with National Heart Foundation administrators and the Heartbeat New Zealand Committee. They also provided a formal means by which the Heartbeat Programme Director could access the health promotion ideas and expertise of programme personnel.

(c) Need for planning format.

Another recommendation that was made in June 1989 by the evaluation team concerned the need to establish formal planning procedures within the programme, as a basis for making sound decisions regarding use of Heartbeat funding. The evaluation team had observed that, as stated in Chapter Six, the Heartbeat New Zealand Committee received a range of applications for funding, both for activities within the Heartbeat programme, and from groups outside of the programme. These applications varied a great deal in terms of the type and quality of information provided to support the application, and decisions were made by the committee in the absence of explicit criteria. The evaluation team considered that the adoption of a specified planning format for all proposed new activities would help ensure that adequate planning had occurred prior to the funding application being made, and would provide a better basis for decision-making by

the Heartbeat New Zealand Committee. It was felt that a modified version of the planning format used by the Department of Health's Health Education Officers might be suitable for Heartbeat's purposes, and it was recommended that such modifications be made and the format adopted for use as a planning procedure within Heartbeat.

This recommendation was not discussed at the June 1989 Heartbeat New Zealand Committee meeting, and the evaluation team listed it as "Status unknown" in their September 1989 evaluation report to the committee. The recommendation was discussed at the September meeting after the evaluator and her immediate supervisor had left the meeting, and it was clear from the meeting minutes that there was some confusion as to what the evaluation team had intended by the recommendation. The minutes recorded the Heartbeat Programme Director as stating in response to this recommendation that the Department of Health had not yet required Heartbeat to revise its application form to conform with the Department's own planning form, but that the evaluators' assistance would be sought in preparing such an application form when it was required in future. He had apparently interpreted the recommendation as relating to the format used by Heartbeat to apply for funding from the Department of Health, rather than a planning format for use within the Heartbeat programme itself. When the evaluator included modifying the Department of Health's planning form for use as a planning procedure within the Heartbeat programme as one of her proposed activities for the period from September to December 1989, the Programme Director wrote back saying he did not see this as a priority because the next funding application to the Department of Health would not be required to be prepared for some time. The evaluation team decided not to pursue this issue further, in the light of the evaluator's other work commitments at the time.

The need for a planning format for use by Heartbeat programme staff that was identified by the evaluation team in mid-1989 was met to a large extent following the March 1990 evaluation report, with the adoption of the evaluation plan format by Project Coordinators, referred to in Chapter Six. The need for a standard application form for use by outside groups applying to Heartbeat for funding was also met to a large extent at a

later stage, with the creation of the Community Grants Project by Heartbeat in 1990, for which an application form was specifically developed.

(d) Framework for planning and decision-making.

In the first few months of involvement with the Heartbeat programme, the evaluation team identified a general lack of strategic planning in decision-making by the Heartbeat New Zealand Committee. As identified in Chapter Six and referred to earlier in this chapter, the decision-making rationale for the types of projects and activities initiated and funded by Heartbeat was not explicit during 1988 and early 1989 when major funding decisions were made. Applications for funding were received by the committee on an ad hoc basis, rather than systematically sought, and they were also dealt with on an ad hoc basis, rather than on the basis of clear criteria.

The June 1989 evaluation report identified the need to have an overall framework within which to make decisions about which activities to initiate and fund. The evaluation team suggested that the most appropriate framework for Heartbeat to use in making decisions and planning activities was the Ottawa Charter for Health Promotion, with its five strategy areas of building healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. The Ottawa Charter was considered a useful framework by the evaluation team because it included a broad range of strategies appropriate for use in health promotion. In particular, it highlighted the fact that health education aimed at developing personal skills was only one part of a comprehensive health promotion approach. There appeared to be a heavy emphasis upon health education as the primary strategy for health promotion within the National Heart Foundation and among some Heartbeat participants, and the evaluation team considered that it would be useful to draw attention to other types and levels of health promotion activity.

To illustrate this, a grid was drawn up which showed where each of the projects Heartbeat New Zealand had initiated or funded to date fitted within the Ottawa Charter strategies (see Appendix 10). Each activity was categorised under one or more Ottawa Charter strategies according to its main emphasis as perceived by the evaluation team.

This provided a visual overview of what Heartbeat was doing, and where its activities were currently focused. The report stated that for Heartbeat to promote health effectively in the cardiovascular disease area it should either have an adequate number of activities under each of the Ottawa Charter strategies, or have determined that there were complementary activities taking place organised by other bodies such as the National Heart Foundation itself, or the Nutrition Taskforce. Health promotion activities of the National Heart Foundation unconnected with Heartbeat were also included in the grid, in order to build up a picture of whether a comprehensive health promotion approach to the cardiovascular area was being developed.

Based on the grid, the evaluation team commented in the evaluation report that the majority of activities Heartbeat had initiated or funded to date had been in the strategy area of developing personal skills, followed by the area of creating supportive environments. The National Heart Foundation's other health promotion activities were also mainly in these areas. The evaluation team commented that there was currently no involvement in the area of reorienting health services, and minimal involvement in strengthening community action and building healthy public policy. The following recommendation was made:

> That appropriate coverage of the five Ottawa Charter health promotion strategy areas should be sought when allocating funding from Heartbeat New Zealand.

The minutes of the June 1989 Heartbeat New Zealand Committee did not explicitly refer to discussion of this recommendation, although it was agreed prior to the evaluation report being discussed that the Programme Director would prepare a paper for the next meeting on potential activities for Heartbeat in the areas of developing healthy public policy and reorientating health services. When questioned by the evaluator about the outcome of the recommendation prior to the September 1989 Heartbeat New Zealand Committee, the Heartbeat Programme Director indicated that there was general support for the recommendation, and that ways of putting it into practice were under discussion. No further discussion of the recommendation was recorded in subsequent minutes of the

Heartbeat New Zealand Committee. However, the Programme Director did make explicit reference to the five strategies of the Ottawa Charter in subsequent planning and funding documents, at times using these five areas to categorise present or proposed activities. Heartbeat staff members also used the Ottawa Charter grid approach on several occasions to present options for future Heartbeat activity in the areas of nutrition and smoking.

Despite the lack of formal action on this recommendation, its intention was substantially achieved in 1990 with the development of Heartbeat programme objectives incorporating the five Ottawa Charter strategies, and the stipulation that in future the relationship between new or proposed Heartbeat activities and the programme objectives should be explicit.

(iii) Organisational Communication

(a) Roles and responsibilities of Heartbeat Awards staff members.

An issue which was identified during informal discussion and formal interviews in the first few months of the evaluator's involvement with Heartbeat New Zealand was that there were problems in the Heartbeat Awards project concerning confusion and differing perceptions as to the roles and responsibilities of the different staff members involved. As stated earlier, the Heartbeat Awards project involved a number of different staff members in the Auckland and Christchurch offices of the National Heart Foundation. A lack of clarity concerning roles and responsibilities was perceived to exist both within the staff group involved in Heartbeat Awards, and in the broader context of the National Heart Foundation. One reason for this was that roles within the Heartbeat Awards project had tended to evolve as the project developed (e.g., the gradually increasing separation of the two project components of school canteens and workplace cafeterias), and another was the lack of formal specification of the involvement of some staff members in the project (e.g., the time commitment and activities of staff working part-time on the project).

Within the staff group involved in Heartbeat Awards, a particular problem was perceived to be the relationship between the Christchurch-based public relations consultant employed two days per week by Heartbeat, who worked predominantly on Heartbeat Awards, and the Auckland-based National Heart Foundation Communications

Coordinator, who also had involvement in the project. Neither of these people had a formal title or job description within the Heartbeat programme, and both were consulted by other staff members about aspects of Heartbeat Awards publicity and promotion. This at times led to duplication of activity and disagreement about preferred courses of action, as Christchurch-based staff worked with the Christchurch consultant, and Auckland-based staff worked with the National Heart Foundation Communications Coordinator.

There were also problems within the broader context of the National Heart Foundation. In response to a query from Heartbeat Awards staff members the Heartbeat Programme Director had stated in early 1989 that the Christchurch-based Heartbeat Dietitian was to be overall coordinator of the Heartbeat Awards project. However, the Auckland-based Executive Director of the National Heart Foundation appeared to regard the Auckland-based Programme Coordinator as overall coordinator of the project. For example, he requested that she prepare a three year plan for Heartbeat Awards in workplace cafeterias as well as her own area of responsibility of school canteens, which was viewed as inappropriate by both Auckland and Christchurch-based Heartbeat Awards staff. Auckland-based Heartbeat Awards staff members reported being unsure of whether they should be reporting primarily to the Executive Director or the Heartbeat Programme Director. The Executive Director also reprimanded the Christchurch-based Heartbeat Dietitian on one occasion for using the public relations consultant rather than the National Heart Foundation Communications Consultant to arrange publicity for Heartbeat Awards.

Based on the information obtained from Heartbeat Awards staff the evaluator considered that there was a need to obtain clarification on these issues, and to communicate this to ensure that both Heartbeat and National Heart Foundation staff were aware of the situation. The following recommendation was made in the June 1989 evaluation report:

> That the roles and responsibilities of Heartbeat Awards staff members and the channels by which communication should occur need to be documented and made known to all Heartbeat and National Heart Foundation staff.

No discussion of this recommendation was recorded in the minutes of the June 1989 Heartbeat New Zealand Committee meeting. The evaluator wrote to the Heartbeat

Programme Director in July 1989 requesting information on the current status of the recommendation. The Programme Director wrote in reply that he had communicated to Heartbeat New Zealand and National Heart Foundation staff on the question of roles, responsibilities and channels of communication within Heartbeat Awards, but did not indicate whether this occurred verbally, or in writing as the evaluation team had intended and the recommendation implied it should be. The issues that had been identified by Heartbeat staff did appear to have been resolved to the extent that the evaluator did not receive further reports of problems in this area.

The overlap between the roles of the Christchurch-based public relations consultant and the National Heart Foundation Communications Coordinator was resolved when in June 1989 the Heartbeat New Zealand Committee decided to limit the public relations consultant's role to producing the Heartbeat Columns, and to assign overall responsibility for Heartbeat's publicity and promotion activities to the Communications Coordinator. This occurred because the public relations consultant's contract came up for renewal, however, rather than as a result of the evaluation team's recommendation. The establishment of the Project Coordinators' meetings, and the implicit understanding that developed that the staff who attended these meetings had equivalent status under the Heartbeat programme also helped contribute to greater clarity regarding roles and responsibilities.

(b) Access to information by Project Coordinators.

The issue of access to information by Heartbeat Project Coordinators was raised by the Project Coordinators at their first two monthly meeting on July 26 1989. The Coordinators expressed concern that they had not been told of comments and decisions about their projects made by Heartbeat New Zealand Committee members at the June 1989 meeting of that committee. The Project Coordinators did not receive copies of the Heartbeat New Zealand Committee meeting minutes, and relied for their information on the Heartbeat Programme Director, who admitted that he had been remiss in this regard. The Project Coordinators were particularly concerned that people in equivalent positions to theirs in the Department of Health in Wellington had access to the Heartbeat New Zealand

Committee minutes, presumably through the Department of Health representative on the committee, when they, as employees of the programme, did not.

The Programme Director explained that it was National Heart Foundation policy to have limited distribution of meeting minutes because of their often sensitive nature, but stated that he would raise the issue with the Heartbeat New Zealand Committee. In their September 1989 report the evaluation team identified the need for Project Coordinators to be kept fully informed of Heartbeat New Zealand Committee decisions regarding their projects as an issue of importance and made the following recommendation:

> That the Heartbeat New Zealand Project Coordinators should receive minuted decisions of the Heartbeat New Zealand Committee relevant to their projects as soon as possible after each Heartbeat meeting.

The Heartbeat Programme Director stated in response to this recommendation that following the July 26 Project Coordinators' meeting, copies of the June 1989 Heartbeat New Zealand Committee meeting minutes had been distributed to the Project Coordinators. It was agreed that Project Coordinators should continue to receive the meeting minutes, with only personal and confidential information withheld.

The issue of access to programme-related information by Heartbeat Project Coordinators was also raised at the September 13 and November 20 1989 Project Coordinators' meetings. At the September 13 meeting the Project Coordinators requested that they be sent copies of Heartbeat New Zealand Committee agenda items prior to committee meetings. One reason for this was that they were often asked by committee members to comment during the meeting on documents they had not seen. It was confirmed that in future the Project Coordinators would also receive copies of the evaluation reports prior to the Heartbeat New Zealand Committee meetings (these had previously been provided following the meetings, after permission had been obtained by the evaluation team from the Heartbeat Committee Chairperson).

The Project Coordinators requested further information on financial matters relating to their project areas at the September 13 and November 20 Project Coordinators' meetings. At the September meeting they stated that they were not receiving enough

information from National Heart Foundation administrators on the current financial situation, and they requested an explanation of the way costs had been allocated to different project areas in financial statements they had recently received. They identified apparent discrepancies between these financial statements and their own financial records, and queried the way some costs had been categorised. There was discussion of the role of Project Coordinators in financial and budgetary matters, and the Programme Director stated that the Project Coordinators were responsible for helping to plan budgets and ensuring that expenditure was kept within budgetted figures. The Project Coordinators stated that in order to fulfill this role they required more frequent updates on project expenditure, and that they needed to understand the system of financial accounting that was operating.

At the November 20 1989 Project Coordinators' meeting the Heartbeat Programme Director reported that he had conveyed the above concerns to the Executive Director of the National Heart Foundation, who was opposed to providing Project Coordinators with frequent detailed breakdowns of expenditure in their project areas. The Project Coordinators reiterated that if they were to work within their project budgets they required more information on financial matters, and they requested a meeting with the Executive Director to discuss this issue.

In addition to the issue of financial information, two of the Project Coordinators requested access to the bimonthly reports of other National Heart Foundation staff members and the minutes of the Health Education Committee, at the November 20 1989 Project Coordinators' meeting. They stated that at present they often felt uninformed about what was happening in the wider National Heart Foundation organisation, and that receiving these documents would assist in this area. There was a general discussion about access to information, and it was commented that the National Heart Foundation as an organisation was characterised by a very restricted flow of information to staff members. It was agreed by the meeting that in principle, the more informed staff were about what was happening in the organisation the better. The Programme Director stated that while

he agreed staff should have greater access to a range of information, others in the organisation did not.

The evaluator considered that a formal recommendation from the evaluation team might facilitate improved access to information by Project Coordinators. In the evaluation report to the December 1989 meeting of the Heartbeat New Zealand Committee it was stated that a recurring issue in Project Coordinators' meetings was the extent, and procedures for sharing, of information about the Heartbeat programme and individual projects, as well as the National Heart Foundation as a whole. It was reported that there was a feeling among Project Coordinators that in order to work together as a team and constructively influence the development of Heartbeat New Zealand, access to a fuller range of information than they currently had was required. Because of Heartbeat's position within the National Heart Foundation, they also needed to stay informed about developments within the Foundation. The evaluation team reported the concern expressed by Project Coordinators that it was difficult for them to gain access to sufficiently detailed information on the financial status of their projects to adequately undertake financial planning.

The evaluation report stated that because Heartbeat was structured within the National Heart Foundation, its administration had largely involved the application of existing policies and practices regarding access to and procedures for sharing of information. While some arrangements had been made to facilitate the flow of information within the Heartbeat programme (e.g., regular Project Coordinators' meetings, distribution of Heartbeat New Zealand Committee meeting minutes to Coordinators), it was suggested that further arrangements for greater information sharing might be required for the optimal functioning of the Heartbeat programme. The following recommendation was made:

> That Heartbeat New Zealand Project Coordinators be asked to formally identify their information needs in order to ensure adequate coordination and forward planning and that mechanisms to routinely provide such information be developed.

This recommendation was accepted by the Heartbeat New Zealand Committee.

The information needs of Project Coordinators were discussed at the next Project Coordinators' meeting, held on February 26 1990. It was agreed that Project Coordinators should send their two monthly progress reports to the other Project Coordinators as well as the Heartbeat Programme Director and Heartbeat New Zealand Committee. It was confirmed that Project Coordinators should receive the Heartbeat evaluation reports at the same time as Heartbeat New Zealand Committee members, and it was agreed that they should also receive meeting agendas and copies of working party reports. It was agreed that the contents pages of journals received by the National Heart Foundation should be circulated to all health professional staff, including the Project Coordinators. Project Coordinators asked to receive all material about the National Heart Foundation which other employees received, and cited the example of the 1989 Annual Report, copies of which had not been provided to Heartbeat staff members. It was agreed that this would occur in future. Circulation of Health Education Committee minutes as requested by Project Coordinators at their November 1989 meeting had commenced. Copies of National Heart Foundation Council meeting minutes were requested, and after discussion between the Heartbeat Programme Director and other National Heart Foundation administrators, it was agreed that one copy of these minutes would be kept in a file available for perusal by staff members on request. Production of a regular in-house Heartbeat newsletter was proposed at the February 26 Project Coordinators' meeting, but this did not occur during the research period.

While improvements in the Project Coordinators' access to information occurred in the areas identified above, the situation regarding access to financial information did not improve during the research period. The Executive Director of the National Heart Foundation did not agree to attend the February 1990 Project Coordinators' meeting as requested by them in November 1989, stating that he would instead meet with individual Project Coordinators if requested, to discuss project financial matters. One of the Project Coordinators had discussed the need for regular updates on project expenditure with the Executive Director prior to the February meeting, and she reported that he had indicated that he was unclear as to precisely what the Project Coordinators wanted to know. The

Project Coordinators once again stated and had recorded in the meeting minutes that if they were to attempt to restrict project expenditure to budgetted amounts, they needed regular updating as to the current financial status of their projects.

The situation regarding access to financial information came to a head in late 1990, when Project Coordinators were provided with information on the current financial status of their projects and it was found that the Heartbeat Awards project was running over budget for the twelve month period from July 1 1990. Based on these figures, the Executive Director asked both Heartbeat Awards Project Coordinators to provide him with a report on where they could make substantial savings in order to stay within the budgetted figure. This issue was discussed at the November 12 1990 Project Coordinators' meeting, and it emerged that neither of the Heartbeat Awards Project Coordinators had been consulted about the amount of money budgetted for their activities for the twelve months from July 1 1990, and that there were anomalies in the way expenditure had been allocated to the project areas which had contributed to the budget overrun. For example, it appeared that all of the activities of the Project Coordinator responsible for Heartbeat Awards in workplace cafeterias had been charged to this project, when in fact a number of her activities were unrelated to the workplace cafeteria project (e.g., visits to Area Health Boards, attendance at food labelling planning meetings). The school canteen and workplace cafeteria components of Heartbeat Awards had also been budgetted as one project, when in fact both Project Coordinators operated independently on financial matters. These and other concerns about financial reporting were expressed by the Project Coordinators to the meeting of the Heartbeat New Zealand Committee the following day, and the Chairperson of that committee agreed that there should be greater liaison between the Project Coordinators and the Executive Director on financial matters, that Project Coordinators should have greater involvement in setting budgets for their project areas, and that they should receive regular reports on project expenditure.

(iv) Relationship Between Heartbeat and Te Hotu Manawa Maori

As outlined in Chapter Three, a Maori Heartbeat programme was established in early 1989. Although formally a sub-committee of the Heartbeat New Zealand Committee,

Maori Heartbeat, or Te Hotu Manawa Maori as it was known from 1990, operated largely independently, as a parallel Maori structure within the National Heart Foundation. Te Hotu Manawa Maori was funded by a separate grant from the Department of Health. The programme was relatively inactive until October 1990 when a full-time Executive Officer was appointed, based in the Auckland office of the National Heart Foundation. The Heartbeat evaluation team was not involved in evaluation of Te Hotu Manawa Maori during the research period, but by late 1990 issues had become apparent concerning the relationship between Heartbeat New Zealand and the Maori programme, which led to the evaluation team making two recommendations in this area in November 1990.

The major issue concerned the extent to which the Heartbeat New Zealand programme should attempt to incorporate biculturalism, above and beyond having supported the establishment of Te Hotu Manawa Maori. Two alternative viewpoints were apparent among Heartbeat participants on this issue. From early 1989 when the Maori programme was established, to the end of the research period, the evaluator observed that dissatisfaction with the progress of Te Hotu Manawa Maori was expressed by a number of Heartbeat personnel and administrators on frequent occasions. There were complaints that Te Hotu Manawa Maori was not moving fast enough in appointing staff and establishing its own activities, and that communication between Te Hotu Manawa Maori, Heartbeat New Zealand and the wider National Heart Foundation was very poor. The attitude of these Heartbeat staff and administrators appeared to be that Te Hotu Manawa Maori had sole responsibility for developing Maori heart health initiatives, and that it was performing poorly in this, to the detriment of the reputation of the Heartbeat New Zealand programme and the National Heart Foundation, which had supported its establishment.

An alternative viewpoint expressed by some other Heartbeat and National Heart Foundation participants, was that both the National Heart Foundation and the Heartbeat programme had a responsibility to incorporate biculturalism themselves, as well as supporting Te Hotu Manawa Maori. These participants expressed the view that the National Heart Foundation was a monocultural organisation which had only just begun to move in the direction of biculturalism, and that there was substantial opposition to this

move from some of the more conservative members of the Foundation. An anti-racism seminar had been held by the Waitangi Consultancy Group in the National Heart Foundation in 1989, and it was reported that the reaction to this had been quite negative from a number of quarters.

The evaluator canvassed the opinions of Heartbeat participants on the issue of biculturalism and the development of Te Hotu Manawa Maori in interviews conducted in September and October 1990. Most of those interviewed agreed with the view that the Heartbeat programme needed to incorporate biculturalism, rather than leaving Maori heart health initiatives solely in the hands of Te Hotu Manawa Maori. Several respondents mentioned the population-based approach that Heartbeat was set up to promote as the reason why it must include a focus upon Maori as well as non-Maori New Zealanders. They saw the function of Te Hotu Manawa Maori as being to ensure that an adequate level of resources was allocated to the development of Maori-controlled heart health initiatives, but considered that Heartbeat's population-based approach should still impact upon Maori people. The view was expressed during interviews that the National Heart Foundation needed to further address biculturalism, particularly with regard to members of its Regional Committees. Several respondents described the Waitangi Consultancy seminar as an unsuccessful attempt to do this. There were reported to be a number of unresolved issues following this seminar, and it was stated that no opportunity for feedback about or follow-up to the seminar had been provided. It was also suggested that present Heartbeat New Zealand members should participate in an anti-racism seminar. The evaluation team reported these comments and recommended in their November 1990 evaluation report that Heartbeat and the National Heart Foundation give consideration to the issues identified concerning biculturalism, and hold discussions with Te Hotu Manawa Maori in this area.

When this recommendation was discussed at the Heartbeat New Zealand Committee meeting, the Executive Director of the National Heart Foundation indicated that he considered the recommendation unnecessary, since the National Heart Foundation had already addressed the biculturalism issue, most importantly by supporting the establishment of Te Hotu Manawa Maori, and would continue to make progress in this

area. Others present endorsed the need to further address biculturalism within the Heartbeat programme and the National Heart Foundation, but no specific action was agreed upon. The Executive Officer of Te Hotu Manawa Maori, who was present at the meeting, expressed the view that moving toward biculturalism was a slow developmental process, and that the National Heart Foundation had more work to do in this area. No action on this recommendation occurred during the research period.

A second issue regarding the respective roles and relationship between Heartbeat and Te Hotu Manawa Maori was identified in the November 1990 evaluation report. This concerned the Heartbeat Community Grants project. A meeting involving the Heartbeat Project Coordinators, Programme Director and evaluator to consider grant applications had been held on September 27 1990. There had been lengthy debate at this meeting over whether the group should be considering applications from Maori community groups, and whether Heartbeat New Zealand should be funding these applications. It was suggested, for example, that the group should pass over applications from Maori groups to Te Hotu Manawa Maori to consider, and some of those present also thought that funding for successful Maori groups should come from the Te Hotu Manawa Maori budget, rather than that of Heartbeat New Zealand. It was reported at the meeting that Te Hotu Manawa Maori planned to establish a similar granting system for community initiatives in future. The outcome of the discussion was that since Heartbeat had advertised the availability of the grants to all community groups, including Maori groups, all groups which met the criteria set down should be considered. It was agreed that Te Hotu Manawa Maori could be asked to advise on applications from community groups if the Heartbeat group felt that judging the merits of these was outside its expertise. While the issue appeared to have been resolved for the time being, the evaluator considered that the broader policy issue of the relative spheres of influence of Te Hotu Manawa Maori and Heartbeat New Zealand Committees could usefully be clarified for the benefit of Heartbeat Project Coordinators and other staff in future. The following recommendation was therefore made:

> That discussion occur between representatives of the Heartbeat New Zealand Committee and te Komiti o te Hotu Manawa Maori regarding the relative spheres of influence of the two committees, particularly in relation to the funding of community grants, and that the outcome of this discussion be communicated to Heartbeat Project Coordinators.

This recommendation was discussed by the Heartbeat New Zealand Committee, and it was proposed that in relation to the Community Grants Project, two Maori representatives would be appointed to the selection committee, including the Executive Officer of Te Hotu Manawa Maori. This was agreed to by the two Maori representatives on the Heartbeat New Zealand Committee, on behalf of Te Hotu Manawa Maori. Broader discussion on the relative spheres of influence of the two committees did not occur during the research period.

(v) Procedure for Appointing New Committee Members

In November 1989 the Heartbeat Programme Director circulated a paper proposing a restructuring of the committees of the National Heart Foundation, to improve administration, efficiency and communication. The formation of a new Health Promotion Committee to take the place of the existing Heartbeat New Zealand and Health Education Committees was recommended. Discussions on the committee restructuring occurred during the remainder of 1989 and 1990, with the change to a Health Promotion Committee occurring in early 1991, after the research period had ended.

A major question for the evaluation team, and others who commented upon this issue, concerned the effectiveness of committees such as the Heartbeat New Zealand Committee, in the light of membership composition and selection procedures. The committees of the National Heart Foundation were perceived to be dominated by white male medical practitioners, and particularly cardiologists. Selection of new committee members tended to occur by personal recommendation of existing committee members, who tended to recommend people similar to themselves, thus perpetuating the limited range of perspectives and expertise represented on committees.

There was concern, both in terms of the existing composition of the Heartbeat New Zealand Committee, and in the proposed composition of the new Health Promotion

Committee, that there was insufficient health promotion expertise represented, and that too many committee places were set aside for people by virtue of their fulfilling other roles or holding other positions in the organisation. For example, in the first draft of the proposed committee membership of the new Health Promotion Committee circulated in November 1989, only three of the 12 proposed positions on the committee were identified as being for people with particular skills in health promotion. The other nine positions were reserved for people representing particular occupations (e.g., General Practitioner, Cardiologist), other National Heart Foundation committees or groups (e.g., a representative of Regional Committees and of the Foundation's health professional staff), or National Heart Foundation office-holders (e.g., Medical Director, Executive Director). The proposed composition of the committee was altered three times before the end of 1990, and the number of specifically health promotion places was increased to five of the twelve places, but the procedures for selecting these committee members were still not explicit.

Terms used by some programme participants to describe the National Heart Foundation method of selecting committee members included the "old boy's network", and "incestuous". The statements were made that too much emphasis was placed on not offending important people in appointing committee members, and that the best approach to filling the places on the new Health Promotion Committee would be for all members of the present Health Education and Heartbeat New Zealand Committees to resign, and then for appointments to the new committee to be made on the basis of the skills required for the role of the new committee. Despite the fact that the restructuring proposal had been under discussion for almost a year, some current Heartbeat New Zealand Committee members stated that they were unclear about the proposed role and functions of the new Health Promotion Committee, and uncertain whether their particular skills were relevant to it.

On the basis of their own observations and interpretations, and the views expressed by some programme participants, the evaluation team recommended that the National Heart Foundation give consideration to the following points:

- the importance of formulating a clear brief on the role and functions of the new Health Promotion Committee and skills required by committee members

- the desirability of widely publicising the committee brief and calling for nominations for membership

- that in appointing committee members primary attention should be given to their individual skills and likely contribution to the committee rather than existing committee membership or occupational group.

The recommendation was discussed while the evaluator and her immediate supervisor were present in the Heartbeat New Zealand Committee, and again at the end of the meeting when they were not. The response from committee members was mixed. There was general agreement with the first aspect of the recommendation, of the importance of formulating a clear brief on the role and functions of the new committee, and skills required by members.

There was disagreement regarding the third aspect, that primary attention should be given to the skills and likely contribution of potential committee members rather than existing committee membership or occupational group. In response to one committee member questioning the number of places on the new Health Promotion Committee reserved for National Heart Foundation committee representatives and office-holders, the Heartbeat Programme Director stated that this matter had been open for discussion for a long period, and there had been plenty of opportunity for input previously from present committee members.

There was opposition from National Heart Foundation representatives on the committee to the suggestion that the committee brief be widely publicised and nominations for membership called for, but support for this from some other members. The supervisor of the evaluation team argued strongly for calling for nominations, and after further discussion it was agreed that nominees should be invited from a number of key organisations to fill the five health promotion positions on the new Health Promotion Committee. An appointments sub-committee comprising the National Heart Foundation Executive Director, the Heartbeat Programme Director, the present Chairperson of the

Heartbeat New Zealand Committee, and the supervisor of the evaluation team was formed to process nominations and make recommendations regarding committee membership to the Management Committee of the National Heart Foundation. A notice outlining the Health Promotion Committee role and functions and calling for nominations for membership was sent out in December 1990 to the Health Promotion Forum and Public Health Association for circulation to their members. Processing of nominations and selection of new committee members occurred in January 1991, after the research period had ended.

Section 3: Discussion

(i) Contribution of Evaluation Activities to Programme Development

Formative evaluation input to the functioning of the overall Heartbeat programme in the form of recommendations to the Heartbeat New Zealand Committee on issues of programme management, planning and coordination and organisational communication can be seen to have made a positive contribution to programme development. While not all of the recommendations on programme functioning made by the evaluation team were accepted or fully implemented by the Heartbeat New Zealand Committee, most recommendations did lead to some form of action that improved the situation to some degree.

In the area of programme management, the formation of an executive sub-committee with authority to act on behalf of the full Heartbeat New Zealand Committee arose directly from a recommendation by the evaluation team, and was important in terms of formalising procedures for and ensuring continuity in programme decision-making between meetings. The evaluation team's recommendation regarding the need for an intermediate level of programme management between the Programme Director and Heartbeat New Zealand Committee and programme staff was less successful, however, and was not implemented despite being raised in two evaluation reports, and despite agreement by the Heartbeat New Zealand Committee on the second occasion to form a working party to examine the management structure of the programme. It is clear that the appointment of

a Programme Manager for Heartbeat New Zealand was perceived to have important and somewhat negative implications for existing power relationships within the National Heart Foundation, and that there was opposition to it on these grounds from key individuals. The increase in the Programme Director's time allocation to Heartbeat from 3/10 to 5/10 which was requested and agreed to in late 1989 also made it unlikely that a Programme Manager would be appointed. There was theoretically less need for such a position, and it would be difficult to justify allocating further salary funding in the area of programme administration, on top of the Programme Director's 5/10 salary. However, despite the low likelihood of success with this recommendation, the evaluation team considered they had a responsibility to raise the issue a second time, and did so. The proposal of the working party that the possibility of employing a person in Wellington to conduct advocacy activities for Heartbeat be investigated was not supported by the Heartbeat New Zealand Committee (nor by one of the members of the working party). In the face of opposition from the Executive Director of the National Heart Foundation to further consideration of the topic, debate on this issue ceased.

In terms of programme planning and coordination, the evaluation team obtained official sanction from the Heartbeat New Zealand Committee for the importance of careful planning as opposed to speedy implementation of the Heartbeat Awards pilot phase, and for the scheduling of regular planning meetings of Heartbeat Awards staff. These aspects had been identified as important by some project staff members, but their attempts to obtain support for them from Heartbeat or National Heart Foundation administrators had been unsuccessful. The institution of regular Project Coordinators' meetings as a result of the evaluation team's recommendation can be seen to have been a significant development in the operation of the Heartbeat programme which had a number of positive outcomes for both the Project Coordinators as a group, and for the progress of Heartbeat as a whole. While explicit consideration was not given by the Heartbeat New Zealand Committee to the broader aspect of this recommendation, that (more general) procedures for ensuring greater coordination of Heartbeat projects be investigated, the Project Coordinators'

meetings had a pronounced positive effect on their own, based on the evaluator's observation.

In contrast, the evaluation team's recommendation that the Department of Health's health education planning form be modified and adopted for use as a planning procedure within Heartbeat was not implemented. It emerged that the intention of this recommendation was not self-evident as the evaluation team had assumed, and there was clearly some confusion as to what was meant by it. In hindsight, the evaluation team's intentions in making the recommendation were achieved by other developments at a later stage, perhaps more satisfactorily than if the recommendation had been accepted and implemented at the time by the Heartbeat New Zealand Committee.

The recommendation that appropriate coverage of the five Ottawa Charter health promotion strategy areas be sought when allocating funding from Heartbeat New Zealand was a fairly general one, which yielded little in the way of tangible outcomes. The presentation of the grid showing where present and proposed Heartbeat and National Heart Foundation health promotion activities fitted within the Ottawa Charter strategies was primarily intended by the evaluation team to raise awareness of the range of health promotion strategies available in addition to the health education approach of developing personal skills. The intention of the recommendation was met at a later stage when the Heartbeat programme objectives were formulated, which incorporated the five Ottawa Charter strategies, and when it was agreed that new and proposed activities would be considered in terms of their relationship with the programme objectives. A number of limitations of the grid approach are apparent in hindsight, including the arbitrary nature of assignment of projects and activities to the five strategy areas, and the lack of a dimension showing the relative magnitude of resource allocation to each area. However, after the presentation of the grid, most of the planning documents developed by the Heartbeat Programme Director included some mention of the five Ottawa Charter strategies, and some documents were structured around the five areas. Several Project Coordinators also used the grid approach to present options for future development on occasion.

Several evaluation recommendations were made in the area of organisational communication, with varying outcomes. The Heartbeat Programme Director indicated to the evaluator that he had actioned the recommendation that the roles and responsibilities of Heartbeat Awards staff members and the channels by which communication should occur be documented and made known to all Heartbeat and National Heart Foundation staff. However, it was not clear whether this occurred in writing as intended by the evaluation team, or verbally, in which case the recommendation would be likely to be less effective as a means of achieving lasting clarification of the situation. The problems identified in this area by Heartbeat Awards staff were not subsequently brought to the evaluator's attention, suggesting that any confusion was cleared up.

Positive action was achieved on the issue of access to information by Heartbeat Project Coordinators, and the recommendations of the evaluation team clearly contributed to this. The Project Coordinators received minuted decisions of the Heartbeat New Zealand Committee relevant to their projects from September 1989. The evaluation team's further recommendation, that Project Coordinators be asked to identify their information needs and that mechanisms to provide such information be developed, led to the Project Coordinators formally identifying what they felt they needed in order to keep informed about Heartbeat and National Heart Foundation activities and issues. Policy decisions were then made to enable them to receive this information on a regular basis. This can be seen to have opened up what had previously been a rather restricted flow of information to project staff about the programme and the broader organisation, which was a feature of traditional communication practices within the National Heart Foundation. The situation regarding access to financial information by Project Coordinators was one area which did not improve during the research period, largely because of apparent obstruction by the National Heart Foundation Executive Director. However, the Heartbeat New Zealand Committee provided formal support for Project Coordinators in their repeated requests to the Executive Director for greater access to financial information about their projects in November 1990, which provided Project Coordinators with a much stronger basis for their requests.

The recommendations regarding biculturalism and the relationship between Heartbeat, the National Heart Foundation, and Te Hotu Manawa Maori made in November 1990 appeared to have little impact. The need or desirability of the National Heart Foundation and Heartbeat further addressing biculturalism was not supported by the Executive Director of the Foundation, who appeared to interpret the recommendation as unjustified criticism of the Foundation, and discussion on this topic was limited and inconclusive.

The evaluation team's recommendation regarding procedures for appointing committee members to the new Health Promotion Committee was partially implemented. This recommendation was significant in that it involved explicitly challenging existing National Heart Foundation practices, which the evaluation team had avoided doing previously, seeking to confine their activities and recommendations specifically to the Heartbeat programme. However, the impending merging of Heartbeat with the Foundation's other health education activities under the auspices of the new Health Promotion Committee, meant that the composition of the committee could have a significant influence upon the Heartbeat programme in future, and procedures for appointing committee members were therefore considered by the evaluation team to come within their brief to comment upon. The suggestion that existing committee membership or occupational group should not count as factors in appointing committee members was rejected by National Heart Foundation participants. The desirability of widely publicising the committee brief and calling for nominations for membership was the subject of some debate, with opposition coming from National Heart Foundation quarters, and support from those unconnected with the Foundation. The eventual agreement that the five health promotion representatives on the committee could be selected from among nominations received, and the establishment of a working party to oversee this represented a notable departure from usual National Heart Foundation procedure.

It can be seen that the evaluation team was most active in seeking to influence the overall functioning of Heartbeat during the earlier stages of their involvement with the programme. The first evaluation report concentrated upon issues of overall programme

functioning, and made a number of recommendations regarding this, while subsequent reports made fewer or no such recommendations, but made more recommendations regarding particular Heartbeat projects. The June 1989 evaluation report was the first opportunity for the evaluation team to formally comment upon the Heartbeat programme from an evaluation perspective. The recommendations in it were the outcome of the evaluation team's "first impressions" of the programme, and were made from the perspective of outsiders previously unfamiliar with the programme, based on an initial period of learning how the programme operated. The potential for impact by the evaluation team on overall programme functioning may have been greatest during these early stages when they still had the status of "objective outsiders".

A role which can be seen to have emerged for the evaluation team in their formative evaluation input to the overall programme was to act as a channel of communication for others in the programme (e.g., between the Project Coordinators and the Heartbeat New Zealand Committee). The evaluation team frequently voiced concerns to the Heartbeat New Zealand Committee which had been communicated to the evaluator by other programme participants who were either not in a position to voice these concerns themselves, or who had unsuccessfully attempted to have these concerns resolved in the past. It was possible, and often more successful, for the evaluation team to raise contentious issues and suggest solutions to these than other programme participants, because it was explicitly part of the evaluation team's brief to adopt a critical perspective on and maintain a degree of independence from the programme.

While it could be argued that a number of the changes which occurred at the recommendation of the evaluation team may have happened at some stage anyway (e.g., formation of an executive sub-committee, regular Project Coordinators' meetings), it is clear that the evaluation team's recommendations put these on the agenda of Heartbeat's steering committee, and facilitated the occurrence of such changes to a significant degree.

Overall, while the formative evaluation input to overall programme functioning provided by the evaluation team was essentially remedial, and did not radically alter the

face of the Heartbeat programme, it can be seen to have contributed to improved programme operation in a number of ways.

(ii) Evaluation Issues

An important lesson was learned by the evaluation team based on the response of the Heartbeat New Zealand Committee to recommendations in their June 1989 evaluation report, when there was no record of any discussion or decisions by the Committee for many of the recommendations made by the evaluation team. From this experience it became clear that action was necessary to ensure that all formal recommendations made by them were in fact considered by the Heartbeat New Zealand Committee and reported in the meeting minutes, and if formally adopted, were then actioned by programme administrators. In subsequent reports, the evaluation team ensured that any recommendations appeared both in the relevant section of the text of the report, and at the front of the report following the report summary. They numbered all recommendations for easy identification. From the second evaluation report they added a section at the front of the report entitled "Current status of previous recommendations", where previous recommendations were listed, with their current status (e.g., implemented, under discussion, accepted in principle, status unknown). Monitoring the implementation of evaluation recommendations in this way had the important function of ensuring that recommendations could not simply be ignored or overlooked by the Committee or programme administrators.

A question which is raised in the evaluation literature concerning the effectiveness of recommendations made by evaluators is the extent to which recommendations should be fairly broad and general, or alternatively, recommend a specific course of action (e.g., Hendricks & Handley, 1990). Recommendations made by the evaluation team to the Heartbeat New Zealand Committee included fairly broad recommendations (e.g., that appropriate coverage of the five Ottawa Charter areas should be sought when allocating funding), fairly specific recommendations (e.g., that the position of Heartbeat Programme Manager be readvertised), and recommendations which were a mixture of broad and specific (e.g., that procedures for ensuring greater coordination of Heartbeat projects be

investigated, including regular meetings of Project Coordinators). The experience with Heartbeat does not overwhelmingly support the use of either broad or specific recommendations, since success with the various categories of recommendations was mixed, and appears to have depended upon factors additional to the broadness or specificity dimension. However, the experience with the recommendations which combined broad and specific aspects, where the broad aspect was often ignored, and the specific aspect taken up, suggests that providing decision-makers with a specific action to take if they accept the general thrust of the recommendation is likely to be important.

The evaluation team's experience with the two recommendations regarding programme management yields some interesting points for consideration by evaluators. The first time this was raised the evaluation team did not provide a detailed justification for the recommendation, and made a specific recommendation that the Programme Manager's position be readvertised, which was rejected by the Committee after some discussion, despite reported support for the recommendation among some Committee members. When they raised this issue on the second occasion, the evaluation team set out in some detail a justification for the recommendation, and proposed that a working party be established to examine the whole question of the management structure of Heartbeat, including the appointment of a Programme Manager. This recommendation was accepted by the Committee and a working party was formed. Although the outcome of the working party was contrary to the evaluation team's earlier recommendation, it is clear that more progress was made and there was greater potential for change with the approach used on the second occasion.

Based on the Heartbeat experience with the programme management issue and the Heartbeat Community Project (reported in Chapter Five) where a working party was recommended, and with the issue of selection of committee members where the decision to form a sub-committee was made by the Heartbeat New Zealand Committee, recommendation of the formation of a working party is a potentially useful strategy for evaluators to use. In Heartbeat the formation of a working party provided an opportunity for Committee members to exert additional influence to that possible in meetings of the full

committee. Those Committee members who volunteered for or were assigned to a working party tended to be those with a particular interest in either promoting or resisting change in that area. The major advantage for decision-making of a working party over the full committee was that it involved a smaller group of people focused upon a particular problem or issue, with time set aside specifically for its consideration. While their outcomes varied, working parties were potentially an effective means of initiating change in contentious areas of the Heartbeat programme to the extent that they could ensure ownership of decisions by the Committee.

The status of the evaluation supervisor as a member of the Heartbeat New Zealand Committee was clearly an important factor in the outcome of some evaluation recommendations, since she was able to continue to represent the perspective of the evaluation team after the other two members had left the meeting. One evaluation recommendation which probably would not have been implemented without the influence of the evaluation supervisor as a member of the Heartbeat New Zealand Committee was that concerning seeking nominations for membership of the new Health Promotion Committee, since there was substantial opposition to this from National Heart Foundation representatives. Membership of the evaluation supervisor on the sub-committee that was formed to further this recommendation also helped ensure that it was implemented. However, as noted in Chapter Five, the dual role of the Director of the Alcohol Research Unit as Heartbeat evaluation supervisor and member of the Heartbeat New Zealand Committee did influence perceptions of the evaluation team's objectivity held by some programme participants.

Information obtained from Heartbeat programme participants through interviews conducted by the evaluator yielded useful information for formative purposes, and provided a stronger basis for making recommendations in contentious areas that the evaluation team had already identified as warranted. One of the questions which recurred in formative evaluation of the overall Heartbeat programme was the basis upon which the evaluation team were making recommendations. There were hints from some programme participants that many of the formative evaluation recommendations were made on the

basis of the subjective beliefs of the evaluation team, unsupported by empirical evidence. While many of the evaluation team's recommendations were based on their own observation and interpretation of programme operation, when such beliefs were also expressed by others besides the evaluation team the recommendations assumed added weight.

It was clear that some Heartbeat participants were initially uncomfortable with the approach taken by the evaluation team to the formative evaluation of the overall Heartbeat programme, and that this approach did not conform to their ideas about what evaluation should involve. The minutes of the June 1989 Heartbeat New Zealand Committee meeting, for example, stated that the Chairperson had emphasised to Heartbeat project staff that "the evaluation team was not determining policy in regard to the Heartbeat New Zealand programme", and that another Committee member had expressed the view that "the strategy for the evaluation process should remain primarily with the Heartbeat New Zealand Committee". There was also discussion at this meeting of the distribution of the evaluation reports, with concern from National Heart Foundation participants that the reports might be distributed outside of Heartbeat or the National Heart Foundation, which could be damaging to the reputations of both. The Heartbeat Programme Director also commented at the September 12 1989 Project Coordinators' meeting that he did not like the fact that the second evaluation report had included a section presenting the current status of the recommendations made by the evaluation team in June 1989, on the grounds that the Committee was under no obligation to agree with or accept the recommendations of the evaluation team. Both the evaluator and several Project Coordinators argued in response that while the Committee might disagree with the recommendations, they did have a responsibility to discuss and make decisions on them, which had not occurred with all of the June 1989 recommendations. The minutes of the September 9 meeting, written by the Programme Director, stated that it was pointed out at the meeting that it was the responsibility of the Heartbeat New Zealand Committee to consider all recommendations made by the evaluation team, but not necessarily to agree with them all.

It is clear that many of the formative evaluation recommendations made by the evaluation team were opposed by National Heart Foundation participants in the Heartbeat programme, who perceived them as potentially threatening the interests or established practices of the Foundation. National Heart Foundation representatives, and particularly the Executive Director, tended to block those recommendations which had implications for the Foundation (e.g., the programme management issue, biculturalism, selection of new committee members). This blocking occurred during the Heartbeat New Zealand Committee meetings, when opposition to the recommendations was expressed, or their need or relevance was questioned, and at later stages, when further discussion of some recommendations was stifled (e.g., on the management structure of Heartbeat), or cooperation was withheld (e.g., provision of financial information to Project Coordinators). It is clear that the concern of the evaluation team with the effective functioning of the Heartbeat programme was sometimes incompatible with the perceived need of National Heart Foundation administrators to preserve the status quo.

(iii) Health Promotion Issues

The formative evaluation activities outlined in this chapter identified a number of organisational issues and problems concerning the Heartbeat New Zealand programme which are not peculiar to health promotion programmes, but which can clearly influence the effectiveness of such programmes. Issues and problems were identified in the three major areas of programme management, programme planning and coordination, and organisational communication, and various steps were taken to improve the situation in these areas. These issues and the steps taken to address them are obviously relevant to other health promotion programmes, and should ideally be addressed during the planning stages of such programmes. For example, the Heartbeat experience illustrates the need to ensure that there is adequate provision for programme management of health promotion initiatives, and that those responsible for programme management have the relevant skills and experience to perform adequately in the role. The Heartbeat experience also illustrates the potential limitations of a health promotion programme structure that vests decision-making authority solely or substantially in a steering committee, in the absence of

provision for continuity of decision-making between steering committee meetings. Formative evaluation activities highlighted the importance of ensuring adequate provision and support for planning of health promotion at project level, as well as the need for strategic planning at programme level to occur from an early stage of programme development. The value of building in mechanisms such as regular meetings of Project Coordinators to enhance programme coordination and tap into the health promotion skills and expertise of staff was illustrated. The need for clear channels of communication and lines of accountability within health promotion programmes was identified, as was the importance of ensuring that health promotion programme staff have easy access to the information they need to adequately fulfill their responsibilities.

On a more general level, this chapter illustrated that, as noted in earlier chapters, the functioning of the Heartbeat programme was substantially influenced by existing policies and practices of the organisation in which it was located. A number of changes which were made within the Heartbeat programme as a result of evaluation recommendations represented departures from traditional practice within the National Heart Foundation. In many ways the Heartbeat programme posed a challenge to some existing practices within the National Heart Foundation which were not appropriate to the demands posed by a new health promotion programme and new staff members with different expectations. The formative evaluation input provided by the evaluation team to the overall Heartbeat programme clearly also posed a challenge to the National Heart Foundation. As stated previously, health promotion planners need to be aware of the implications of locating new health promotion programmes within existing organisations, and particularly, of the potential for resistance to change from within such organisations.

This chapter has discussed formative evaluation input to the functioning of the overall Heartbeat programme, provided as recommendations in the formal reports from the evaluation team to the Heartbeat New Zealand Committee during the research period. These recommendations were made on the basis of information obtained from the evaluator's observation and analysis of programme functioning, in conjunction with

information and comment obtained from other programme participants. The three major areas of programme functioning where recommendations were made were programme management, programme planning and coordination, and organisational communication. Additional recommendations were made concerning the relationship between Heartbeat and Te Hotu Manawa Maori, and procedures for appointing new committee members. While not all of the recommendations on programme functioning made by the evaluation team were accepted or fully implemented by the Heartbeat New Zealand Committee, most recommendations did lead to some form of action that contributed to improved programme functioning.

CHAPTER EIGHT

DISCUSSION

The aim of this research, of constructively influencing the development of an emergent heart disease prevention and health promotion programme by providing ongoing evaluation input to the programme planning and decision-making process was achieved. Over the course of the 21 month research period the author provided formative evaluation input to the Heartbeat New Zealand programme in the form of information collection and feedback to encourage information-based decision-making, and consultation to help improve overall programme functioning. While formative evaluation input was only one source of influence upon the development of the Heartbeat programme, and formative evaluation findings and recommendations were not always accepted or fully implemented by programme personnel, positive outcomes of the formative evaluation input can be identified at the level of individual Heartbeat projects, and the programme as a whole.

Chapter Eight is the final chapter of this thesis, and discusses the formative evaluation activities and findings. The first section provides a summary of the formative evaluation input provided to Heartbeat New Zealand and the contribution this made to programme development. The second section discusses issues highlighted by the Heartbeat research in terms of formative evaluation. The chapter concludes with a discussion of the implications of the Heartbeat experience for the future development and evaluation of health promotion and disease prevention programmes.

Section 1: Summary of Research Activities and Findings and Their Contribution to Programme Development

Four aspects of formative evaluation input to the Heartbeat programme have been reported in this thesis, comprising input to Heartbeat's two major ongoing projects of Heartbeat Awards and the Heartbeat Community Project, and input to the overall programme through development of a framework for outcome evaluation of

Heartbeat, and formal recommendations on programme functioning to the Heartbeat New Zealand Committee. The major activities and outcomes of formative evaluation in these areas will be discussed in turn.

(i) Heartbeat Awards

Intensive formative evaluation input was provided by the author to the pilot phase of the Heartbeat Awards project. This project aimed to promote healthy eating in a healthy environment by encouraging school canteens and workplace cafeterias to meet Heartbeat criteria for healthy food choices, hygiene, and a smokefree environment. During the pilot phase the evaluator collaborated with project staff in identifying and collecting a range of relevant information, including the situation that existed in school canteens and workplace cafeterias prior to the Heartbeat Awards intervention, the views and perceptions of project recipients about Heartbeat Awards, and the short term impacts of the project. The evaluator provided consultative input by participating in the project planning process, attending major project meetings and providing advice and suggestions on a range of project design and implementation issues. Formative evaluation of the Heartbeat Awards pilot phase provided information to assist in answering questions of the feasibility, appropriateness and effectiveness of the Heartbeat Awards initiative. Once wider implementation of Heartbeat Awards occurred, a more detached consultative role developed for the evaluator, where advice and guidance were provided as requested, particularly in refining and improving information-gathering procedures.

Overall, formative evaluation of the Heartbeat Awards project showed that there was support for the health promotion approach adopted among the target groups, that health-promoting changes were made in participating sites as a result of involvement in the project, and that the response from consumers was generally reported to be favourable. Other important evaluation findings were that the Heartbeat Awards project reinforced an existing trend toward promoting health in schools and workplaces, and that it helped focus the efforts of people in these sites who were already working toward such change. While major modifications of the Heartbeat

Awards model were not shown to be warranted, formative evaluation activities did provide information for project staff that allowed fine-tuning to occur in a number of areas.

(ii) Heartbeat Community Project

The Heartbeat Community Project involved the provision of nutrition education sessions to groups in the community by trained lay leaders under the supervision of National Heart Foundation Health Educators. The approach was modelled on the National Heart Foundation's cardiopulmonary resuscitation programme, and was being implemented nationally when the evaluator entered the setting. During an initial four month period of intensive formative evaluation input, the evaluator examined the origin and development of the project, obtained monitoring information on project implementation, reviewed the research literature to ascertain the likely outcomes of the approach, and interviewed Heartbeat New Zealand Committee members to obtain their perceptions of the project. It was found that the Heartbeat Community Project in practice did not reflect the planned small group emphasis which was central to the project model; that the likelihood of behaviour change in recipients as a result of the intervention was uncertain; that the model of nutrition education reflected in the project was being increasingly questioned in the international research literature; and that Heartbeat New Zealand Committee members had a number of concerns about the project.

Based on the information obtained by the evaluator, a re-examination of the likely worth of the Heartbeat Community Project in its present form was recommended, and a working party was established to consider the issues identified and decide upon future action. This working party did not make clear decisions about the future of the Heartbeat Community Project, however. Following a workshop to further consider the issues raised in formative evaluation of the Heartbeat Community Project, a process of developing agreed-upon broader objectives and strategies for the project began. These were finalised in late 1990, and provided a basis for the future

development of the project. The evaluator adopted a consultative role in the reorientation of the Heartbeat Community Project that occurred.

While by the end of the research period some change in the project appeared to have been implemented in most regions, this change was slow and incremental rather than dramatic, and was difficult to accurately assess in view of limitations in the monitoring information available about the current status of the project. The development of the Heartbeat Community Project was strongly affected by organisational influences, reflecting its status as a joint project of the National Heart Foundation and the Heartbeat programme. Overall, the major role of formative evaluation in development of the Heartbeat Community Project can be seen to have been in identifying potential areas for change in the project, and setting up opportunities for such changes to be planned and implemented by programme participants, which were not always supported or taken up by those participants.

(iii) Framework for Outcome Evaluation

Formative evaluation input to the overall Heartbeat programme was provided by the evaluator in the development of a framework for outcome evaluation of Heartbeat New Zealand. The evaluator examined an existing proposal for outcome evaluation of Heartbeat New Zealand which was based upon assessing changes in population levels of cardiovascular disease risk factors or variables related to risk factors, and identified a number of problems with it. A major issue that was identified was an apparent lack of congruence between formally stated programme intentions and actual programme implementation. Based on the evaluator's observation of programme functioning, it seemed unrealistic to expect that the activities that had been implemented by Heartbeat would be capable of having the impact that the formal aims and desired outcomes of the programme envisaged. A further problem with the existing proposal was that even if the Heartbeat programme could be expected to impact on a population basis in the areas envisaged, it would be difficult or impossible to attribute any observed change to the activities of the programme.

An alternative framework for later outcome evaluation of the overall Heartbeat programme was developed which involved specifying a programme goal and targets, programme objectives, and project objectives and targets. The framework for outcome evaluation involved combining consideration of the outcomes of individual projects and activities under the programme, the extent to which the activities implemented under the programme were consistent with programme objectives, and any available information on changes in population rates of cardiovascular disease risk factors and related variables during the relevant period.

In order to ensure that sufficient information would be available when required on the progress and achievements of each Heartbeat project or activity, a standard format for project planning and evaluation was introduced by the evaluator. This formalised the process of general project and specific evaluation planning, achieved consistency across the programme in terms of setting out objectives, strategies and targets, provided a basis for periodic checks by project staff and programme administrators on project performance, helped clarify the respective responsibilities in project monitoring and evaluation of the evaluator and project staff, and ensured that consideration was given to the role of each project or activity in helping to meet Heartbeat programme objectives.

The framework for outcome evaluation of Heartbeat that was developed represented a change from the previous emphasis on achievement of quantitative targets in terms of population risk factors, to a more direct focus upon the effects of what was actually implemented under the programme, taking into account important programme characteristics and the context in which it operated. The approach that was developed aimed to ensure that when outcome evaluation of the overall Heartbeat programme occurred, its performance would be judged on an appropriate and realistic basis, and that the information required to make such judgements would be available when needed.

(iv) Functioning of Overall Heartbeat Programme

Over the course of the research period, a number of recommendations regarding the overall functioning of the Heartbeat programme were made to the Heartbeat New Zealand Committee, based on the evaluator's observation and analysis of programme functioning in conjunction with information and comment obtained from other programme participants. The three major aspects of programme functioning about which recommendations were made were programme management, programme planning and coordination, and organisational communication.

In the programme management area, a need to formalise procedures for and ensure continuity in programme decision-making between steering committee meetings was identified, and an executive sub-committee of the Heartbeat New Zealand Committee with the authority to act on behalf of the full committee between meetings was recommended and formed. The need for an intermediate level of management in the Heartbeat programme was identified, and it was recommended that an earlier proposal to appoint a Heartbeat Programme Manager be re-activated. This issue was raised on two separate occasions by the evaluation team, but was not implemented by the Heartbeat New Zealand Committee.

Problems in programme planning and coordination were identified, and a number of recommendations were made in this regard. Official sanction was obtained from the Heartbeat New Zealand Committee for the importance of careful planning as opposed to speedy implementation of the Heartbeat Awards pilot phase, and for the scheduling of regular planning meetings of Heartbeat Awards staff. Regular meetings of Heartbeat Project Coordinators were instituted as a result of a recommendation from the evaluation team, and these fulfilled an important information-sharing and planning function. An early recommendation that a standard planning format be adopted by Heartbeat was not implemented, but the need for this was taken care of by other developments at a later stage. An attempt was made to ensure that programme planning and decision-making incorporated the full range of available health promotion

strategies, and the intention of this recommendation was also met by other developments at a later stage.

Poor organisational communication was identified as an ongoing problem during the research period. The need to clarify the roles and responsibilities of the various staff members involved in the Heartbeat Awards project was identified and implemented at an early stage. Restricted access to programme-related information by Heartbeat Project Coordinators was a recurring issue and several recommendations on this topic improved the access to and flow of information within the Heartbeat programme, although access to National Heart Foundation-controlled financial information did not improve.

Recommendations regarding the need for further consideration of biculturalism, and greater dialogue between the Heartbeat New Zealand Committee and te Komiti o te Hotu Manawa Maori had little impact, while a recommendation concerning National Heart Foundation procedures for selecting new committee members was partially implemented.

The formative evaluation input provided to the Heartbeat New Zealand programme in the form of recommendations regarding programme functioning, while essentially remedial, and not always accepted or fully implemented, can be seen to have made a positive contribution to programme development in a number of areas. An important role for formative evaluation which emerged was to provide a channel of communication for others in the programme, facilitating change by raising issues at the level of the Heartbeat New Zealand Committee. An important influence on the contribution of the formal recommendations to Heartbeat programme development was resistance to change by National Heart Foundation representatives.

Section 2: Formative Evaluation Issues Highlighted by the Heartbeat Research

(i) Evaluation Research Literature

Formative evaluation of Heartbeat New Zealand illustrated a number of the issues and key features of formative evaluation as identified by evaluation authors in the literature, and discussed in Chapter Two.

One of the major reasons for an increased emphasis on formative evaluation in the literature in recent years has been the recognition that opportunities for influence of evaluation are greatest when a programme is in the early stages of development, before financial and political commitments have been made which may be irreversible (Hornik, 1980). In the Heartbeat research, the evaluator entered the setting when the programme had been in operation for 15 months, when a significant amount of funding had already been committed in particular directions, and initial choices of major programme strategies had already been made. Contrasts between the Heartbeat Awards and Heartbeat Community Projects provide support for the idea that the potential influence of evaluation is greatest in the early stages of programme development. The Heartbeat Awards project was about to be piloted when the evaluator entered the setting, and it was apparent that there was considerable scope for modification and adjustment of the project model if this was identified as warranted by evaluation. In contrast, the Heartbeat Community Project was being implemented nationwide when the evaluator entered the research setting. It was clear that for a number of reasons key programme participants were committed to the particular approach that had been adopted, and that there was substantial resistance to changing it in response to evaluation input. A number of the problems identified by the evaluation team concerning the Heartbeat Community Project could have been avoided if there had been formative evaluation input to the project from an early stage (e.g., involving examination of the likely effectiveness and efficiency of the range of potential strategies for achieving the project aims, development of clear, specific and realistic

objectives, piloting the intervention, and ensuring that adequate monitoring systems were in place).

In addition to illustrating that opportunities for influence of evaluation input are likely to be greatest in the early stages of programme development, the Heartbeat experience suggests a further point. Opportunities for influence may be greatest when formative evaluators themselves are new to programmes, perhaps regardless of the stage of programme development. The evaluator observed that when formative evaluation of Heartbeat began, a major source of influence for the evaluation team was their status in the eyes of programme participants as "objective outsiders". While evaluation was quite threatening for some programme participants, evaluation input was generally accepted as essential by programme administrators, both for maximising programme effectiveness, and to maintain credibility in the eyes of funders. From their perceived standpoint as objective outsiders, in the early stages of their involvement the evaluation team were able to identify and recommend reappraisal of several areas of programme functioning where they considered quite major changes were warranted. The evaluator observed that, not only were some programme participants apparently more receptive to feedback from the evaluation team on overall programme functioning during the early stages of their involvement with the programme, but it was also easier for the evaluator herself to identify aspects warranting change during the early stages, when she had a fresh perspective on the programme, and in fact was relatively ignorant of important political and other influences affecting the programme. As time went on and familiarity and involvement with programme operation and participants grew, the evaluation team appeared to lose their status and associated influence as "outsiders" to some extent, but gained influence and credibility as programme "insiders". As the evaluator became more enmeshed in the workings of the programme on a day-to-day basis it became more difficult for her to identify and recommend consideration of major changes in programme structure or direction, but easier for her to identify potentially workable solutions in controversial areas within the programme.

The approach taken in formative evaluation of the Heartbeat programme reflected the position taken by some authors in the evaluation literature that the focus of evaluation should shift away from seeking conclusions about overall programme effects, toward emphasising short term control and correction by, for example, providing regular feedback about performance, evidence of success, and suggestions for improvement (McLaughlin, 1987). The nature of formative evaluation of Heartbeat, whereby a full-time evaluator and other members of an evaluation team were attached to the programme on an ongoing basis, is consistent with the approach advocated by McLaughlin (1987) of adopting a regularised strategy for information collection and analysis, and abandoning the concept of "evaluation as event" (p. 94).

The Heartbeat experience also illustrates points about formative evaluation made by McClintock (1986), regarding the concepts of uncertainty and options that are central to his model. McClintock (1986) stated that formative evaluation should function to decrease uncertainty about programme performance, while increasing uncertainty about programme structure (i.e., identifying options and alternatives to existing programme practice to help maintain variety in organisational functioning, enhance adaptability, and overcome bureaucratic resistance to change). Input to the pilot phase of the Heartbeat Awards project illustrated the role of formative evaluation in decreasing uncertainty about programme performance, as the major evaluation activity was obtaining and feeding back to project staff information about how the project was proceeding, and how people were responding to it. In fact, Heartbeat Awards project staff remarked on a number of occasions that the formative evaluation findings only confirmed their own impressions and beliefs about the project. This can be seen as a reflection of the fact that the project was in fact well-planned and soundly based, rather than detracting from the value of the formative evaluation input. Formative evaluation input to the overall functioning of the Heartbeat programme reflected McClintock's (1986) emphasis on identifying programme options as a crucial objective of formative evaluation. Recommendations were made regarding alternative arrangements for programme management, improved structures and procedures for

programme planning and coordination, and improved organisational communication to increase effectiveness. Formative evaluation input to the Heartbeat Community Project also involved identifying potential alternatives to existing programme practice. A major role of the Heartbeat formative evaluation in these areas was to identify potential areas for change in the programme and set up structures and opportunities for such changes to be planned and implemented, if there was support for them among programme participants.

The Heartbeat research involved the evaluator moving beyond the traditional evaluation role of technician or methodologist, to fulfill an advisory and consultative role (McClintock, 1986; Fitzpatrick, 1988). This involved her developing a close working relationship with programme personnel, and providing input to decisions about the planning, development and implementation of the programme, which contrasted with the traditional view of the programme evaluator as a neutral, detached observer (Fitzpatrick, 1988; Rossi & Freeman, 1989). The Heartbeat research also clearly illustrated that formative evaluation encompasses a range of different strategies and issues, beyond questions concerning the design and planning of programmes. Formative evaluation of Heartbeat New Zealand illustrated the point made by a number of evaluation authors, that questions of programme planning and design, implementation, and outcomes are relevant in this approach to evaluation (Carter & Hamilton, 1985; Fitzpatrick, 1988; Rossi & Freeman, 1989, Velasquez et al., 1986).

Formative evaluation of Heartbeat New Zealand can be seen to have involved the evaluator to a greater or lesser extent in almost all of the common activities in formative evaluation that were identified in Chapter Two based on the evaluation literature. Her work in the area of formulating a framework for outcome evaluation contributed toward developing and refining the programme model, objectives and strategies. Reviewing the research literature was an important activity in formative evaluation of the Heartbeat Community Project, and to a lesser extent in developing the framework for programme outcome evaluation. Formative evaluation of Heartbeat Awards included assisting programme staff in conducting needs assessment and

exploratory research, and piloting the intervention. Obtaining feedback from programme participants was a feature of formative evaluation input to Heartbeat Awards, the Heartbeat Community Project, and overall programme functioning. Development of programme monitoring and evaluation systems occurred, both through the work on formulating a framework for outcome evaluation, and through project-level activity in Heartbeat Awards and the Heartbeat Community Project.

(ii) Other Issues

In addition to issues and features of formative evaluation identified by evaluation authors and discussed in Chapter Two, a number of other issues concerning formative evaluation were highlighted by the Heartbeat research.

An important issue in the early stages of the evaluator's involvement in the Heartbeat programme was the response of programme participants to the formative evaluation approach adopted. Formative evaluation was a new and unfamiliar concept to most Heartbeat programme participants. As stated above, formative evaluation represents a departure from the traditional model of evaluation with its emphasis on evaluator detachment and objectivity, and focus on assessing programme outcomes. Some Heartbeat programme participants clearly expected and wanted the evaluation team to fulfill the traditional technical role of evaluation and felt uncomfortable with the involved collaborative approach, and consultative and advisory function that the evaluation team identified as appropriate. For example, it was clear that some members of the Heartbeat New Zealand Committee considered that it was their role to formulate programme policy and directions, and the evaluation team's role to objectively evaluate the effects of these. There were indications from these people that they thought the evaluation team was exceeding its brief and behaving inappropriately in attempting to influence programme policy and directions. In the early stages of their involvement with the programme it was necessary for the evaluator and other members of the evaluation team to repeatedly explain their rationale for identifying formative evaluation as the most appropriate approach at this stage of the Heartbeat programme's development, and what a formative evaluation approach involved in

terms of the role of the evaluation team. Two important factors in eventually obtaining acceptance from most programme participants of the formative evaluation approach adopted were that the Department of Health representative on the Heartbeat New Zealand Committee was supportive on the grounds that formative evaluation was a good use of resources from the Department's point of view, and that most of the project staff who were receiving formative evaluation input to their projects considered this was valuable. However, the degree of involvement and collaboration of the formative evaluator in programme planning and decision-making processes during programme development does raise important questions concerning the appropriateness of their involvement in later outcome evaluation of the same programme. As stated in Chapter Six, the evaluator concluded that it would be inappropriate for the Heartbeat evaluation team to be involved in the planned outcome evaluation of the overall Heartbeat programme, which would require a degree of detachment and a fresh perspective that members of the evaluation team could not provide.

In addition to a lack of familiarity and some discomfort among programme participants with the general concept of formative evaluation as an approach to programme evaluation, there were features of the particular model of formative evaluation adopted by the evaluation team in the Heartbeat research which affected the relationship with programme participants, and the degree of acceptance of formative evaluation input to the programme. One feature of the evaluation team's approach that can be identified as significant was their combined role as external and in-house evaluators. The model of formative evaluation adopted by the evaluation team was based on the premise that providing effective formative evaluation input to the Heartbeat programme required maintaining a critical perspective on the overall programme (a major feature of external evaluation of programmes), while also working closely with those involved in planning and implementing it (a major feature of internal or in-house evaluation). The evaluation team approach that was adopted reflected this model. While the author was involved with programme personnel on a day to day basis, and developed a close working relationship with them, the other two

members of the team were involved much less intensively in the programme, and in different capacities. Combining these different perspectives allowed the development of both in-depth knowledge and involvement in programme processes, and continued critical assessment of the progress of the overall programme. The fact that the evaluation team had an independent institutional base from the Heartbeat programme assisted in maintaining a critical perspective on the programme. The model of formative evaluation adopted in this research was also based on the premise that the knowledge and previous experience in the health promotion field possessed by the Director and Deputy Director of the Alcohol Research Unit as the other two members of the evaluation team should be brought to bear on the evaluation. They possessed an awareness of central concepts, previous research and experience, and current practice in health promotion, and considered this was an appropriate basis for providing advice to help ensure the Heartbeat programme was soundly based in health promotion terms.

The problems of combining the models of external and in-house evaluation in the one programme were illustrated in the response of some programme participants to the approach taken in formative evaluation of the Heartbeat Community Project. These people did not consider the critical formative evaluation perspective adopted by the evaluation team with this project to be appropriate. As discussed in Chapter Five, this led to conflict with project implementors in the initial stages over issues such as the appropriate role of evaluation in the Heartbeat programme, authority for decision-making about evaluation activity, and responsibility for carrying out different types and levels of evaluation activity. In particular, there was dissatisfaction with the different approaches adopted by the evaluation team in formative evaluation of the Heartbeat Awards and Heartbeat Community Projects. The evaluation team considered that the Heartbeat Awards project was an innovative initiative which was soundly based in health promotion terms, and the project was being piloted at the stage when the evaluator entered the research setting. On this basis it was considered by the evaluation team to warrant intensive formative evaluation input to provide information to help refine and improve it. In contrast, the Heartbeat Community Project was

modelled upon a more traditional individual educative approach which was considered to be less soundly based in health promotion terms, and was being implemented nationally. While the demand from project staff was for outcome evaluation of the project in terms of its effect on behaviour change in participants, there was limited information available about the project's origin and development, its objectives and likely outcomes, how it operated in practice, and how it fitted in within the broader Heartbeat programme. On this basis, the evaluation team identified a critical examination of this project as a higher priority than input aimed at refining and improving the existing project model. However, the assumed right of the evaluation team to decide upon the type of formative evaluation input that would be provided to different activities under the Heartbeat programme, based partly on their judgement of what represented good health promotion practice, was challenged by some programme participants, who considered that their primary role should be to develop and improve whatever was implemented by Heartbeat. As reported in Chapter Five, the evaluation team initially alienated those responsible for implementing the Heartbeat Community Project as a result of the approach adopted, which meant that, had project personnel remained the same, it would have been difficult for the evaluator to then develop the collaborative working relationship required by the in-house element of the Heartbeat formative evaluation.

A further issue relating to the particular model of formative evaluation adopted by the evaluation team concerns differing standards of performance for Heartbeat New Zealand among programme participants. As discussed in Chapter Five and Six, the evaluation team and some other programme participants tended to operate on the assumption that Heartbeat should represent an exemplary model of a population-based health promotion and disease prevention programme, and therefore held somewhat higher expectations for its performance than others, whose primary concern was to develop a workable and smoothly functioning programme. A recurring issue in this regard was the desire of the evaluation team and others that the programme did not concentrate its efforts and resources on traditional health education approaches, to the

exclusion of strategies aimed at achieving change in environmental influences on behaviour, which, while less familiar, were considered likely to be more effective and efficient overall.

Some important points can be identified from the Heartbeat experience in terms of the way in which formative evaluation influenced programme decision-making. It is clear that there was often not a simple and direct relationship between the evaluation team's suggestions or recommendations based on formative evaluation activities, and programme decision-making. One reason for this was that it was generally not possible for the evaluation team to make compelling suggestions or recommendations on the basis of definitive empirical evidence, in the areas identified by them as of concern. This was partly because of the nature of health promotion as an emerging field, and the consequent limited availability of clear research evidence to support particular approaches (e.g., regarding the merits of traditional health education versus environmental change approaches in the nutrition area), and partly because many of the areas in which the evaluation team made recommendations were ones where it was simply not possible to know beforehand what the exact effect of the suggested change would be (e.g., the programme management issue). Suggestions and recommendations for improvement were generally based on a combination of factors, including the evaluation team's own observation and analysis of the situation in question, their combined previous experience, discussion with relevant programme participants, logical argument, and research findings and empirical evidence where this was available. Programme participants did not always agree with the interpretations of the evaluation team, and there were often factors influencing the situation which over-rode the views or perspective of the evaluation team. Because the evaluation team could not provide definitive proof or assurances that their suggestions or recommendations would actually work as intended if implemented, they were sometimes asking programme decision-makers to take risks the decision-makers were not prepared to take.

In this situation it can be seen that a major source of influence of formative evaluation on programme decision-making was acting as a catalyst to facilitate change. The evaluation team were able to formally identify issues which often could not be raised by others, and put these on the agenda for consideration by programme decision-makers. Having formally raised such issues and suggested appropriate action, the outcome of the evaluation team's recommendations was then substantially dependent upon the response of other programme participants to them. If there was sufficient interest or concern about particular issues identified, these issues tended to be picked up and taken further, and if not, or if there were other influences operating (e.g., opposition from National Heart Foundation participants), they did not. As discussed in Chapter Seven, it was important for the evaluation team to formally monitor the outcomes of their recommendations, to ensure they were at least addressed by the programme steering committee, and if adopted, that they were implemented by programme administrators. In addition, while fairly broad recommendations were often made, it was useful for the evaluation team to include in these a specific course of action which could be taken if the committee agreed with the thrust of the recommendation. In contentious areas, it was found to be important to provide adequate justification for recommendations, and it was at times useful for the evaluation team to recommend an interim course of action, such as the formation of a working party, as a means of ensuring further consideration of an issue.

In the situation that existed, the evaluator observed that in order to maintain credibility, it was important for the evaluation team to avoid being seen by programme participants to be making suggestions or recommendations solely on the basis of their own beliefs, and a broader basis of support for their suggestions and recommendations was an important factor in increasing their likely influence. The dual role of the Director of the Alcohol Research Unit as the evaluation supervisor and a member of the Heartbeat New Zealand Committee, while helpful to the evaluation in some respects, did lead to a lack of clarity at times in terms of which of her roles her expressed views reflected (i.e., her role as supervisor of the Heartbeat evaluation, or

as Heartbeat New Zealand Committee member), and the basis for those views. This influenced the perceived credibility of the evaluation team in the eyes of some programme participants. The Heartbeat experience in this respect confirms comments by some evaluation authors that it is important for the formative evaluator to avoid becoming an advocate or partisan participant, and to remain open to the investigation of different options or alternative solutions to problems (e.g., Fitzgerald, 1988; McClintock, 1986).

An important characteristic of Heartbeat New Zealand was that it was a multi-faceted programme, with a number of different components to which formative evaluation input was provided by the evaluator. There was a need for the evaluator to be flexible in her approach, in order to respond to needs and opportunities for evaluation input as they emerged. The fact that the evaluator entered the research setting at a stage when the overall programme and individual projects were in a state of ongoing development and change meant that new evaluation issues and priorities arose periodically, and it was difficult to accurately plan evaluation activities in advance. In addition, it was difficult to balance the concurrent evaluation demands of the different projects on the evaluator's time. This led to the need for the evaluator to obtain acceptance from key programme participants that project-level evaluation should be viewed as a joint responsibility of the evaluator and project staff, rather than solely the responsibility of the evaluator. The demands of the situation also had important implications for the types of evaluation methods and questions that were appropriate in formative evaluation. The Heartbeat Awards experience, for example, illustrated the importance of tailoring formative evaluation data collection methods to ensure that they would generate information useful for ongoing project decision-making in a short timeframe. This meant relatively small scale research, using methods such as telephone interviews and brief questionnaires that would enable data to be obtained, analysed and reported quickly. There was a focus on assessing immediate change and short term impacts based on self-report measures.

The development and maintenance of a good working relationship between the formative evaluator and programme personnel was clearly a crucial factor influencing the effectiveness of formative evaluation input at project level. Close communication with project staff was required for the evaluator to identify needs and opportunities for information collection and consultative input, and provide this in a timely fashion. There were variations in the speed and extent to which a good relationship developed between the evaluator and various project staff in the Heartbeat research. The Heartbeat experience illustrated that the relationship with project staff depended not only on the ability of the evaluator to establish good rapport on a personal level, but also on the attitude of project staff to evaluation itself. As noted in Chapters Four and Five, the importance of orienting programme staff to evaluation in order to obtain their commitment and support for evaluation activities from an early stage was perhaps not adequately recognised or addressed by the Heartbeat evaluation team. In retrospect, it would have been helpful for the evaluation team to have held an introductory seminar on evaluation for all programme staff to outline the purpose and procedures of the different types of evaluation, and formative evaluation in particular, clarify the respective roles and responsibilities of the evaluator and programme personnel in project-level monitoring and evaluation, and provide an opportunity for staff to voice their concerns about evaluation and have these addressed. The Heartbeat research also identified a potentially important role for the formative evaluator, in providing training for programme personnel in evaluation skills, to enable them to adequately perform evaluation tasks which were designated as their responsibility. This training occurred informally to some extent in the Heartbeat programme, but a more formal approach may have been preferable and more efficient.

Section 3: Implications of the Heartbeat Experience for the Future Development and Evaluation of Health Promotion and Disease Prevention Programmes

(i) Influence of Decisions and Events During Establishment Phase

The development of the Heartbeat programme illustrates the importance of decisions and events during the establishment phase of such programmes in determining the future shape of the programme.

One important influence upon Heartbeat's development that can be identified as arising from its establishment phase was the limited period of time that the National Heart Foundation had to prepare for Heartbeat's establishment. There were only a few months between the first discussions of the possibility of structuring Heartbeat New Zealand within the National Heart Foundation, and agreement being reached between the Foundation and the Department of Health in December 1987, at which time a grant of $400 000 for the financial year ending March 1988 was provided by the Department, with further funding installments of $250 000 being made in July and December 1988. As a consequence of the lack of lead time, the National Heart Foundation was placed in the somewhat embarrassing situation of having a significant amount of funding available for the Heartbeat New Zealand programme, before a "programme" as such existed (e.g., with a clear strategic plan, steering committee, management and administrative structure, and so on). This meant that during the first year or so of Heartbeat's formal existence, a significant amount of time and energy was spent dealing with questions and issues that would normally be resolved prior to programme establishment. Immediate uses for the Heartbeat money were sought. The lack of overall programme planning and coordination, and a reactive rather than proactive mode of programme operation that characterised the Heartbeat programme during the research period can thus be traced to some extent to the circumstances of its establishment. It is clearly important to recognise the need for adequate lead time in programme establishment.

A second important issue which can be identified was the early decision by the Department of Health to structure Heartbeat within the National Heart Foundation. As discussed in earlier chapters, the functioning of the Heartbeat programme was substantially influenced by existing policies and practices of the organisation within which it was located. The advantages of basing a new programme such as Heartbeat within an existing organisation were fairly obvious. These advantages included avoiding substantial establishment costs and duplication of activities, building upon existing networks and resources, and avoiding competition between new and existing programmes in the same field. However, Heartbeat's location within the National Heart Foundation was also the source of a number of problems and tensions during the research period.

One such issue concerned the National Heart Foundation's public image needs, and the implications of these for the types of health promotion activities that were seen as appropriate and effective by Foundation representatives. This was illustrated in resistance from some National Heart Foundation participants to moving beyond the traditional face-to-face health education emphasis of the early Heartbeat Community Project model. This resistance can be partly attributed to the fact that the health education emphasis met the Foundation's need to maintain a positive public image by ensuring high visibility of its workers at a local community level, regardless of how effective it was in broader health promotion terms.

There were also issues of administration and accountability which impacted upon Heartbeat activities. For example, the small group emphasis of the early Heartbeat Community Project model was easy to plan, implement, monitor and report on, which made it much more attractive to Foundation administrators than other less well-defined, but possibly more effective approaches. Accountability concerns were also apparent in the early implementation of the Heartbeat Awards project, in terms of the debate over speedy implementation versus careful planning. The National Heart Foundation perspective on this issue was that speedy implementation of the pilot phase of the project was more important than careful and longer term planning, to quickly

produce successful outcomes which would show that Heartbeat funding was being actively put to use and producing results.

In the evaluator's observation, the priority given to action and producing visible results can be seen as part of the organisational culture of the National Heart Foundation, arising from the perceived need of the Foundation to show that public donations (or government funding) are being used to maximum effect, and not to build up what might be perceived as an unwieldy and unproductive administrative structure or processes. This aspect of organisational culture had implications for the Health Educators, who were expected to implement the Heartbeat Community Project with no reduction of their existing workload in other areas. The dual role of the Health Educators in National Heart Foundation and Heartbeat activities, and the expectation that they would simply work harder in order to keep up their responsibilities in both areas, created workload pressures which had implications for their role in the Heartbeat Community Project and its effectiveness.

The problems identified by the evaluation team in terms of Heartbeat programme management, planning and coordination, and organisational communication can all be seen to represent in part features of the functioning of the National Heart Foundation which were transferred to the Heartbeat programme by virtue of its location within that organisation. As discussed in Chapter Seven, a number of changes made in these areas as a result of formative evaluation recommendations represented departures from traditional National Heart Foundation practice, necessitated by the demands of a new health promotion programme and new staff members with different expectations. A number of these changes were resisted by National Heart Foundation participants in the Heartbeat programme, who perceived them as threatening the interests or established practices of the Foundation. The Heartbeat formative evaluation itself posed a challenge to the National Heart Foundation, and it can be seen that the concern of the evaluation team and others with the effective functioning of the Heartbeat programme was at times not compatible with

the desire of National Heart Foundation administrators to preserve the existing pattern of functioning of the overall organisation.

In summary, the decision regarding whether or not to base a new health promotion programme within an existing organisation should recognise that the programme is likely to be shaped to a large degree by existing characteristics of the organisation. Thus the organisation's likely influence on the activities and outcomes of the programme needs to be taken into account.

(ii) Programme Planning and Evaluation Issues

Two major implications for the planning and evaluation of future health promotion and disease prevention programmes can be identified from formative evaluation of Heartbeat New Zealand. These points relate to the value and importance of early and ongoing strategic planning in programmes, and the value and importance of programme decision-makers adopting a model of information-based decision-making. Both strategic planning and information-based decision-making can be seen to be central elements of the concept of formative evaluation.

An important general principle which can be identified from the Heartbeat formative evaluation is the need to pay at least as much attention to planning how a health promotion or disease prevention programme should operate in order to achieve its desired outcomes, as to deciding what those outcomes should be. Planning how a programme should operate needs to occur concurrently with identification of desired outcomes, to ensure that programme implementation is consistent with programme aims to the greatest possible degree.

The process of setting realistic objectives for a programme is clearly important. A useful tool in setting realistic objectives is for programme planners to identify a hierachy of possible outcomes in the programme focus area, and identify the likely reach of the programme in terms of its resources, likely activities and timeframe. The Heartbeat experience illustrated the importance of programme objectives fulfilling the joint purpose of providing a basis for more specific programme planning, and providing a basis for measuring programme achievements in future.

While clearly stated programme objectives are important in terms of guiding the form and directions of the programme, they should not be regarded as immutable, and should be reviewed periodically to ensure their continued relevance and applicability to the current situation.

The Heartbeat experience highlighted the importance of programme decision-makers considering the full range of strategies available for achieving programme objectives, and basing the choice of major programme strategies on consideration of their likely effectiveness and efficiency in achieving those objectives. For health promotion programmes, the five strategy areas of the Ottawa Charter provide a useful starting point in identifying alternative strategies or levels of intervention for achieving programme aims.

The importance of establishing clear criteria and procedures for funding allocation decisions by programme steering committees was illustrated in the formative evaluation of Heartbeat, to ensure that programme resources are used to maximum effect. This is important both in considering applications for funding from external groups, and for the allocation of resources within the existing programme.

The Heartbeat experience illustrated that consideration of outcome evaluation of health promotion and disease prevention programmes needs to occur at an early stage to ensure that the programme as implemented will be capable of achieving the desired outcomes, and that relevant information can be systematically collected in order to be available when required. An important role for those providing evaluation input to such programmes is to ensure that the proposed design of outcome evaluation of the overall programme is appropriate to programme activities, characteristics and context. While outcome evaluation should ideally be planned at an early stage, it remains important for evaluators to assess programme implementation, in view of the slippage that commonly occurs between programme plans and actual operation, and the fact that programme objectives may change over time in response to a range of influences. If this occurs, expectations regarding programme outcomes and their assessment may need to change accordingly.

At the level of individual programme components, or projects, the value of implementing formal and standardised planning procedures for use by project managers is clear from the Heartbeat experience. Conducting a review of the research literature relevant to the project area can provide valuable information for planning purposes, and should be encouraged as standard practice. The value of piloting new interventions was clearly illustrated within the Heartbeat programme, and this also should be encouraged as standard practice within health promotion and disease prevention programmes. Whatever the arrangement by which evaluation input is provided to such programmes, it is important to ensure that each programme component or project is subject to a basic level of monitoring and evaluation. A suggested minimum level of monitoring and evaluation for projects is the formulation of clear objectives, strategies and targets, pre-testing of all project resource materials on a sample of their intended audience, collection of basic monitoring information on project implementation (e.g., who the project involves or affects, where, when and at what cost), and obtaining feedback from participants on their response to the project and any effects they attribute to it. Project staff need to ensure that provision for collection and analysis of evaluation information is built into project timetables, and need to accept that although incorporating ongoing evaluation into projects does have implications for the speed and timing of project development, it is important from the point of view of improving the quality of the intervention. The Heartbeat experience also suggests the value of ensuring that each component of a multi-faceted programme is subject to outcome evaluation at an appropriate point, in addition to any outcome evaluation of the overall effects of the programme.

The model of formative evaluation applied to Heartbeat New Zealand involved the attachment of a three member evaluation team to the programme. The team consisted of a full-time evaluation researcher, an immediate supervisor, and an overall supervisor of the evaluation who was also a member of the programme steering committee during the research period. The evaluation team were located in a university-based health promotion research unit, and drew upon knowledge and

experience in the field of health promotion in their input to the programme. The formative evaluation approach adopted combined aspects traditionally associated with external and in-house evaluation approaches. A critical perspective on the functioning of the overall programme was maintained, in conjunction with the evaluator working closely with programme personnel to develop and improve the activities of the programme.

This model of formative evaluation input is clearly most applicable to fairly large-budget health promotion and disease prevention programmes such as Heartbeat New Zealand, which can afford the salary and working expenses of a full-time evaluation researcher. It is also probably most applicable to programmes receiving government funding, where it is important for programme credibility and accountability to incorporate the provision of independent evaluation input. In these circumstances, the approach to formative evaluation of Heartbeat, while not without its problems and issues, can be seen to have been a reasonably useful and effective model.

However, the concept of formative evaluation can be seen to have much wider applicability than that represented by the Heartbeat model. The Heartbeat experience shows that there would be potential for most of the in-house aspects of the Heartbeat formative evaluation model to be built in to ongoing programme processes, and to be implemented by programme personnel themselves, with appropriate training and support. An adaptation of the Heartbeat model which would be appropriate for a range of different programmes would be the provision of training for programme personnel in basic formative evaluation methods and procedures, with the availability of consultation from specialist evaluators on more complex or technical issues where necessary. The concepts of early and ongoing strategic planning, and adoption of a model of information-based decision-making should be central to such training in formative evaluation methods.

(iii) Summary and Conclusion

Formative evaluation of Heartbeat New Zealand involved providing ongoing evaluation input to the programme planning and decision-making process with the aim

of constructively influencing the development of the programme. The two major roles in formative evaluation of Heartbeat were information collection and feedback, and consultation.

Formative evaluation input contributed to programme development in a number of ways. In the Heartbeat Awards project, it helped answer questions concerning the feasibility, appropriateness and effectiveness of a health promotion intervention aimed at creating and supporting behaviour change by altering environmental influences on health. Formative evaluation of the Heartbeat Community Project identified the need for, and facilitated, the reorientation of the project model from a traditional health educative approach to reflect more innovative health promotion strategies. Formative evaluation led to the development of a framework for later outcome evaluation of Heartbeat which was tailored to the activities, characteristics and context of the programme, to enable its performance to be judged on an appropriate basis, and to ensure the availability of the information required to evaluate its outcomes. Formative evaluation activities identified problems in the overall functioning of the Heartbeat programme in terms of programme management, planning and coordination, and communication, and action to improve the situation in these areas was recommended.

The Heartbeat formative evaluation illustrated a number of features and issues involved in this approach to evaluation. It confirmed that opportunities for influence of evaluation are likely to be greatest during the early stages of programme development, and suggested that there may be the greatest opportunities for some forms of influence when formative evaluators themselves are new to programmes. The role of formative evaluation in decreasing uncertainty about programme performance, and identifying potential areas for change in programme practices was illustrated.

Formative evaluation of Heartbeat New Zealand required a broader range of roles than the traditional technical evaluation role, and featured involvement and collaboration of the evaluator in programme planning and decsion-making processes.

The formative evaluator was involved in a range of different activities, and questions of programme design and planning, implementation, and outcomes were relevant.

To most programme participants formative evaluation was a new and unfamiliar concept, which required explanation and justification by the evaluation team. Significant features of the model of formative evaluation adopted in the Heartbeat research included the evaluation team approach, the combination of features of external and in-house evaluation, the application of health promotion knowledge and experience of team members to the evaluation, and differing standards of performance for the Heartbeat programme held by the evaluation team and other programme participants.

The relationship between formative evaluation input and programme decision-making was not simple and direct. The major source of influence of formative evaluation was acting as a catalyst to facilitate change in the programme. The basis upon which the evaluation team were believed to be making suggestions or recommendations emerged as an important factor governing perceived credibility of the formative evaluation input.

The multi-faceted and emergent nature of the Heartbeat programme required the evaluator to be flexible and responsive in her approach, to obtain acceptance from key programme participants that project-level evaluation was a joint responsibility of the evaluator and project staff, and to tailor data collection methods to ensure the information obtained was relevant and timely. Development and maintenance of a good working relationship with programme personnel was crucial in ensuring the effectiveness of formative evaluation input at project level, and the importance of obtaining commitment and support for evaluation from project staff at an early stage and of providing them with training in relevant evaluation skills was identified.

Decisions and events during the establishment phase of Heartbeat New Zealand had an important influence upon its development which should be recognised in the planning of future health promotion and disease prevention programmes. The lack of lead time for the National Heart Foundation to prepare for Heartbeat's establishment

contributed to a lack of overall planning and coordination, and a reactive mode of programme operation that developed. The decision by the Department of Health to structure Heartbeat within an existing organisation meant the functioning of the Heartbeat programme was substantially influenced by the policies and practices of that organisation. The National Heart Foundation's public image needs and administrative and accountability issues influenced the Heartbeat programme, and problems in Heartbeat programme functioning identified by the evaluation team can be linked to the operation of the Foundation. Both the Heartbeat programme and its formative evaluation posed a challenge to established practices within the National Heart Foundation.

The major implications of formative evaluation of Heartbeat New Zealand for the future planning and evaluation of health promotion and disease prevention programmes which were identified were the importance of early and ongoing strategic planning in such programmes, and the importance of programme decision-makers adopting a model of information-based decision-making. The model of formative evaluation that was applied to Heartbeat New Zealand was appropriate in terms of the relatively large-scale and government-funded nature of the programme. However, the in-house aspects of the model could be applied to a wide range of programmes by the provision of training for programme personnel in formative evaluation methods, and the availability of consultation from specialist evaluators where appropriate.

APPENDIX 1: First Heartbeat Awards questionnaire on school canteen for teacher representatives

SCHOOL CANTEEN QUESTIONNAIRE

1. In terms of healthy nutrition, how would you rate the range of food sold in the school canteen? (please circle)

Very unhealthy	Fairly unhealthy	Neither	Fairly healthy	Very healthy

Why?

2. To what extent do you consider the range of food sold in the school canteen is consistent with what pupils are taught in school about healthy nutrition?

Highly inconsistent	Fairly inconsistent	Neither	Fairly consistent	Highly consistent

Why?

3. How much do you think the canteen manager knows or has heard about what pupils are taught about healthy nutrition? (please circle)

Knows or heard absolutely nothing	Knows or heard almost nothing	Knows or heard a little	Knows or heard quite a lot	Knows or heard a lot	Knows or heard a great deal

Why?

4. Are there any changes you would like to see made in the range of food sold in the school canteen? (please describe)

5. How do you think the following groups would feel if changes were made so that "healthier" food was sold in the school canteen (please circle)

(i) School Board of Trustees

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

ii) Principal

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

iii) Teachers and other school staff

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

iv) Parents

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

3

v) Pupils

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

vi) Canteen manager and other staff

Very opposed	Fairly opposed	Neutral	Fairly supportive	Very supportive

Why?

6. Ideally, who should make decisions about what is sold in the school canteen?

Why? 4

7. To your knowledge, does the school have any form of written policy linking what is taught in school about healthy nutrition and what is sold in the school canteen?

If yes : What is the policy?

Have you any comments?

If no : Would you like to see such a policy?

If yes: What should be in it?

5

If No :Why not?

8. Do you have any further comments?

Your name: .....

Your school: .....

APPENDIX 2: First Heartbeat Awards questionnaire on school canteen for canteen managers

SCHOOL CANTEEN CHECKLIST

Please write the number of each food item sold in a normal week.

Food Item	Number sold
Savoury pies (e.g. meat, bacon & egg)	_____
Sausage rolls	_____
Meat cobs	_____
Frankfurter rolls	_____
Filled bread rolls	
- white bread	_____
- wholemeal bread	_____
Salad sandwiches	
- white bread	_____
- wholemeal bread	_____
Other sandwiches	_____
Soup	_____
Yoghurt	_____
Doughnuts	_____
Cream buns	_____
Fruit pies/turnovers	_____
Custard pies	_____
Cakes	_____
Muffins	_____
Fruit apples	_____
bananas	_____
oranges	_____
pears	_____
other (please state)	_____

Fruit juice (pure) ..... _____

Fruit flavoured drinks ..... _____

Fizzy drinks ..... _____

Milk-based drinks ..... _____

Icecream confections
(e.g. Trumpet, Choc Bar) ..... _____

Ice blocks (water-based) ..... _____

Potato crisps ..... _____

Twisties/Cheezels/Rashuns etc ..... _____

Confectionery: chocolate/carob bars ..... _____

muesli bars ..... _____

nut bars ..... _____

licorice ..... _____

other ..... _____

Other food items (please write in)

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

..... _____

Do you have any posters on the walls of your canteen?

Yes / No (please circle)

If yes:
Please write what each of the posters on the walls of your canteen shows:

Example: "Poster 0 Bread rolls"

Poster 1 _____

_____

Poster 2 _____

_____

Poster 3 _____

_____

Poster 4 _____

_____

Poster 5 _____

_____

(continue if necessary) _____

_____

_____

_____

_____

_____

_____

_____

Your name: _____

Contact telephone number: _____

School: _____

Please bring the completed checklist with you to the May 30 seminar.

Thank you for your co-operation.

APPENDIX 3: Telephone interview schedule to obtain feedback on Heartbeat Awards in school canteens introductory seminar

Telephone interview questions for May 30 seminar.

1. What were the main points you took away from the seminar? (Looking back now, what are the main points you remember from the seminar?)

2(a) What was the most useful part of the seminar for you?

(b) What was the least useful part?

3. Did you come away feeling you knew about what Heartbeat Awards involves?

If yes: What does it involve?
What happens next?
If no: What would have helped?
What happens next?

4. Are there any questions you have that weren't answered by the seminar?

5. Are there areas you would have liked to see covered that weren't? Areas that were covered that shouldn't have been?

6. Do you have any comments about the venue, catering arrangements, displays, posters and other materials for you to take away?

7. If you were planning such a seminar, are there any changes you would make?

8. Any further comments?

APPENDIX 4: Feedback sheet for Heartbeat Awards introductory seminars

HEARTBEAT AWARDS SEMINAR

EVALUATION FORM

1. **How interesting did you find the seminar, overall? (Please circle)**

Very Uninteresting	Fairly Uninteresting	Neither	Fairly Interesting	Very Interesting

Any Comments?

.....

.....

.....

.....

.....

2. **How relevant do you think the points covered in the Seminar are to the situation in your cafeteria?**

Very Irrelevant	Fairly Irrelevant	Neither	Fairly Relevant	Very Relevant

Any Comments?

.....

.....

.....

.....

.....

3. **How clear are you now about what the Heartbeat Awards programme involves?**

Very Unclear	Fairly Unclear	Neither	Fairly Clear	Very Clear

Do you have any unanswered questions? (please state)

.....

.....

.....

.....

.....

4. **How likely is it that your cafeteria will seek a Heartbeat Award at some point?**

Very Unlikely	Fairly Unlikely	Neither	Fairly Likely	Very Likely

What will this depend on?

.....

.....

.....

.....

.....

5. **Do you have any comments about the length of the seminar, the venue, catering arrangements, displays etc.?**

.....

.....

.....

.....

.....

6. **Any other comments?**

.....

.....

.....

.....

.....

Your occupation? .....

APPENDIX 5: Second Heartbeat Awards questionnaire on school canteen for teacher representatives

TEACHER QUESTIONNAIRE

1. In terms of healthy nutrition, how would you rate the range of food currently sold in the school canteen? (Please circle)

Very unhealthy	Fairly unhealthy	Neither	Fairly healthy	Very healthy

Why?

2. To what extent do you consider the range of food currently sold in the school canteen is consistent with what pupils are taught about healthy nutrition? (Please circle)

Highly inconsistent	Fairly inconsistent	Neither	Fairly consistent	Highly consistent

Why?

3. How much do you think the canteen manager currently knows or has heard about what pupils are taught about healthy nutrition? (Please circle)

Knows or heard absolutely nothing	Knows or heard almost nothing	Knows or heard a little	Knows or heard quite a lot	Knows or heard a lot	Knows or heard a great deal

Why?

The following questions concern what has happened or is planned to happen at your school since the May 30 Heartbeat Awards seminar. Please answer by circling an option and writing comments where these are requested.

4. Since the Heartbeat Awards seminar have there been any discussions concerning the school canteen?

Yes / No / Don't Know (Please circle)

If yes: Who with?

How many discussions?

What about?

What has the outcome been?

If no: Are discussions concerning the canteen planned?

Yes / No / Don't Know (Please circle)

If yes: Please describe

5. Have there been any meetings regarding the school canteen?

Yes / No / Don't Know (Please circle)

If yes: Who with?

How many meetings?

What about?

What has the outcome been?

If no: Are meetings regarding the school canteen planned?

Yes / No / Don't Know (Please circle)

If yes: Please describe

6. Has a committee been formed?

Yes / No / Don't Know (Please circle)

If yes: Who is on the committee?

What is it for?

How many times has it met?

What has it done so far?

If no: Are there plans to form a committee?

Yes / No / Don't Know (Please circle)

If yes: Please describe

7. Has any action been taken towards incorporating the school canteen in the school policy?

Yes / No / Don't Know (Please circle)

If yes: By whom?

What action has been taken?

What is/will be the outcome?

If no: Are there plans to incorporate the school canteen in the school policy?

Yes / No / Don't Know (Please circle)

If yes: Please describe

8(a) Have any changes been made in the school canteen itself? (Please describe)

(b) Have any difficulties been experienced in making these changes? (Please describe)

(c) Who was involved in decisions about the above changes? (Please list)

(d) Are any changes planned in the school canteen? (Please describe)

9(a) Did a parent representative from your school attend the May 30 seminar?

Yes / No / Don't Know (Please circle)

Comments:

(b) Has a parent representative been involved since the May seminar?

Yes / No / Don't Know (Please circle)

Comments:

10. For this question please indicate by circling, how each group has reacted to what you have outlined in Q4-8. If you have no knowledge of a group's reaction, please tick this option and move on to the next group. If no changes have been made, please move on to question 11.

(a) School Board of Trustees

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

Comments:

(b) Principal

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

Comments:

(c) Teachers and other school staff

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

7

Comments:

(d) Parents

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

Comments:

(e) Pupils

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

Comments:

(f) Canteen manager and other staff

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

No knowledge of their reaction [ ]

Comments:

11. Has your school applied for a Heartbeat Award? (Please tick one)

(i)	Yes - applied for and received	[ ]
(ii)	Yes - applied for, not yet received	[ ]
(iii)	No - but intend to apply	[ ]
(iv)	No - do not intend to apply	[ ]

Comments: (i) (ii) (iii)
What do you see as the significance of a Heartbeat Award? (eg. why has your school applied, or intends to apply?)

Comments: (iv)
Why does your school not intend to apply?

12(a) Have you read through the red guidebook ("School Canteens and Heartbeat Awards")?

Yes / No (Please circle)

If yes: Please move to (b)

If no: Please state why not then move to Q13.

(b) How clear was the guidebook on what Heartbeat Awards is about? (Please circle)

Very unclear	Fairly unclear	Neither	Fairly clear	Very clear

Comments:

(c) How clear was the guidebook on how you should go about achieving a Heartbeat Award? (Please circle)

Very unclear	Fairly unclear	Neither	Fairly clear	Very clear

Comments:

(d) How relevant do you think the suggestions and ideas in the guidebook are to the situation in your school? (Please circle)

Highly irrelevant	Fairly irrelevant	Neither	Fairly relevant	Highly relevant

Comments:

(e) Can you identify anything that should have been explained in more detail? (Please describe)

(f) What would you have liked to see more of in the guidebook? (Please describe)

What would you have liked to see less of? (Please describe)

(g) For you personally, what was the most useful part of the guidebook? (Please describe)

What was the least useful part? (Please describe)

(h) Do you have any suggestions for ways the guidebook could be improved? (Please describe)

13. Do you have any further comments?

14. Your name?* _____

Your school? _____

*Needed for questionnaire identification purposes only (your name will not be quoted in any reports produced from this information).

THANKYOU FOR YOUR COOPERATION

APPENDIX 6: Second Heartbeat Awards questionnaire on school canteens for canteen managers

CANTEEN MANAGER QUESTIONNAIRE

Would you please answer the following questions by circling an option and writing comments where these are requested. The questions concern what has happened or is planned at your school since the May 30 Heartbeat Awards seminar.

1. Since the Heartbeat Awards seminar have there been any discussions concerning the school canteen?

   Yes / No / Don't Know (Please circle)

If yes: Who with?

How many discussions?

What about?

What has the outcome been?

If no: Are discussions concerning the canteen planned?

Yes / No / Don't Know (Please circle)

If yes: Please describe

2. Have there been any meetings regarding the school canteen?

   Yes / No / Don't Know (Please circle)

If yes: Who with?

How many meetings?

What about?

What has the outcome been?

If no: Are meetings concerning the canteen planned?

Yes / No / Don't Know (Please circle)

If yes: Please describe

3. Has a committee been formed?

Yes / No / Don't Know (Please circle)

If yes: Who is on the committee?

What is it for?

How many times has it met?

What has it done so far?

If no: Are there plans to form a committee?

Yes / No / Don't Know (Please circle)

If yes: Please describe

4. Has any action been taken towards incorporating the school canteen in the school policy?

Yes / No / Don't Know (Please circle)

If yes: By whom?

What action has been taken?

What is/will be the outcome?

If no: Are there plans to incorporate the school canteen in the school policy?

Yes / No / Don't Know (Please circle)

If yes: Please describe

5. Have any of the following changes been made in the school canteen?

(a) Added some new healthier products Yes / No / Don't Know (Please circle)

Please describe:

(b) Increased supply of some existing healthier products Yes / No / Don't Know

Please describe:

(c) Reduced supply of some less healthy products Yes / No / Don't Know

Please describe:

(d) Removed some less healthy products Yes / No / Don't Know

Please describe:

(e) Introduced "specials" for healthy products Yes / No / Don't Know

Please describe:

(f) Introduced breakfast Yes / No / Don't Know

Please describe:

(g) Altered prices Yes / No / Don't Know

Please describe:

(h) Changed display of food Yes / No / Don't Know

Please describe:

(i) Changed posters in canteen Yes / No / Don't Know

Please describe:

(j) Changed hygiene procedures Yes / No / Don't Know

Please describe:

(k) Changed smoking practices Yes / No / Don't Know

Please describe:

(l) Have any other changes been made? (Please describe)

(m) Have any difficulties been experienced in making these changes? (Please describe)

(n) Who was involved in decisions about the above changes? (Please list)

(o) Are changes planned in any of the areas from (a) to (k)?

Yes / No / Don't Know (Please circle)

If yes: Please list the changes that are planned

6(a) Did a parent representative from your school attend the May 30 seminar?

Yes / No / Don't Know (Please circle)

Comments:

(b) Has a parent representative been involved since the May seminar?

Yes / No / Don't Know (Please circle)

Comments:

7(a) How have students reacted to the changes you outlined in Q5? (Please circle)

(If no changes made, please move to Q8)

Very opposed	Fairly opposed	Neither	Fairly supportive	Highly supportive

Why?

(b) Has making the changes had any effect on canteen sales?

Yes / No / Don't Know (Please circle)

If yes: What effect?

(c) Have the changes had any other effect? (Please describe)

8. Have you attempted to contact any new manufacturers since the May 30 Heartbeat Awards seminar?

Yes / No (Please circle)

If yes: Which manufacturers?

Have you experienced any difficulties in this area?

If no: Do you intend to contact any new manufacturers?

Yes / No (Please circle)

If yes: Which ones?

9. Has your school applied for a Heartbeat Award? (Please tick one)

(i)	Yes - applied for and received	[ ]
(ii)	Yes - applied for, not yet received	[ ]
(iii)	No - but intend to apply	[ ]
(iv)	No - do not intend to apply	[ ]

Comments: (i) (ii) (iii)
What do you see as the significance of a Heartbeat Award? (eg. why has your school applied, or intends to apply?)

Comments: (iv)
Why does your school not intend to apply?

10(a) Have you read through the red guidebook ("School Canteens and Heartbeat Awards")?

Yes / No (Please circle)

If yes: Please move to (b)

If no: Please state why not then move to Q13.

(b) How clear was the guidebook on what Heartbeat Awards is about? (Please circle)

Very unclear	Fairly unclear	Neither	Fairly clear	Very clear

Comments:

(c) How clear was the guidebook on how you should go about achieving a Heartbeat Award? (Please circle)

Very unclear	Fairly unclear	Neither	Fairly clear	Very clear

Comments:

(d) How relevant do you think the suggestions and ideas in the guidebook are to the situation in your school? (Please circle)

Highly irrelevant	Fairly irrelevant	Neither	Fairly relevant	Highly relevant

Comments:

(e) Can you identify anything that should have been explained in more detail? (Please describe)

(f) What would you have liked to see more of in the guidebook? (Please describe)

What would you have liked to see less of? (Please describe)

(g) For you personally, what was the most useful part of the guidebook? (Please describe)

What was the least useful part? (Please describe)

(h) Do you have any suggestions for ways the guidebook could be improved? (Please describe)

11. Do you have any further comments?

12. Your name?* _____

Your school? _____

*Needed for questionnaire identification purposes only (your name will not be quoted in any reports produced from this information).

THANKYOU FOR YOUR COOPERATION

APPENDIX 7: Heartbeat Awards in school canteens 1990 evaluation plan

HEARTBEAT AWARDS IN SCHOOL CANTEENS

Key features:

Schools are encouraged through involvement in the Heartbeat Awards project to provide a health-promoting school canteen service for pupils, receiving recognition from Heartbeat New Zealand for meeting relevant criteria.

History and current status:

The project was piloted in Auckland during the second school term of 1989, and extended to other centres during late 1989 and 1990.

Relevant Heartbeat programme objective:

To develop and support activities aimed at organisational and institutional change relevant to heart disease prevention and health promotion.

Project objectives:

1. To build healthy public policy

    a) HBNZ will encourage School Boards of Trustees to include food policy matters in their school charter.

2. To create a supportive health environment in schools through

    a) integrating the school canteen into the school health programme

    b) providing and promoting food choices that meet the national nutrition guidelines

    c) ensuring food is prepared and sold in a smoke-free environment

    d) ensuring a high standard of hygiene is achieved in school canteens.

Project strategies and targets:

1. HBNZ to prepare material for Boards of Trustees to encourage that food policy is considered within the School Charter.

    a) produce a leaflet

    b) write regular features in the magazines which are produced specifically for BOT and PTA.

    Targets:

    i) To produce and distribute leaflet by October 1990.

    ii) Regular features - School Parent
    Principal Today
    School Guardian

2. Conduct seminars and EXPO's for participating schools according to the seminar schedule.

Targets:

i) Involve a minimum of 50% of all secondary and intermediate schools in seminars by July 1991 (340 schools).

ii) 25% of participating schools to apply for a Heartbeat Award within one year of attending a seminar.

iii) Respond to the needs of primary schools as resources permit in 1990. Plan for extension of the project to ensure availability to all primary schools in major centres by mid-1991.

iv) Develop a pilot programme, in co-ordination with HBA Workplace, suitable for boarding schools. Pilot to trial term 1 1991.

3. Provide information and support to participating schools in the form of

a) project resources - canteen managers' handbook, posters, stickers, newsletters, nibbles packs (information on new or existing products suitable for sale in canteens)

b) manufacturer liaison - HBNZ to initiate and co-ordinate supply and distribution relationships between manufacturers and school canteens. Wherever possible HBNZ to ensure
- beneficial pricing and payment terms
- adequate distribution
- development of promotional material and activities to assist schools to sell these products.

c) health professional liaison - HBNZ to inform and involve the support of local and national health agencies e.g. dieticians, dental nurses, public health nurses, NHF regional network.

Targets:

i) To produce a resource for parents to give guidance about lunches supplied from home. Available for mid 1991.

ii) To have contacted and maintained liaison with at least 30 national food manufacturers (of products suitable for sale in school canteens) and/or producer boards by December 1990.

4. Develop a network of School Canteen Co-ordinators using Jump Rope as a model.

Target:

i) By December 1990 all major metropolitan areas will have a School Canteen Co-ordinator.

Evaluation:

To date evaluation activity by project staff and/or Heartbeat evaluation team has consisted of:

Formative evaluation input to planning, implementing and evaluating pilot project

Pre-testing resources

Seminar feedback

Establishment of project monitoring system.

Future evaluation activity should consist of:

Heartbeat evaluation team available to provide advice or assistance with further development of the project as requested by project staff or programme management.

Ongoing assessment of achievement of project targets.

Evaluation of Auckland trial EXPO (July 1990).

Process evaluation of manufacturers' component (August - October 1990).

Formative evaluation of establishment and training of School Canteen Regional Co-ordinator network (November 1990 - February 1991).

Formative evaluation input to boarding school pilot (February - April 1991).

Interim outcome evaluation assessing achievement of project objectives (August-October 1991).

APPENDIX 8: First Heartbeat Awards questionnaire on workplace cafeterias for cafeteria managers

WORKPLACE CAFETERIAS QUESTIONNAIRE

Please write the number of servings of each of the following items that your cafeteria sells in a normal week, being as accurate as possible.

1. HOT FOODS **NUMBER SOLD**

(a) Pastry Items

Savoury pies (eg meat, bacon & egg) .....____

Sausage rolls .....____

Small savouries .....____

Quiche .....____

Hot fruit pies/turnovers .....____

Vol au vents .....____

Samosas .....____

Other (please specify).....____

.....____

.....____

.....____

(b) Fried Foods

Battered fish .....____

Chips .....____

Spring/Curry rolls .....____

Hot dogs .....____

Fried eggs .....____

Other (please specify).....____

.....____

.....____

.....____

(c) Meat, Poultry, and Fish Main Meals

Roast meat.....____

Chops - grilled .....____

- fried .....____

Steak - grilled .....____

- fried .....____

Casseroles/stews .....____

Sausages - grilled .....____

- fried .....____

Chicken pieces - grilled .....____

- fried .....____

- Other (please specify) .....____

.....____

Spaghetti Bolognaise .....____

Lasagne .....____

Macaroni and cheese .....____

Chow mein .....____

Fried rice .....____

Shepherd's pie .....____

Baked fish .....____

Fish pie .....____

Other (please specify) .....____

.....____

.....____

.....____

.....____

(d) Vegetables

Roast - potatoes .....____

- pumpkin .....____

- Other (please specify) .....____

.....____

Boiled/steamed/mashed - potato .....____

- pumpkin .....____

- carrot .....____

- peas .....____

- beans .....____

- corn .....____

- cabbage .....____

- cauliflower .....____

Baked/jacket potato .....____

Other (please specify) .....____

.....____

.....____

.....____

(e) Other Hot Foods

Soup .....____

Frankfurter rolls .....____

Hamburgers .....____

Pizza .....____

Toasted sandwiches .....____

Other (please specify) .....____

.....____

.....____

2. COLD FOODS

(a) Bread-based items

Bread rolls - white .....____

- wholemeal .....____

Sliced bread - white .....____

- wholemeal .....____

Filled bread rolls - white .....____

- wholemeal .....____

Salad sandwiches - white .....____

- wholemeal .....____

Other sandwiches - white .....____

- wholemeal .....____

Pita bread - white .....____

- wholemeal .....____

(b) Sweet Baked Items

Doughnuts .....____

Cream buns .....____

Cakes .....____

Slices .....____

Muffins .....____

Fruit loaf .....____

Scones .....____

Cold fruit pies/turnovers .....____

Iced buns (eg Chelsea, Sally Lunn) .....____

Biscuits .....____

Cheese cake .....____

Other (please specify) .....____

.....____

.....____

.....____

(c) Fresh Fruit

Apples .....____

Bananas .....____

Oranges .....____

Pears .....____

Other (please specify) .....____

.....____

.....____

Fruit salad - with cream .....____

- without cream .....____

(d) Other Cold Foods

Filled croissant .....____

Meat and salad plate .....____

Salad - lettuce .....____

- coleslaw .....____

- potato .....____

- bean .....____

- rice .....____

- pasta .....____

- Other (please specify) .....____

.....____

.....____

.....____

Cold quiche/savoury pie .....____

Yoghurt .....____

Salad dressing/mayonnaise
(please state type) .....____

3. DRINKS

Tea, coffee, Milo .....____

Fruit juice (unsweetened) .....____

Fruit flavoured drinks .....____

Fizzy drinks (eg coke).....____

Milk-based drinks (eg Zap).....____

Milkshakes .....____

Milk - whole/homogenised .....____

- low fat .....____

Other (please specify).....____

.....____

.....____

4. OTHER FOODS

Ice cream confections (eg Trumpet).....____

Ice blocks (water-based).....____

Potato crisps .....____

Twisties/Cheezels/Rashuns etc .....____

Nuts (eg peanuts, cashews) .....____

Chocolate/carob bars .....____

Muesli bars .....____

Other confectionery (please specify).....____

.....____

.....____

5. Is a low fat salad dressing/mayonnaise available?

Yes / No (please circle)

If yes:Please state type

6. **How many days each week are shallow fried or deep fried meat, poultry or fish offered as a main meal?**

____

7. **On days when fried meat, poultry, or fish is offered as a main meal, is there also a non-fried main meal available?**

Yes / No / Sometimes (please circle)

8. **How many days each week are fried or roasted vegetables served?**

____

9. **On days when fried or roasted vegetables are served, is there also a non-fried or roasted vegetable dish available?**

Yes / No / Sometimes (please circle)

10. **Do you serve:**

(a)	White rice	Yes / No	(please circle)
(b)	Brown rice	Yes / No	(please circle)
(c)	Plain pasta	Yes / No	(please circle)
(d)	Wholemeal pasta	Yes / No	(please circle)

11. **Do you have any food or drink posters on the walls of your cafeteria?**

Yes / No (please circle)

If yes: Please write what each poster shows:

Example: "Poster 0 Bread rolls"

Poster 1 _____

Poster 2 _____

Poster 3 _____

Poster 4 _____

Poster 5 _____

Poster 6 _____

Poster 7 _____

(continue if necessary) _____

_____

_____

12(a) How many cafeteria staff are there? ____

(b) How many have received training in food hygiene? ____

(please state what training)

(c) Is the cafeteria required to be inspected by a health agency? (eg Department of Health, local Council)

Yes / No (please circle)

If yes:Which agency? (please state)

What date was the last inspection carried out? (please state)

_____

13(a) Does the cafeteria sell cigarettes?

Yes / No (please circle)

(b) Are ashtrays placed on all tables?

Yes / No (please circle)

If no: Please describe.

(c) **Does the cafeteria have provision for a smoke-free area?**

Yes / No (please circle)

If yes:Please describe what provision is made.

Are there signs to indicate the smoke-free area?

Yes / No (please circle)

If yes:Where?

14. **Your name?** _____

Contact telephone number _____

Workplace _____

THANKYOU FOR YOUR COOPERATION
Please bring the completed checklist to the Heartbeat Awards seminar, where it will be collected.

APPENDIX 9: Heartbeat Awards in workplace cafeterias 1990 evaluation plan

HEARTBEAT AWARDS IN WORKPLACE CAFETERIAS

Key features:

Workplaces are encouraged through involvement in the Heartbeat Awards project to provide a healthy cafeteria environment for employees, and those which meet the established criteria receive recognition from Heartbeat New Zealand for doing so.

History and current status:

The project was piloted in 1989 in Auckland and Christchurch, and wider implementation began in 1990.

Relevant Heartbeat programme objective:

To develop and support activities aimed at organisational and institutional change relevant to heart disease prevention and health promotion.

Project objectives:

1. To create a supportive health environment in the workplace cafeteria through providing and promoting
   a) food choices that meet the national nutrition guidelines
   b) food hygiene training for cafeteria staff
   c) a smokefree environment.
2. To facilitate the involvement of relevant agencies in a collaborative approach to promoting health in the workplace.
3. To develop the commitment of workplace managers to creating a workplace environment that supports health.

Project strategies and targets:

1. Conduct seminars for participating companies according to the seminar schedule.

   Targets:

   a) involve a minimum of 300 companies in seminars in the major metropolitan areas by December 1990
   b) 25% of the participating companies to apply for a HBA within 3 months of attending seminar
   c) additional 25% of participating companies to apply for a HBA within 6 months of attending seminar.

2. Provide information and support to participating companies in the form of:

   a) project resources - caterers' handbook, posters, stickers, signs, promotional material, newsletter

   b) local contacts who can provide expertise and ongoing support in food hygiene training, nutrition, and going smokefree.

3. Involve representatives from local and national agencies involved in occupational health, health protection, environmental health, dietetics and nutrition, food hygiene training, catering, health education and NHF regional network in a collaborative approach to promoting health in the workplace by:

   a) sending project information

   b) inviting representatives to attend a preliminary meeting in their area and to seminars

   c) writing articles for journals and newsletters appropriate to these groups.

   Target:

   Make contact with all relevant agencies in each area before the seminar for participating companies.

4. Inform workplace management about the project by:

   a) writing to company management about their company's involvement, and when a HBA is granted

   b) distributing the "Information for Management" booklet

   c) sending project information to Employers Assoc. on a regional basis and inviting them to send a representative to a seminar.

Evaluation:

To date evaluation activity by project staff and/or Heartbeat evaluation team has consisted of:

Focus groups with food service establishment personnel

Obtaining background information from Occupational Health Nurses and other relevant groups

Formative evaluation input to planning, implementing and evaluating pilot project

Seminar feedback

Establishment of project monitoring system

Future evaluation activity should consist of:

Heartbeat evaluation team available to provide advice or assistance with further development of the project as requested by project staff or programme management (e.g on revision of seminar feedback form, collation and reporting of monitoring information).

Ongoing assessment of achievement of project targets.

Interim outcome evaluation assessing achievement of project objectives to occur October - December 1991.

APPENDIX 10: Ottawa Charter grid

Table 1:
Heartbeat New Zealand activities in the five Ottawa Charter health promotion strategy areas

	OTTAWA CHARTER HEALTH PROMOTION STRATEGIES				
Project	Healthy public policy	Creating supportive environments	Strengthening community action	Reorienting health services	Developing personal skills
Submissions on policy issues	•				
Coalition to eliminate tobacco advertising	•		•		
Professor Glantz visit	•		•		
Heartbeat Awards		•			
Heart Food Festival promotion		•			
Media non-smoking campaign & children's competition		•			•
Maori Netball League			•		
Community non-smoking projects			•		•
SOS					•
Heartbeat Community Project					•
Nutrition campaign (media support, 2 videos, 1 commercial)		•			•
Cholesterol documentary		•			•
NHF recipe books, posters, videos, pamphlets		•			•
NHF exercise activities					•
NHF support for Health Education Resource Project					•
Food labelling	•	•			
Infotainment		•			•
The Smokefree Education Trust		•			•
Smokebusters Club		•			•
Community Nutrition Centre					•

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