



New Zealand Federation of
Voluntary Welfare Organisations Inc

PRICEWATERHOUSECOOPERS 

Value Added by Voluntary Agencies

Agency Research Report: Diabetes New Zealand Inc.

June 2004

Executive Summary

Diabetes New Zealand Inc. is one of 10 voluntary sector agencies participating in the Value Added by Voluntary Agencies project (VAVA). While Diabetes New Zealand is a national organisation, it has 37 member societies. In this report, the organisation that encompasses these is collectively referred to as Diabetes New Zealand Inc.

The overall aim of the project is examine the voluntary added-value of the services that the not-for-profit sector contributes to New Zealand. This study is designed to increase the understanding of the services that the sector provides and outcomes that are achieved by it. This reflects a paradigm shift in thinking that has centred on the funding and costs of voluntary agencies to a greater recognition of their services as investments in the effective achievement of stated outcomes.

This approach can assist internal management of agencies through a clearer picture of the size, value and nature of the voluntary inputs (contributions of labour, capital and assets). Externally, knowledge about the size of the voluntary-value-add has the potential to influence others (decision makers, public perception) about the nature, quality and quantity of services and goods that voluntary agencies deliver.

“Inputs-voluntary-value-added”, the focus of this report, is a part of the total value added by voluntary agencies. It is defined as the voluntary and/or in-kind contributions of the labour, donations and capital that the agency combines with other inputs to provide outputs (services and goods). Future projects could examine how these outputs then combine to produce outcomes. The voluntary-value added of inputs, outputs and outcomes (less the government-funded, privately contracted and other market transactions) will be the total voluntary value-added of the organisation.

Some of the key insights about the inputs-voluntary-value-added by Diabetes New Zealand Inc. are that the:

- Total estimated number of volunteer full-time equivalent jobs (FTEs) created by Diabetes New Zealand Inc. is 56, placing it in an equivalent position to the top 5% of profit making organisations
- Input-voluntary-value-added by Diabetes New Zealand Inc. is estimated to be between \$1.9 million and \$3.4 million annually, with \$1.3 million to \$2.9 million being the estimated contribution from its volunteers
- Estimated ratio of Diabetes New Zealand Inc.’s input-voluntary-value-added to its total income from all sources, is between 20% and 31%.

Observations from this study are of value to Diabetes New Zealand Inc. in providing:

- Greater recognition of the significance, size and impact of their organisation
- A basis for enhancing volunteer management programmes

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Disclaimer

In preparing this report and forming our opinion, we have relied upon, and assumed the accuracy and completeness of all information available to us from public sources, interviewees, survey respondents and furnished to us by participants of the VAVA project. We have evaluated that information through analysis, inquiry and review but have not sought to verify the accuracy or completeness of any such information. It should not be construed that we have conducted an audit of any Voluntary Agencies or related parties.

We will not accept responsibility to any other party other than to New Zealand Federation of Voluntary Welfare Organisations, to whom our report is addressed, unless specifically stated to the contrary by us in writing. We will accept no responsibility for any reliance that may be placed on our report should it be used for any purpose other than that for which it is prepared.

Our report has been prepared with care and diligence and the statements and opinions in the report are given in good faith and in the belief on reasonable grounds that such statements and opinions are not false or misleading. No responsibility arising in any way for errors or omissions (including responsibility to any person for negligence) is assumed by PricewaterhouseCoopers or any of its partners or employees for the preparation of the report to the extent that such errors or omissions result from PricewaterhouseCoopers' reasonable reliance on information provided by others or assumptions disclosed in the report or assumptions reasonably taken as implicit.

We reserve the right, but are under no obligation, to revise or amend our report if any additional information (particularly as regards the assumptions we have relied upon) which exists on the date of our report, but was not drawn to our attention during its preparation, subsequently comes to light.

1 Introduction

The VAVA project examines the ways that voluntary agencies invest in human capital, adding value through voluntary contributions, focused provision of services (and goods) and effective delivery of outcomes to specified groups of eligible users.

This project is led by the New Zealand Federation of Voluntary Welfare Organisations (NZFVWO).

Phase one is focused on inputs-voluntary-value-added. It aims to identify the amount and equivalent market value of in-kind (i.e. donated, not paid) labour and other resources used as inputs¹ by voluntary sector agencies to provide services, and sometimes goods.

Compared to most organisations, voluntary sector agencies are unusual in that they combine market activities with non-market activities. A considerable proportion of these organisations' labour and capital inputs are provided voluntarily and free of charge. This makes the provision of their services and goods (outputs) possible at low-cost or free access for those who need them. Until now, the value generated each year by the voluntary sector has been only partly visible, since current voluntary agency financial reporting and contracting centres on financial accounts and budgets that mainly monitor their market priced activity (eg paid labour, direct government grants).

"Inputs-voluntary-value-added", the focus of this report, is a part of the total value added by voluntary agencies. It is defined as the voluntary and/or in-kind contributions of the labour, donations and capital of the agency.

Future projects could examine how these, combined with other inputs, provide outputs. These then combine to produce outcomes. The voluntary-value added of inputs, outputs and outcomes (less the government-funded, privately contracted and other market transactions) will be the total voluntary value-added of the organisation. Phase one of the VAVA project has analysed the estimated inputs-voluntary-value-added for 10 voluntary agencies. The next phase could quantify an equivalent market value of the outputs of voluntary agencies, with reference to their inputs. Following this, it would be possible to examine the true range and value of outcomes that are achieved.

The ten agencies participating as case studies for the input phase of the project are:

- 1) Barnardos
- 2) Citizens Advice Bureau
- 3) Diabetes New Zealand Inc.
- 4) Literacy Aotearoa
- 5) IHC
- 6) National Association of ESOL Home Tutor Scheme
- 7) Playcentre
- 8) Royal NZ Foundation of the Blind
- 9) Royal New Zealand Plunket Society Inc
- 10) Victim Support.

¹ See Appendix 1 for a glossary of terms and concepts

2 Diabetes New Zealand Inc

Diabetes New Zealand Inc.'s objective is to act as a national focal point for people with diabetes by:

- providing support to its members, member societies and health professionals
- increasing public awareness of diabetes
- supporting all people affected with diabetes
- supporting research in the treatment, prevention and the cure of diabetes.²

Key Results for Diabetes New Zealand Inc.

The data reported by Diabetes New Zealand Inc. relate to a 12-month period from 1 January 2002 to December 2002 (the 'research year') That data has been calibrated to present an annual perspective of the amount of value contributed by volunteers and from other sources for that year. It includes results for the central operations of Diabetes New Zealand Inc. and an estimate of the 36 member societies (excluding the New Zealand Society for the Study of Diabetes, NZSSD). The estimate of total society activity is based on results from Diabetes Nelson and Tauranga , extrapolated to estimate results for all the member societies.³

It is important to note that the research year for Diabetes New Zealand Inc. included the income of the Diabetes Supply Scheme (DSS), the trading arm of DNZ.

Where possible, comparison with the 10 participating VAVA agencies is provided in an accompanying figure or table, comparing the result for Diabetes New Zealand Inc. with the average for the group. It is important to note that the 10 participating agencies form a small part of the overall voluntary sector and the averages expressed are the averages for them. What has come through in this project is that these 10 organisations are diverse in many ways (in organisational structure, as well as service delivery), giving a flavour of how diverse the whole sector might be.

One of the ways that Diabetes New Zealand Inc. differs significantly from some of the other case study agencies is its organisational structure. Another difference is that its (unpaid) members contribute their labour voluntarily but they are also the beneficiaries of its activities (though they carry out their activities in a way that benefits others than themselves as well).⁴

Hence, the averages should not be viewed as the complete sector average, or even as a general reflection of other features of the sector. Over time, and with increasing information from additional agencies recording volumes of volunteer labour and other donations, these averages can be tested for the wider sector.

The total number of hours of volunteer work recorded by Diabetes New Zealand Inc. for its research year are 105,975.

² See Appendix 2 for a profile of Diabetes New Zealand Inc.

³ When evaluating the results, it is important to keep in mind the fact that these two societies are not necessarily representative of the other 34 member societies.

⁴ It is important to note this aspect of Diabetes New Zealand Inc. because the usual definition of a charity for tax purposes is that the charitable beneficiaries are different from the providers. The intent of this distinction is to separate private gain, which should be provided through transaction in the market place, from services aimed specifically at those in need.

Table 1 presents the numbers of volunteer hours reported by Diabetes New Zealand Inc., calibrated as full-time employees (FTEs), according to the three different occupation groupings: Board Members, Managers and Volunteer Workers. This is contrasted with the averages for the numbers of volunteers reported by the 10 participating VAVA agencies.

Table 1: Total reported hours calibrated as FTEs, at each level of voluntary work

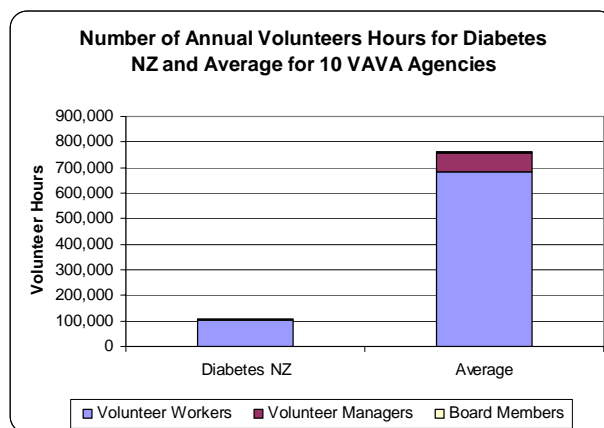
Level of Voluntary work	Diabetes New Zealand Inc.		Average for 10 VAVA agencies	
	Number of hours per year	FTEs per year	Number of hours per year	FTEs per year
Volunteer Workers	101,429	53	685,013	364
Volunteer Managers	1,672	1	72,021	38
Board Members	2,874	2	6,789	4
Total volunteers	105,975	56	763,824	406

Source: Data supplied by Diabetes New Zealand Inc. for December year 2002 and nine other voluntary agencies. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

The range of tasks carried out by volunteers varies considerably but a high proportion of volunteers do skilled work. This range of skills is only partly captured by the way volunteers are grouped, as presented in Table 1.

Figure 1 displays the information described by Table 1 in chart form, illustrating that the volume of voluntary hours recorded by Diabetes New Zealand Inc. is substantially lower than the average volume recorded by the 10 VAVA agencies. Diabetes New Zealand Inc. societies employ paid managers⁵, which is a reason why the annual hours of volunteer managers is low in comparison to the average for the other case study participants. The annual FTEs contributed by Volunteer Board Members for Diabetes New Zealand Inc. is around half of the VAVA average.

Figure 1: Annual hours of volunteer work



Source: Data supplied by Diabetes New Zealand Inc. for December year 2002 and by 9 other voluntary agencies. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

⁵ All of the government funding to Diabetes New Zealand Inc. goes towards the provision of specific deliverables. The employment of paid managers is funded out of other income earned by the societies.

The estimated total number of volunteer full-time equivalent jobs (FTEs) created by Diabetes New Zealand Inc. is 56.

As shown by Table 1, the number of full-time jobs for Diabetes New Zealand Inc. is equivalent to 56. This is estimated based on the information from Diabetes New Zealand Inc. about the hours spent by its Society members on voluntary work during a year. It is low in comparison with the average of 406 FTEs for all 10 agencies participating in the inputs-value-added study. Nevertheless, the estimated size of Diabetes New Zealand Inc. voluntary workforce is comparable to the top 5% of New Zealand enterprises in terms of number of paid employee FTEs.⁶

Volunteer FTEs : Paid FTEs

Diabetes New Zealand Inc. has a decentralised organisational structure. Therefore, it has not been possible to collect data about all of its paid Society staff to calculate the proportion of volunteer-FTEs to paid-FTEs by Diabetes New Zealand Inc.. The average among those VAVA agencies reporting numbers of paid staff, was 406 volunteer-FTEs to 472 paid-FTEs. In other words, volunteers, on average across the 10 case studies, contribute close to an equal number of hours as those carried out by their paid staff.

Total Value of In-Kind Labour

As volunteer labour is not paid, the VAVA project has developed a methodology to estimate its market-equivalent value based on the range of competencies and capabilities of the volunteers, the tasks they do and their levels of responsibility.

There are 3 key features of volunteer labour that can be taken to reflect the range of competency and capability of the individual, as well as the tasks they are asked to do:

- 1) seniority and experience
- 2) skills required for tasks undertaken/ when the tasks are done/ the proportion of volunteer time devoted to tasks at different levels

The above two are taken into account when selecting the average market-equivalent rate to apply to estimate the value-add at each level of responsibility.

Then, the scenarios are further defined by:

- 3) levels of responsibility within the organisation -
 - Voluntary worker (someone whose work is supervised)
 - Volunteer manager (someone who supervises others' work)
 - Volunteer board member (someone with governance responsibility).

Three scenarios are presented to reflect the unknown variation in volunteer seniority, experience, competency and capability, as well as the range of tasks involved at each level of responsibility, among the 10 VAVA agencies.

⁶ Ministry of Economic Development. (2002) SMEs in New Zealand: Structure and Dynamics. Available from < http://www.med.govt.nz/irdev/ind_dev/smes/2003/index.html >

The hours worked by volunteers were grouped into the three levels of responsibility by the case study agencies. The potential range for the equivalent market-value of volunteer labour is selected for each of the three scenarios by PricewaterhouseCoopers, based on low, medium and high pay rates recorded from a range of sources.

Details of how the hourly rates were chosen for each level of work in each scenario are provided in Appendix 1. Specific data sources are documented by the footnotes to Chart B.

The table and graph below examine the estimated magnitude of the added-value of Diabetes New Zealand Inc.'s volunteers, showing the estimated range based on three scenarios of low, medium and high market equivalent-pay rates for them.

Table 2: Three scenarios indicating the potential range of the value of Diabetes New Zealand Inc.'s total volunteer labour force

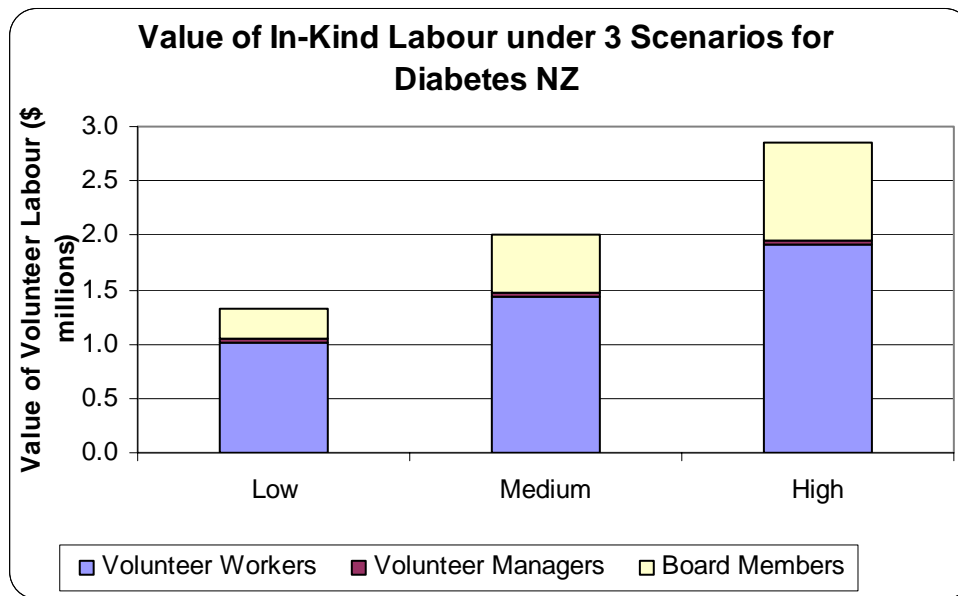
Level of volunteer	Lower value scenario: \$yr	Medium value scenario: \$yr	Higher value scenario: \$yr
Volunteer Workers	1,014,290	1,433,192	1,909,908
Volunteer Managers	29,795	38,122	44,860
Volunteer Board Members	287,400	538,875	898,125
Total \$ per year	1,331,485	2,010,188	2,852,893

Source: Data supplied by Diabetes New Zealand Inc. for December year 2002 to calculate total hours per year per level of volunteer. See Appendix 1 for basis of pay rates applied to estimate value of total volunteer labour force. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

Figure 2 is a bar graph presentation of the information in Table 2. The estimates of the value of the volunteer labour range from \$1.3 million to \$2.9 million per year. These results are of a market-equivalent value, but they are not necessarily an indication of what people doing that work should be paid. This is because those who choose to become volunteers are motivated to be involved for other than financial considerations.⁷ The purpose of the analysis is to estimate the value of volunteers as part of the inputs that the agencies combine to produce services and goods.

⁷ The opportunity cost of a volunteer is not necessarily paid employment. In many cases, a volunteer would be otherwise engaged in social, leisure, recreational and/ or family activities and the choice to volunteer is not to undertake paid activity.

Figure 2: Equivalent value of the volunteer labour worked for Diabetes New Zealand Inc., according to three scenarios of value



Source: Data supplied by Diabetes New Zealand Inc. for December year 2002 to calculate total hours per year per level of volunteer. See Appendix 1 for basis of pay rates applied to estimate value of total volunteer labour force. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

Other In-Kind Value

In addition to Diabetes New Zealand Inc. volunteers, other voluntarily-provided inputs (ie donations, donated goods and services, an annualised value for donated property and other assets) complete the picture of the inputs that go into providing its services. For Diabetes New Zealand Inc., these inputs are mainly monetary donations, as recorded by Table 3a.

Table 3a: Sources and amounts of monetary donations to Diabetes New Zealand Inc.

Annual cash donations to Diabetes New Zealand Inc.	
Fundraising	\$ 22,446
Grants	\$ 23,500
Donations	\$196,048
Estate Bequests	\$293,244
Total Cash Donations:	\$535,238

* Note that the data has been extrapolated from DNZ and 2 Diabetes Societies and is an estimate only. For example, bequests are very lumpy from year-to-year. Source: Data supplied by Diabetes New Zealand Inc. for December year 2002. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

In addition to the cash donations received, additional value is received each year by voluntary sector agencies in the form of donated goods, subsidised services and sometimes assets including buildings, vehicles and computers (where an imputed value is estimated to represent the annual value received in the research year). Diabetes New Zealand Inc. reported this item to be \$10,500.

Table 3b compares the amount of donated cash with other income for Diabetes New Zealand Inc. and the average for the 10 VAVA agencies. It records the magnitude of the actual annual cash income received by agencies in this study. Note that even the smaller agencies have an above average income, compared with the average revenues of New Zealand's profit making businesses.

Table 3b: Annual donations, other income and total income reported for Diabetes New Zealand Inc. and the average for 10 VAVA agencies

\$millions per year	Donated	Other Income	Total Income
Diabetes New Zealand Inc.	\$0.5m	\$7.4m*	\$8.0m
Average for 10 VAVA agencies	\$4.2m	\$24.4m	\$28.6m

* Other income for Diabetes New Zealand Inc. includes income from DSS, interest income and contracted income. Source: Data supplied by Diabetes New Zealand Inc. for December year 2002. Other data supplied by 9 other agencies included in this study. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

Table 4 below (column D) shows the estimates that are combined to calculate the inputs-voluntary-value-added for each of the three labour value scenarios.

Input-voluntary-value-added by Diabetes New Zealand Inc. is estimated to be between \$1.9 million and \$3.4 million annually.

Given the three scenarios used in the calculation of the value added by volunteer staff, the results are expressed as a range. This gives an indication of the magnitude of the voluntary inputs mobilised by Diabetes New Zealand Inc. each year. These are then combined with other paid inputs to create the services and goods provided to the specified users of its services.

The estimated ratio of Diabetes New Zealand Inc.'s input-voluntary-value-added to total income from all sources is between 20% and 31%.

Also shown by Table 4 is the inputs-voluntary-value-added as a percentage of total inputs that go into providing the services delivered by Diabetes New Zealand Inc.

Table 4: Ratio of Diabetes New Zealand Inc.'s input-voluntary-value-added to annual inputs

(Where total inputs is equal to total income including government grants from Table 3b plus the value of volunteer labour).

Scenario of labour value	Value of volunteer labour A	Plus other in-kind value B	Plus monetary donations C	Inputs Voluntary Value-Added A+B+C=D	Total Inputs	VVA as % of Total Inputs
Low	\$ 1,331,485	\$10,500	\$535,238	\$ 1,877,223	\$9,318,563	20%
Medium	\$ 2,010,188	\$10,500	\$535,238	\$ 2,555,926	\$9,997,266	26%
High	\$ 2,852,893	\$10,500	\$535,238	\$ 3,398,631	\$10,839,971	31%

Source: Data supplied by Diabetes New Zealand Inc. for December year 2002. Analysis by PricewaterhouseCoopers for the Value Added by Voluntary Agencies project, April 2004.

The final column of Table 4 shows that, given the estimated lower and upper values for the component of volunteer labour, between one fifth and one third of the value of all of Diabetes New Zealand Inc. inputs is resourced by voluntary contributions by volunteers and other in-kind contributions from the community.

In other words, the success of national Diabetes New Zealand Inc. activities to manage, prevent and promote awareness of diabetes is carried out by a significant level of community support. These figures put in context the estimated magnitude of the volunteer contributions and the proportion of inputs that come from voluntary activity. In this way, the analysis provides a basis for understanding the value-added of voluntary agencies inputs. A greater understanding of how this added value makes a difference, how it adds to the magnitude and quality of outputs and to the effectiveness of outcomes, has potential for improving the relationships have their users, funders, the Ministry of Health and to other relevant government agencies.

3 Potential Uses of These Results

It is now possible to consider the operations of Diabetes New Zealand Inc. from a number of new perspectives, some of which arise from comparing the position of Diabetes New Zealand Inc. with that of other agencies. The 10 VAVA agencies are characterised by considerable diversity.

Each has structures and processes in place that have been developed over time to reflect organisational goals. In addition, the nature and access to funding and the expectations of their contracts has played a major role, if only because of the type of reporting and monitoring that has been required.

New information about the value of inputs-voluntary-value-added gives a new perspective on aspects of agency performance. Given that the input-voluntary-added-value of Diabetes New Zealand Inc. is estimated to be between a fifth and a third of the inputs that go into providing its services, a greater understanding of how to employ this to add value to the agency's outputs and outcomes is likely to enhance its overall performance.

As this project progresses to examine outputs and outcomes, it will be possible to further identify the features of effective service delivery models. Then, the patterns that emerge in relation to the data about voluntary activities can be designed into new measurements of performance that make their contribution to outputs and outcomes clearer.

New performance management tools may include:

- monitored and evaluated annual information about volunteers, what they do, when they do it and how they make a difference to an agency's outputs of services and goods
- increased focus on volunteer management, such as training and support programmes
- the balance of volunteer hours and/or FTEs to those for paid staff
- the balance of numbers/FTEs of volunteers at each level of work (this would be enhanced by data about the number of paid managers and the distinction between what they do and what is the role of the volunteer managers)
- regular monitoring and evaluation of the ratio of inputs-voluntary-value-added to the value of total cash and in-kind inflow
- the proportion of funding received from different sources
- new appreciation for the way voluntary sector agencies multiply the value of government investment, by attracting voluntary contributions of non-market inputs, such as volunteer labour, in-kind goods and donations of money and assets.

Further phases of the VAVA research would identify and describe the outputs (the services and goods) produced by the voluntary sector. Based on this, the value of the full range of outcomes for clients, volunteers, donors of goods and/or money, funding institutions, government and society would be identified. The final phase of valuing outcomes will lead to a more comprehensive examination of the value added by the voluntary sector and enable a more complete understanding of the effectiveness of the sector.

4 Conclusion

This study has found that the:

- Total estimated number of volunteer full-time equivalent jobs (FTEs) created by Diabetes New Zealand Inc. is 56, placing it in an equivalent position to the top 5% of profit making organisations
- Input-voluntary-value-added by Diabetes New Zealand Inc. is estimated to be between \$1.9 million and \$3.4 million annually, with \$1.3 million to \$2.9 million being the estimated contribution from its volunteers
- Estimated ratio of Diabetes New Zealand Inc. is input-voluntary-value-added to its total income from all sources is between 20% and 31%.

This information, will be useful for funding applications, where the value added in the form of volunteer labour and other in-kind donations can be identified as regular elements of project plans and reporting.

Observations from this study are of value to Diabetes New Zealand Inc. in providing:

- Profiles of the roles and value of volunteers in Diabetes New Zealand Inc. as a basis for improved volunteer support and training programmes
- Greater recognition of the significance and size of the organisation
- Increased understanding of their impact on the development and social services policy
- Tools and concepts for measuring the value of volunteer labour
- An information base for the development of further output and outcome related value-added studies.

Appendix 1: Concepts and Definitions

The approach for valuing the inputs of voluntary agencies is to define concepts so that the requirement for service provision can be compared with paid employment and profit-making companies. Collection of the number of hours when volunteers are employed provides a basis for comparing the amount of time contributed by volunteer labour with the amount of time when paid staff are employed

These issues are discussed more fully in an overview report. This appendix provides a brief summary of some of the key concepts to provide a context for interpreting the results described in this individual report.

Full-Time Equivalent Jobs – FTEs of Volunteers

Data covering the annual number of volunteers hours was collected from each participating agency. Some agencies kept routine records, but most used surveys to measure the number of volunteers and the number of hours they contributed towards the services delivered. The summary results were multiplied to produce an annual figure of total number of volunteer hours.

This annual total was divided first by 40 hours per week, and then by 47 working weeks per year to come up with a FTE value equivalent to the FTEs measured for the paid workforce. The 40 hours per week is based on a full-time paid employee working 8 hours for 5 days a week. The 47 weeks of the year is 52 weeks less 3 weeks leave and 10 days statutory holidays. Both of the divisors are conservative in that the common working week is 37.5 hours, many people have 4 weeks leave a year and in most years, there are more than 10 statutory holidays.

The hours worked were divided into three groups based on the level of responsibility of the volunteers:

- Voluntary worker (someone whose work is supervised)
- Volunteer manager (someone who supervises others' work)
- Volunteer board member (someone with governance responsibility).

Inputs, Outputs and Outcomes

Inputs: the time, materials and annual value of capital that are combined to produce services and goods (and outputs).

Outputs: the range of services provided and the supply of the goods created.

Outcomes: the ultimate result achieved through the provision of goods and services.

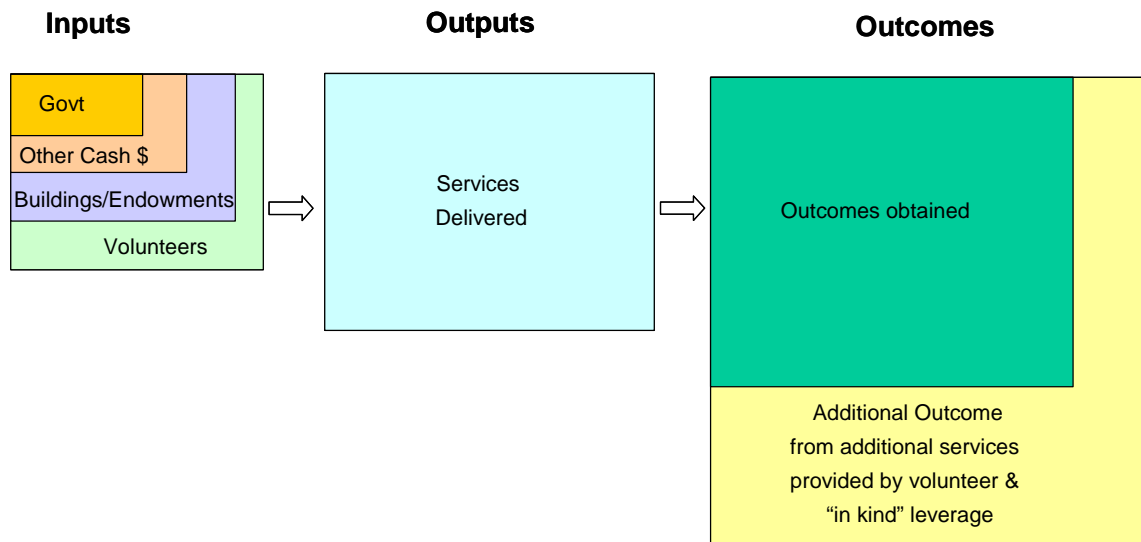
Examples of outcomes include making a difference to the quality of life of users by increasing their independence or state of health. A feature of voluntary agencies is that the lives of their volunteers (and often, paid employees as well) who work for them may also be improved through their involvement and this could also be included as an outcome. Further, individuals who donate money to voluntary agencies, as well as institutional funding agencies who fund them, may experience improved outcomes for themselves because of their involvement.

Inputs of time, money and goods are combined by voluntary agencies to produce a portfolio of services or outputs. This portfolio of outputs combines to engage users in

a way that leverages outcomes that are potentially of larger value still. The efficiency of input management and the effectiveness of their response to user need determines the appropriateness of outputs. The strength of the interface of outputs with the requirements of the specified user groups is what will determine the effectiveness of the organisation's results – the outcomes of its service delivery and provision of goods.

The following diagram represents the relationship among inputs, outputs and outcomes of not-for-profit organisations.

Chart A: Relationship of inputs, outputs and outcomes



Inputs-Voluntary-Added-Value

"Inputs-voluntary-value-added" is a subset of the total value added by voluntary agencies. It is defined as the voluntary and/or in-kind contributions of the labour, donations and capital that the agency combines with other inputs to provide outputs (services and goods).

The Research Year

For the purposes of this research, the most recent 12-month period of data from each agency has been assumed to reflect its annual operations. Not all of the agencies share the same balance date. Further, many agencies currently do not routinely collect this information, so it was collected specifically for this study and an update would require another exercise. Once agencies are able to realise the benefit to performance from data similar to that collected in this way, it is anticipated that they will want to collect it more routinely. A principle of good management is to measure the things that you want to manage well.

The research year for Diabetes New Zealand Inc. was the 12 months from 1 January 2002 to December 2002.⁸

⁸ For this project, where many of the key data was collected for the first time, it was felt to be important that the figures be collected on a basis that is consistent with the agency's other management/performance data. As the data collected become more exact, it will be possible to make sensible adjustments to put each organisation on an similar annual reporting period as is done by the New Zealand System of National Accounts for private companies and government agencies.

Value of Voluntary Labour

Calculating a value of voluntary labour has a number of challenges. For a start, the motivation of volunteers is commonly to contribute their time because of the nature of the engagement. In other words, they choose to do the work because it is voluntary and unpaid.

The equivalent market value applied to estimate inputs-voluntary-added, represents the replacement cost of providing the services if paid labour was substituted for volunteers. This method to estimate the value of volunteers is one of several that could be used – the different approaches are discussed in more detail in the overview report.

While these results are based on market-equivalent values, they are not necessarily an indication of what people doing that work should be paid. This is because those who choose to become volunteers are generally motivated to be involved for other than financial reasons. Further, the time that they are devoting to the voluntary activities replaces time that would otherwise be devoted to unpaid work such as social, family caring activities and so on, rather than paid employment.

A reason for the valuing the addition to inputs from voluntary labour, though, is to understand the magnitude of the inputs and how they contribute to the performance of the agency.

The application of market-equivalent rates to the hours worked by volunteers is a method of estimating this magnitude. The pay rates selected relate to an averaging of seniority and experience, the skills required for tasks undertaken, when the tasks are carried out, the proportion of volunteer time devoted to tasks at taken at each level of responsibility.

Three scenarios of the value of voluntary labour were developed to illustrate the possible range in the equivalent market-value of volunteers' time. They are defined as the low pay rate scenario, the medium pay rate scenario and the high pay rate scenario.

The different pay rates combine the level of low, medium and high rates with the level of responsibility of the volunteers.

The following matrix shows the hourly rates chosen and the footnotes reference the sources of data applied in coming up with the assumptions:

Chart B: Three scenarios of the value of volunteer labour, expressed as hourly rates

Category of voluntary work	Low	Medium	High
Volunteer workers	Basic clerical wage (1) \$10	75% of averaged Remuneration Report rate (5) \$14.13	100% of averaged Remuneration Report rate(5) \$18.83
Volunteer managers	Average wage (2) \$17.82	85% of averaged Remuneration Report rate (5) \$22.80	100% of averaged Remuneration Report rate(5) \$26.83
Volunteer board members	Govt Mgt Board Rate: Level 6 (3)(4) \$100	Core Govt Board level 3 rate(6) \$187.50	Core Govt Board level 1 rate (7) \$312.50

- (1) Chosen to reflect a basic rate for unskilled labour, a little above the Statutory Minimum Wage for adults current during the research year, of \$8.50 per hour. Source: Department of Labour online at: www.ers.dol.govt.nz/pay.minimum.
- (2) The average hourly amount received from wages and salaries during the research year. Source: Statistics New Zealand, Quarterly Employment Survey, results for the June quarter 2003.
- (3) All subsequent calculations for the value of Board Members' time assumes 10 meetings per year, and 8 hours per meeting. Therefore all of the rates for annual fees for Board Members have been divided by 80 to estimate the appropriate hourly rate.
- (4) Derived from middle rate of Level 6, at annual fee of \$8,000 p.a. for Government Management Boards. Source: Cabinet Office Circular CO (03) 4, Annex 3, online at www.dpmc.govt.nz/cabinet/circulars/co03.
- (5) Based on average of the rates for a range of jobs with similar job content and at several levels of seniority (e.g. including Welfare Services Manager, Welfare Worker, Community Programme Co-ordinator, Counsellor and External Educator. Rates for each job advised in the April 2003 Watson Wyatt report *Remuneration in the Voluntary Welfare Sector*. In that report rates are expressed as annual salaries, which have been converted here to hourly rates by dividing by 2000 hours.
- (6) Derived from middle rate of Level 3, at annual fee of \$15,000 p.a. for Government Management Boards. Source: Cabinet Office Circular CO (03) 4, Annex 3, online at www.dpmc.govt.nz/cabinet/circulars/co03.
- (7) Derived from middle rate of Level 1, at annual fee of \$25,000 p.a. for Government Management Boards. Source: Cabinet Office Circular CO (03), online at www.dpmc.govt.nz/cabinet/circulars/co03.

Appendix 2: Profile of Diabetes New Zealand Inc.

Diabetes New Zealand Inc. is a nationwide, not-for-profit organisation and registered Incorporated Society. Its national office is in Wellington.

Established in February 1962, the objective of Diabetes New Zealand Inc. is to act as a national focal point for its 13,500 members, comprising the 37 Diabetes Societies throughout New Zealand and other interested parties with diabetes by:

- Providing support to its members, member societies and health professionals involved with diabetes
- Increasing the general public's awareness of diabetes so the incidence of undiagnosed diabetes is reduced
- Supporting all people affected with diabetes in their day-to-day management and control
- Supporting research in the treatment, prevention and cure of diabetes.

The key values of Diabetes New Zealand Inc. are:

- People with diabetes are our key audience
- Knowledge and information are keys to diabetes management
- Support is provided for people affected by diabetes.

Diabetes New Zealand Inc. is focused on improving the health outcomes of those with diabetes through the commissioning, communication and publication of information. To do this, Diabetes New Zealand Inc.:

- it meets and communicates regularly with its 37 member Diabetes Societies
- organises an annual conference and annual general meeting
- raises awareness of diabetes during its annual Diabetes Awareness Week
- provides policy advice to government
- manages www.diabetes.org.nz, providing up-to-date information on diabetes, including a wide range of diabetes pamphlets and booklets
- produces '*Diabetes*', a professionally presented quarterly magazine with a circulation of 18,000
- advocates for all people with diabetes.

Diabetes New Zealand Inc. is a member of the Western Pacific Region of the International Diabetes Federation (IDF), the membership organisation of diabetes consumer groups.

Sources of funding to Diabetes New Zealand Inc. include members' capitation fees, direct members fees, donations, grants, bequest funds and government contracts.

Diabetes New Zealand Inc. is governed by an elected Council and Executive. It employs a Chief Executive, Operations Manager, Regional Liaison Officer and a Treasurer. Within the Diabetes Societies, there may be paid field officers and other paid staff, who may be part-time or full-time.