

RESEARCH ACTIVITY SURVEY

of Health Professionals in the NWHB 1999-2003

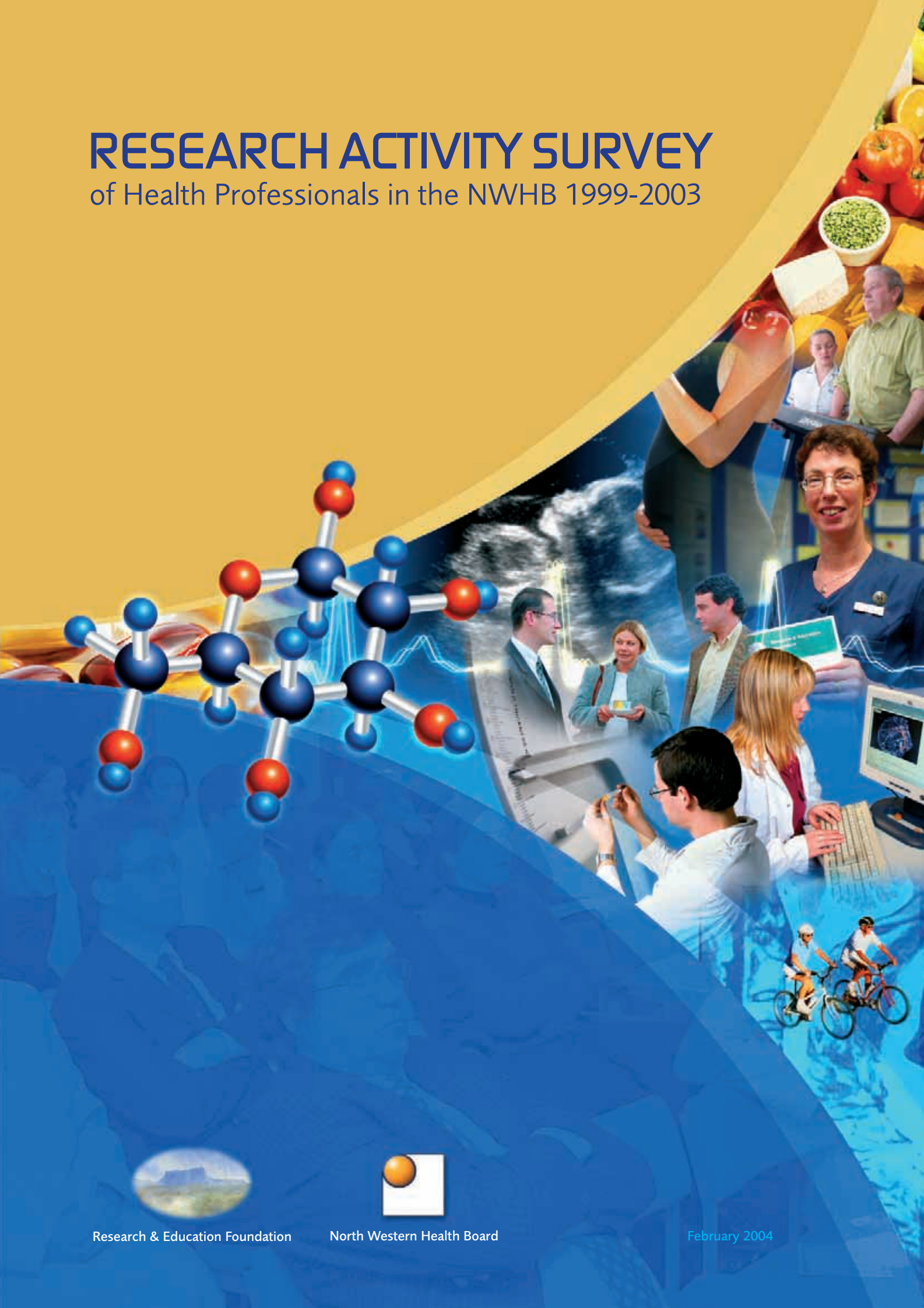


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This project was supported by...



Research & Education Foundation



North Western Health Board



Executive Summary

In June 2003 a research activity survey of health care staff in the NWHB in the period October 1999 – June 2003 was undertaken. It aimed to collect information on the research interests and experience of health care staff and to provide the framework for furthering research in the region.

A total of 1265 postal/web-based questionnaires were circulated to health care staff of all disciplines: Doctors, nurses, managers, allied health professionals, public health & health promotion department, community care staff etc. A total of 387 responded, corresponding to a response rate of 28.5%. The majority of respondents (58%) expressed an interest in becoming involved in research in the future and suggested over 300 project ideas.

There is a large pool of health care staff with research experience in the region: More than half of respondents have undertaken research at some point in their career and about one third were involved in a total of 156 projects in the study period 1999 – 2003. These resulted in 34 publications in peer-reviewed journals, 41 reports to the NWHB and other professional bodies, 41 third level theses and 170 presentations. Two thirds of the projects had impacted on clinical practice. Three quarters of respondents had received no funding for this research and just 10 respondents had received funding in excess of €10,000. There are particularly strong collaborative links with the educational sector and partners within the health care sector, both with departments/institutions within the NWHB and externally.

The main barriers to undertaking research were lack of protected time and funding. Respondents indicated that increased skills support, research training and further collaboration with other institutions/departments would help facilitate involvement in research.

This report has identified significant scope for advancing a research culture in the NWHB by building on the documented knowledge, interest, experience and expertise of health care staff in the region; however strategic developments and appropriate support measures need to be put in place in order to maximise this potential.

The recommendations put forward by the Research Survey Project Committee for enhancing research at the NWHB include: The setting up of a strategic planning group for research, infrastructural developments, protected budget line, enhanced training in research skills, increased research awareness, adequate resources for support functions, update of institutional research policies, production of intermittent reports on research activity in the region, participation in relevant conferences and sharing of research findings at specialty and regional meetings.



I Preface

This study was undertaken on behalf of the North Western Health Board (NWHB) in May – September 2003.

Whilst sections of the NWHB have made efforts to develop a research environment over the years, this is the first Health-Board-wide project aiming to enhance research in the region.

Nicola Morley, Research Assistant, with the support of the Research Survey Committee, conducted the study.

The Committee wish to express their gratitude to

- AstraZeneca for sponsoring the design and printing of the report
- Health Research Board for awarding a Summer Student Grant to the project
- The National Lottery for a grant for the project
- Sligo General Hospital for financial assistance

Also thanks to:

- Nicola Morley for her hard work on the project
- NWHB Management for their interest and support
- All respondents for their contribution to the study and
- The Research & Education Foundation for use of facilities and resources

A preliminary report was submitted to the HRB in October 2003 as part of the Summer Student Grant Scheme. It was selected as one of 8 finalists for the HRB Watt's Medal Competition in January 2004.

Research Survey Project Committee:

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2 Introduction

An active research community working close to the delivery of health care is critical to the improvement of the quality of the health care services delivered to the patients of the region. Research is also vital to the education and training of health care staff and their continuing professional development. A vibrant research environment is attractive to new employees and will help recruit high-calibre staff to the region. It is also important in maintaining and improving the profile of the health board, in the provision of patient safety measures and in the translation of research findings into clinical practice.

Health care research in Ireland has traditionally been undertaken mainly at the larger centres with a culture of research. Research in General Hospitals and in Primary Care have been sporadic, poorly funded and without support structures.⁽¹⁾⁽²⁾ In hospitals without a close affiliation to academic institutions, service provision takes priority and the environment has not been conducive to research.

In recognition of this, the Research & Education Foundation at Sligo General Hospital in 1999 conducted a research survey of health care staff in the Sligo General Hospital catchment area for the period January 1995 - October 1999, which provided the foundation for recommendations on the development of a research culture at the NWHB.⁽³⁾⁽⁴⁾ Since then, some of the proposals of that study have been partly or fully implemented.

In 2001, the National Research Strategy "*Making Knowledge Work for Health*"⁽⁵⁾ made provision for significant financial and infrastructural support of research in health boards. The research community in the NWHB is looking forward to the implementation of this strategy and the potential benefits for the region in terms of improved strategic planning, structural support for research and infrastructural provisions.

Other important strategic developments for research in recent years include the incorporation of Clinical Research Consultants posts into the Irish health system as recommended by Comhairle na nOspidéal in October 2002⁽⁶⁾ and the provision for strengthening nursing research regionally in "*Strategy for Action – Developing Nursing and Midwifery Practice*" due to be published by the Nursing/Midwifery Planning and Development Unit at NWHB in March 2004.

This study is a follow-up of the 1999 project, expanding the study to include all of the NWHB. The survey is undertaken in recognition of the need to identify the framework for action and resource allocation for research at NWHB. The information collected on research activity and conditions for undertaking research will help inform the way forward in: a) developing a research environment, and b) implementing research policy aiming to increase the quantum and quality of research in the region.

^{(1) (2) (3) (4) (5) (6)} See Section 8 - References (page 26)

3 Aims & Objectives

The survey aims to collect and collate information on the research activity of health care staff of all disciplines in the NWHB since October 1999 and to create a knowledge base that will direct the future efforts to further a health research culture in the North West by

- Creating a database of the research undertaken in the NWHB in the period October 1999 – June 2003
- Documenting research publications, funding and funding sources, collaborative partners, working conditions etc. in relation to research undertaken in October 1999 – June 2003
- Identifying the emerging areas of strength in the region.
- Identifying topics of interest for research in the coming years
- Ascertaining general measures and specific support measures that would enhance a culture of research in the NWHB.
- Identifying perceived barriers to individuals/departments' involvement in research.





4 Materials & Methods

The methodology used was a survey, conducted in June 2003 by means of a purpose designed questionnaire. The survey was aimed at all health care staff in the North Western Health Board.

A Research Survey Project Committee with representatives from several health care disciplines and geographical regions of the Health Board was set up to advise on the design, conduct and reporting of the survey. A questionnaire (*Appendix 1*) was designed and produced in both hard copy and in web-format.

A total of 1265 questionnaires were distributed, corresponding to approx. 40% of all health care staff at the NWHB. 965 questionnaires were mailed in hard copy and a further 300 staff, who were known to be regular users of email, were encouraged by email to respond to the web based questionnaire. Hyperlinks to the web-based questionnaire were posted on the NWHB and Research & Education Foundation websites.

Participants were given two weeks to return the questionnaire. Hereafter, a reminder was sent to non-respondents. A second reminder was posted or emailed to non-respondents extending the deadline by one month. Telephone calls were subsequently made to a selection of non-respondents, who were known to have an interest in research.

Sampling Population

The target population was health care staff of all disciplines in the NWHB area including Doctors, Nurses, Allied Health Professionals, Community Care staff & Management staff at:

- Sligo & Letterkenny General Hospitals
- Our Lady's Hospital Manorhamilton
- Sligo & Donegal Mental Health services
- Community Hospitals (*St. John's, Sligo; St. Patrick's, Carrick-on-Shannon; Sheil Hospital, Ballyshannon; Lifford CH; Donegal CH; Killybegs CH; St. Joseph's, Stranorlar; Carndonagh CH*)
- Public Health Department
- Health Promotion
- Sligo & Donegal Community Care services
- General Practices
- NWHB Head Office, Manorhamilton.

The following groups of health care staff were included in full in the posting/emailing of the questionnaire: Consultants, NCHDs, GPs, Clinical Nurse Managers (incl. Directors of Nursing), Clinical Nurse Specialists, Nursing School staff, Public Health Medical & Research staff, Health Promotion officers, Managers at Head Office and General Hospitals, Senior Allied Health Professionals and senior staff in the Community Care Section (e.g. AMOs, senior Public Health Nurses, Senior Social Workers, Clinical Psychologists etc).

Key personnel such as Heads of Service, Allied Health Professional Managers and Nurse Managers were asked to pass on the questionnaire to other staff that were known to have an interest or previous experience in research. A random sample of one hundred staff nurses was selected (50 from each of the two acute hospitals) corresponding to about 10% of staff nurses in the Health Board. A similar sample size was employed in the 1999 survey.

All health care staff were invited to take part in the survey via the NWHB web site and email notice board.

5 Results

Response rate

The total number of returned questionnaires was 387, of which 360 were from persons included in the original sampling population. There were 27 returns from health care staff, to whom the questionnaire had been passed or who had been prompted to respond via the web-site advertisements. This corresponds to a response rate of 28.5% excluding the unsolicited returns. There was significant variation in response rates within groups e.g. 4.7% of NCHDs and 66.7% of Public Health Department staff returned the questionnaire (*Appendix 2, Table 1*).

Table 1 Survey sample, returns and return rates

Group	Number	Returns	Return rate
Consultants	94	35	37.2%
NCHDs	213	10	4.7%
GPs	115	43	37.4%
Nurses	458	144	31.4%
Heads of service	56	16	28.6%
Allied Health Professionals (AHP)	28	11	39.3%
Public Health Department	24	16	66.7%
Health Promotion Dept.	20	4	20.0%
Community Care Staff (CCS)	257	81	31.5%
Nurses*	n/a	(9)	n/a
AHP*	n/a	(15)	n/a
CCS*	n/a	(3)	n/a
Total incl. unsol.	1265	387	n/a
Total excl. unsol.	1265	360	28.5%

* Respondents, who were not part of the original survey sample i.e. encouraged to respond by manager or website

The majority of respondents were based in the two largest counties of the NWHB (Sligo: 41% and Donegal: 56%), where the two acute hospitals are situated. The remaining 3% worked in Leitrim or west Cavan.

Interest in undertaking research in the future

Overall, 58% of respondents (224) are interested in becoming involved in research in the future (Figure 1). Figure 2 illustrates that interest in research is evident amongst all groups of health care staff.

Fig. 1 Percentage of respondents (387) expressing an interest in undertaking research in the future.

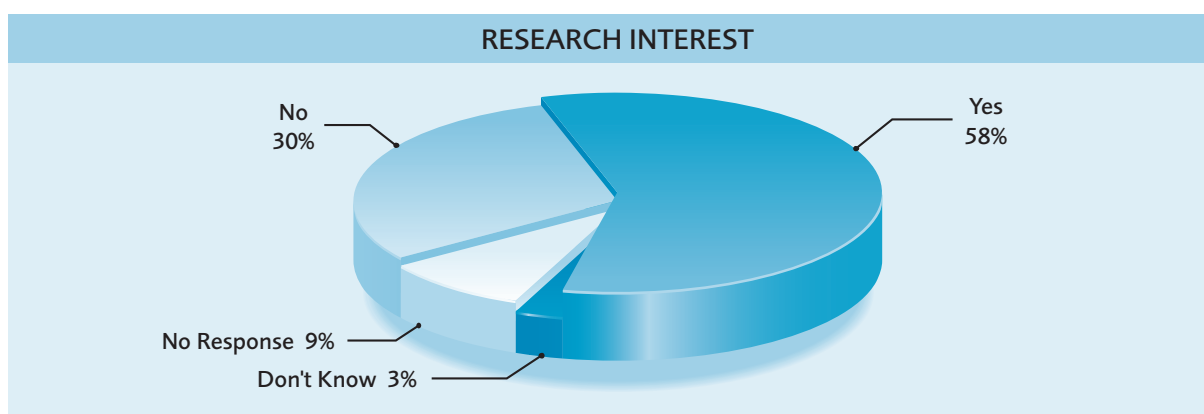
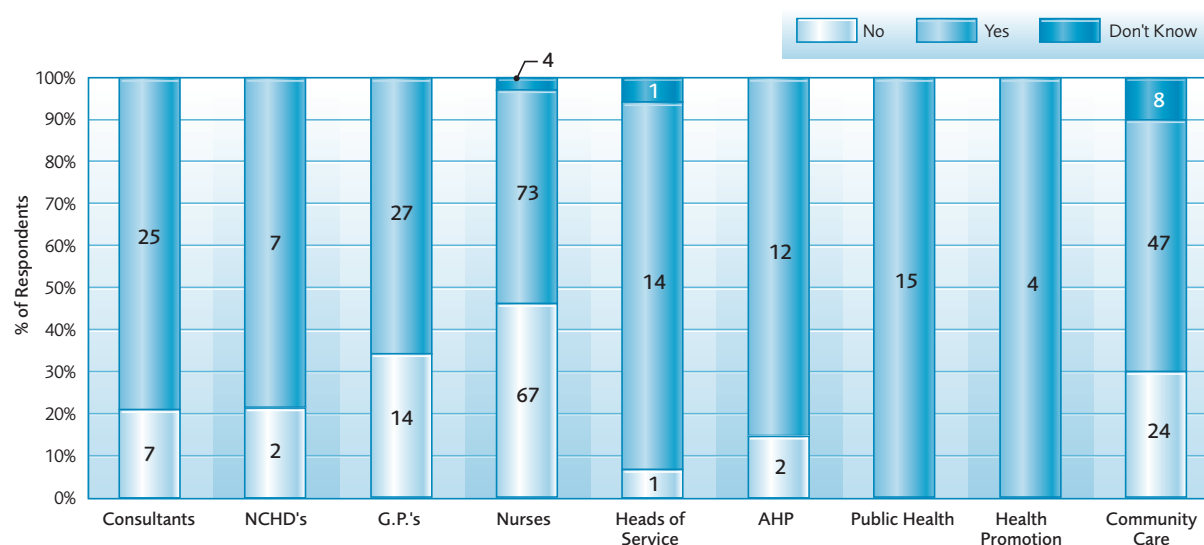


Fig. 2 Interest in undertaking research in the future for groups of health care staff. Numbers on bars indicate No. of respondents. Missing responses are omitted.



Of the 224 respondents expressing an interest in undertaking research about 85% made suggestions for one or more research projects or indicated an area of interest. A total of 306 ideas were put forward for future research projects. These have been categorised into topic fields of research and are listed in Table 2.[†] There are large numbers of research proposals within the topic fields of health services research, mental health, primary care, nursing and internal medicine. Proposals into speech & language therapy, public health and cardiology also feature prominently.

[†] A full list of the suggestions for future research projects can be obtained from the Research & Education Foundation Office at Sligo General Hospital or downloaded from www.ref-sligo.ie

Table 2 *Number of proposed research projects categorised into topic fields.*

Field of Research	No. of Projects
Anaesthesia	5
Biochemistry	3
Cardiology	12
Child Health	8
Complementary Medicine	3
Dentistry	9
Genetics	1
Health Promotion	7
Health Services Research	63
Human Resources	6
Infection Control	2
Information Management	2
Information Technology	7
Internal Medicine	29
Medical Communication	1
Mental Health	29
Nursing	24
Nutrition	4
Obstetrics/Gynaecology	4
Oncology	11
Orthopaedics	7
Ophthalmology	1
Pharmacy	4
Physiotherapy	6
Primary Care	18
Public Health	13
Social Care	6
Speech & Language Therapy	15
Surgical Specialties	6
Total	306

Research Experience

The majority of respondents (55%) had undertaken research at some stage in their career (Figure 3). 123 respondents (32%, Figure 4) had been involved in research in the period investigated in this study (October 1999 – June 2003), whereas 173 (45%) had undertaken research prior to October 1999. With the exception of nursing staff, the majority of respondents from other groups of health care staff have research experience (Figure 5).

Fig. 3 Percentage of respondents (387), who have undertaken research at some stage in their career.

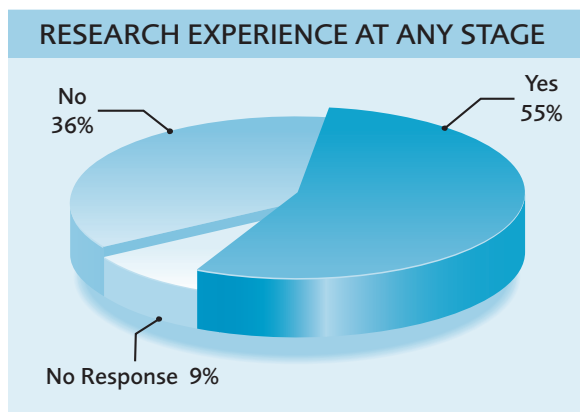


Fig. 4 Percentage of respondents (387), who have undertaken research in the period October 1999 – June 2003

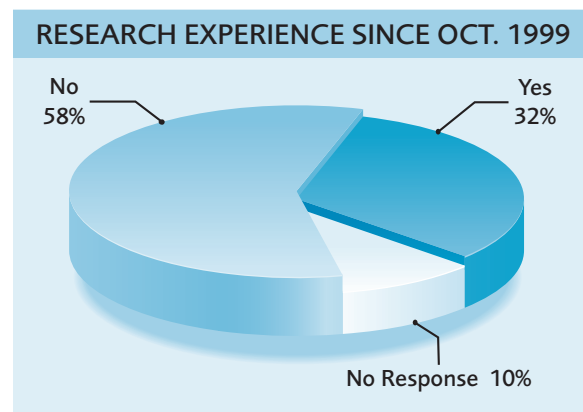
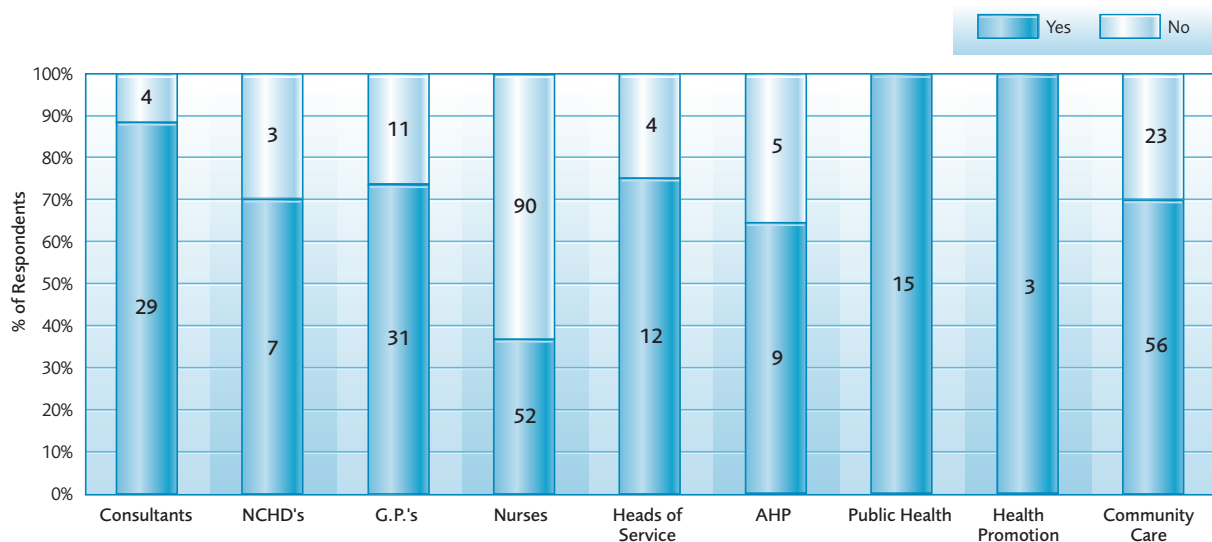


Fig 5 Experience in research for groups of health care staff. Numbers on bars indicate no. of respondents. Missing responses are omitted.



The 123 respondents, who had been involved in research in the study period Oct. 1999 - June 2003, had undertaken a total of 157 projects (Table 3). There is particularly strong interest in health services research and primary care research. There is also considerable activity in the fields of cardiology, nursing & midwifery, mental health, child health and respiratory medicine.[†]

[†] A full list of the research projects undertaken October 1999 – June 2003 can be obtained from the Research & Education Foundation Office at Sligo General Hospital or downloaded from www.ref-sligo.ie

Table 3 *Topic fields of research projects undertaken October 1999 – June 2003.*

Field of Research	No. of Projects
Anaesthesia	2
Biochemistry	6
Cardiology	11
Child Health	10
Dentistry	6
Education	5
Health Promotion	7
Health Service Management	5
Health Services Research	15
Information Management	2
Internal Medicine	3
Management	3
Medical Communication	1
Mental Health	10
Microbiology	1
Nursing & Midwifery	8
Nutrition	3
Obstetrics/Gynaecology	1
Old age health	5
Oncology	1
Ophthalmics	5
Orthopaedics	5
Pharmacy	3
Prevention	1
Primary Care	21
Public Health	4
Radiology	4
Respiratory Medicine	8
Surgery	1
Total	157

Presentations & Publications

The presentations and publications resulting from the research carried out in the study period are listed in tables 4 and 5. A total of 34 papers in scientific peer reviewed journals were reported (Table 4). They were produced by 17 of the 123 respondents with research experience in the study period. Some publications include more than one author working at the NWHB. The publications marked with an asterisk (*) in Table 4 were published as a result of research undertaken prior to taking up post at the NWHB.

The total impact factor for the publications listed in table 4 is 41.94 (range: 0.336 - 4.759) based on 2001 data adapted from the "Journal Citation Reports" published by ISI[†]. The impact factor for the peer-reviewed publications for the 1999 survey was 31.68 (range: 0.238 - 3.054).

Table 4 Publications in scientific peer-reviewed journals October 1999 – June 2003

Journal	No. of Publications
Acta Psychiatrica Scandinavica*	1
Administration	1
Biomarkers	1
British Journal of General Practice	4
British Journal of Hand Therapy	1
British Journal of Psychiatry (suppl)*	1
Chest*	2
Clinical Dysmorphology	1
Clinical Radiology*	2
Clinical Rehabilitation*	1
European Respiratory Journal (suppl)	2
International Journal of Health Care Quality Assurance	1
Irish Journal of Medical science*	1
Irish Medical Journal	8
Journal of Hand Surgery	1
Journal of Medical Screening*	1
Medical Education	1
Radiography*	1
Resuscitation	1
Social Psychiatry & Psychiatric Epidemiology	1
The Breast*	1
Total	34

*Publications on research conducted prior to NWHB employment

[†] Impact factor for a specific year is defined as the total number of citations made in that year for articles published in two previous years divided by the number of citable articles published in these years.

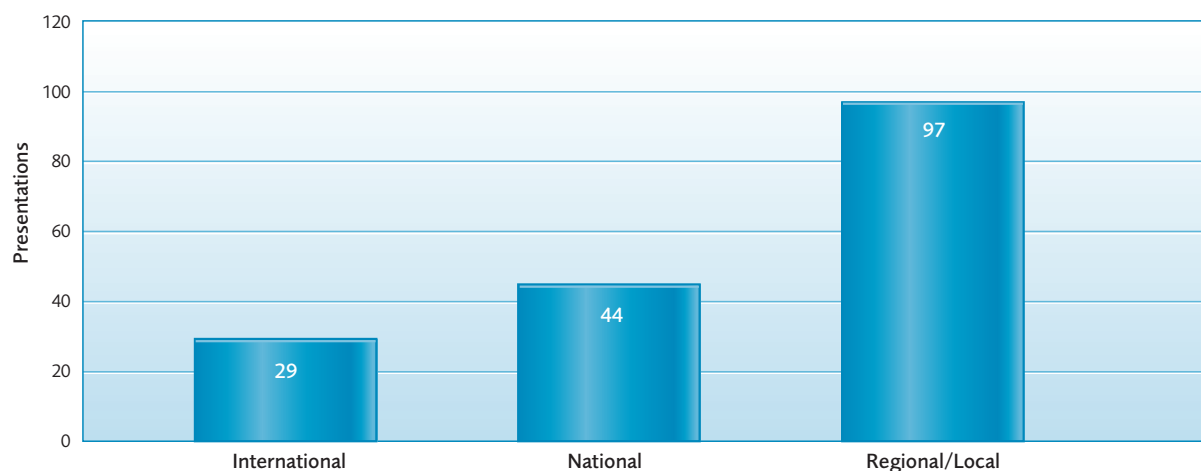
Publications other than in peer-reviewed journals were produced: 41 research projects were undertaken as part of third level education and particularly postgraduate degrees, some of which were carried out prior to taking up post at the NWHB and 41 reports for the NWHB and "other professional bodies" were published (Table 5). "Other publications" include abstracts in journals and conferences, articles in scientific magazines, educational material, guidelines, patient information leaflets etc.

Table 5 *Publications other than scientific journals October 1999 – June 2003*

Publications	Number
PhD dissertation	6
MSc dissertation	18
MA dissertation	2
MD dissertation	2
MDPH	1
MPhil	1
Other 3rd level project	11
Text book contribution	4
Report to NWHB	25
Report to other professional body	16
Other publications	17
Total	97

The 123 respondents with research experience gave a total of 170 presentations in the study period (Figure 6), 29 of which were to international conferences.

Fig. 6 *International, National & Regional/Local Presentations Oct '99- June 2003*



Some respondents with research experience in the study period had not yet published the findings of their projects. The main reasons for not preparing a paper or presentation were lack of time to write up, research part of 3rd level course, lack of experience and studies still in progress (Table 6).

Table 6 *Reasons for not publishing research undertaken October 1999 – June 2003*

Research Not Published due to:	Number
Lack of time to write up a publication	29
Research part of undergraduate or post graduate course	22
Lack of Publishing experience	17
Submitted for publication	16
Study Ongoing	14
In formulation	11
Research not deemed sufficiently comprehensive	9
Confidential Information	9
In press	3

Funding

The 123 respondents with experience in research were asked how much funding they were allocated in the study period from within the NWHB (Internal) and from outside of the NWHB (external). 47% and 38% had received no funding from external and internal sources respectively. A significant proportion of respondents did not answer this question (28% and 37%, Table 7) and it is likely that this group did also not receive funding.

Table 7 Funding to respondents, who participated in research in the period Oct '99 – June '03

Amount in €	External Funding*		Internal Funding*	
	Respondents	%	Respondents	%
No funding	58	47	47	38
0-5000	14	11	16	13
5000-10000	5	4	2	2
10000-50000	6	5	0	0
50000-100000	3	2	0	0
>100000	1	1	0	0
Educational Fee	1	1	13	11
No response	35	28	45	37
Total	123	100	123	100

*External: funding from sources outside the NWHB, Internal: funding within the NWHB

Few respondents had obtained research grants and most were relatively small grants of less than €10,000 (Table 7). Funding in the form of educational fee from the NWHB was received by 13 respondents. Very few received grants of significant magnitude. The three recipients of €50,000 – €100,000 are:

- Clinical Risk Management Research Project at Sligo General Hospital funded by the DoHC
- Population Based Research into:
 - The experiences of lesbian, gay & bisexual people in accessing health services in the North West funded by the Equality Authority
 - Diet, nutrition and poverty amongst asylum seekers in the North West funded by the Combat Poverty Agency
- Donegal Area Rapid Treatment Study (DARTS). Programme to reduce call-to-needle-time for patients with acute myocardial infarction funded by the Irish Heart Foundation, GMS Payments Body and DoHC

The project receiving a grant exceeding €100,000 was the Clinicians in Management Project at Sligo General Hospital funded by the DoHC.

Some full time researchers in departments such as Public Health and Health Promotion are core-funded. The funding for these posts does not feature in Table 7.

The sources of funding from external bodies and from sources within the NWHB are listed in Figures 7 and 8. External funding sources include industry, medical & nursing bodies, DoHC and the educational sector. No respondents had received funding from the HRB. The main internal funding source is the NWHB (department not specified), with some researchers receiving financial support via department budgets. Also included are 4 research seed grants from the Research & Education Foundation and funding from the Primary Care Development Unit.

Fig. 7 External sources of funding for research October 1999 – June 2003

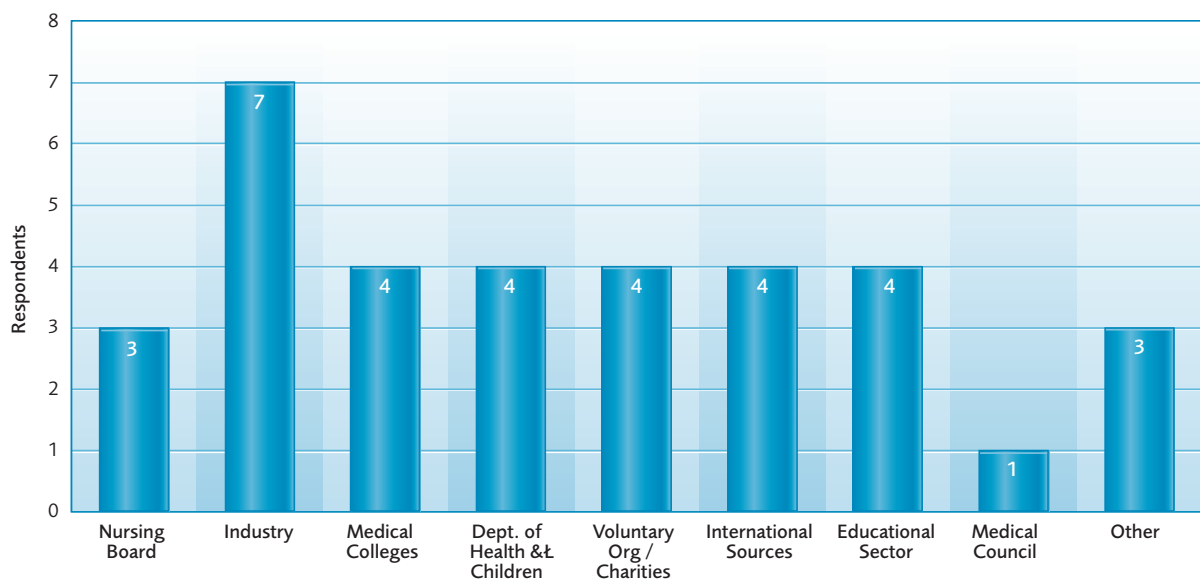
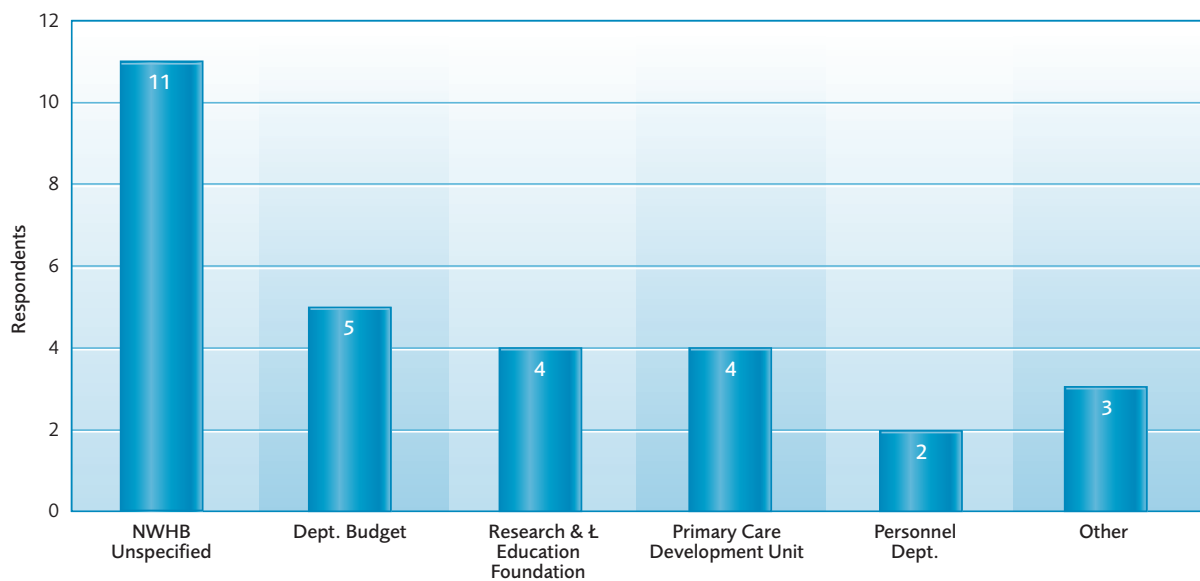


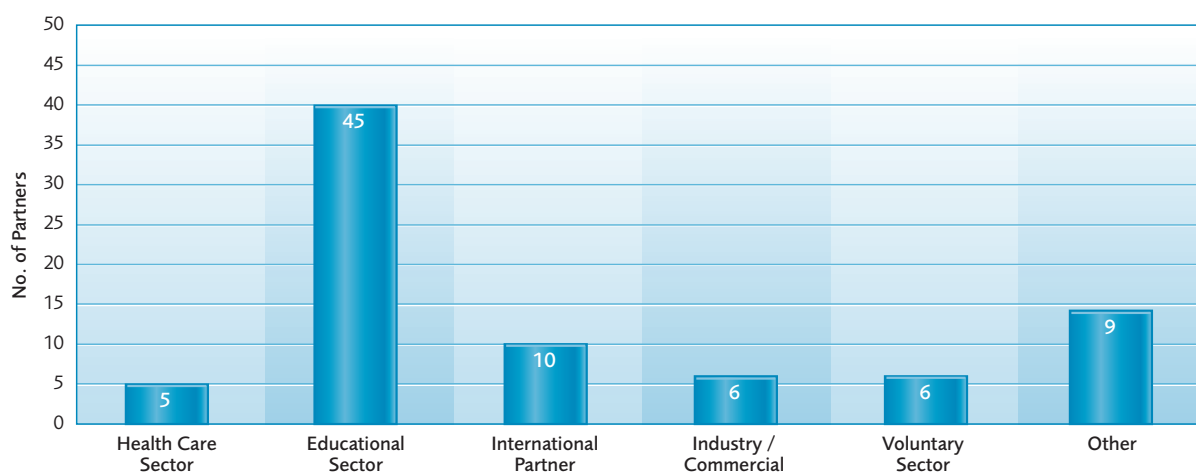
Fig. 8 Internal sources of funding within the NWHB for research October 1999 – June 2003



Collaborative Partners

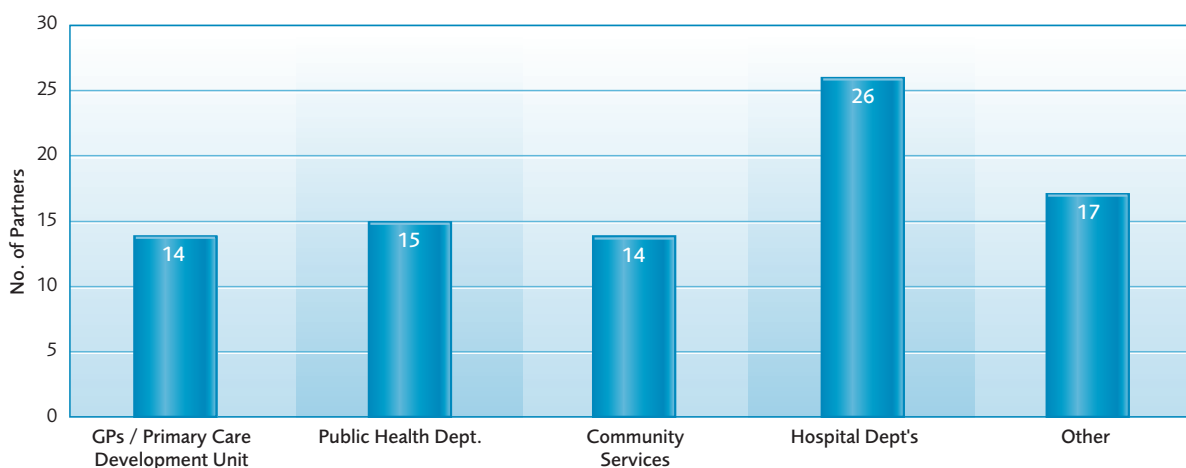
Many of the research projects carried out in the study period involved collaboration with other researchers, institutions, departments etc. Respondents indicated a total of 81 collaborative partners external to the NWHB, of which the majority (45) were from the educational sector (Fig. 9). There was also some collaboration with industry, international partners and the voluntary sector. The 'other' category includes Dept. of Justice, Equality Authority, Publishing Houses, CAWT, Garda Síochana etc.

Fig. 9 External collaborative partners October 1999 – June 2003



A similar number of partners (86) from within the NWHB collaborated in the undertaking of research (Fig. 10). The chart shows significant collaboration between Hospital Departments: Specialties, allied health professionals such as the laboratory and pharmacy, medical/nursing staff and individuals working in the acute hospitals. Partners from General Practices, the Public Health Dept and Community Services are also listed as partners by a number of respondents. The 'other' partners refer to groups such as Ambulance service, Clinical Audit team, Health Promotion Dept., Senior NWHB management etc.

Fig. 10 Internal collaborative partners within the NWHB October 1999 – June 2003

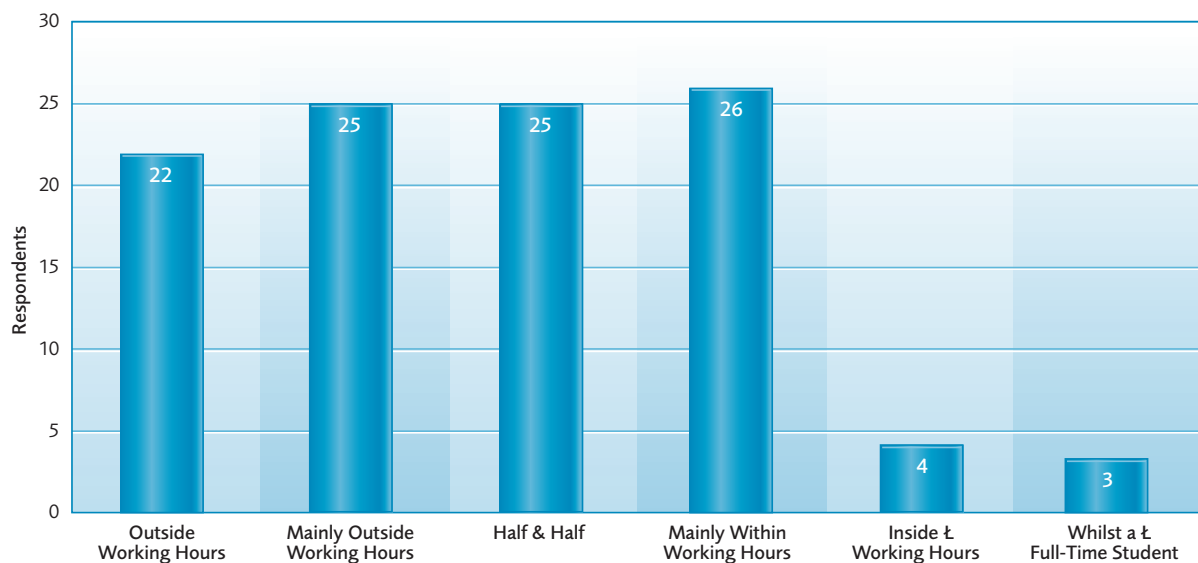


Research Activity and Working Hours

The survey participants were asked when the research was undertaken. Of those who answered this question (105 out of 123) 25% undertook the research "mainly within working hours" (26). However, almost the same number of respondents who participated in research did so "mainly outside working hours" at 24% (25). Just over one fifth (21%) did all their research completely outside of working hours compared to 4%, who did all their research inside working hours (Figure 11).

Fig 11

Number of respondents undertaking research within/outside working hours
October 1999- June 2003



Impact on practice

The impact of the research undertaken October 1999 – June 2003 on practice was documented by respondents for each project described (Table 8 – overleaf). 70 projects had influenced practice in some way with a majority having a direct impact on practice (43). A similar number of projects (44) had so far had no impact on practice, some of these were still being finalised, and others were awaiting implementation. A small number (8 respondents) were unsure of whether or not their projects had influenced practice.

Table 8 Perceived impact on practice of research undertaken Oct '99 – June '03

Impact on Practice	
Nature of Impact	No. of projects
Change of Practice	43
Guided Future Developments	10
Guidelines Developed/Changed	10
Raised Awareness	4
Confirmed Present Practice	2
Led to Further Research	1
Total	70
No impact on practice	
Response	No. of projects
Not Yet	14
No	14
Project Ongoing	8
Don't Know	8
Total	44

Support measures and barriers to becoming involved in research

Respondents, who had undertaken research whilst employed by the NWHB, were asked what support was available to them within the Health Board. The answers were analysed and grouped into themes (Table 9). Peer support and encouragement from colleagues, funding (especially for course fees), study leave and support from the Public Health Department and the Primary Care Development Unit were cited as the main type of support. 24 respondents said they had received little or no support (5+19).

Table 9 Support available from within the NWHB to respondents, who carried out research at the NWHB October '99 – June 2003

Support Available	No. of Respondents
Peer Support/Colleagues	28
Funding/Course Fees	22
None	19
Time/Study Leave	13
Public Health Dept	11
Primary Care Dev. Unit	10
Library	8
Other	7
Ethics Committee	5
Facilities	5
Little	5
Supervision	5
Admin Support	4
IT Support	4
External Advisors affiliated with the NWHB	3
Research & Education Foundation	3
Laboratory	2

Suggestions for general measures that would enhance health care research in the NWHB were sought in an open-ended question and were provided by 197 respondents. Table 10 shows a summary of the themes arising from the responses with examples of specific statements. Protected time for research is suggested by a large proportion of respondents. Education and training in research skills, research awareness, skills support and funding also feature strongly amongst suggestions for enhancing research in the region.

Table 10 *Suggestions by 197 respondents for general measures that would enhance research at the NWHB*

Theme	Respondents	Examples of Statements
Protected Time	58	<ul style="list-style-type: none"> ➤ Reduce service commitments ➤ Protected time with bleep-free-zones ➤ Entitlement to research leave
Education/Skills Training	38	<ul style="list-style-type: none"> ➤ Educate people not experienced in research ➤ Training in medical statistics & research techniques ➤ Local courses on research skills & methodologies
Research Awareness	30	<ul style="list-style-type: none"> ➤ Raise profile of research through communication ➤ Involvement at all levels to enhance awareness ➤ Demonstration of research benefits through implementation
Skills Support	26	<ul style="list-style-type: none"> ➤ Grant application advice ➤ Statistical support ➤ Editorial support ➤ Research facilitators
Funding	25	<ul style="list-style-type: none"> ➤ Seed money at Board level ➤ Funding to support implementation
Facilities	20	<ul style="list-style-type: none"> ➤ Clinical research building ➤ Access to IT facilities ➤ Dedicated research laboratory facilities
Strategic Developments	20	<ul style="list-style-type: none"> ➤ Implementation of target 73 of Health Strategy ➤ Dedicated unit directing research at NWHB ➤ Change in corporate attitude
Documentation of Data /Ideas	19	<ul style="list-style-type: none"> ➤ Use of patient identifier ➤ Identify needs for research within specialties ➤ Research based on consumer needs
Other	18	<ul style="list-style-type: none"> ➤ Requirement that staff do some research ➤ More people doing it ➤ Standardise research applications
Guidance/Supervision	15	<ul style="list-style-type: none"> ➤ A research coordinator offering guidance ➤ Focus groups on shared interests ➤ Support from supervisors
Research Staff	10	<ul style="list-style-type: none"> ➤ Provision of research fellows ➤ Staff for research ➤ Secretarial support for research
Collaboration	8	<ul style="list-style-type: none"> ➤ Collaboration with universities ➤ Partnership with IT Sligo ➤ Improved collaboration with research bodies

From a list of specific support measures survey participants selected three, which would help them become involved in research. The most important support measures identified by the respondents were design & methodology advice; statistical expertise, help in formulating the research question and access to collaborative partners (Table 11).

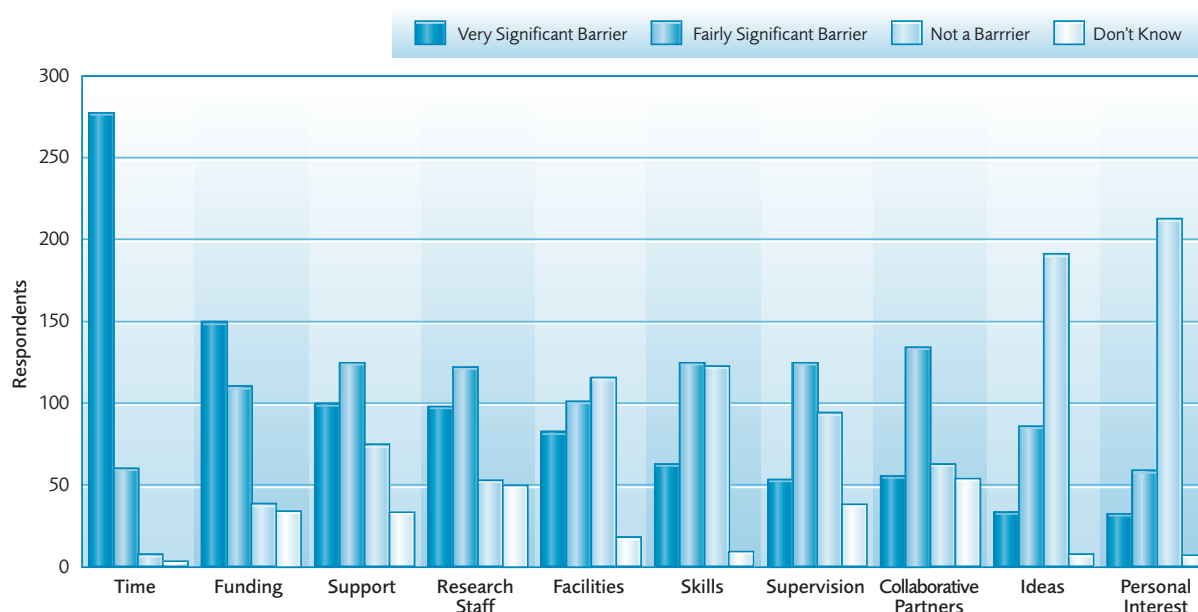
Table 11 Support measures perceived as important by the respondents

Support Measures	Number*
Design & Methodology Advice	190
Statistical Expertise	159
Help in formulating the Research question	125
Access to collaborative partners	122
Peer-support	115
Grant application Advice	93
Information on Funding Bodies	74
Research Ethics Application support	53
Grant Management Arrangements	38

*Each respondent ticked 3 options

The barriers to performing research that were considered most significant were lack of time & funding (Figure 12). Lack of support, research staff and facilities were also fairly significant barriers to research. Interest in research & ideas were not perceived as barriers to getting involved in research.

Fig 12 Barriers to undertaking research as perceived by the respondents



6 Discussion

The Research Activity Survey highlights recent research activity and the potential for developing a vibrant research community within the NWHB. The results show that health care staff, working in the NWHB, recognises the value of research by demonstrating a significant interest in research and by suggesting numerous proposals for future research. A large number of staff has relevant, up-to-date knowledge and experience in basic and applied research and this is underpinned by the positive impact local research has had on clinical practice.

The potential for developing research at the NWHB is indicated by the finding that almost two-thirds of respondents across all health care disciplines express an interest in becoming involved in the future. This group has suggested more than 300 ideas for new research projects covering a broad spectrum of topics.


A considerable number of staff within the health board has some research experience (55% of respondents), which, if nurtured appropriately, is valuable in the fostering of future research. The majority of health care staff surveyed have carried out research at some point in their career and many have a considerable track record in research and the appropriate skills to undertake and supervise new studies.

The rather low response rate of the survey (28.5%) is not unexpected given that service provision traditionally has been the main focus for the NWHB, which is located in a region without a medical school, university or other dedicated health research institution. Some staff who did not respond to the questionnaire may not have perceived research as being relevant to their routine work. Furthermore, the survey was undertaken in the holiday season and NCHDs were on the move to their next post in the rotational schemes.

One-third of respondents carried out research in the study period October 1999 – June 2003. Some of this was completed before taking up posts at the NWHB e.g. during full time education or in previous jobs. Apart from departments within the health board with a research remit (Public Health Department, Health Promotion Dept), research activity has been relatively sporadic and mainly undertaken outside working hours. Many projects arose from postgraduate studies and this is reflected in the relatively large number of third level theses and project reports, the substantial number of collaborative partners from the educational sector and in the educational fees paid by the NWHB. A moderate number (34) of publications in peer-reviewed scientific journals were reported. Lack of time was the main reason for research findings not being published at the time of the survey.

Impact on health care practice was documented by about two-thirds of those involved in research in the study period. This illustrates the potential of research as a vehicle for change in effective practice and that there is a willingness to learn from research findings.

Very little funding has been granted to researchers at the NWHB; about three-quarters received no funding at all. A number of minor grants were received from both external and internal sources and a few (10) had been funded in excess of €10,000.



Corresponding with the findings of the 1999 report ⁽³⁾ ⁽⁴⁾, lack of funding and time are the main barriers to staff becoming involved in research. There is evidence that skills support, skills training/education and improved collaboration with other health care groups and external partners would help facilitate staff involvement and maintain interest.

Bearing in mind the shorter time-frame of this survey compared to the 1999 survey (3.5 and 5 years respectively) and the expanded sample population and geographical area surveyed, the following comparative comments between the two sets of results can be made: There is a similar level of positive attitude towards undertaking research, research experience, skills and enthusiasm for research for both study periods. Funding for research in the region has not increased and researchers have yet to capitalise on the increased availability of grants from the HRB. The output of publications in peer-reviewed journals remained at approximately the same level, however there were more PhD dissertations, reports and regional presentations.

Since the 1999 report, sections of the NWHB have implemented schemes with the aim of enhancing research. For example, Sligo General Hospital has re-constituted the Research Ethics Committee (Letterkenny General Hospital already has a REC); Postgraduate Medical Education Teams with a research remit are in place in the acute hospitals; The Nursing/Midwifery Planning & Development Unit at the NWHB have assigned a regional Research Coordinator; The Public Health Department has contributed to research training days and has provided support functions such as statistical advice and data-analysis; The Research & Education Foundation at Sligo General Hospital has established and organised an annual multidisciplinary research conference, offered research seed grants, organised research skills training days and facilitated collaborative research with other institutions; Plans for establishing a Research Foundation at Letterkenny General Hospital are at an advanced stage. These initiatives are all encouraging for staff interested in contributing to the development of a culture of research at the NWHB.

⁽³⁾ ⁽⁴⁾ See Section 8 - References (page 26)

7 Conclusion & Recommendations

This research survey of health care staff at the NWHB has identified considerable scope for advancing a research culture at the Health Board by building on the documented knowledge, interest, experience and expertise in the region. Strategic developments and appropriate support measures need to be put in place to maximise this potential. An ethos should be built into the working environment to ensure that research is regarded as an essential element of health service provision leading to improved patient care.

The suggestions made for nurturing a research environment require actions at national and local level. Protected time for research and increased financial support call for changes in contractual arrangements and allocation of funding at national level. Research skills training and support functions for researchers, although also requiring funding, could be undertaken at local level. An enhanced level of awareness of the benefits of research and various related strategic developments require support and facilitation in all NWHB.

The implementation of the National Research Strategy "Making Knowledge Work for Health", ⁽⁵⁾ with its provision for a health care research function at Health Board level is key to achieving an improved research environment regionally. The research community in the NWHB is looking forward to the implementation of this strategy and the potential benefits for the region in terms of improved strategic planning, structural support for research and infrastructural provisions.

Pending the implementation of the National Research Strategy and considering the findings of this report, the survey committee recommends the following actions:

- Setting up of a strategic planning group for research within the NWHB
- Securing budget lines with protected funding for research
- Developing dedicated research facilities
- Enhancing training and education in research skills accessible at the region
- Increasing research awareness by valuing systematic investigation and facilitating the translation of research findings into practice
- Updating and developing research policies at local level
- Meeting the requirements of educational accreditation bodies for research activity at institutional level
- Allocating adequate resources for support functions such as Research Ethics Committees, Skills support (e.g. statistics, grant applications, publications), ICT support for research, information services etc.
- Working to achieve partnership arrangements with 3rd level institutions, industry and voluntary health organisations.
- Facilitating participation in national and international conferences
- Improving the sharing of research findings at specialty, institutional and regional meetings
- Producing intermittent reports on the research activities of the NWHB

⁽⁵⁾ See Section 8 - References (page 26)



8 References

1. Murphy AW. *Research and development in Irish Primary Care* (Editorial). Irish Medical Journal 2000; 93:69
2. Murphy JFA. *Funding medical research* (Editorial). Irish Medical Journal 1998; 91:112
3. Jensen MB et al. *Health Research: A descriptive study in the Sligo General Hospital Catchment area 1995-1999*. Irish Medical Journal 2001; 94:90
4. *Research Survey of health professionals in the Sligo General Hospital region of the North Western Health Board 1995 – 1999*. Research & Education Foundation. February 2000.
5. *Making Knowledge Work for Health: A Strategy for Health Research*. Department of Health and Children 2001. Dublin Stationery Office
6. *Comhairle na nOspidéal*. Report of the Academic/Clinical Research Consultant Committee. October 2002



9 Glossary

AHP	.....	Allied Health Professional
AMO	.....	Area Medical Officer
CA	.....	Clinical Audit
CAWT	.....	"Cooperation and Working Together"
CCS	.....	Community Care Staff
CH	.....	Community Hospital
CNM	.....	Clinical Nurse Manager
DoHC	.....	Department of Health & Children
DMHS	.....	Donegal Mental Health Services
HRB	.....	Health Research Board
GP	.....	General Practitioner
ICT	.....	Information Communication Technology
LGH	.....	Letterkenny General Hospital
NCHD	.....	Non-consultant Hospital Doctor
NWHB	.....	North Western Health Board
OLHM	.....	Our Lady's Hospital Manorhamilton
PCDU	.....	Primary Care Development Unit
PHD	.....	Public Health Department
PHN	.....	Public Health Nursing
REF	.....	Research & Education Foundation
SGH	.....	Sligo General Hospital
SMHS	.....	Sligo Mental Health Services
STC	.....	St. Conal's Hospital Letterkenny

Appendices

Appendix I

Survey Questionnaire

Personal details

1. Name: (for internal contact purposes only)
- Occupation:
- Work Address:
- Date of commencing employment in the NWHB

Research Interests

2. Are you **interested** in undertaking research? Yes No

If **No**, go to question 4

If **Yes**, continue

3. Please list any **ideas for future research projects** that you would like to undertake if given the opportunity, regardless of the scale of the suggested project. *(This information will help link respondents with similar interests)*

a. Topic of research:

b. Field of research (e.g. dental, immunology, cardiology, information technology, health services research, management etc.)

c. Description of project in max 20 words:

d. Suggested partners (e.g. GPs, Public Health, Hospital Laboratory, other hospitals, Third level Institutions):

4. Have you any suggestions for general measures that would enhance health care research in the NWHB? Please specify

5. What are the top three specific support measures that would help you become involved in research?

Please tick **3** only

Grant application advice	
Statistical expertise	
Research Ethics application support	
Information on funding bodies	
Help in formulating the research question	
Design & Methodology advice	
Grant Management arrangements	
Access to collaborative partners	
Peer-support	
Other, please identify:	

6. Please indicate the significance of each of the following factors when you consider the **main barriers to you** in undertaking research at the NWHB (please tick):

LACK OF:	Very significant barrier	Fairly significant barrier	Not a barrier	Don't know
Facilities				
Time				
Funding				
Support				
Supervision				
Research staff				
Personal interest				
Skills				
Ideas				
Collaborative partners				
Other, please specify:				

Research Experience

7. Were you **at any stage involved** in research prior to October 1999? Yes No
 (for definition of research, see last page).

8. Have you **undertaken** research since October 1999? Yes No

9. If you have carried out research whilst employed at the NWHB, what **support was available** to you within the health board?

10. If you have undertaken research or have published since October 1999, please **describe the research projects** in this table. Use only one table per project (photocopy if necessary).

Project No: (starting at 1)	
Title:	
Start date:	
Date of completion:	Tick here if ongoing:
Field of research: (e.g. Dentistry, Health Services Research, Immunology etc.)	
Project description in max 20 words:	
Collaborative partners: (e.g. Third level institutions, other departments at NWHB, other Health Care partners, Industry etc.)	
Has this project had an impact on practice? (e.g. change of guidelines, altered service provision etc.)	
Publications related to above project: (please tick below)	
<input type="checkbox"/>	Article 1 in journal: (name of journal) Year:
<input type="checkbox"/>	Article 2 in journal: (name of journal) Year:
<input type="checkbox"/>	Text book contribution
<input type="checkbox"/>	PhD dissertation
<input type="checkbox"/>	MSc dissertation
<input type="checkbox"/>	MA dissertation
<input type="checkbox"/>	MD dissertation
<input type="checkbox"/>	Other 3rd level project
<input type="checkbox"/>	Report to NWHB
<input type="checkbox"/>	Report to other professional body
<input type="checkbox"/>	Not published
<input type="checkbox"/>	Other significant publications, please specify:
Presentations related to the above project: (Please tick below)	
<input type="checkbox"/>	International presentations
<input type="checkbox"/>	National presentations
<input type="checkbox"/>	Regional/local presentations

11. If you have carried out research since October 1999, that has **not been published**, was it due to:

Please tick

Lack of publishing experience	
Lack of time to write up a publication	
Research deemed not sufficiently comprehensive	
Research part of undergraduate or postgraduate course	
Confidential information	
Study ongoing	
In formulation	
Submitted for publication	
In press	
Other, please specify:	

12. In general, has the research you have carried out since October 1999 **taken place**:

Please tick

Outside regular working hours	
Mainly outside regular working hours	
Half and half outside/inside working hours	
Mainly within working hours	
Within working hours	
Whilst a full-time student	
Other, please specify:	

13. What is the total **amount of research funding** your research projects have been granted since October 1999?

a. External Funding (outside NWHB)

Please tick

No funding received	
€0 - €5,000	
€5,000 - €10,000	
€10,000 - €50,000	
€50,000 - €100,000	
> €100,000	
Educational fee paid	

Sources of external funding:

b. Internal funding (within NWHB)

Please tick

No funding received	
0 - €5,000	
€5,000 - €10,000	
€10,000 - €50,000	
€50,000 - €100,000	
> €100,000	
Educational fee paid	

Sources of internal funding:

14. Other **relevant comments or information** you wish to have considered:

.....

Thank you very much for taking the time to complete this questionnaire

Definition of research

Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalisable knowledge.

Appendix 2

Sampling population, returns and return rates

Group	Location	Numbers	Returns	Return rate %
Consultants	SGH & SMHS	49	24	49.0
	LGH & DMHS	45	11	24.4
	Total Consultants	94	35	37.2
NCHDs	SGH & SMHS	104	3	2.9
	LGH & DMHS	105	7	6.7
	OLHM	4	0	0.0
	Total NCHDs	213	10	4.7
GPs	Donegal	72	27	37.5
	Sligo	33	12	36.4
	Leitrim	9	3	33.3
	West Cavan	1	1	100.0
	Total GPs	115	43	37.4
Nurses	CNM I, II & III SGH	63	15	23.8
	CNM I, II & III LGH	43	23	53.5
	Ward sisters SMHS, STC	103	22	21.4
	Ward sisters CH, OLHM	61	19	31.1
	Specialist Nurses SGH	20	10	50.0
	Specialist Nurses LGH	14	7	50.0
	Management & Admin SGH	14	3	21.4
	Management & Admin LGH	12	5	41.7
	Nursing School SGH	15	10	66.7
	Nursing School LGH	13	5	38.5
	Staff nurses SGH	50	10	20.0
	Staff nurses LGH	50	15	30.0
	unsolicited response*	n/a	(9)	n/a
	Total		458	144	31.4

Continued overleaf >>

Group	Location	Numbers	Returns	Return rate %
Heads of Service	SGH	15	7	46.7
	LGH	19	9	47.4
	Regional	22	0	0.0
	Total	56	16	28.6
Allied Health Prof.	SGH	11	4	36.4
	LGH	11	4	36.4
	REF & CA at SGH	6	3	50.0
	unsolicited response*	n/a	(15)	n/a
	Total	28	11	39.3
Public Health Dept.	Total	24	16	66.7
Health Promotion	Total	20	4	20.0
Community Care	Area Medical Officers	15	4	26.7
	Children's Services	18	3	16.7
	Chiropody	4	0	0.0
	Community Welfare	2	0	0.0
	Dental Dept.	27	7	25.9
	Dietician	5	3	60.0
	Env. Health Dept.	12	1	8.3
	Occupational Therapy	5	4	80.0
	Ophthalmic Dept.	4	0	0.0
	Psychology	27	12	44.4
	Public Health Nursing	15	4	26.7
	Physiotherapy	33	14	42.4
	Social Work Dept	26	9	34.6
	Speech Therapy	21	9	42.9
	Other Community Care staff	43	11	25.6
	Unsolicited response*	n/a	(3)	n/a
Total	257	81	31.5	
TOTAL	Incl. unsolicited responses	1265	387	n/a
TOTAL	Excl. unsolicited responses	1265	360	28.5

*Respondents not part of the original sample, i.e. encouraged to respond by manager or web-site.

“...This survey of health care staff at the NWHB has identified considerable scope for advancing a research culture at the Health Board by building on the documented knowledge, interest, experience and expertise in the region...”

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