

# Psychologists In Physical Health Services In New Zealand

Malcolm W. Stewart, *University of Auckland*

Explored utilisation of psychologists in physical health services in New Zealand. Psychology Advisors and Professional Leaders in District Health Boards (DHBs) were surveyed about the DHB psychologist workforce, particularly in physical health. Seventeen percent of DHB psychologists worked in physical health services. Psychologist positions in physical health had increased 82% in the last five years – three times the increase in mental health psychologist positions. The DHBs varied widely in utilisation of psychologists in physical health. Most psychologists in physical health were Clinical Psychologists. Positions for health psychology interns are increasing, suggesting growing acceptance. Results suggest rapid growth of psychologist roles in physical health services in New Zealand. This may reflect greater recognition of the importance of managing psychological and social factors in treating physical disorders, and how psychologists can help improve effectiveness and outcomes in physical health services.

been a growing interest and commitment within the New Zealand physical health services towards the involvement of psychologists (Stewart, 2001).

This paper reports the results of a survey of the role that psychologists are playing in physical health services within the New Zealand publicly-funded health system. In particular, the paper explores the size of the workforce of psychologists in physical health, the types of physical health services that are employing psychologists, and the growth in the utilisation of psychologists in physical health services over time.

Psychologists potentially have a strong role within physical health services in New Zealand (Rozensky, 1994; Stewart & Young, 2007). Many of the major causes of mortality and morbidity in developed countries are conditions for which modifiable health behaviours and lifestyle factors are significant either as risk or protective factors (World Health Organisation, 2005). For these physical disorders, psychological and behavioural factors may contribute substantially to the condition and the resultant impairment, disability, and handicap (Royal College of Physicians and the Royal College of Psychiatrists, 1995). Many people who present to physical health services have significant psychological needs that may be causal or maintaining of their disorder, or arise from the development of their disorder (Peveler, Kilkenny, & Kinmoth, 1997). There is increasing evidence that psychologists

and psychological techniques can play a significant role in assisting the enhancement of physical health (see Marks, Murray, Evans, Willig, Woodall, & Sykes, 2005, for an overview). There is also evidence that psychological input can improve outcomes for people with a range of physical health difficulties and can lead to service cost savings (e.g. Anderson, 2002; Chiles, Lambert, & Hatch, 1999).

While psychologists in New Zealand have been interested and involved in working with people with physical health difficulties since at least the 1970s (Carlson, Smith, & Sheppard, 1993; McKerracher & Walker, 1982) utilisation of psychologists within physical health services has remained relatively inconsistent and limited (Stewart, 2001). In recent years Health Psychologists with clinical competencies have begun to be trained in New Zealand. There has in the last decade

## Method

### *Participants*

Participants in this study were the Professional Leaders for Psychology (or Psychology Advisors) for the 16 of the 21 District Health Boards (DHBs) in New Zealand. Professional Leaders for Psychology (or their equivalent), were identified for eighteen of the twenty-one DHBs in New Zealand. Sixteen Professional Leaders (representing 89% of the 18 DHBs with identified Professional Leaders, or 76% of all the DHBs in New Zealand) responded to the questionnaire that forms the basis of this study. Of the remaining three DHBs, two did not employ psychologists at the time of the study and no response was received from enquiries with the third. The responding Professional Leaders represented a wide range of DHBs from those that were predominantly urban to those that were predominantly

rural, from some of the most populous to some of the smallest, and from those containing large hospitals with many specialist tertiary services to those with a more modest range of services.

### Measures

A brief survey that had been developed previously to inform a paper on Medical Psychology in New Zealand (Stewart, 2001) was revised and sent to the Professional Leaders for Psychology. This survey primarily requested information on: the composition of the psychological workforce in the DHBs; the number of psychologists working in the physical health area and the areas in which they are employed; changes in the psychological workforce in the last five years, delineating between changes in the workforce of psychologists working with physical health issues and changes in the total psychological workforce; and psychologists working outside DHBs who had a strong physical health focus. Revision primarily involved updating the language to reflect the current names of health organisations. On the previous occasion when this survey was used it provided valuable qualitative information (Stewart, 2001) but the response rate was too low to allow valid quantitative analysis of the results.

### Procedure

The survey form was distributed initially in an electronic form and later, if requested, in a paper form. The Professional Leaders were asked to complete the form and return it to the investigator. Descriptive data was derived from the returned forms. Quantitative analysis was undertaken using parametric statistical techniques including *t* tests and Pearson's *r*, or non-parametric statistical techniques when the data was not normally distributed. Responses to open ended questions were tabulated and the frequency of similar responses was counted.

## Results

### Psychologists in DHBs in New Zealand

The participating DHBs reported a total staff of psychologists in clinical roles of 423 psychologists (353 Full Time Equivalent), with 2 - 90 psychologist staff members ( $M = 26$ ,

$SD = 22$ ) per DHB. The population per full-time equivalent psychologist varied from 6000-35,000 for different DHBs. The number of psychologist staff members in the DHB was higher for the predominantly urban DHBs ( $M = 41$ ,  $SD = 23$ ) compared the predominantly rural DHBs ( $M = 12$ ,  $SD = 7$ ). However, the population per psychologist was not related to the total population served by the DHB.

Eighty-nine percent of DHB psychologists had a clinical psychology qualification. There was a higher proportion of psychologists with a clinical psychology qualification in the predominantly urban DHBs ( $M = 93\%$  for the urban DHBs,  $M = 72\%$  for the more rural DHBs:  $t(14) = 2.3$ ,  $p < 0.04$ ) and in the DHBs with more psychologists per capita ( $r(16) = 0.76$ ,  $p < 0.001$ ). The proportion with a clinical psychology qualification was not related to the total population of the DHB.

### The Current Utilisation of Psychologists in Physical Health Settings

Seventeen percent of the psychologists in DHBs were reported as working substantially in physical health settings. Of the psychologists working in physical health settings, 74% were employed by physical health services and 26% were employed by mental health services to work in physical health settings. Thirteen (81%) of the responding DHBs reported having one or more psychologists working in physical health settings. The number of psychologists working in physical health settings in each DHB ranged from 0-20 ( $M = 4.3$ ,  $SD = 5.3$ ), being from 0 to 33% of the psychological workforce within the DHB. The number of psychologists working in physical health settings was strongly correlated with the total psychologist workforce in the DHB ( $r = 0.92$ ,  $p < 0.001$ ).

Individual DHBs ranged from having

Table 1.  
Physical health services employing psychologists

Area of Activity	Number (%) DHBs served by psychologist	Av. psychologist FTE applied to service.
General Medical Areas		
Pain	6 (38%)	1.0
Diabetes	5 (31%)	0.7
Respiratory	3 (19%)	0.6
Cardiology	3 (19%)	0.6
Older Persons	2 (13%)	1.3
Injury/Physical Rehab	2 (13%)	0.8
Gynaecology	1 (6%)	1.0
Breast Services	1 (6%)	1.0
Neurology	1 (6%)	0.6
Burns	1 (6%)	0.5
Haematology	1 (6%)	0.3
Rheumatology	1 (6%)	0.2
Renal Services	1 (6%)	
Paediatric Health		
General Paediatrics	3 (19%)	0.8
Child Development	3 (19%)	1.5
Child Health	3 (19%)	1.5
Paediatric Cancer	1 (6%)	1.0
Neurological Rehabilitation		
Neuro rehab	5 (31%)	1.8
General Hospital Liaison		
Psychiatric Liaison	6 (38%)	0.9
Paediatric Liaison	3 (19%)	1.2

Note: The psychologist FTE applied to service averages only across the DHBs that employ psychologists to that particular service.

0-11 physical health settings that were served by a psychologist as part of the team, at least on a part-time basis. The specific physical health settings in which psychologists were employed to work for a substantial proportion of time are shown in Table 1. This table also shows the number of DHBs reporting that they have psychologists working in each service type, and the average full-time equivalent of psychologist time assigned to that service in the DHBs that employ a psychologist for that type of service.

Of the psychologists working in physical health settings, the majority had clinical psychology qualifications. Thirteen percent of psychologists working in physical health settings (2% of all psychologists employed by DHBs) had a specific health psychology qualification and only 3% of all psychologists were reported by the Professional Leaders as likely to primarily regard themselves as Health Psychologists. However, there was some indication of a change in this situation. Of the psychology interns (in their last year of training) employed in the DHBs, 20% of the interns were reported to be health psychology interns.

#### *Growth of Psychologists in Physical Health Settings in Recent Years*

The Professional Leaders reported on the growth of psychologist positions in the last five years. Across all DHBs there had been a 32% increase in the number of full-time equivalent (FTE) psychologist positions in the last five years. However, there had been an 82% increase in the number of FTE psychologist positions in the physical health services, while psychologist FTEs in mental health had grown by 26% in the last five years. This indicates that psychology positions in physical health settings have increased at approximately three times the rate that they have been established in mental health settings. The pattern was quite variable across the country with four DHBs (25%: mostly smaller DHBs) reporting a net reduction in their total psychology FTEs, typically due to unfilled positions. No DHB reported a net decrease in their psychology FTEs in physical health services.

#### *Psychologists Working in Physical Health Settings Outside of the DHBs*

The Professional Leaders were asked to identify any psychologists in their district who worked primarily with people with physical health difficulties but who did not work for the DHB. The average number of settings reported by Professional Leaders was 1.1 (range 0-5), indicating either that few psychologists outside the DHB work primarily with people with physical health conditions, or that the Professional Leaders were not aware of this activity. The activity that was identified included (in decreasing order of frequency): Primary Health Organisations, private practitioners, private rehabilitation services, non-governmental organisations offering social services, drug and alcohol therapy, services offering assistance with specific disorders (e.g. Cancer, HIV), and university staff with an interest in health psychology

#### **Discussion**

This paper reports on a survey of the utilisation of psychologists in physical health services within the District Health Boards in New Zealand. Tuck (2007) surveyed the Professional Leaders and Psychology Advisors of DHBs, or a human resources or payroll manager in DHBs without a Professional Leader, to develop a profile of all psychologists working in DHBs. Her results, which identified 541 psychologist positions (489 full-time-equivalent) across 21 DHBs, is consistent to within 3% with the total psychologist workforce that would be estimated from the current sample by pro-rating across 21 DHBs. Her results showed very similar DHB psychological workforce composition and characteristics to those found in the present study. Tuck found 13% of the psychological workforce in DHBs were employed in physical health services, compared with 17% in the current survey. This difference may have been due to psychologists who were employed by mental health services, but who were working significantly in a physical health setting being treated differently between the two surveys. Tuck reported the growth in total psychologist FTEs in 14 DHBs over 5 years. From these figures, the average growth in total psychologist positions

can be estimated as 29% compared with 32% in the current study. Tuck did not report on the rate of growth of positions in physical health services. The high level of agreement between the two surveys suggests that the current results are representative of the DHB workforce.

Results of the current study indicate a substantial increase in the provision of psychological input in physical health services in New Zealand, with a more than 80% increase in positions in the last five years. There has been a substantial growth in the total number of psychologist positions in DHBs in the last five years, but the rate of increase of psychologist positions in physical health settings has been about three times faster than the rate of increase in mental health settings. Results obtained from a similar survey in 2000 (Stewart, 2001) were not sufficiently representative to allow the full quantitative analysis undertaken here, but were indicative of a growth in momentum for psychology in physical health services at that stage. These results indicate that this has been maintained and appears to be further strengthening. The developing momentum may reflect some changes in the health system and may also reflect changes in the availability of suitably qualified psychologists.

These results suggest an increasing recognition by the New Zealand health system, as there has been overseas (Marks, et al., 2005; Mayou, 2005; Rosensky, 1994; Royal College of Physicians and the Royal College of Psychiatrists, 1995), of the value that psychological therapies and psychologists can add in physical health services. There is considerable evidence to show that the presence of mental health issues increases the cost of providing physical health care and reduces the effectiveness of physical health services (e.g. Marciniak, Lage, Landbloom, Dunayevich, & Bowman, 2004). It has been argued that significant inefficiencies and reduced outcomes of physical health services, may be due to the inability of these systems to deal adequately with the psychological and social components of the biopsychosocial model (Engel, 1977) despite increasingly sophisticated and costly treatment to deal with the biological components (e.g., Mayou, 2005). Thus, the provision

of resources, such as psychological input, that more directly address the psychological and social aspects may be highly cost-effective. Indeed, some high users of physical health systems are likely to show substantial benefit only if the psychological (including behavioural) aspects of their condition are addressed. The results of this study suggest that there are growing efforts to address these needs.

Workforce issues may also be a significant driver of the trends observed. There has until recently been no specific training programme for psychologists to develop clinical competencies for working in physical health areas, although most university psychology departments have offered undergraduate and/or postgraduate Health Psychology courses, and many clinical psychology trainees have taken placements or internships in physical health services. Other psychologists have developed interest and expertise in physical health issues and have chosen to work in this area. This history is reflected in the finding that Clinical Psychologists are the majority of psychologists employed in physical health services at present. However, health psychology graduates from programmes teaching clinical competencies to a level similar to clinical psychology training programmes are beginning to be employed in the physical health services. More evident is the growth in the number of health psychology interns employed in DHB physical health services. This is likely to indicate a growing acceptance of Health Psychologists with clinical competencies in DHB physical health services, and may in future be reflected by increasing numbers being employed into these services. With both Clinical Psychologists with interest and experience in the physical health area and Health Psychologists with assessment and therapy competencies, there would appear to be an increasing availability of suitably qualified psychologists to meet the need for psychological input in physical health services.

However, the total increase in access for people with physical health difficulties to psychologists through the DHBs may be somewhat less than these figures suggest, due to access being affected by opposing

trends. The increase in the number of psychologists working in physical health services may be in part balanced by a decrease in access to mental health service psychologists. The tightening of admission criteria for mental health services towards admitting only those identified as having the most severe mental health difficulties reduces the access for people with physical disorders that may be assisted by psychological input (Stewart & Young, 2007).

Another notable pattern in the data was the inconsistency between DHBs as to which services have access to dedicated psychologist input. While this in part may reflect both the range of services offered by the different DHBs (some DHBs may rely more on regional services provided by other DHBs for particular services), it also reflects the resource use decisions made by DHBs and the "psychological mindedness" and interests of the clinical leaders in the physical health services. For example, while New Zealand best practice guidelines for cardiac rehabilitation indicate that a psychologist should be included as a key member of the rehabilitation team (New Zealand Guidelines Group, 2002), this is not consistently occurring throughout the country. While less populous DHBs would have more difficulty funding such positions, it may also be feasible for a suitably experienced psychologist to cover several physical health services and thereby defray the cost to any single service.

In summary, this study has shown a substantial growth in the utilisation of psychologists in publicly-funded physical health services in New Zealand in the last few years. However, the pattern of use is inconsistent across different DHBs both in terms of whether this type of input is provided or not and in terms of what services it is provided to. There is evidence to indicate that such input is important in improving the effectiveness and cost-effectiveness of physical health services, so the trend of developing these psychologist positions is consistent with a stronger evidence-based health system.

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**Address for Correspondence**

Malcolm Stewart  
Counties Manukau District Health Board  
Mental Health Administration  
Private Bag 93311  
Otahuhu, Auckland  
E mail: malcolm.stewart@middlemore.co.nz

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**Declaration of interest**

The author has no financial interest in the study described in this manuscript

## Appendix 1

*Questions and Response Types in the Survey of DHB Psychologists Working in Physical Health Settings*


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Name of DHB

**Psychologist Workforce: Clinical Roles**

How many psychologists are employed in **clinical roles** in your DHB (Number & FTE)

How many of these psychologists...

...hold the postgraduate diploma of Clinical Psychology or equivalent? (Number & FTE)

...hold a postgraduate diploma in Health Psychology or equivalent? (Number & FTE)

...would probably also consider themselves to be health psychologists? (Number & FTE)

How many of the psychologists in clinical roles **do not** work in Mental Health? (Number & FTE)

Of the psychologists **not employed in mental health** ..

..what areas (eg., cardiology, pain clinic, neurosurgery, general hospital liaison, genetic counselling) do they work in? (clinical area and FTE)

Of the psychologists who **are employed in mental health**..

.. do any of them provide consultation or therapy services in general hospital settings? If so, what areas do they work in? (clinical area and FTE)

For the following questions, please only consider psychology interns or trainees who are in their last year of training prior to qualifying for their professional qualification

How many psychology interns or trainees are employed by your DHB? (number)

How many of these interns or trainees are health psychology interns? (number)

**Psychologist Workforce: Non-Clinical**

Are you aware of any psychologists (Masters level qualification or above) working in non-clinical roles in physical health settings (ie, not mental health) in your DHB? This may include, but is not limited to, health promotion, primary prevention, organisational, managerial, staff educational, and research roles. (Job title, setting, FTE)

**Changes in the Workforce: Psychologists in Clinical Roles**

In the last five years, how has the psychological workforce involved in clinical roles changed in your DHB? (change in FTEs)

In the last five years, how has the psychological workforce involved in clinical roles **outside of mental health** changed in your DHB? (change in FTEs)

In the last five years, what positions outside of mental health have psychologists started or stopped working in (Started/stopped, clinical area, and FTE)

**Psychologists outside of the DHB Working in Physical Health Settings.**

Are there any psychologists that you are aware of who work in your area (district) **but not for the DHB** and whose work is primarily with people with physical health difficulties? Their work may be either in direct clinical provision of care or through primary or secondary prevention activities or health promotion activities. If so: Please indicate

(Employer, type of work, particular specialty)

**Other Comments**

Do you have any other comments you would like to make about psychologists working in physical health settings in New Zealand?