

Research Strategy

2002-2005

Sligo General Hospital



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A document prepared for Sligo General Hospital by



**Research & Education Foundation
Sligo General Hospital
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1. Introduction

Health Research in Ireland has entered a new era with a national strategic approach to its development and unprecedented financial support for research programmes. Sligo General Hospital is in a position to avail of these opportunities by developing its research capacities appropriate to research requirements, skills, resources, service commitments etc.

The Department of Health and Children has stated in its strategy for health research “**Making Knowledge Work for Health**” that:

“There is a need to establish a strong R&D function at Health Board level ...to support the achievement of health objectives and to support their planning and service responsibilities. The assignment of responsibility within the health board and the preparation of an institutional R&D Strategy for health are critical to the establishment of a strong research culture”¹

The Research Strategy for Sligo General Hospital (SGH) is developed in response to the above and is the framework for research activity undertaken and supported by SGH, North Western Health Board. It incorporates research goals, outline of strengths and weaknesses, objectives and action points for implementation.

The Strategy facilitates the planning, support, monitoring and evaluation of research activities within SGH and it constitutes the foundation for research policies and administrative procedures.

This Hospital Research Strategy is an evolving document developed and reviewed every three years. It is commissioned and ratified by the Hospital Management Committee.

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2. Research Ideals

The National Health Strategy “**Quality and Fairness**” affirms the national commitment to health research:

“The implementation of the [National Health] Strategy must include support for health research, with particular reference to supporting health professionals who wish to carry out research on identified needs and the speedy application of findings where appropriate to improve service delivery”²

The above statement is recognition of the association between a proficient health research environment and improved health care service. The NWHB’s “**View on Health**” says the following about its commitment to high-quality service delivery:

“We work to influence positively the health and social status of the entire community in the North West and of specific at-risk-groups within the community. We work to respond in an effective and holistic manner to the identified health and social needs of individuals, of groups, and of the wider community with the objective of promoting their independence and self reliance.”³

In support of these objectives,

SGH will promote the creation of a fertile and accommodating research environment and foster the promotion of a research ethos amongst health professionals at the hospital and in its associated community.

SGH will support areas of inquiry where researchers can make original contributions to their disciplines and to the community in which they work by supporting researchers in areas where their skills and knowledge can be focused on defined, mission orientated research projects.

3. Research goals

The research goals of SGH provide the framework for the objectives outlined in section 4. They are broad statements of aspiration that guide practice. The research goals of SGH are to:

1. encourage research that reflects the Research Ideals of this Strategy.
2. encourage and support, financially and otherwise, health professionals of all grades within SGH in the conduct of high quality research.
3. increase the quantum of research undertaken within SGH.
4. focus research resources and support in key areas identified by National Strategies, NWHB and SGH.
5. operate as part of the broader research community within the North Western Health Board as well as part of the national and international health care profession.
6. focus on serving the interests and needs of the local community.
7. encourage collaborative research between health professionals within the NWHB, the border region, nationally and internationally as well as with third level institutions, research bodies and the industry.
8. develop partnerships and strategic alliances with other institutions and research centres to share the research capacity of SGH more actively.
9. encourage research participation amongst staff with no previous research experience.
10. develop organisational and managerial structures to support the research programmes within SGH.
11. develop educational structures to assist in the planning, execution and evaluation of research.
12. provide the infrastructure and administrative support for research.
13. contribute to improving the education and training environment of health professionals within the region.
14. foster the dissemination of research findings and promote the integration of evidence based research into clinical practice.
15. reward particularly outstanding groups or individuals on their health care research
16. implement a system of evaluation of the research supported and commissioned by SGH.

4. Research Strengths & Weaknesses Objectives for future development

This section identifies the current research strengths and weaknesses at SGH and outlines the objectives SGH have identified in meeting the goals of the research strategy. It encompasses human resources, research infrastructure, research collaboration, dissemination of research findings, financial support for research, training in research and research ethics. Specific action points for each objective are listed in section 5.

4.1 Human Resources

Strengths

The pool of research experience and skills brought to the hospital with medical consultant appointments and other senior staff is significant. The vast majority of such new staff have, as part of their postgraduate professional training, several years' experience in some aspect of health sciences research. Many will have gained their knowledge in centres of research excellence and developed skills in the planning, execution and publication of health care research.

The two Postgraduate Medical Tutor posts at SGH have a research component in their job function. Their creation in 2001 marks the first contractual arrangements for protected research time amongst clinicians in the hospital.

The short duration of the contract held by NCHDs at SGH, typically 6 or 12 months, hinders a long-term commitment to a research study in the Hospital by trainee doctors. However, some NCHDs have, with the support of their consultants and the Postgraduate Tutors, initiated small-scale research projects within their departments. There is great potential for continuing this trend and for establishing long term clinical research programmes, which alternating NCHDs could participate in, even for a shorter period.

The GP Training Unit in Sligo, based at SGH, employs a Research Tutor on a part-time basis supervising research undertaken by 4th year GP trainees. Furthermore, a Research Officer from Public Health Departments supports the research component of "Quality Improvement Projects" carried out by a number of GPs in the hospital catchment area.

Several staff members of other health care disciplines such as Laboratory Scientists, Paramedical Staff, Nurses etc. have research experience, typically obtained as part of a postgraduate degree programme. A minority of this group have acquired a PhD through research. Both doctors and nursing staff have gained some experience in recent years in the conduct of clinical trials.

The Research & Education Foundation, a charity organisation set up at the hospital with the mission of supporting programmes of research and education, has played a significant role in developing infrastructures to support health care research. The Foundation employs staff, who have carried out commissioned projects for the hospital, administered research seed grants, organised research meetings, developed research infrastructures etc. A committed Board of Directors have voluntarily worked for the Foundation since 1992 in support of its mission.

The significant potential for participation in research across all disciplines has been documented by a survey conducted amongst health professionals in SGH and its catchment area⁴. This study confirmed that there is an untapped resource of skills in health research in the region.

Weaknesses

SGH is a general hospital with extensive accreditation for staff training with focus on service provision and without formal attachment to a medical school. One of the main barriers for developing a research culture at SGH has been the lack of provision for staff with a research remit and protected time for research. A multifaceted role of medical staff in teaching, clinical work and research is not officially facilitated at SGH. The research undertaken has been sporadic in nature and has traditionally been initiated by a few enthusiastic health care professionals and carried out mainly outside normal working hours.

Support staff for research has also been lacking – research nurses, technicians, administrators, access to a statistician and other services have yet to be provided.

There is a lack of clarity in Hospital Management at SGH regarding responsibility for the development and management of research.

Objectives

- **Develop a core of research personnel with protected time**
- **Provide adequate support staff**
- **Build on existing strengths and staff with proven research record and encourage inexperienced staff of all grades**

4.2 Research Infrastructure

Strengths

The Research & Education Centre at SGH provides staff with access to Library and Information services, Information Technology, Reading space and Lecture Room. The Centre offers access to communications networks such as HEAnet and a wide selection of databases, journals, books etc. It accommodates the Departmental and Hospital wide teaching sessions, Journal Clubs, Case Conferences, Themed Study Days, Annual Multidisciplinary Research Conference and functions as exhibition space for research posters.

The hospital has conducted a study on the future needs for a capital development to support training, education and research and will incorporate this into the overall hospital development control plan to be funded through the National Development Plan.

Weaknesses

SGH has no physical space dedicated to supporting research activities. IT equipment, laboratory facilities, office space etc. is for service functions and made available for research out of goodwill. The anticipated expansion of research activities and employment of dedicated research staff calls for protected space and equipment for research.

Participation in electronic research networks is inhibited by the limitations of the national electronic network infrastructure. The high-speed backbone developed by HEAnet supplying educational and research institutions with research networks, such as the Web of Science, does not at present extend to Sligo and leaves SGH with alternative high-cost connection options only.

Objectives

- **Provide protected research facilities**
- **Expand the participation in communication networks**

4.3 Research Collaboration

Strengths

One of the advantages of carrying out research at a medium sized hospital such as SGH is the relative intimacy of the working environment. Because the specialties are in close physical proximity, there is abundant potential for collaborative and interdisciplinary research within the hospital. Already some departments are carrying out studies with the input from other disciplines, in particular the Laboratory, Specialist Nurses and Paramedical staff.

The Hospital has collaborated on several research projects with its neighbour institution, the Institute of Technology Sligo. In particular the Schools of Science and Engineering have undertaken studies with Dept. of Surgery, Orthopaedics and Biochemistry in recent years. The collaboration typically involves the sharing of facilities, resources and supervision of postgraduate students at Masters or PhD level. In addition, numerous final year undergraduate science students from IT Sligo have undertaken projects in the Laboratory at SGH with joint supervision by staff of the two institutions. With the recent introduction of degree courses in Health Science & Physiology and Occupational Safety & Health as well as a Diploma course in Biomedical Science at IT Sligo, there will be further scope for joint investigative health research. Students and staff at the IT already contribute with presentations at the Annual Research Conference at SGH and senior management are in consultation about the development of formal policies for joint projects. A Memorandum of Understanding on research collaboration will be finalised and endorsed in 2002. Staff members of the IT are on the Board and Research Advisory Committee of the Research & Education Foundation and actively contribute to its work.

Multi-centre Clinical Trials are collaborative in nature. SGH has participated in several clinical trials in recent years. Staff conducting and administering the trials locally cooperate with both the sponsors and other participating institutions.

Clinical Research Centres are emerging in major hospitals in Ireland, usually in association with a medical school. SGH has initiated discussions with such CRCs on the possibility of collaborating on various large-scale research projects. These often rely on the supply of samples from large populations – a resource to which this hospital could contribute. In return, studies originating at SGH can benefit from the expertise, specialised analytical facilities, contacts etc. of established CRCs.

SGH has participated in several Cross Border health programmes with a research component such as those being processed through the CAWT arrangements.

Weaknesses

SGH is geographically removed from major academic centres. Health service provision has been the sole official task of the hospital until recently and although the Hospital and Health Board have been supportive of research activities by groups and individuals, both have failed to actively facilitate collaborative research with a coordinated institutional approach.

Research partners have been limited to a few personal contacts in other institutions and the Hospital has yet to participate in international studies such those undertaken under the EU Framework programme.

Objectives

- **Address SGH's relative geographic isolation and detachment from major universities traditionally linked with research centres.**
- **Establish research networks.**

4.4 Dissemination of Research Findings

Strengths

Library and information services have improved markedly over recent years both in terms of expansion of resources and access during out-of-working hours. The increase in the number of users of the SGH Library facilities of 33% in a one year period (2000-2001) is a reflection of the need and the quality of the service provided.

Teaching sessions in Evidenced Based Medicine are conducted in the hospital with regular intervals. Intradepartmental Journal Clubs and Case Conferences contribute to the continuing education of staff at all levels and raise awareness of recent research findings.

The Annual Research Conference at SGH provides a forum for the presentation of local research findings and for national speakers with a high profile in research.

Weaknesses

The sporadic nature of research activities at SGH means that most staff members are removed from the experience of research planning, execution and evaluation. Participation in research is an obvious route to the acquisition of knowledge of research methods and ability to assess the validity of other researchers' findings. It could therefore be argued that, in an environment with little research activity, a greater effort is required by health professionals working in acquiring cutting edge knowledge and implementing findings into clinical practice.

Grand rounds and hospital-wide case conferences have not been consistently endorsed and carried out in the hospital.

The absence of research support to assist in the production of presentations, posters and publications has been an inhibitory factor in the dissemination of local research findings.

Objective

- **Support dissemination of research findings to other health professionals, funding agencies, the academic community, the broader local and national community and the professional medical press.**

4.5 Financial support for research

Strengths

Some staff members have significant experience in applying and acquiring research funding mainly from experience gathered prior to taking up employment at SGH.

The Research & Education Foundation has instituted a Research Seed Grant Fund at the Hospital with annual provision of a total of up to €12,500 for small-scale projects in the catchment area.

Weaknesses

Research at SGH has so far been undertaken with no funding or financed by relatively small-scale once-off project grants from various funding agencies. SGH have yet to attract large-scale research funding from bodies such as HRB, DoHC, EU, Wellcome Trust etc. The majority of the larger grants from these institutions are allocated to research programmes with a 3-5 year time-frame, collaborative aspect and full time research staff. For example, one of the criteria for many HRB project grants is that the principle applicant responsible for the undertaking and management of the research programme must hold an academic or equivalent post in an Irish research/academic institution and be actively involved in research.

SGH has no budget line for Research & Development. Support for research activities by the hospital must come from within other budgets and with the current rise in spending, R&D easily becomes less of a priority than the day-to-day service costs.

SGH has no official policies and procedures for the financial management of research activities.

Objective

- **Provide and attract funding for research undertaken at Sligo General Hospital**

4.6 Training in Research

Strengths

Training of SGH staff in research methodology mainly originates from academic institutions, either through research undertaken prior to taking up post at SGH or as a feature of a postgraduate course attended on a part-time basis, whilst in employment. NWHB actively supports and finances external postgraduate education of staff. Such activities have resulted in a pool of research knowledge amongst a cross section of disciplines, which is largely untapped at local level.

The introduction of a Core Skills Curriculum has provided the hospital with a forum for teaching of research related topics such as Evidence Based Medicine, Paper Writing, Research Ethics, Research Management etc. Both the GP Training Unit and the Postgraduate Tutors initiate and support research conducted by trainee doctors.

The Annual Research Conference at SGH plays an educational role for researchers at SGH. The presentation of a project orally or in poster format gives staff the opportunity of experiencing the process of communicating research methodology and findings. Case conferences and journal clubs at intradepartmental level have a similar educational function.

Weaknesses

The obvious route to training in research methodology is the conducting of projects, however the ad hoc nature of the research undertaken at SGH limits the opportunities for staff to partake in research. The supervision of projects is not part of any staff members' remit and left to enthusiastic persons with a personal interest and commitment to research.

Most training available locally is orientated to medical staff; other disciplines must avail of external sources for training and supervision.

Objective

- **SGH seeks to contribute to the undergraduate, postgraduate and continuous professional training of health professionals in the region by playing a role in providing an understanding of the methodology and evaluation of health research.**

4.7 Research Ethics

Strengths

The SGH Research Ethics Committee (REC) was constituted in 2001. The REC has developed operating procedures, application form and various other documents in line with national and international legislation and principles of good clinical practice. These have been reviewed and validated by the Irish Medicines Board.

SGH has supported financially the participation of REC administrative staff and members of the REC in conferences on the conduct of REC business and the principles of research ethics.

Weaknesses

SGH has not yet established policies for the management of research at the hospital including criteria for permission to initiate research studies involving human subjects. Only Clinical Trials must at present seek REC approval and this obligation is founded in Irish Legislation, not SGH or NWHB policy.

Awareness of the REC, its role and working methods is inadequate at SGH and in its catchment area.

Objective

- **It is central to the principles that guide research within SGH catchment area to maintain the highest ethical standards as well as validity and accuracy in the collection and reporting of data. For research involving humans it is of primary importance to protect the welfare and rights of participants in research.**

5. Implementation

The successful implementation of the objectives of this Strategy requires Sligo General Hospital take a proactive approach to building upon the strengths and addressing the weaknesses outlined the previous chapter. The action points listed below serve to direct the efforts by management, researchers etc. towards meeting these objectives.

5.1 Human Resources

Action	
a.	Reward researchers by provision of protected time, financial support, SGH Research Medal etc.
b.	Establish and facilitate Research Teams of high standard in key areas of research.
c.	Ensure adequate health and safety provision to all staff involved in research.
d.	Facilitate the appointment of dedicated research support staff such as research nurses, technicians, administrative personnel etc.
e.	Assign a Senior Manager at SGH with the responsibility for developing, supporting and coordinating research activities.
f.	Develop the research skills of staff by supporting teaching programmes in research methods, facilitating the attendance of staff at external conferences and meetings, supporting local conferences and meetings.
g.	Support the voluntary efforts of the Research & Education Foundation.
h.	Actively seek to incorporate a research component into the contract of a proportion of new appointments, in particular consultants.

5.2 Research Infrastructure

<i>Action</i>	
a.	Provide research staff with temporary accommodation until a permanent research centre is in place.
b.	Actively support the development of a dedicated health research centre including laboratories, office space, IT facilities etc.
c.	Continuously develop and update Information Technology facilities and provide equipment dedicated to research activities.
d.	Finance the equipment required to assist the work of administrative, technical and professional research support staff.
e.	Make provisions for expansion and renewal of Library stock and non-print materials, extensive Library opening hours, reading rooms etc.

5.3 Research Collaboration

<i>Action</i>	
a.	Encourage cross-institutional research by nurturing links with third level institutions, health care agencies and other hospitals and their associated researchers.
b.	Collaborate with other research centres and units within the NWHB such as the Research & Education Foundation, Public Health Department, Health Promotion Unit, Nursing School etc.
c.	Interact with other health care researchers in the western and border region, liase with other Health Boards and explore cross border links.
d.	Promote international links by supporting the participation of staff in international conferences, seminars etc. and in EU sponsored collaborative research programmes.

5.4 Dissemination of Research Findings

<i>Action</i>	
a.	Foster a culture of sharing research findings within and across health care professions and specialties within the hospital and its community by supporting journal clubs, grand rounds with a research component and in general promoting evidence based practice.
b.	Encourage the participation in and presentation of local research at national and international conferences and seminars.
c.	Promote and support the publication of research findings in peer-reviewed journals.
d.	Support an annual research conference with presentation of local research projects and external contributors.
e.	Convey research findings to appropriate government agencies, the press etc.
f.	Develop and/or participate in electronic research networks (websites, electronic discussion groups etc.)

5.5 Financial Support for Research

<i>Action</i>	
a.	Compete for research funding from relevant bodies, institutions and industry.
b.	Assign and protect a line in the SGH budget for R&D
c.	Develop procedures for the financial management of research activities.
d.	Maximise the funding potential provided in national strategies and programmes
e.	Provide funding for research support staff.
f.	Participate in joint funding applications with other institutions e.g. HEA grants, HRB, EU Framework etc.
g.	Provide funds for participation in local and external research training programmes, seminars, conferences etc.
h.	Contribute to Research Seed Grant Fund established by the Research & Education Foundation for research projects for health care professionals in the SGH catchment area.
i.	Provide assistance in grant application techniques.

5.6 Training in Research

<i>Action</i>	
a.	Support and contribute to the teaching and training in research methods.
b.	Provide a service for the acquisition of research material (manuals, electronic information, course material etc.) on the planning, conduct and evaluation of research as well as on funding and research ethics.
c.	Contribute to the education in research by providing opportunities for the participation in conferences, training seminars and other external research activities.
d.	Support the teaching and training in evidence-based practice by facilitating the integration of research findings into clinical practice where appropriate.

5.7 Research Ethics

<i>Action</i>	
a.	Uphold a Research Ethics Committee, which conducts its business in line with national and international legislation and guidelines on good clinical practice.
b.	Set up policies that ensure that all research conducted under the aegis of SGH, which involves humans, obtains approval by the Research Ethics Committee.
c.	Support the continuous training of administrative REC staff and REC members in the conduct of REC affairs.
d.	Publicise widely the existence, role and working methods of the REC to health professionals in the SGH catchment area.

References

¹ *Making Knowledge Work for Health, A Strategy for Health Research*, DoHC, June 2001

² *Quality and Fairness – A Health System for You*, Health Strategy, DoHC, 2001

³ <http://www.nwhb.ie/files/general/viewhealth.shtml> accessed February 13th 2002

⁴ *Research Survey of health professionals in the Sligo General Hospital region of the North Western Health Board 1995-99*, R&E Foundation SGH, February 2000