IRISH COLLEGE OF GENERAL PRACTITIONERS

STRATEGY FOR RESEARCH

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INTRODUCTION

Wonca Europe defines general practice as an academic and scientific discipline, with its own educational content, research, evidence base and clinical activity.

Following the National Research Workshops held in 2001 and 2002 and the PRC Think Tank in 2002, the urgent need to develop research capacity for general practice in Ireland was identified. The numbers of general practitioners involved in research in general practice are very few and the lack of a research culture was also identified as a problem. A major barrier was perceived to be the lack of bio statistical & methodology experience in Ireland, leading to poor proposal writing & consequently poor access to national funding. It would be useful to have a background literature database accessible to project directors, members, GP trainees and others who could be encourages to undertake research. The college needs to encourage new views and perspectives on general practice research. How can research be made more attractive to encourage participation of practising GPs? Audit processes should be refined as practical tools of direct benefit to the GP and the practice.

WHY DO RESEARCH?

According to the Mant Report 1997, *R & D in Primary Care*, there is an irrefutable case for supporting research in primary care.

1) **Decisions made in primary care need to be based on research evidence.**
   The ICGP Research strategy aims to create a knowledge based health service in which clinical, managerial and policy decisions are based on sound information about research findings and scientific developments. The need for a firm knowledge base is as great in primary care as in secondary care.

2) **Primary care is central to the Irish health service and to individual patient care.**
   Over 90% of contacts between the population and the health service take place in primary care.
   - Most serious disease (including recurrence of disease treated in hospital) presents first in primary care.
   - Most minor illness is treated entirely in primary care.
   - Chronic illness (including serious problems such as major depression, asthma, hypertension, hypothyroidism, arthritis, and heart failure) is treated mainly in primary care.
   - Most preventative health care, including maternity care and child health surveillance, takes place in primary care.

   As the point of first contact with the health service, primary care is the point where many important decisions are made:
   - Diagnostic decisions about the seriousness of symptoms are of great importance to the individual patient; both delay in diagnosis and unnecessary anxiety can have serious consequences for the patient and his/her family.
   - Decisions about the need for invasive investigations or hospital admission are important both to the patient and to the health service. The primary care referral decision is arguably the most important single determinant of the cost of health care.
   - Decisions about the prescribing of medications are also of great importance to the patient and the health service. Many patients will take medication prescribed in primary care (e.g. hypertensive drugs) for the rest of their lives.

3) **The evidence base for primary care needs to be strengthened.**
   All members of the primary health care team and their patients need a wide range of information to support their decisions. Current research evidence and the capacity to generate it is sparse.
   There is a substantial evidence gap, which is limiting the provision of the highest quality care in relation to four areas of clinical activity in primary care:
   - The recognition and clinical management of the early presentation of disease;
   - The clinical management of established disease treated predominantly in primary care;
   - The clinical management of chronic disease (which again takes place predominantly in primary care);
   - The assessment and clinical management of disease risk.

   A number of questions about the organisation and delivery of primary care merit further research, including:
   - The effective delivery of preventive health care through primary care;
   - The optimal use of resources in the delivery of clinical services in the community;
   - The management of chronic and complex conditions managed in primary care which also require a very strong social care component.

4) **The capacity of primary care to undertake research necessary to provide a firm evidence base is at present limited.**
The improvement and expansion of primary care research is part of the government's health policy as per the National Primary Care Strategy 2002. The additional funding provided for a Research Director will go some way to increasing this capacity.

5) **Much of the evidence required by primary care can only be obtained by research in primary care involving primary care practitioners and their patients.**
The knowledge base to support clinical decision making for individual patients in primary care is largely informed by research in secondary care. However research is required in primary care:
- Where research is needed to inform decisions which are only taken in primary care (e.g. the recognition and clinical management of the early presentation of disease; the clinical management of common disease treated predominantly or only in primary care);
- Where there is an intention to apply research done in secondary care to a primary care population. In these cases, the necessary research can only be done in a multidisciplinary primary care environment, although close collaboration with clinical academic colleagues with specific expertise is usually helpful.

Clinical research undertaken in primary care should reflect the important conditions commonly seen and take account of the spectrum of clinical activity.

6) **The appropriate involvement of primary care staff in research is likely to increase the quality of clinical care in the health service.**
A number of mechanisms have been proposed to explain a relationship between the conduct of research and high quality care. These include the application of quality controlled protocols for care, the creation of a self-critical professional culture, and faster dissemination and adoption of research evidence.

7) **Evidence based health care must cross professional and organisational boundaries.**
The argument that evidence based care should cross the primary-secondary care professional boundary is strong:
- A key factor of the outcome of serious disease is the speed and route of referral from primary care.
- Continuing care for serious disease, after acute treatment is complete, is usually provided in primary care.
- Many treatments initiated in primary care have a major impact on people's lives; the cost to the individual and to society of poor treatment is high.

8) **Research in primary care is important for public health.**
Public health research should be done by and through primary care because the setting provides an unrivalled opportunity to study individual health in its social and cultural context.

9) **Research is important to empower patients to make informed choices.**

10) **Small shifts in the balance of research funding will have a major impact in primary care.**
There is a serious mismatch between the financial and clinical importance to the health service of decisions made in primary care and the available evidence and research capacity in this sector. The correct balance is unknown but the need to begin to shift the balance is clear. The low level of current funding means that the small shifts will have a major impact in primary care. We must not expand faster than is consistent with the achievement of high quality research and we must take regular stock of return on investment.

THE BRISBANE INTERNATIONAL INITIATIVE 2002
– Advanced education for primary care research

Although delivery of primary health care varies between countries and health care systems, it has a clear general basis: (1) open access, implying that everyone can present any problem at any time, and (2) continuity of care, with responsibility in all phases of the health care process. Accordingly, in primary care, the spectrum of patients and health problems encountered is essentially different from referred care and the ongoing improvement and innovation of clinical and health care interventions represents major international research challenges. There is international agreement that the international research base for primary care needs to be urgently expanded. However, the scarcity of advanced primary care research expertise in most countries, coupled with the traditionally national orientation of primary care research training, severely limits the options for collaboration and further development.

Objectives:

The Brisbane international initiative will focus on the development of scientific leadership in international primary care research. Two major strategies were agreed to address this objective:

1. combine the best expertise from primary care research and other relevant research fields to establish a comprehensive curriculum for primary care research training;
2. create an advanced international training context for PhD and MSc research students in primary care.

The participating institutions will share available courses and modules, and newly create collaborative courses and modules, materials and facilities, where necessary. In doing so, they will optimise the opportunities for international training of the research students they have accepted responsibility for. The programme will provide a multidisciplinary educational context for advanced primary care research into clinical subjects, selected on talent and motivation for a research career, may also participate in modules of the programme.

The long-term outcome will be to assure high quality in all aspects of Primary Care Research. An important additional outcome will be the facilitation of international collaboration in performing primary care research.

CURRENT RESEARCH CAPACITY

According to The Howie Report 1988, for research to succeed there needs to be:

a) A climate of opinion in which research and development is expected, valued and rewarded;
b) Infrastructure - resources and advice available to support research and development;
c) Skills - Methodological, interpersonal and organisational.

In Ireland, the existing skills training for primary care research include:

- Projects in 3rd/4th years of G.P. Training
- Senior Registrar Programme
- M.Sc. Courses

Sources of funding for primary care research include:

- General Medical Services (Payments) Board Fund;
- Irish College of General Practitioners Foundation Fund;
- Health Research Board.

Existing resources available for primary care research are:

- Postgraduate Resource Centre;
- Disease Surveillance Network;

- Cardiovascular Secondary Prevention Data Centre;
- ICGP Library;
- ICGP Website / Distance Learning;
- GP IT Group;
- Data Protection / Freedom of Information.

BARRIERS TO RESEARCH

1) **Scarcity of research capacity.**
   There is considerable variation in the research capacity of each primary care discipline. Primary care research in all disciplines is characterised by the commitment of a small number of enthusiasts. The failure to recruit and retain gifted individuals is due in large part to the lack of role models, effective training and often insecure career structures.

2) **Deficiency of research skills**
   Many existing primary care research staff from all disciplines have not enjoyed high level of research training in a centre of excellence and their methodological expertise is sometimes inadequate; there has been a failure to select and apply rigorously methodologies appropriate to a primary care perspective. There is a lack of skills in proposal writing and a lack of research culture in general in Ireland.

3) **The reasons most frequently cited as limiting primary care research quality are:**
   - lack of research leadership;
   - inadequate protected time to do research;
   - lack of research training and access to skills of other disciplines and professional groups;
   - lack of career training pathways

4) **Primary care research is primarily based in the university departments.**
   There is a need to combine resources in order to increase the capacity for research and to improve our access to national and international research funding.

5) **Up to now primary care research in Ireland has had a deficit of funding.**

OBJECTIVES

1. **Appointment of Research Director.**
   Following meetings between Dr. Michael Boland, Prof. Tom O'Dowd, and Dr Velma Harkins, and Dr Tony Holohan and Fergal Goodman of the Department of Health and Children, funding was secured to allow the appointment of a Research Director who will be at the disposal of primary care researchers. The Research Director will be able to provide statistical advice and advice in proposal writing to those undertaking research, as well as to oversee the development of research training.

2. **Development of a National Clearing House.**
   A national clearing house should be developed which would list all projects being undertaken nationally, so that researchers could liase with the clearing house before engaging in research themselves. There could be a role for research director in co-ordinating the national clearing house.

3. **Allocation of Seed Funding for Primary Care Research.**
   The funding which had been released by the foundation towards the position of research director should be allocated for seed funding for primary care research. This could be used in order to

increase the number of practices involved in research, which is currently minimal, to promote the culture of research and to be used as building block as part of primary care research networks. Seed funding could be allocated as follows:
- €500 given for a good proposed research idea.
- €5000 given for the development of the project, using the resources of the research director and the College.

4. **Closer liaison with EGPRW** and involvement with Brisbane International Initiative on postgraduate training, particularly with the college providing a module for MSc / PhD.

5. **Training**
   Current level of training in primary care research in Ireland, outside of the universities is minimal. A training module in research methods needs to be developed for trainees, trainers and general practitioners outside of teaching practices, who are interested in developing a research capacity. The research director would be involved in developing this module, as part of his role in developing research skills within general practice.

6. **Establishment of All-Ireland School of General Practice Research**
   This would be on a similar basis to the Schools of Primary Care Research (SPCRs) that have been set up in countries such as Scotland, England, Netherlands and Sweden. It would be collaboration between the university departments and the ICGP in order to organise research methods courses, train research degree supervisors, and provide degree supervisors for each other's GP researchers or students.

7. **Development of an Irish Primary Care Research Network.**
   Primary Care Research Support Networks (PCRSNs) have been developed in some countries such as the UK, USA, Australia, and Israel. These bring together doctors in the same area who wish to develop research. Activities of PCRSNs include education and project discussion meetings, mentor schemes, collaborative projects, keeping a database of projects, members, and publications, sharing facilities for poster printing, presentation technology support, statistics and electronic access to literature.

8. **Modification of Research Weekend**
   The poor attendances at the national research weekends reflect the lack of research being carried out in general practice. In view of this, and in order to promote research collaboration between the AUDGPI and the ICGP, the option of combining the AUDGPI annual scientific meeting and the ICGP research weekends have been discussed with that body. It has been suggested that the present one-day AUDGPI meeting could be preceded by a day of developmental workshops relating to research. The next ICGP research weekend is due for autumn 2003; it has been suggested that this could be combined with the AUDGPI scientific meeting due in Belfast in March 2004.

9. **Relationship with Department of Health and Children.**
   We would hope to develop a good working relationship with the DoHC and the Primary Care Task Force and to continue to pursue funding for relevant projects.

RESEARCH NETWORK

The primary aims of an Irish General Practice Research Network would be to:
- help the development of research practices;
- involve a greater number of general practitioners in practical research in the community;

- provide a high quality resource to stimulate primary care research and support the research as it occurs;
- safeguard consistency and quality across the country, so that irrespective of where the practitioner is situated, help and support would be available.

Table 1

Dimensions of Research In Primary Care: Potential Configurations			
	Location of research centre	**Background of those conducting research**	**Location of research fieldwork**
1. Research in primary care	Any academic unit	Any background, including secondary care, primary care, public health and social science	Primary care settings
2. Research answering questions of interest to primary care practitioners	An academic department of primary care, but may be in any academic unit including general practice	Primary care, but may include other backgrounds including social science, public health and secondary health	Primary care settings, but may include other settings (e.g. secondary or social care)
3. Research by primary care practitioners	General practice, but may be based in an academic department of primary care	Primary care	Primary care settings, but may include other settings (e.g. secondary or social care)

CHARACTERISTICS OF A NETWORK

There is little agreement on what constitutes a network, however Frances *et al,* (1991) suggested that four features that distinguish networks are:

A flat organisational form A flat organisational form distinguishes networks from other ways of organising social or economic activity such as a vertical or hierarchical form. A flat organisational form refers to the small number of tiers between the top and bottom of an organisation (in this case the network).

Informal relations between individuals and agencies Informality presumes that relations between members within the network are equal, which can give rise to collegiate-style relations as manifested in professional organisations. The informality might also mean that networks are run co-operatively or, at least, with minimal bureaucracy. This helps to generate mutuality and reciprocity among members.

A common ethos and outlook In order to bind the informal relations between members, networks require a common ethos and outlook amongst its members. This ethos may not always be explicit and it may be placed under strain as the size of the network increases, thereby making co-ordination difficult.

Trust & co-operation Related to the network's ethos is the necessity for trust and co-operation between members. As these relations are only informal, trust and loyalty become critically important to the functioning of the network. Thus, the construction and maintenance of such trust becomes essential.

MODELS OF NETWORKS

In their 1997 report, Evans *et al,* identified four models of primary care research networks which they designated as:

- the crystal model,
- the carousel model,
- the orbital model,
- the bicycle wheel model.

These models are idealised versions, designed to highlight key aspects of organisation within the network, Networks may conform more or less closely to the models or may be a combination of more than one model. Examples of the typology of these models identified by Evans *et al*, are shown on Table 2

Table 2 **TYPOLOGY PRIMARY CARE RESEARCH NETWORKS**

Type	**Key Functions**	**Management Style**	**Co-ordination**	**Centre / Periphery Relations**	**Degree of Formality**	**Resource Intensity (cost per member)**
Crystal	Mutual Support	Informal / collective	Shared within membership	Interactive	Low	Low
Carousel	Promoting practitioner research	Member's steering group	Central co-ordination with collaborating units	Interactive & linear	Medium	Medium to high
Orbital	Promoting practitioner research; high quality research **in** primary care	Executive	Central co-ordination with satellite units	Linear & interactive	High	High
Bicycle Wheel	High quality research **in** primary care	Executive	Central co-ordination	Linear	High	Low to medium

ALL IRELAND SCHOOL OF GENERAL PRACTICE

In other countries, schools of primary care research (SPCRs) have proved to be a cost-efficient way of concentrating expertise and running courses and it would be envisaged that an All-Ireland school of general practice research would also help in developing collaborative projects, and/or ongoing research programmes. In the countries where they have been set up, SPCRs have been found to be most helpful for universities with small GP departments, and in sparsely populated areas where there may be difficulties in supporting candidates for higher degrees in research. A high proportion of primary care professionals and practices involved in research networks are also engaged in undergraduate and postgraduate teaching. This is a strength, which could be exploited here for the effective dissemination of research and the cost-effective provision of academic infrastructure.

Dr. Frank Dobbs and the EGPRW are hoping to set up European groups for SPCRs and for PCRSNs in order to encourage their activities and we have liaised with Dr Dobbs regarding setting up such activities in Ireland. The college has had discussions with Prof. Andrew Murphy and Prof. Tom O'Dowd regarding the collaboration of the AUDGPI and the ICGP in an all-Ireland school.

Model for All-Ireland Virtual School of General Practice

- A "Virtual" School - a school without walls
- Directorate - facilitation and co-ordination
- Primary care researchers working together in similar areas
- Partnerships between Primary Care Research Networks, DoHC, Research Practices, Universities, HRB

RECOMMENDATIONS FOR PRIMARY CARE RESEARCH IN IRELAND

CURRENT:

- **Combine money for prizes.**

- **Develop Model M.Sc. with proposed All-Ireland School of General Practice.**

- **Possible international student exchange.**

- **Gradual expansion of primary care research.**
  There are very few individuals with excellent research skills at senior level. Such individuals are extremely vulnerable to being over-stretched as supervisors and mentors if expansion is too fast. A controlled programme of gradual expansion over 5-10 years is appropriate.

- **Development of a journal of record.**
  It was felt that there is a lack of suitable journals in which members can publish research. This is perceived as a disincentive to research as there is considerable difficulty in being published in international peer review journals. The format of a journal of record could be an e-journal.

DIRECTIONS FOR THE FUTURE:

- **Look at Scottish Models**

- **Develop support for Research Networks**

- **Develop a network of a large number of general practices involved in research, which will become a research network.**

- **Develop the position of research director using the recommendations in this report.**

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