Medical Student to General Practitioner
An urgent call to action

From the Association of University Departments of General Practice in Ireland and Irish College of General Practitioners

AUDGPI
Association of University Departments of General Practice in Ireland

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About ICGP

The Irish College General Practitioners (ICGP) is the professional body for General Practice in Ireland. The College was founded in 1984 and is based in Lincoln Place, Dublin 2. The College's primary aim is to serve the patient and the general practitioner by encouraging and maintaining the highest standards of general medical practice. It is the representative organisation on education, training, and standards in general practice.

About AUDGPI

The Association of University Department of General Practice in Ireland (AUDGPI) is a national organisation representing academics and clinicians in primary care in Ireland. Established in 1997 to promote excellence in academic general practice and supported by the then six academic departments of general practice in the Republic of Ireland and Northern Ireland, and now inclusive of the new Medical School in Ulster University. AUDGPI aims to support the development of teaching and research within Irish academic general practice and primary care for the benefit of patients, practitioners, educators, and researchers in Ireland.

Acknowledgements

The working group gratefully acknowledges all those consulted during the writing of this report including, but not limited to; Professor Val Wass OBE, Professor Frank Sullivan, Professor Christian Mallen, international GP Training Programmes and Medical Schools (listed Appendix 4); those who contributed to or advised on sections of this report: Professor Nigel Hart, Professor Liam Glynn, Professor Raymond O'Connor, Dr Austin O'Carroll, Dr Tony Foley; Dr Gozie Offiah, those who completed surveys; Training Scheme Programme Directors, Trainers, and University GP staff and those who provided feedback on the report including medical students and GP Training Taskforce Advisory Group.

Thanks to ICGP Research, Policy & Information Department staff, Emma Smith, Patricia Patton and Gillian Doran for their assistance.

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Consultant in Anaesthesia and Intensive Care,

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Honorary Personal Professor in Anaesthesia, University of Galway,

Medical Director, National Doctors Training and Planning.

Preface

It is with great pleasure that I present this report developed jointly, by the Association of University Departments of General Practice in Ireland (AUDGPI) and the Irish College of General Practitioners (ICGP), to address the pressing issue of the GP workforce crisis in Ireland. Our healthcare system is facing a severe shortage of General Practitioners, causing significant challenges in providing timely and high-quality care to patients. This report represents a major step forward in the education and development of future General Practitioners in Ireland. It is the result of a year-long collaboration between the AUDGPI and the ICGP, and is informed by an extensive examination of the current situation in Ireland, peer-reviewed literature and international practices.

The report is a forward-thinking and ambitious approach to GP education. It presents a unified view of how the Medical School Departments of GP and the ICGP National GP Training Program can work together to increase the number of medical school graduates choosing to become GPs and meet the needs of patients and communities. It emphasizes the importance of viewing GP education as a continuum, from medical school to qualified GP in practice, and highlights the need for critical action at several points along the continuum. One of the key messages of the report is the need for a national funding model to support undergraduate general practice placements for medical students in all medical schools. The report also highlights the importance of developing a strong clinical academic training pathway for Irish General Practice to support the academic arm of GP and improve the quality of patient care.

Importantly, the report aligns with national health strategies and the future direction of healthcare set out in Sláintecare. It builds on the strategic vision described by the ICGP discussion paper 'Shaping the Future of General Practice'. Furthermore, it supports the National Doctors Training & Planning strategic objectives of training being needs-based and promotes alignment between different stages of GP education.

The report will require significant investment, resources and support to be enacted. A high-level implementation group will be set up to guide the process and engage with key stakeholders. The recommendations of this report have the potential to make a significant positive impact on patient care. I strongly believe this report will serve as a catalyst for positive change in the GP workforce crisis in Ireland and contribute to safeguarding high-quality, evidence-based patient care. I look forward to working with the relevant stakeholders in the implementation of the report recommendations. Finally, I would like to express my gratitude to the members of the AUDGPI and ICGP working group for their hard work and dedication in bringing this report to fruition.

Sincerely,

Professor Brian Kinirons

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Consultant in Anaesthesia and Intensive Care,

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Honorary Personal Professor in Anaesthesia, University of Galway,

Medical Director, National Doctors Training and Planning.

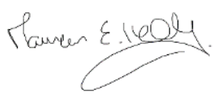
Letter of Introduction

Ireland is experiencing a considerable crisis in the recruitment and retention of GPs, threatening timely access to high quality health care, in the community, for patients and their families. The reasons for this crisis are complex and multifactorial, and demand innovative, multi-faceted action. Recent publications by the Irish College of General Practitioners (ICGP) and others clearly set out short, medium and long term strategies to address the general practice workforce and workload challenges. One of the key priorities is the need to train more General Practitioners. Our report ***"Medical Student to General Practitioner- An urgent call to action"*** brings another important perspective to addressing the problem. It specifically explores the contribution that more formal and structured collaboration between the ICGP National Specialist Training Programme in GP and Medical School Departments of GP, can make towards addressing the GP workforce crisis, and safeguarding high quality, evidence based, patient care in Ireland.

The report was developed collaboratively. In December 2021, the Association of University Departments of General Practice in Ireland (AUDGPI) and ICGP, established a joint working group to **'explore a more formal and structured collaboration between the ICGP Specialist Training Programme in General Practice and Medical School Departments of General Practice"** (AUDGPI 2021). **The remit of the working group** was to produce a report with a series of recommendations for meaningful collaboration between Irish post-graduate GP specialist training and undergraduate medical school GP education, across a wide breadth of domains: education, clinical placements, research, academic training, and wider contribution. **The process of the working group** entailed regular meetings from January 2022 to February 2023. The working group reported regularly to the Executive of the AUDGPI and the GP Training Taskforce Advisory Group of the ICGP and offered opportunities for both of these committees to feed into the development of the report.

The **ultimate aim** of enhanced collaboration is to positively impact on the delivery of timely, high quality, evidence based, holistic and compassionate GP care to patients, their families, carers and communities in which they live. In order to provide this care we need to attract sufficient numbers of high calibre medical school graduates to enter GP specialist training, where they will develop the skills and capacity to lead and evolve Irish GP to meet the current and future health needs of our diverse community of patients. It is essential that sufficient capacity be developed in academic GP, to ensure that GP is a leading, innovative, research, education and evidence informed clinical speciality.

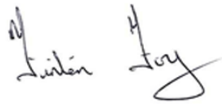
We are pleased to present our report outlining 14 clear recommendations that target action at specific points along the continuum of GP education from medical student, through to intern, GP trainee and GP registrar, including clinical academic training. We are grateful to the many individuals and organisations whom we consulted, and those who contributed to the write up of this report. We particularly want to acknowledge and thank our colleagues on the working group, for their dedication and hard work over the past year to bring this comprehensive report to fruition.



Dr. Maureen E Kelly

Chair of Working Group

Associate Professor, Discipline of General Practice, School of Medicine, University of Galway



Mr Fintan Foy

Chief Executive Officer, Irish College of General Practitioners

Working Group Biographies

Dr. Maureen Kelly PhD, MICGP, FRCGP, M Med Ed., MB, BCH, BAO, DCH, DObs

Maureen is Associate Professor and Lead of Undergraduate General Practice teaching in the School of Medicine, University of Galway. She has extensive experience in undergraduate GP education and faculty development of GP teachers. She served as Assistant Programme Director of the Western GP Training Scheme for almost 20 years, where she had a special interest in the professional development and mentorship of GP trainees and building GP research capacity. From 2017-2021 she served as Vice Dean for Civic Engagement, in the College of Medicine, Nursing and Health Sciences, University of Galway and spear headed the first multi-professional civic engagement committee and programme of work. Her other areas of expertise include selection and recruitment of medical students and widening participation in health professions education. She sits on the national executive of the Association of University Departments of GP in Ireland, and the ICGP GP Training Taskforce Advisory Group.

Mr Fintan Foy, Chief Executive Officer, Irish College of General Practitioners (ICGP)

Fintan joined the ICGP as Chief Executive Officer in February 2017. In his 6 years as CEO, the College has taken on full oversight and responsibility for GP training from the HSE. Fintan has overseen significant changes to College governance in addition to structural and development changes at management level throughout the College. Prior to his current role, he was Chief Executive Officer of the College of Anaesthetists of Ireland. Previously, he worked for 18 years in the Royal College of Surgeons in Ireland where he held a number of senior management roles at both undergraduate and postgraduate levels. Fintan was Chairman of the International Medical Graduate Training Committee, of the Forum of Postgraduate Training from 2013 –2016 and Secretary to the Forum from 2015-17. He is a government appointed nominee to the Council of the Pharmaceutical Society of Ireland, and Board Member, and Company Secretary of Polio Survivors of Ireland.

Professor Patrick Redmond MB BCh BAO PhD MMEd MRCPI MICGP FRACGP LFOM FHEA HDip(FM) PG Dip(Statistics)

Patrick is a General Practitioner and Associate Professor in General Practice, in the Royal College of Surgeons Ireland (RCSI), University of Medicine and Health Sciences. Patrick previously worked as a clinical academic in Ireland, Australia, and the UK. He graduated in Ireland and then completed a PhD as part of the Health Research Board PhD Scholars Programme. He worked at The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, the University of Western Australia, and at King's College London. He leads a programme of work to better understand patients' cancer journey from diagnosis to survivorship, while improving outcomes and reducing healthcare costs.

Professor Walter Cullen MB, MD, MICGP, HDip (T&L), FFSEM(RCSI), FRCGP

Walter is Professor of Urban General Practice and Director of Quality at University College Dublin (UCD) School of Medicine. He graduated from Eastern Regional Vocational Training Programme in General Practice and since then, has worked in clinical academic roles at UCD and University of Limerick. He was Foundation Professor of General Practice at UL (2009-14) before taking up his current position at UCD School of Medicine. In this role, he is Head of Subject (Academic General Practice) and works as a General Practitioner in Dublin's North East Inner City. Promoting the vertical integration of General Practice teaching, learning and research by strengthening links between medical schools and general practice training is, for him, a key objective

Mr Brian O'Malley, MA, MSc

Brian is Executive Director of Training and Assessment for ICGP. He joined the College in January 2021, having worked for the previous 5 years with its international partner, iheed. In that role he helped establish the College's overseas training programmes, in Malaysia and the Middle East. As Project Lead for the GP Training Transfer project, Brian has led the negotiation of the Transfer Agreement with the HSE. Since then, in the role of Executive Director for Training and Assessment he has built the College's capacity in digital systems for learning and assessment, including MICGP exams, and the rollout of blended learning.

Dr. Martin Rouse MB MRCGP MICGP

Martin was appointed National Director of GP Training ICGP in 2021. Martin has incorporated his interest in Medical Education throughout his career in General Practice. He was originally appointed as CME tutor to the Waterford Faculty in the 80's. He was later involved in the establishment of the South East GP Training Scheme and held the post of Programme Director. Having served on numerous college committees and is a member of the IMO and National Association of Program Directors he has a wide knowledge of the day to day operation of training throughout the country. A member of a five doctor partnership in Clonmel, two of whom are trainers, he is very aware of the challenges trainers face on a daily basis and in particular over the past year. A foundation member of both ICGP and IMO he is hugely optimistic for the future of GP training in Ireland in the context of the transfer of overall responsibility for training to the College.

Dr Diarmuid Quinlan: MB, BCh, BAO, BSc, MICGP, FRCGP, DCH, DFFP, DipPractDerm, LLM

Diarmuid is a GP in practice in Glanmire Cork. He is the Medical Director of the Irish College of General Practitioners. He is on the board of the Health Products Regulatory Authority, Ireland. He is passionate about quality improvement and patient safety. He worked on the clinical risk management team of a leading medical indemnity organisation. He was the HSE ICGP Clinical Lead for Diabetes prior to the medical director role. He has a longstanding interest in medical education, and is an undergraduate tutor in University College Cork School of Medicine, postgraduate tutor in Cardiff University (Dermatology) and Warwick University (Diabetes). He won the ICGP Quality and Safety award in 2013 with a methotrexate safety initiative, and in 2018 for an Atrial Fibrillation screening initiative.

Executive Summary and Summary of Recommendations

1 It is widely accepted internationally, that General Practice (GP) is the backbone of effective and efficient health care service. The demands on GP have escalated significantly in the past two decades. Globally, there is a pressing shortage of General Practitioners (GPs) to adequately meet the needs of patients in primary care. Ireland is currently experiencing a severe GP workforce shortage and workload crisis that is negatively affecting the provision of timely, high-quality care to patients, their families, and the communities in which they live.

2 In order to address this crisis, bold, innovative action is urgently required. Ireland needs to recruit, train, and retain more GPs. In doing so, we need to maintain the highest possible standard of GP clinical care to patients and their families. This is a highly complex demand and requires concerted effort, inter-organisational collaboration, and a multi-faceted approach. Several GP publications and representations to government have been made by GP organisations, that identify contributing factors to the workforce problem in Irish general practice, highlight areas where appropriate action can be taken, and make the case for an urgent response. Most recently, the ICGP ***'Shaping the Future'*** (ICGP 2022b) discussion paper has urged that a government working group on the future of GP, be established as a matter of priority.

3 This report ***"Medical Student to General Practitioner - An urgent call to action"*** is a joint call to action from the Association of University Departments of General Practice in Ireland (AUDGPI) and the Irish College of General Practitioners (ICGP). It specifically explores the contribution that more formal and structured collaboration between the ICGP National Specialist Training Programme in GP and Medical School Departments of GP[1], can make towards addressing the GP workforce crisis, and safeguarding high-quality, evidence-based, patient care in Ireland.

4 It is a **unique strength of this report** that it represents, for the first time, a unified view from the entire academic GP community, the ICGP and the postgraduate specialist GP Training Programme in Ireland. The report consists of five chapters.

5 **Chapter 1** explores the background and rationale for this report, sets out the report aims and objectives and describes how this report was compiled. A 2018 Department of Health capacity review calculated a required increase in primary care workforce of up to 48%, by 2025 (Department of Health 2018). To illustrate what this means practically for patients, in Feb 2022 there were 26 GP panels left vacant around the country. Of these, 13 GP posts (serving a population of 17,000 people) were left unfilled for more than a year (Carswell 2022). Remote and underprivileged communities are hardest hit.

6 **Chapter 2** describes the current model of GP teaching in Irish medical schools, GP Specialist training, GP Internship and presents comparative international experience. There are several examples of existing very good collaborations between GP training schemes and University Departments of GP. However, for the most part, these occur in an informal manner, and are often dependent on the enthusiasm and motivation of single individuals, severely limiting their impact, scalability, and sustainability. By international comparison, opportunities for GP trainees in Ireland to become involved in the teaching and clinical supervision of medical students, and opportunities for GP intern placements, are very limited.

[1] The term Medical School Departments of General Practice is used for simplicity throughout this report, to refer to academic units within medical schools that conduct research and education in the field of General Practice (GP). However, not all medical schools have a departmental structure. General Practice, as a discipline, can exist as standalone units (e.g., Departments) or it may be integrated (e.g., with Epidemiology or Primary Care). This report refers to Academic General Practice in Medical Schools, in its totality, as Departments of General Practice.

7 **Education and Training** - A key response to the Irish GP workforce crisis has been the expansion of GP training places. It is critical that there is continued support to strengthen, and ensure the further development of, local GP Schemes aligned to regions under the ICGP National Training Programme. In keeping with the Programme for Government (Department of the Taoiseach 2020) the number of GP training places rose from 208 places in 2020, to 285 in 2023, and a projected 351 in 2026. It is imperative that these expanded places are filled by suitably qualified medical school graduates.

Recent research indicates that there is a significant difference between Irish medical schools, in the rate of EU medical student graduates applying for a career in GP, ranging from 25-55% (Murphy AW et al 2022). The reasons for this are not fully understood but given the urgency in the GP workforce crisis, clearly steps need to be taken to address this discrepancy. There is systematic research evidence that the duration and quality of GP experience at undergraduate level, particularly the GP clinical placement, is associated with medical graduates' likelihood of choosing a career in GP (Alberti et al 2017, Amin et al 2018, Davison et al 2020, Marchand & Peckham 2017). Securing sufficient high quality GP clinical placements for medical students, ensuring GP is more visible in the undergraduate curriculum, and providing opportunities for GP trainees / registrars and interns to be more visible to medical students are key priorities in tackling the GP workforce crisis in Ireland.

Chapter 3 makes **six** ambitious recommendations that will ensure that medical students have a high level of exposure to GP and doctors in GP training, at every stage along the GP education continuum from medical school applicant to medical student, GP Intern, GP Trainee (year 1-2), GP Registrar (Years 3-4) through to qualified GP (see recommendations 1-6, page 39).

9 **The implementation of this report** is discussed in **Chapter 5**. The identification, quantification and ring-fencing of robust resources, funding and supports to promote education and training in general practice along the career trajectory from medical student through to GP Intern, GP Registrar and ICGP Member, with academic career pathways, is essential to the success of these recommendations. Further, it is acknowledged that the recommendations for funding and implementation in this report should align with the wider discussions on the future of general practice by stakeholders such as ICGP, IMO, AUDGPI, Medical Council Department of Health, HSE, Medical Schools Council, Higher Education Authority and others. In particular we are informed by "Shaping the Future of General Practice", which outlines key solutions to the growing shortage of GPs in Ireland. **Chapter 5** makes two further strategic and structural recommendations. Recommendations 13-14, page 66.

8 **Research and Clinical Academic Training Pathway**- Research capacity in Irish General Practice has grown significantly since the publication of the sentinel Mant report (HRB 2006). Academic GP is now leading education and research initiatives that have national and international impact. The future of Irish general practice requires a strong evidence base, that is rooted in the reality of Irish general practice; designed and conducted by highly skilled and sufficiently resourced academic GPs and primary care scientists; and translated into the clinical care provided to our patients and their communities. However, the pathway for Academic GP Training remains severely underdeveloped. This limits the potential for GP research to impact positively on patient care and presents a barrier to GP registrars who may be interested in developing their research skills and pursuing a career in Academic General Practice. It is also a disincentive to bright ambitious medical students, who see clinical academic research training as a marker of esteem for a discipline.

Chapter 4 makes **six** innovative recommendations to build a national structured clinical academic training pathway for GP (see recommendations 7-12, page 57).

10 **The impact of this report** lies in the effective and timely enactment of the report recommendations. These recommendations will:

- **Promote General Practice as a positive career choice** amongst medical students by enhancing opportunities for shared teaching, learning, assessment, role modelling, and contribution to the GP and patient communities, across the spectrum from medical student to GP intern, GP trainee and GP registrar. (Chapter 3 recommendations).
- **Provide a streamlined and defined academic career training pathway** for GP, and incorporate opportunities for GP trainees, registrars, and recent graduates to gain more exposure to academic GP- inclusive of education and research domains (Chapter 4 recommendations).
- **Build synergies and efficiencies** based on closer working arrangements and mutual areas of interest, in education and research, between postgraduate GP Programme and Scheme Directing staff, faculty in the Medical Schools Departments of General Practice, GP Trainers and GPs who take medical students. (Chapter 5 recommendations).
- **Promote the retention of trained GPs:** by providing enhanced career opportunities for GPs, this will encourage GPs to stay in practice as they can also engage in a range of other professional activities.
- **Enable the effective implementation of health policy in Ireland:** by supporting Sláintecare population health planning, Regional Health Authority alignment and linkages between ICGP, medical schools and healthcare structures regionally / locally.

Report Recommendations

1	Develop and implement a national funding model that supports the hosting and delivery of undergraduate general practice placements for medical students in all medical schools
2	Expand GP Intern places nationally, increasing incrementally and monitoring for evidence of impact
3	Establish 'GP Hubs' affiliated with each Medical School Department of GP, and local GP Training Scheme
4	Encourage all GP trainees to be involved in the education of medical students – via the formal and informal medical curricula
5	Establish an optional 'Rotation in Academic General Practice- Teaching and Scholarship' for GP trainees during hospital training
6	Create 1-2 Professor / Senior Academic posts in GP Education in each medical school
7	Provide GP research experience at undergraduate level through intercalated degrees (BSc, MSc, PhD) and research electives
8	Promote Academic Internships in General Practice
9	Develop and resource a structured GP Specialist Training – Academic Pathway
10	Actively support promotion of the ICAT programme for GP trainees.
11	Develop post specialist training opportunities for GPs to develop an academic career
12	Consolidation and expansion in GP Clinical Academic appointments at all levels
13	Align regional Training Schemes with medical schools, with the establishment of a structured framework to support collaboration and maximise synergies between Medical Schools and postgraduate GP Training
14	Establish a high-level implementation working group, representative of relevant stakeholders, with responsibility for enacting the report recommendations

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Chapter 1

Introduction

"We must continuously emphasise... that the ultimate beneficiaries of this improved educational experience are not ourselves but our patients – the people who matter most."

Dr John Mason

This chapter will:

1. Describe the rationale for change.
2. Set out the aims and objectives of this report.
3. Describe how this report was compiled.

1.1 Rationale for Change

Workforce - Primary care is the corner stone of sustainable, effective, efficient, and affordable health care systems (Macinko et al 2003, Starfield 1998, WHO 2018). To function optimally healthcare systems, require a highly trained and skilled GP workforce. Over the past two decades, due to a variety of well documented factors (Box 1.1) GP is under increasing pressure, and now the world is facing a global shortfall in the number of GPs required to adequately meet patients' healthcare needs (OECD 2021).

Box 1.1 Factors contributing to GP workforce pressures in Ireland and worldwide

- Increasing population growth
- Aging patient population
- Increased patient multi-morbidity, complex multi-morbidity, and polypharmacy
- Policy shift towards primary care with more complex conditions and chronic illnesses being managed in the community.
- Aging GP workforce with significant numbers facing retirement.
- Reduced numbers of medical school graduates opting for a career in General Practice
- Desire for more family friendly, flexible and portfolio working arrangements by more recently qualified GPs and GPs in training.
- Low morale and burnout
- COVID-19 workload: vaccination and COVID related illness
- Additional workload arising from involvement in the prevention of chronic conditions by helping patients to address risk factors.

Ireland is no exception to this worldwide shortage of GPs. We are currently experiencing a considerable crisis in the recruitment and retention of GPs, and predictions of the extent of this problem are bleak. Sláintecare (Committee on the Future of Healthcare 2017) reforms are reorienting our health services towards primary care in the community, and this shift in care demands an increased and expanded GP workforce. In 2015 it was estimated, that by 2025 the shortage of GPs could be as high as 1,380 – against a total workforce at the time of 3,923 (a 35% increase) (McGovern & Morris 2015). A 2018 Department of Health capacity review calculated a required increase in primary care workforce of up to 48%, by 2025 (Department of Health 2018). Whilst the figures are stark, the real negative effect of insufficient GP workforce is experienced directly by patients and across the wider healthcare ecosystem. In Feb 2022 there were 26 GP panels left vacant around the country, of these 13 GP posts were left unfilled for more than a year (Carswell 2022). These unfilled posts served a General Medical Card Services population of over 17,000 people. Remote and underprivileged communities are hardest hit- for example Achill Island has been relying on locum GP services for over a year, at a cost to the HSE of more than a quarter of a million euro annually, and a personal cost to patients from the lack of continuity of their medical care provider (McGovern 2022). Simply put In Ireland ***"We need more GPs: train, retain and recruit"*** (ICGP 2022a)

Addressing the workforce crisis is a highly complex demand and requires concerted effort, inter-organisational collaboration, and a multi-faceted approach. One systematic review concluded that the factors that influence recruitment to, and retention in GP, are multiple, complex, and idiosyncratic (Marchand & Peckham 2017). Accordingly, solutions need to be innovative, targeting several identified trigger points along the career trajectory of a GP. Internationally health services organisations and governments are taking bold steps. For example, the UK government set a target of 50% of all medical school graduates choosing a career in GP (Department of Health UK 2015). In Canada, the College of Family Physicians of Canada set a target of 40% of medical students selecting family medicine as their first choice, by 2017 (Bosco et al 2016), while Scottish Medical Schools are working to increase the percentage of teaching that takes place in general practice to 25% of the medical curriculum (Gilles, J., 2019).

In Ireland, there is increasing urgency to act and there have been calls for a government working group to be established, most recently in the ICGP ***Shaping the Future*** discussion paper (ICGP 2022 b). This, and several other publications set out short, medium, and long-term strategies to address the GP workforce crisis (Quinlan 2021, ICGP 2022(a), IMO 2017). In addition to increasing the numbers of GPs we train, the proposed strategies are wide ranging from upgrading the physical infrastructure, to broadening the primary care team and improving real time data analytics.

This joint AUDGPI / ICGP report was specifically commissioned to explore the contribution that more formal and structured collaboration between the ICGP Specialist Training Programme in GP and Medical School Departments of GP, can make towards addressing the GP workforce crisis and safeguarding high quality, evidence based, patient care in Ireland.

Education and Training - There is systematic research evidence that the duration and quality of GP experience at undergraduate level, particularly the GP clinical placement, is associated with medical graduates' likelihood of choosing a career in GP (Alberti et al 2017, Amin et al 2018, Davison et al 2020, Marchand & Peckham 2017). Recent research indicates that there is a significant difference between Irish medical schools, in the rate of EU medical student graduates applying for a career in GP (Murphy AW et al 2022). Between 2017-2021 inclusive, the average annual percentage of EU graduates applying to the national GP Training Program (n=1,302) ranged from 25-55% for each of the six Irish medical schools - a 2.2 fold difference. The reasons for this are not fully understood but given the urgency in the GP workforce crisis, clearly steps need to be taken to address this discrepancy. Enhanced collaboration between the ICGP Specialist Training Programme in General Practice and Departments of GP in Medical Schools is one action that can help to address this problem. A landmark UK report "By Choice not by Chance" (Wass et al 2016) explicitly calls for stronger collaboration, recommending that the UK counterparts of the ICGP and AUDGPI "should work more closely to link into medical schools"-. It concluded that: "Collaboration is absolutely essential to raise the profile and future vision of general practice".

Securing sufficient high quality GP clinical placements for medical students is a **key priority** in tackling the GP workforce crisis. This presents a challenge for Departments of GP, as Medical Schools have to separately establish and fund clinical placements in General Practice. By contrast, in the UK, a tariff system of funding medical student education provides for parity of funding for teaching in the GP setting with teaching in the secondary care setting (Rosenthal et al 2022). This funding puts GP education in UK medical schools on a firm footing and enables the delivery of high-quality GP clinical experience for medical students. The lack of funding to support GP placements in Irish medical schools presents a significant barrier. The ICGP take-over of GP training in 2021 has been aligned with welcome and long overdue expansion of the number of GP training places. Currently there are 938 GP trainees on the Irish College of General Practitioners (ICGP) National Specialist Training Programme in GP. The annual intake in 2022 was 258, and this is set to increase to 350 trainees in 2026. It is essential that these GP training places are filled with suitable candidates, who are enthusiastic and motivated about general practice. The expansion in training places, inevitably leads to further demand for GP training practices and GP trainers, who must be adequately resourced and supported to meet these challenges.

"Shaping the Future" (ICGP 2022) specifically states, "We must build a diverse and inclusive workforce that is representative of the communities we wish to serve". There is international evidence that widening diversity in the medical school intake (i.e., increasing the numbers of places for entrants from ethnic minorities, socially disadvantaged backgrounds, and other non-traditional categories) positively influences the proportion of graduates who choose a career in GP and who opt to work in socially deprived and rural areas (Lowe 2019). There is a significant opportunity for Departments of GP and the ICGP National GP training programme to work collaboratively to motivate and encourage future medical school applicants, particularly from this cohort. It is imperative that Departments of GP and the ICGP work collaboratively and view **GP education as a continuum** from medical school applicant to medical student, GP Intern, GP trainee (year 1-2), GP registrar (Years 3-4) thorough to qualified GP. This report recommends how this can be achieved (see Chapter 3).

Research and Clinical Academic Training Pathway- Research capacity in Irish General Practice has grown significantly since the publication of the sentinel Mant report (HRB 2006). Academic GP is now leading education and research initiatives that have national and international impact. The future of Irish general practice requires a strong evidence base, that is rooted in the reality of Irish general practice; designed and conducted by highly skilled academic GPs, lecturers, researchers, and data managers; and translated into the clinical care provided to our patients and their communities. However, the pathway for Academic GP Training remains underdeveloped, and this presents a barrier to GP registrars who may be interested in developing their research skills and pursuing a career in Academic General Practice. The Wass Report (2016) also identified that medical students recognise that GP does not offer a structured academic career pathway, that there are fewer research opportunities in GP as compared with secondary care specialities and this is a significant disincentive to GP as a career choice. The Wass Report stressed the importance of resourcing, supporting, and publicising, the development of clear academic training pathways and the promotion of a strong Academic GP to compliment GP clinical care. This report proposes a new structured clinical academic training pathway (see Chapter 4).

The timing of this report is critical. Several elements currently align that will support the delivery of this report's recommendations.

1

The recent transfer of responsibility for General Practice (GP) training from the Health Service Executive (HSE) to the ICGP creates significant opportunities for change. The new model of GP Training (ICGP 2019) (described in Chapter 2) will allow for more flexibility and broader scope of experiences for GP trainees.

2

Experiences from the Covid-19 pandemic have demonstrated how inter-institutional collaborations, between the ICGP and University Departments of GP can operate very successfully (Clyne et al 2022).

3

There is a growing appreciation that in order to meet the WHO standard of ethical recruitment in healthcare workforce, Ireland has an obligation to be self-sufficient in its medical workforce (HSE NDTP 2022). This places a collective social responsibility on Irish Medical Schools, and postgraduate GP training, to produce sufficient GPs to meet the health needs of the population.

1.2 Aims and objectives of report

The aim of this report is to positively impact on the delivery of timely, high quality, evidence based, holistic and compassionate GP care to patients, their families, carers and communities in which they live. The objectives of this report are to:

1.

Provide an evidence-based rationale for closer collaboration between Departments of General Practice in the Medical Schools and the ICGP Specialist Training Programme in General practice, highlighting the potential to positively impact on future career choice of medical students for a career in GP and increased applications to GP training

2.

Describe ways to collaborate in the education of medical students, interns, GP trainees and GP registrars

3.

Recommend ways to enhance and expand GP clinical academic training pathways and support the attainment of higher research degrees in General Practice

4.

Identify, address, and resolve barriers and challenges and make recommendations for the implementation of this report.

1.3 How this report was compiled

The report was developed over fourteen monthly meetings of the Working Group. Minutes from the monthly meetings were shared with the AUDGPI executive and the Taskforce Advisory Group of the ICGP, for their knowledge and input. Both the AUDGPI executive and the ICGP GP Training Academic Council, approve the final version of this report. In preparation of this report the working group consulted a wide base of national and international resources, stakeholders and experts in the field (see reference list and Appendix 2 for full details) in summary these included –

- A review of the published research evidence in relevant peer reviewed journals
- Reports from professional bodies internationally including, but not limited to- Scottish School of Primary Care, European Academy of Teachers in General Practice and Family Medicine, Health Education England, College of Family Physicians of Canada, Royal College of General Practitioners UK, the Royal Australian College of General Practitioners, the UK Society for Academic Primary Care
- Consultation with International Academic GP Experts including Professor Frank Sullivan (Professor of Primary Care Medicine & Dean of Research, University of St. Andrews) Professor Val Wass OBE (Emeritus Professor of Medical Education, Keele University), Professor Christian Mallen (Professor of General Practice & Head of School of Medicine, Keele University) via phone, email and zoom meetings.
- A review of models of GP training in several EU countries, Canada, and Australia – involving consultation with experts in GP training (full details in Chapter 2 & Appendix)
- A review of Clinical Academic Training in the UK (full details in Chapter 4 & Appendix)
- A review of position papers, published reports and submission to government from national professional bodies including the ICGP, IMO and AUDGPI
- The working group conducted a series of Email / Phone surveys in May/ June 2022 of
  - Departments of GP in the 6 medical schools
  - The 13 GP Training Schemes
  - All GP trainers affiliated with the ICGP.
- The working group received feedback on the report from medical students via the All Island Association of Undergraduate Societies in GP and GP Training community via the ICGP GP Training Taskforce Advisory Group and their perspectives and feedback informed the recommendations of this report.

Chapter 2

GP Education and Training - Description of Current Irish Model and International Examples

This chapter will:

1. Report on survey findings of current GP teaching delivery in Irish Medical Schools.
2. Describe the new model ICGP Specialist Training in General Practice.
3. Report survey findings of current collaborations between Medical Schools and GP Training and provide exemplar Case Studies to illustrate successful collaborations.
4. Summarise the features of GP Intern posts in Ireland.
5. Report on survey findings of multilevel learning amongst GP Trainers currently.
6. Present examples of GP training schemes internationally, describing ways in which they collaborate with medical schools.

2.1 General Practice delivery in Irish Medical Schools

Ireland has six medical schools located in the University of Galway (formerly National University of Ireland Galway), University College Cork (UCC), University College Dublin (UCD), University of Limerick (UL), Trinity College Dublin (TCD) and the Royal College of Surgeons in Ireland University of Medicine and Health Sciences (RCSI). The recommendations and content of this report are confined to these six Medical Schools. Additionally, there are two medical schools in Northern Ireland, Queens University Belfast (QUB) and Ulster University (UU), who are active members of AUDGPI. University of Galway and TCD are undergraduate schools, while UCC, UCD and RSCI are mixed undergraduate and graduate entry. UL is exclusively graduate entry. The undergraduate degree programmes are either 5 or 6 years, and the graduate entry degree programmes are 4 years duration. Most Irish Medical Schools have relatively 'traditional' curricula with the majority of clinical teaching occurring in secondary care, the exception being UL where approximately 25% of the clinical curriculum is delivered in general practice. Medical students can also avail of the opportunity for an intercalated degree, whereby the duration of their medical school training is extended and the student graduates with an additional degree at either masters or PhD level – e.g., Masters in Clinical Research. This option is not commonly availed of by medical students- informal estimates of annual intercalated degree awards per medical school range from 0-20, only a fraction of these would be in General Practice. Recent research indicates that this is not unusual internationally (Al-Busaidi 2020).

The working group conducted an internal email survey of Departmental GP teaching across the six Medical Schools in the summer of 2022, to provide an up-to-date overview of undergraduate teaching delivered by Departments of GP. Responses were received from Departments of General Practice in all six Medical Schools. Detailed results are tabulated in Appendix 3.

Summary of survey findings and observations:

- **GP contributes to the teaching of medical students across the entire medical curriculum.**
- **Typically, GP contributes substantially** to the teaching and assessment of early patient contact, clinical, communication, professionalism, and research skills, in the earlier years of the Medical Degree programmes (usually year 1-3). The medical schools differ in this regard. In some schools, Departments of GP are responsible for the organisation and delivery of these early phase modules (RCSI, UCC, UCD). In other medical schools these modules are coordinated with other departments and the teaching is delivered (in part or in whole) by staff from the Department of GP and practising GPs who come in on a sessional basis to the teach in the medical school.
- **In all Medical Schools GP is taught in more depth in an expanded footprint in the senior years of the programme** typically in years 3, to 5 or 6.
- **General practice teaching comprises** of large group lectures, small group learning, tutorials, problem based and case-based learning, high and low fidelity simulation, role-play and clinical skills laboratory learning. However, the backbone of the teaching is the clinical placement in general practice. This "authentic General Practice teaching", is defined by Alberti et al (2017) as 'teaching in a practice with patient contact'. It is widely considered the premier GP teaching experience for students, from student and GP faculty perspectives.
- **Our survey found that the number of weeks spent in authentic GP teaching in Irish medical schools** ranges from three to eighteen, and this concurs with the findings of Murphy et al (2022) who calculated that the median number of authentic GP teaching weeks was 4. Each Medical School has a network of GP tutors who take medical student on clinical placement and early patient contact. The average number of GPs per medical school is 136 (min 100, max 201).
- **Measuring** the exact percentage of the curriculum delivered by GP, in each medical school, requires a detailed mapping exercise, beyond the scope of this report. The European Credit Transfer and Accumulation System (ECTS), where provided, offer an approximate measure. A full academic year of teaching equates with 60 ECTS. The ECTS for modules that GP contributes to vary, depending on the Medical School level of subject integration. The ECTS for the main GP programme range from 15 to 25 ECTS.
- **Assessment methods** are varied, examining across the spectrum from knowledge, skills and work-based practice - including Multiple Choice Questions, Objective Structured Clinical Examinations, Modified Essay Questions, Work based assessment, Case Reports, Portfolios.
- **GP formally contributes directly to the Final** Degree award in 5 of the 6 medical schools – accounting for between **8 and 16%.**
- **Demand for medical student GP clinical attachments** has increased significantly in recent years, in line with increased student intake and expanded GP curriculum time. For example, there were 117 medical students on GP placement in University of Galway in 2010, as compared with 206 in the 2021/2022 academic year, an increase of over 75%.

2.2 The new model ICGP Specialist Training in General Practice

Postgraduate GP training in Ireland consists of a four-year national programme, delivered by 13 local training schemes (See Table 2.1) under the remit and oversight of ICGP each scheme is led by a scheme director, with a team of assistant scheme directors, all of whom deliver and facilitate teaching, as well as providing a high level of professional and educational mentorship to their cohorts.

Table 2.1 GP Specialist Training Scheme as of 2022

Region	Training Scheme	Trainee Intake	Total # of Trainees
Dublin North Leinster	North Dublin City	18	82
	RCSI (Dublin)	21	60
	Northeast (Navan)	24	95
Dublin South Leinster	TCD (Dublin)	24	89
	UCD (Dublin)	24	71
	Midlands (Tullamore)	15	87
South	Cork	21	77
	Mid-West (Limerick)	18	68
	Southwest (Kerry)	12	41
	South East (Waterford)	21	68
West	Western (Galway)	36	114
	Donegal	12	43
	Sligo	12	44
Total			939

In years 1 and 2 of the programme, trainees rotate through supervised hospital and community placements, each of four months' duration. This is followed by two years in general practice. Here, the trainee works as a registrar with one-to-one supervision and teaching by a GP Trainer. GP Trainers play a vital role in the professional development of GP registrars role modelling the attitudes, skills and knowledge required for a career in GP. Currently, there are almost 500 GP Trainers nationwide.

Throughout the programme, trainees participate in an educational programme (commonly referred to as "day release") delivered by the training scheme. Year 1 and 2 trainees attend for a half-day and registrars for a full day, each week. The core pedagogical model is one of small group teaching, which has been identified as a key strength of GP training, relative to other specialties. Day release occurs during working hours and represents protected teaching and learning time.

The ICGP is in the process of changing from a traditional time-based model to a competency based educational model. In 2021 ICGP introduced entrustable professional activities (EPAs), which build upon the existing system of workplace-based assessments. Throughout training, the trainee / registrar is practicing with increasing levels of entrustment, with guided feedback across 18 EPAs. These have been developed by the College to reflect the core competencies required of a general practitioner working in Ireland and are accessible via a proprietary mobile app and website.

To achieve CSCST and be entered onto the specialist register, GP trainees/registrars must satisfactorily complete their EPAs/logbooks (confirmed by their scheme) and pass all modules of the Membership of the Irish College of General Practitioners (MICGP) exam. The latter are criterion-referenced exams, culminating in an authenticated simulation of a GP surgery. MICGP examiners are practicing GPs.

GP Training Transfer

Successive governmental health policies have demanded an expansion in general practitioners in line with Ireland's growing and ageing population. The Health Service Executive, which previously managed the training schemes, recognised the need to transfer training to the ICGP to deliver the capacity required. In March 2021, scheme directing staff transferred to ICGP employment, and in October 2021, the legal transfer of training was completed, with ICGP assuming governance of the GP training schemes under the auspices of a national programme. These are now organised regionally, led by four Regional Programme Directors, each of whom is also responsible for a cross-cutting national brief (Recruitment, Quality Assurance, Curriculum Development, and Competency Based Medical Education).

Since completing the transfer, the ICGP has started to develop centralised systems to support the upscaling and standardisation of GP training across the country. This includes the development of a blended learning system using the 'Moodle' learning management system, a placement management system, and an ePortfolio.

Pursuant with the transfer agreement, training places are projected to expand as follows to 2026:

Intake Year	Total GP Training places
2026	351
2025	324
2024	303
2023	285
2022	258
2021	233
2020	208

2.3 Report of Current Collaborations between Medical Schools and GP Training

Part two of the internal survey conducted by the working group, included both Departments of GP and GP Training Schemes, and aimed to provide an overview of the depth and breadth of collaboration that currently exits. Responses were received from 6 Medical Schools and 13 GP Schemes- (response rate 100%). **Appendix 4** tabulates the survey findings in detail.

Summary findings:

- **The level of involvement varies considerably between schemes.** It ranges from providing physical accommodation space for day release, to IT access and IT support for Scheme staff, staff development opportunities, involvement in governance and steering committees of GP training schemes, sharing of teaching expertise, research support for trainee research projects, trainee career advice and mentoring, formal and informal academic training opportunities for GP trainees.
- **All Medical Schools** are involved, to some extent, with one or more Training Schemes.
- **Three Training Schemes** report no involvement with any Medical School.
- **Co-location** of GP Training Schemes within Medical Schools is provided in five of the six medical schools by long standing formal agreements providing physical space for GP training Schemes within the Medical School. Beyond Medical Schools, the Southwest GP Training Scheme has an accommodation arrangement with another higher education institution. Colocation provides excellent opportunities for collaboration – See ***Case Study 1 and Case Study 2*** in next section. However, the infrastructural 'bricks & mortar' requirements for expanded GP training schemes, and the growing medical school student population, threatens to fracture these long-standing arrangements. Financial and strategic planning is required to ensure that co-location arrangements are secured and their potential maximised.
- **IT Services** -RCSI and UCC provide internet access and IT supports, while UL in addition provides informal access to library services.
- **GP Trainees contributing to teaching of medical students-** Three of the medical schools facilitated this in a structured way. Teaching ranged from clinical and communication skills to research skills and career development talks. See Case Study 3 for a highly developed Module in Academic GP.
- **GP Scheme Team contributing to teaching / assessing medical students-** apart from occasional lecture or workshop delivery, this happened infrequently. However, GP scheme team members were involved in student support in other ways e.g., OSCE examiners, judging student GP competitions, contributing to joint conference planning etc.
- **GP Scheme Team governance roles / or recognised position in Department of GP** – Three of the 6 medical schools (UL, UCD, TCD) have a system of appointing GP scheme directors and /or GP trainers as adjunct / honorary faculty in the Medical School (see Case Studies 1 and 2).
- **Staff development** – GP Scheme Directing team contributing to, or attending staff development with Department of GP staff, was not widely practiced but see Case Study 4 for an example of a collaboration where regional GP trainers and GPs tutors who take medical students come together for an annual teacher development meeting.
- **Many collaborations, even longstanding and successful ones, are based on individual champions and personal relationships.** These are most often facilitated by individuals in joint posts, who usually independently secure two separate, unrelated contracts in both undergraduate and postgraduate GP training. The ad hoc nature of this means that if the individual leaves either post, the joint initiative has often ended. This jeopardises their sustainability and limits impact. For instance, newer Scheme Directing teams were unfamiliar with long-standing, informal collaborations with Departments of GP, as evidenced by a mismatch in survey responses, emphasising how precarious informal initiatives are.

2.4 Example Case Studies Describing Successful Collaborations

Box 2.1

Case Study 1 Co-Location between Discipline of General Practice, School of Medicine, University of Limerick and the ICGP Mid-West GP Training Scheme

The Discipline of General Practice and the ICGP Mid-West GP Training Scheme have co-located in the School of Medicine Building on the University of Limerick campus since its opening in 2012. Facilities such as library, computer and clinical skills labs and meeting and lecture rooms are shared which facilitates much ongoing collaboration.

These collaborations include crossover activities in teaching and development of research collaborations. In addition, collaboration in support of the UL GP student society (ULGPIG) and in assessment and examination procedures. Many GP trainers are also members of the University of Limerick Education and Research Network in General Practice (ULEARN-GP). Thus, they have GP trainees in their practice while also taking medical students on their 18 week Longitudinal Integrated Clerkship in General Practice, which accounts for 25% of clinical training for medical students so many opportunities for peer-to-near peer learning occur.

Joint staff appointments exist also, the best examples of which are Professor Ray O'Connor, adjunct professor in the School of Medicine and a very active research collaborator who is also Assistant Director in the Mid-West GP Training Scheme and Professor Michael Griffin, adjunct professor in the School of Medicine and recently retired director of the Mid-West GP Training Scheme.

Benefits

- Regular formal and Informal face to face meeting including weekly joint coffee meeting.
- Excellent ongoing networking opportunities
- Ethos of collaboration and a sense of community of practice
- Sense of Educational Continuity for many students who graduate from the School of Medicine and after their intern year can join the GP training scheme.
- A very positive experience for the Mid-West GP Training Scheme and the Discipline of General Practice providing many opportunities to work together.

Challenges

- How to develop more meaningful and impactful collaborations across education and research

IMPLICATIONS FOR FUTURE COLLABORATIONS

- Very positive collaboration that where possible should be replicated in other locations.
- Challenges of funding and space but opportunities exist while GP Training is being re-modelled and should be explored.

Box 2.2

Case Study 2 Co-Location and Collaboration between UCD School of Medicine (Academic General Practice) and Dublin Mid Leinster / Dublin North City Specialist Training Programmes in General Practice

The UCD School of Medicine has longstanding links and collaborations with several GP Training Programmes in Ireland. Currently two Specialist Training Programmes in General Practice are accommodated on the University's Belfield campus and at the School of Medicine Catherine McAuley Education & Research Centre, adjacent to the Mater Misericordae University Hospital. Facilities such as office accommodation, library, meeting, and lecture rooms are shared which facilitates much ongoing collaboration. This collaboration includes synergies in teaching, especially in training GPs to provide services in areas of deprivation / for marginalised communities, research and governance (e.g., UCD faculty are actively involved in the Steering Group of the Dublin North City Specialist Training Programme). In addition, a number of colleagues involved with Specialist Training contribute to the school's teaching and research activities, which is typically acknowledged by their appointment as Adjunct Clinical Faculty. Finally, there exists considerable overlap in terms of general practices, with many practices involved in GP Training also supporting the undergraduate teaching programme, and vice versa.

Benefits

- Access to practices which support placements for medical students and GP Registrars
- Interaction between medical students and GP Registrars
- Regular formal and Informal meetings and networking opportunities
- A community of practitioners
- Potential for vertical integration and the establishment of a medical student – GP Trainee – GP Principal pathway

Challenges

- Existing collaborations are founded on historical collaborations and relationships and to sustain (and further develop), the establishment of a structured framework is a priority.

IMPLICATIONS FOR FUTURE COLLABORATIONS

- A structured framework to support links and collaborations between medical schools and GP Training is a priority.

Box 2.3

Case Study 3 Module in Academic General Practice

Collaboration between Discipline of General Practice, School of Medicine, University of Galway & the Western and Sligo GP Training Schemes

The Module in Academic GP commenced in 2010. It consists of a structured mentorship and experiential module of either educational or research experience for a fourth year GP registrar, on the ICGP Western GP Training Scheme, (latterly inclusive of Ballinasloe) and the ICGP Sligo GP Schemes within the Discipline of GP. GP registrars are allocated a personal mentor from the GP academic staff. There is a heavy preference from the GP registrars to get educational, rather than research, experience. To date 23 people have completed it. In 2021-2022, 7 GP registrars took part in the module, the largest cohort to date.

Each trainee commits to 16 half days in the Discipline of GP in the academic year, but in reality, many of the registrar's exceed this minimum requirement. Registrars are encouraged to attend and present at AUDGPI/ICGP annual meeting, the Early Careers Seminar, INHED, SAPC, Wonca etc. The GP registrars co-teach with their staff mentor initially. As the GP registrar gains more experience and confidence, they teach the class, while being observed by the staff member who provides feedback to them. The GP Registrar is supported with access to resource materials including guidance on small group teaching skills, communication skills and clinical skills teaching. The GP registrars also pilot OSCE stations and MCQ papers and aid the writing of MCQ questions. Research experience includes experience in instrument design, instrument piloting, data collection, data cleaning, and analysis. A small number of registrars have continued to do a higher degree.

Benefits

- Excellent taster of breadth and depth of Academic GP
- Positive impact on career options – 8 of those who completed the Module have continued in an Academic role (e.g., part-time Clinical Teaching/ Lecturer, Assistant Scheme Director, completing a higher degree).
- Medical students are taught by and exposed to GP registrars- allowing for near-peer teaching experience.

Challenges

- Ensuring adequate time for mentoring and giving feedback to the Registrar
- Accommodating individual interests of GP registrars
- Accommodating all the GP registrars who want to do the Module.
- Not officially recognised as part of Training, dependent on GP Trainer / and Scheme Director support

IMPLICATIONS FOR FUTURE COLLABORATIONS

- Very positive collaboration that can be mirrored in other jurisdictions with minimal change to the format.
- However, in order to be fully reap the benefits the Module needs to be expanded, formalised and recognised by GP Training

Box 2.4

Case Study 4 - Teachers in General Practice- GP Educator Faculty Development Collaboration between Discipline of General Practice, School of Medicine, University of Galway, the Western GP Training Scheme

This meeting is an educator development meeting held jointly by the University of Galway, Discipline of GP and the ICGP Western GP Training Scheme. It is aimed at undergraduate GP tutors (GPs who take medical students on clinical placement in their practice) and GP trainers. The organising committee oversee the administration, plan the three-yearly needs-based curriculum, source medical education expert speakers, and deliver faculty development workshops. The meeting attracts CPD points and serves as a Trainers' workshop for those involved in GP training. Attendance has grown from a base of 45 in the early years, to approximately 60 to 70 GPs annually, many of whom have a dual role as trainers and tutors.

Benefits

- Very positive well received meeting annually.
- Great networking opportunities and sense of community of practice
- For some attendees this meeting was the impetus to expand their GP educator role, from tutor to trainer and vice versa.
- A very positive experience for the Scheme and Dept. of GP Staff, meeting identified GP educator learning needs and providing a good opportunity to work together on a shared project.

Challenges

- During the Covid-19 pandemic it was an online event- the challenge now it to reintroduce it and to consider how to align with the reconfigured and expanded GP Training Schemes and regional network. This year for the first time, there are plans to broaden and include all the local GP Schemes in the Region
- How to secure funding for the provision of this collaborative professional development of GP educators

IMPLICATIONS FOR FUTURE COLLABORATIONS

- Very positive collaboration that can be mirrored in other jurisdictions with minimal change to the format.
- The challenge will be securing adequate funding and managing the numbers of GP tutors and trainers, over larger geographical areas

2.5 General Practice internship post-graduation and pre specialist training

Intern training is currently carried out in over 50 Hospitals and Primary Care facilities around Ireland (HSE 2022). The Medical Intern Board, established in October 2017, has national responsibility for the governance and strategic direction of the intern year. A planned expansion of intern posts in 2023, will see an additional 24 intern posts, bringing the national number of available intern posts to a total of 878 (Offiah, 2022a). This expanded figure includes 30 Academic Intern posts and 22 GP Intern posts. Intern training is for a minimum of 12 months which encompasses a minimum of three months in General Surgery, plus three months in General Medicine. Thereafter, there are a further two 3-month rotations with opportunities to train in Paediatrics, Obstetrics & Gynaecology, Anaesthesia, Emergency Medicine, Psychiatry, Radiology, Surgery, Medicine, and General Practice. In the case of any of the academic internship posts, one of the rotations must also include a rotation to their academic internship, as well as the three months in General Surgery and three months in General Medicine (HSE 2022). There are currently six Intern networks across the country, based around the six Medical Schools. Each network is led by an Intern Co-ordinator. A Medical Council commissioned review of the quality and configuration of the Medical Intern posts is planned and outcomes will inform future reforms of intern training.

Intern places in General Practice: General Practice Internships have been available internationally for many years. In the UK they were introduced in the 1980s, Australia introduced a Prevocational General Practice Placements Program in 2003, and since 1991, Danish doctors applying for GP training are expected to have gained GP experience by working in GP practice during the last half-year of their internship (Martin et al 2007). A pilot scheme of intern's places in General Practice was first established in 2004 in Donegal in conjunction with the Discipline of GP, University of Galway, whereby 4 Interns spent 3 months each, in General Practice and 9 months in hospital intern posts. A review of the pilot highlights several positive experiences (Cantillon et al 2005)

- GP interns worked under the strict supervision of GPs and got much more responsibility for patient care than they did on the wards.
- GP interns reported that there were more opportunities for one-to-one learning in GP and more feedback than in hospitals. They described the relationship between the working environment and the learning environment as being more blurred in general practice in that they were working and learning at the same time.
- GP interns valued the opportunities to take individual responsibility for patient care under the guidance of GP, whereas they felt they operated at the bottom of a decision-making hierarchy in hospital medicine.
- GP interns felt that the insight they gleaned in GP helped them later when dealing with people admitted to hospital.

In 2022, there were 10 GP Intern practices in Ireland, located in all six Intern networks. This accommodated 40 interns, each spending 3 months in General Practice. This was comparable with the numbers of Intern places in specialities such as Psychiatry (n=40), Obstetrics and Gynaecology (n=38), Paediatrics (n=30). It represented less than 5% of places, out of a then total 854 intern positions (G Offiah 2022, Personal communication). In 2023, in response to the need to qualify more GPs as outlined in the Programme for Government (Department of the Taoiseach 2020) and 'Shaping the Future' (ICGP 2022b), the number of GP intern posts will be more than doubled, by the creation of an additional 12 intern posts. The 22 GP intern posts will accommodate a total of 88 GP interns annually and represents 10% of all intern places. The working group welcomes this expansion.

The Intern remains on the payroll of the acute hospital while on their 3-month rotation to a GP practice, i.e., the hospital that provides the opposite 3 months rotation to GP, will pay the intern's salary from the whole 6-month period. GP practices are supported with guidance from the Intern Training Network. The GP principal is responsible for education and clinical supervision, but they are not responsible for organising the intern's salary or leave or other pay entitlements. The GP Intern continues to be monitored and supported by their Intern Training Coordinator, including ongoing intern education, and training.

The Academic Track Intern provides an opportunity for new graduates to complete a 3-month project in clinical research, medical education or healthcare leadership and management. These Academic Track intern posts are not affiliated to any particular speciality ((HSE 2022). In 2022 each of the six Intern Networks hosts an academic track intern post, with four academic interns rotating through the post. As of 2023, there will be an additional 6 Academic Track intern posts accommodating 48 Academic Track interns in total annually.

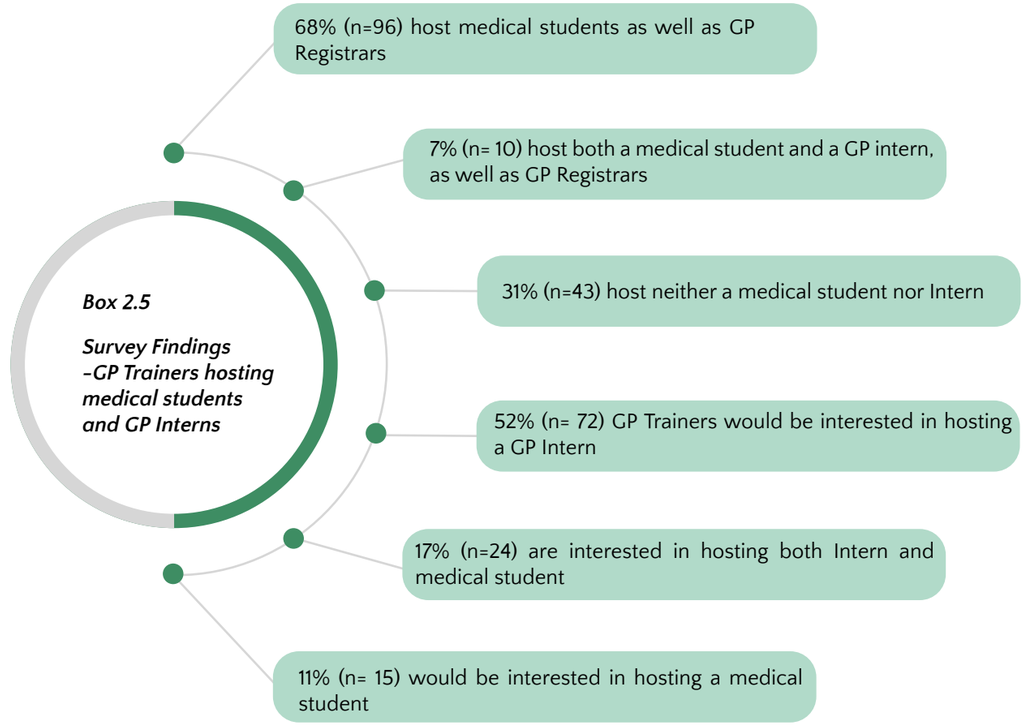
2.6 Report on the internal survey of GP Trainers

The working group conducted an internal survey of GP trainers in May-June 2022 to ascertain the degree of multi-level learning that is currently taking place within the Irish GP trainers' cohort. ***Multi-level learning*** (MLL) is defined as *"the sharing of teaching and learning across different levels of learners such as medical students, pre-vocational doctors, registrars and general practitioner specialists"* (Dick et al 2019). In practice, this means a GP trainer, taking medical students and GP interns at the same time, and purposefully providing opportunities for teaching and learning to take place across these different stages of learning. The evidence and international experience supporting multi-level learning in GP education is presented in Chapter 3.

Results- Responses were obtained from 139 GP trainers (total surveyed 479, response rate 29%), with responses coming from GP Trainers affiliated with all 13 Training Schemes. Thirty respondents were in role as GP training for > 15 years, 49 respondents were training 5-15 years and 60 respondents were training < 5 years.

Box 2.5 summarises the study findings. Of those who responded, 68% of GP Trainers (n=96) reported that they also take medical students, and a further 11% (n=15) would be interested in doing so. In contrast only 7% (n=10) of respondents hosted a GP Intern, yet over half (52%, n=72) would be interested in hosting an Intern. In the free text comments, GP Trainers were overall positively predisposed to taking GP Interns and medical students, with some participants indicating a preference for GP Interns, over medical students.

- *"Currently have registrar and medical students. Huge beneficial to both myself, patients, and practice. Happy to explore possibilities regarding GP intern"* (Respondent 56).
- *"I think that moving medical teaching and intern experience into the community is more likely to help us recruit future GPs"* (Respondent 72)
- *"I feel that a GP intern would get a great start and education here and strongly feel that all interns should rotate through general practice"* (Respondent 124)

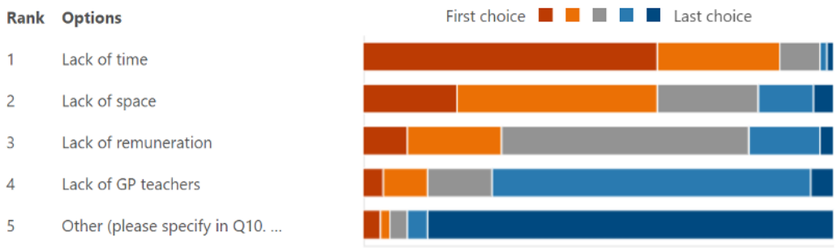


Respondents were asked to rank order the main barriers to host either a medical student or an Intern. These were lack of time (ranked 1st by 62.6%), lack of space (ranked first by 20.1%), lack of appropriate remuneration (ranked 1st by 9.4%) and lack of available GPs to cover clinical workload (ranked first by 4.3%) (See Box 2.6). The free text comments reflected the same barriers.

"The issue is time and space. If I took on a GP intern, I would have to stop taking a med student" (Respondent 103)

"We are based in a HSE primary care centre. We [have] the funding and enthusiasm to expand the practice and the services we offer, both to patients and to facilitate training initiatives like this but are limited by available space. We have made efforts to redesign the space we do have, but the process is slow and subject to layers of oversight beyond our control. Positive engagement between the ICGP and local HSE managers could really help with this sort of initiative" (Respondent 6)

Box 2.6 –In rank order GP Trainers perceived barriers to hosting a medical student or an Intern



2.7 International Models of GP Training integration with Medical Schools

To inform this report and its recommendations, the working group examined GP education and training practices in a broad range of countries, specifically seeking examples of collaboration between Departments of GP in Medical Schools and GP Specialist training programmes. Below and in Appendix 4 we present data on Canada, Finland, Germany, Norway, and The Netherlands, to illustrate different practices and approaches. Given its relevance to clinical academic training pathways, a description of UK GP Training and its relation to Clinical Academic Training is described separately in Chapter 4. A definition and description of vertical integration in GP education from Australia is presented in Chapter 3.

In summary

- Postgraduate GP training ranges in duration from 2-6 years, comprising clinical training and taught programmes.
- In some countries, GP Specialty Training is the responsibility of Medical Schools who develop and deliver training. In these cases, GP Training is generally delivered by a specialised unit within the Medical School that operates in a similar fashion to the GP Training Schemes in Ireland, typically providing weekly teaching and ongoing mentoring and support of Trainees and Trainers.
- Other countries share the delivery of training between Medical Schools and Departments of Primary Care Health Services. Co-location and shared over-arching organisational framework, are common practice, and provide many opportunities for networking and collaboration on joint projects.
- GP Trainee involvement in medical student education and clinical supervision is widely practised, both when the medical student is on GP placement in the community and also involved in supporting medical student education in the School of Medicine or on hospital rotations.
- Trainees who wish to pursue a higher degree and specialised Academic GP training, can do so either as an extended GP training programme or following their satisfactory completion of training.
- Mentoring support for the GP Trainers is widely recognised as important, along with quality assurance, and ongoing skills development.
- Modules on research and evidence appraisal, for GP trainees, are commonly provided by the Medical School GP Academic staff.
- GP training practices that are developed as 'Academic Hubs', play a substantial role in medical student, and intern education, in addition to GP Registrars. These Hubs provide opportunities for near peer and multilevel learning and GP trainees are closely involved in teaching and supervising medical students in these GP practices. See Chapter 3 for definitions and summary of the international research evidence for the benefits of near peer, multilevel learning, and vertical integration of GP education.
- Appendix 4 provides detailed summaries of GP training and collaboration with Medical School Depts. of GP, from each of the countries listed above, with contextual information, to allow for comparisons with the Irish model.

Education

Chapter 3

This chapter will:

1. Set out the potential scope and advantages of enhanced collaboration in GP education.
2. Define Multi-Level Learning and Near Peer Learning and the international evidence to support these in GP education.
3. Make recommendations for enhanced collaboration in the education and training of medical students and those on GP training Programmes.

3.1 Potential scope and advantages of enhanced education collaboration

Over twenty years of evidence and more than 160 published papers, demonstrate that GP is an excellent place for medical student to learn medicine, as good as, or better than secondary care (Park et al 2015). Internationally GP post-graduate colleges are increasingly recognising the importance of specifically requiring GP registrars to learn how to teach, for example, the RCGP curriculum states that senior year GP registrars are ideally placed to teach and mentor more junior colleagues (RCGP 2007). The sentinel 'By Choice not by Chance' report (Wass et al 2016) strongly endorses the value of good GP role models. It highly recommends that GPs and GPs in training are more visible to medical students, through involving them directly in teaching and clinical supervision of students. It counsels against *'negativism within the profession itself'* and promotes exposing medical students and GP trainees to scholarly activity and GP research. The Wass report (2016) also highlighted the opportunity GPs must positively nurture interest in GP as a career amongst school pupils and other potential future applicants to medicine. It is noteworthy that *'Shaping the Future'* (ICGP 2022b) calls for a more diverse GP workforce, that is representative of the communities we serve and underpinned by social accountability and social inclusion. Evidence is emerging internationally that widening access to medicine, is associated with increased service provision in rural and remote GP and socially disadvantaged communities.

GP education and training is historically based on a one-to-one model. Typically, a GP principal takes a medical student on attachment, or a GP trainer supervises a GP registrar, with little or no integration between undergraduate and specialty training (Rushforth et al 2010). This leads to a missed opportunity for cross fertilisation, development of a supportive educational community of practice in GP education, and diminishes the medical student experience of GP as illustrated by this quote:

"In primary care settings, we have had very little teaching by GP trainees. We feel this is a missed opportunity……. We believe increasing teaching sessions delivered by GP trainees will not only have academic benefits but will also provide additional opportunities for students to be exposed to and learn more about general practice as a specialty" (Baid et al 2019- medical student quote).

By contrast, **Vertical Integration** is defined as "The coordinated, purposeful, planned system of linkages and activities in the delivery of education and training throughout the continuum of the learner's stages of medical education" (GPET 2004). Over the past 10 years, vertical integration has been developed, promoted, and researched in GP education, particularly in Australia, but also in Canada, USA, and the UK (Jones et al 2020) and several other countries. In the Australian Model research, evidence describes Vertical integration occurring in the majority most GP training sites. It is describes occurring at three levels (Stocks et al 2011)

1. **Within a general practice** – where the GP educator is responsible for teaching medical students, and graduated doctors at various stages of training- i.e., from the equivalent of internship through to all levels of GP training. This is the most widely practised type of Vertical Integration.

2. **At local level** – where medical students, pre-vocational doctors, GP trainees and GP supervisors from different GP practices are involved in shared teaching together e.g. joint training workshops

3. **At regional levels**, where universities and/or regional GP training schemes coordinate clinical placements, forge close linkages, and build a support network across a region. There are also good examples of this in the UK (Jones et al 2020). This is the most developed and organised level of vertical integration, with rural clinical schools and training programmes being most active at this level.

Vertical integration brings significant benefits to medical students, GP trainees and the GP practice. Key amongst these being increased capacity in GP education, enhanced teaching and learning experience on multiple levels for students and GP trainees, greater work satisfaction for GPs who work as educators, improved time, and effort efficiency, decrease stress levels and fostering a culture for continuous practice improvement, with benefits for patient care (Stocks et al 2011). In Ireland O'Regan et al (2013a), describe similar benefits from introducing vertical integration in the GP teaching on the graduate entry programme in UL Medical School.

3.2 Multi-Level and Near-Peer Learning

There are two recognised ways to accommodate teaching across different learner levels in vertically integrated GP education:

Multi-level learning (MLL) is defined in a BEME review (Dick et al 2019) as *"the sharing of teaching and learning across different levels of learners such as medical students, pre-vocational doctors, registrars, and general practitioner specialists. It includes learners teaching other learners who are at a level of medical education training different from their own (e.g., a registrar teaching a medical student, or a registrar teaching a pre-vocational doctor). It also includes teaching by a GP to two or more levels of learners concurrently, e.g., a group tutorial or case discussion involving medical students, prevocational doctors and registrars."*

Near Peer Learning – (NPL) Near peer learning can be viewed as a subset of multi-level learning. NPL is most commonly defined as learning from *'a trainee who is one or more years senior to another trainee on the same level of medical education training (i.e., medical students teaching other medical students, residents teaching other residents)'* (Bulte et al. 2007). In practice, a slightly broader interpretation of this definition includes GP trainees teaching medical students.

Health Education England and University College London jointly set up an **'Innovative GP Training Post'**, based on multilevel learning, whereby GP trainees have a shared commitment to clinical training and teaching undergraduate medical students for a 6-month rotation. A stakeholders' evaluation of the programme found overall very positive results. Medical students reported a *"safe and collaborative learning environment"*. GP trainees found the post demanding but overall helped by *"consolidating their knowledge, improving their skillset as lifelong learners"*. GP trainers identified there were challenges with space, funding, and organisation, however the benefits were *"seen as a long-term investment that would improve GP recruitment and may improve patient care and clinical standards"* Jones et al (2020).

The advantages of multi-level learning in General Practice are well established by systematic review evidence (Dick et al 2019) and are summarised in Box 3.1. Importantly in addition advantages to the learner, multilevel learning is widely recognised as one means to maximise efficiency in GP teaching. The following quotes, from a qualitative study by stakeholders' views illustrate benefits to GP registrar in terms of knowledge validation and reduced burden on GP trainer (Silberberg et al 2013).

- 'it was quite useful because I validated my knowledge in front of my supervisor and … [was] tested on it by teaching those below me and learned from both the supervisor and juniors' (GP registrar)

- 'you can use the guys with more knowledge to teach the guys with less knowledge, so it actually does unburden you a little bit from direct one-on-one teaching' (GP Trainer).

Potential barriers to implementing multi-level learning include concerns relating to GP trainees' teaching skills, and the requirement to deliver formal training to the GP trainees to develop their teaching skills; the challenge of GP trainees managing time for clinical work and their teaching role; the requirement for space and infrastructure to support the multilevel teaching. In high level vertical Integration, curriculum alignment between undergraduate and GP speciality training requires significant buy-in. Setting up of a clear infrastructure and organisational practices are critical to the success of vertical integration.

Box 3.1 The advantages of multi-level learning

- Broadened range of clinical teaching and experience for the learner (Dick et al 2019)
- Increased collegiality between students, interns, registrars, and GPs (Dick et al 2019)
- GP trainees report that it enhances their learning, self-confidence and acquisition of skills and knowledge (Zamoyski & Alberti 2018, Jones et al 2020)
- Medical students report that they engage well with teachers who are closer and possibly more "connected" to their situation.
- Learners value the positive learning environment and strong teaching ethos in the GP practice (Thomspon et al 2014)
- Positive impact on career intentions of medical students towards GP (Jones et al 2020)
- GP educators report an enhancement of the expertise, enthusiasm, and satisfaction by being involved in different stages of the continuum of the education process.
- A reduction in the teaching load and demand on the GP principal (Jones et al 2020, Dick et al 2019)
- Enhanced service capacity (Jones et al 2020)
- Learning can be multi-directional, juniors can bring new knowledge and also skills to the practice, and the GP supervisor/ practice staff can also learn (vanDer Mortel 2016)

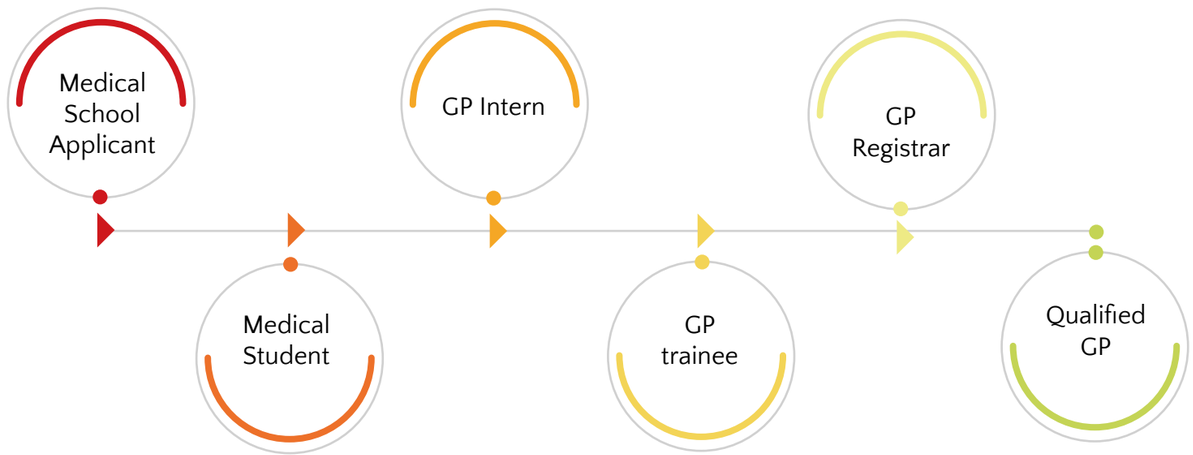
3.3 Proposed Model for Enhanced Collaboration in GP Education and Training

This section presents a proposed model for enhanced collaboration in GP education and Training.

Guiding principles

1. GP education is best viewed as a continuum from medical school applicant to medical student, GP Intern, GP Trainee (years 1-2), GP Registrar (Years 3-4) and qualified GP.
2. High quality GP teaching and clinical placements in GP are paramount to influencing medical students towards a career in GP.
3. A culture shift in GP education recognises and promotes the role of GP trainees and registrars as teachers.
4. Opportunities to make GP as a profession and GPs in training, visible to medical students must be maximised throughout the medical degree programme.
5. Ultimately all doctors benefit from high quality GP education and GP clinical experience, at medical school and intern stages. Those who choose not to go into GP, stand to benefit from a deeper understanding of the working of GP and primary care, in their future hospital careers.

Figure 3.1 The GP Education Continuum



Recommendation 1

Develop and implement a national funding model that supports the hosting and delivery of undergraduate general practice placements for medical students in all medical schools.

Medical students' experience of high quality, authentic GP clinical placements is critically important to the GP workforce pipeline. It is the single most important way to positively influence medical students towards a future career in GP. The working group welcomes the recommendation from "Shaping the Future" (ICGP 2022b) to extend the GP footprint in medical school curricula to 25%. A key element of this expansion is to significantly increase the duration and number of GP clinical placements for medical students in GP. However, GP practices are severely challenged to facilitate even the current number of medical students nationally, in terms of physical infrastructure, space, time and workload demands on GPs. GPs and GP practice teams, require significant supports to enable them to accommodate more medical students, for longer clinical placements, and to do so effectively, efficiently and in a sustainable manner. Furthermore, as highlighted in Chapter 1 Medical Schools bear the costs of medical students' placements in GP. This is in direct contrast to clinical placements in hospital and serves as a major disincentive to Medical Schools considering expanding the GP footprint in the curriculum.

The working group recommends that a national plan be developed to ringfence funding and resources, to ensure sufficient capacity within GP to provide high quality clinical placements for medical students. Furthermore, the funding plan needs to address all stages the GP education continuum –from medical student, through to GP interns, GP Trainees/ GP registrars.

Recommendation 2

Expand GP intern places nationally, increasing incrementally and monitoring for evidence of impact.

Given the centrality of General Practice to patient care arguably, all medical school graduates should do a GP internship. However, currently this would place an unmanageable demand on the Irish GP system. From 2023, 10% of intern places are in General Practice, making internship the stage of medical training where GP is least visible. Yet it is precisely at the time when graduates are deciding their future careers. There is a strong argument for further expanding the number of GP intern places, with a view to providing more exposure to GP and encouraging more graduates to enter a career in GP. The expansion needs to be carefully structured, developed incrementally and monitored for evidence of impact on career choice, and demands on the GP system. To maintain the pipeline, expanding GP intern placements needs to happen in conjunction with, and not in competition to, increasing GP clinical placements for medical students and expansion of GP Training places. It is critical that any expansion of intern places is not achieved at the expense of either medical students or GP trainees' placements.

Therefore, the working group is recommending expanding GP intern places nationally, increasing incrementally and monitoring for evidence of impact. The working group welcomes the planned Medical Council review of the quality and configuration of Intern training. Outcomes of this review will be instrumental to the further expansion of GP intern posts.

Structure – The ideal number of GP intern places will be determined by ongoing monitoring and evaluation. This would entail collaboration between ICGP, AUDGPI, and relevant stakeholders including the HSE, the Medical Council, the Medical Intern Board, the Intern Networks and NDTP. As a guide, each GP practice that hosts an intern can accommodate four per year. It is envisaged that in order to be impactful, there will need to be at least 50 GP practices taking GP interns. Therefore, a total of 50 GP Intern practices would accommodate 200 interns annually, over 22% of total intern places. Each GP Practice taking Interns will be affiliated with a Medical School Dept. of GP. The Intern will be based in GP practice and provided with ongoing support and teaching by their Intern Training Network, with input from the Departments of GP.

Recommendation 3

Establish 'GP Hubs' affiliated with each Medical School Department of GP, and local GP Training Scheme

The survey conducted by this working group established that 68% (n= 96) of GP Trainers also host medical students, with a lesser number also taking GP interns (7%, n=10). All six medical schools can identify GP practices that take medical students, GP trainees, and in some cases GP Interns. However, there is no recognised national framework for the development and support of such practices. They operate independently and are driven and supported by the enthusiasm and dedication of the individual GPs and the practice staff. Vertically integrated GP practices, offer an incredible opportunity for cross fertilisation, near peer teaching, mentoring and career development, but due to the unstructured ad-hoc way they currently operate in Ireland, the full potential for impact is under-realised.

The working group recommends the planned national development of vertically integrated GP practices, otherwise known as 'GP Hubs'. Initially each Medical School Department of GP will collaborate with an affiliated GP training Scheme, with a view to establishing four such GP Hubs, per Medical School. Requirements will include investment in practice space, infrastructure, IT and staff training support. To ensure maximum utility, and exploit the full potential of the Hubs, It is envisaged that this collaborative activity would be supported by a dedicated part time GP Academic. This post would be , shared between the medical school Department of General Practice and the relevant local training scheme.

Structure

It is envisaged that these practices will train:

- 1 GP Intern (3-month posts - 4 per year)
- 2 GP Registrars (one 3rd year, one 4th year)
- 2-4 students at a time (depends on placement duration - aim for minimum 4 weeks).

This provides a total throughput annually per Hub of up to 36 learners at various stages of their GP training – comprising 4 interns; 2 GP Registrars; 16-32 students per year based on 32 weeks of teaching term.

Suitable techniques for managing multilevel learning include, but are not restricted to, observing consultations, parallel consulting, case-based discussion, random case analysis, case diary, tutorials, journal presentations, quality improvement projects and audit presentations. For illustrative purposes, Appendix 5 offers an example of structured week in a GP Hub.

Recommendation 4

Encourage all GP trainees to be involved in the education of medical students – via the formal and informal medical curricula.

The working group recommends that all GP trainees be encouraged, and facilitated to contribute to medical student education, via the formal and/ or the informal curriculum. GP trainees serve as important role models for medical students. Involving GP trainees more in the education and development of medical students will substantially increase the visibility of General Practice in the undergraduate curriculum. However, for the GP trainee, it is vital that teaching and involvement with medical students is valued as part of their professional development as future GPs.

Internationally there is increasing appreciation of the importance of teaching as a competency for GP trainees (Thampy et al 2019). For example, the RCGP recognises teaching and learning, and supporting the education and development of colleagues, as core competencies (RCGP 2016). Similarly, the Royal Australian College of General Practitioners includes teaching and mentoring as core competency, in GP training (RACGP 2022). Irish GP trainees readily engage in peer learning and peer teaching through weekly day release. However, a culture shift is required to normalise the expectation that all doctors training in GP are involved in teaching, supervision, and development of medical students. Consideration should be given to including teaching as a core competency on the ICGP curriculum. Enacting this recommendation requires substantial communication and collaboration between the Departments of GP staff and the medical student body, with GP training and trainees.

Structure

Teaching medical students can occur via the formal curriculum, for example by clinical supervision of a medical student on clinical placement in the GP practice, or bed side teaching of medical students while on hospital rotations, accommodating medical students attending day release, giving tutorials, GP journal clubs, presenting GP audits or GP research etc. Opportunities via the informal curriculum include for example involvement with student led initiatives, the All-Ireland Association of Undergraduate Societies in GP (AAUSGP) and local GP Student Societies, student case study competitions, student voluntary activities and career information evenings and open days, intern career fairs and outreach activities- such as talks to secondary school students.

Recommendation 5

Establish an optional 'Rotation in Academic General Practice- Teaching and Scholarship' for GP trainees during hospital training.

During the first two years of hospital-based GP training, there are core rotations, such as paediatrics that all Trainees must complete, and a menu of other options of clinical rotations, that Trainees complete according to local availability, personal preference and prior experience. The latter group are usually of 3-4 months duration and examples include dermatology and otorhinolaryngology. They offer an opportunity to develop skills in an area of special interest.

The working group recommends establishing and offering a 3-4 month 'Rotation in Academic GP- Teaching and Scholarship', for GP trainees as one of the optional rotations.

Within the Rotation the GP trainee would gain exposure to all the activities of the Department of GP, however the primary focus of this rotation is education- with structured opportunities for involvement in teaching and learning. The Rotation in Academic GP will increase the exposure of medical students to GP trainees as teachers and role models. For the GP trainee it offers opportunities to experience GP education. This experience is highly relevant for the GP trainee's professional development. It is also of benefit for potential future roles as Scheme Directors, GP Trainers, GPs who take medical students on clinical placement and GP clinical skills teaching. Some GP trainees who complete the 'Rotation in Academic GP- Teaching and Scholarship', may subsequently choose further formal GP clinical academic skills training - (See Chapter 4).

Post structure

The post is structured so the GP trainee maintains 1-2 day per week clinical practice, to be arranged locally at GP Training Scheme level, 1 day per week at Day release, allowing for 2-3 days per week commitment in the Department of General Practice, in the Medical School. Given annual and study leave entitlements, it is likely that the GP trainee would have approx. 36-39 days of academic experience, 12-13 days clinical experience and 12-13 Day releases, during the 4-month rotation.

Implementation

We recommend the creation of two such posts in each Medical School. Two posts in each medical school would accommodate maximum of 6 GP trainees per year per school, giving 36 annually, if maximally occupied, which equates with 14% of annual trainee intake (working with a total trainee intake of 258). These posts would be allocated to GP trainees, by the Training Scheme, preferably purposefully selecting those GP trainees who have expressed an interest in such training.

ICGP curriculum learning outcomes

The Academic GP Trainee will be allocated a senior academic staff member of the Department of GP as their Mentor and supervisor, ensuring that they meet the learning outcomes for the rotation. The Rotation in Academic General Practice – Teaching and Scholarship, will enable the GP trainee to meet ICGP curriculum learning outcomes in three ways:

1. The academic skills they will acquire map to the six non-clinical chapters of the ICGP Curriculum, in particular the Personal and Professional Development skills
2. The content of material the GP trainee will teach, assess, or research maps to the relevant content chapters of the ICGP curriculum.
3. The clinical commitment will continue throughout the 4 months, maintaining all the usual opportunities to meet the curriculum learning outcomes.

For illustrative purposes, Appendix 6 sets out a typical weekly plan for the Rotation in Academic GP. Based on the international research recommending training in teaching skills, it entails 4 days of formal training on clinical education and assessment for the GP trainee.

Recommendation 6

Create 1-2 Professor / Senior Academic posts in GP Education in each medical school.

The recommendations in this chapter represent a substantial step change in the demands and scope of GP teaching and learning, in medical schools, GP practices and GP training schemes. The working group recommend the establishment of 1-2 Professor / Senior Academic posts in GP Education in each medical school. These new posts will be required to implement the delivery of the recommendations of this report chapter. These senior posts will serve to: (i) provide academic leadership; (ii) manage the responsibility of supporting the expansion of GP in the medical school curricula; (iii) work collaboratively with the Regional Director of GP training and affiliated GP training Schemes locally and nationally; (iv) support the strategic development, resourcing, and quality assurance of education in the GP Academic Hub practices; (v) support the expansion and maintenance of GP intern practices, (vi) develop the network of GPs taking medical students; (vii) facilitate GP trainees to become involved in teaching and development of medical students, and to (viii) lead GP education research to underpin these activities.

Chapter 4

Research & Clinical Academic Training in General Practice

This chapter will:

1. Highlight the importance of research and research training in Irish General Practice.
2. Summarise current opportunities for clinical academic training in General Practice in Ireland and the rationale for change.
3. Describe an international example of a successful clinical academic training pathway.
4. Set out the principles that should underpin the future development of academic careers in General Practice.
5. Recommend a proposal for enhanced collaboration in General Practice clinical academic training.

4.1 Research in General Practice

General Practice is a discipline at the heart of decision-making in Primary Care and it should be underpinned by a robust evidence-base to improve patient care. Increasingly, questions are raised about the evidence-base used to inform decisions about care, as it is often derived from highly selected secondary care populations (i.e., hospital patients). Local research in the setting of Primary Care, where most patients are managed, is increasingly seen as important but insufficiently developed. In a world characterised by widespread access to knowledge, professional practice will increasingly be defined not by what is known or by whom it is known but by how knowledge is used (Wenzel, 2017). The ability to adopt a questioning, evaluative, and research-based approach to practice is essential. For General Practice, this means revising an understanding of the medical generalist role that includes the capability for scholarly curation and use of 'knowledge-in-practice-in-context' (Gabbay and May 2004).

A recent UK Academy of Medical Sciences report (Academy of Medical Sciences, 2020) stated:

"There is an urgent need to enhance the NHS-academia interface to better harness the research expertise and capability of the NHS for the health and wealth of the nation."

This is equally relevant in an Irish context with the need to grow the capacity for meaningful clinical research in General Practice within the local healthcare system.

General Practice is a data-rich environment. These datasets represent an excellent and substantially under-utilised resource to inform current and future healthcare. Availability of data without the capability and capacity to synthesise, interpret, critically evaluate, and contextualise is of little use to the healthcare system from which the data has been derived. To maximise the value provided by collecting such data, there is a need to train clinical academics to be able to formulate and address research questions which are relevant and of value to the community that they serve. The Mant report (2006) reviewed research activity and investment in primary care research in Ireland in the early 2000s and highlighted a lack of research impact due to the limited capacity of skilled researchers, few clinical academic training opportunities, and a lack of funding.

Within the current research environment in Ireland, the following challenges are noteworthy:

1

There has been an emphasis on technological and biomedical models of research with much of the effort devoted to better treatments for advanced and/or end-stage disease

2

Most of the research revenue is spent on complex clinical trials in hospital settings with a predominant focus on solutions for single diseases

3

There is insufficient research expertise in General Practice to fully meet the needs of the local healthcare system. This has happened because of insufficient intent dedicated to the training for GPs interested in research and the limited research funding for Primary Care (compared to hospital specialties)

4.2 Clinical Academic Training Pathways in Ireland

It is important for patients and service providers that medical training equips doctors with the skills to teach and to undertake clinical and scientific research. This applies equally to doctors choosing a career in General Practice – GPs should be able to participate in research activities throughout their careers on either a full time or part-time basis. Through their combined clinical and academic practice, they have the potential to identify research questions relevant to patient care and to translate research from bench to bedside (Hall et al., 2017). A strong research culture is associated with improved patient outcomes (Ozdemir et al., 2015).

International literature suggests that those who engage with research early in their clinical careers will continue to do so. For examples, graduates of the UK's Academic Foundation Programme (UKAFP) were found to be more likely to progress to specialty academic training compared with graduates of the standard foundation programme (9.5% vs 0.2%) (UK Foundation Programme, 2020).

Opportunities for clinical research in Ireland are increasing. There has been considerable investment in clinical research infrastructure over the last decade. There now exists seven Clinical Research Facilities nationwide, multiple Clinical Trial Networks and Science Foundation Ireland-funded research institutes across the university and healthcare sector (Burke & Hennessy, 2021).

Prior to 2017, there was no combined clinical and academic training programme in Ireland for junior doctors at any level. The introduction of academic internships and HRB funded combined clinical academic doctoral training programmes (Figure 4.1) is welcome but the current training opportunities in Ireland, at all career stages, are not considered flexible nor suitably developed to permit GP trainees to consider acquisition of both clinical and research skills. Specific issues include the relative incompatibility of hospital specialist designed doctoral programmes for typical GP training (i.e., GP trainees are disadvantaged by their comparatively shorter training programme); lack of research training capability / knowledge / resources / administrative support; short term clinical academic appointments; ad hoc uncoordinated impermanent local training posts; lack of clarity on leave entitlements (e.g. paternity leave; pension entitlements etc.). All these challenges lead to a difficulty in recruiting talented individuals into a very uncertain career structure.

Figure 4.1 HRB funded Research Training Opportunities

4.3 Current General Practice Clinical Academic Training Pathways in Ireland

The current landscape of potential General Practice Clinical Academic training opportunities from 'pre-medical' to the post specialist clinical training space is illustrated in Figure 4.3. The following is a short description of the postgraduate opportunities (undergraduate teaching and learning opportunities are discussed in more detail in Chapter 3).

1 National Structured Clinical Academic Training Schemes

a *Academic Internship Track*

In 2017, the academic internship track (AIT) was launched, it provides a 1-year combined clinical and academic training programme to junior doctors in their first postgraduate year (National Doctors Training and Planning, n.d.). AIT interns complete a 3-month project in clinical research, medical education or healthcare leadership and management. This is a competitive programme, with demand exceeding capacity, and evidence of a contribution to research skills capacity (publication, progression to further academic training) (Burke & Hennessy, 2021). In 2022, each of the six Intern Networks hosted an academic track intern post, with four academic interns rotating through the post. This is set to expand in 2023, to 12 posts (48 Academic Track Intern posts in total, per year). Academic Intern Track posts are not affiliated to any particular speciality (HSE 2022). A 2021, evaluation of the programme reported none of the AIT trainees were based in General Practice (Burke & Hennessy, 2021).

b *Integrated Clinical Academic Training (ICAT) Programme*

This HRB funded clinical academic training programme began in 2017 and is an all Island programme providing doctoral training across all disciplines of human medicine, veterinary medicine and dentistry. Trainees are provided with accredited clinical training positions alongside an academic supervisor and progress with doctoral training over an extended specialist training period (Figure 4.2). Mapping of this timeline to General Practice training has been suggested as restrictive and a possible explanation why no GP trainees have been successful in applying to the programme to date. However, following recent detailed consultation between ICAT management and the ICGP, eligibility criteria are changing, specifically, from 2023, ICAT will be open to GP Trainees who are at SHO 1, 2 and GP Registrar level. It is hoped that this will lead to more GP trainees applying to the ICAT programme.

Figure 4.2 ICAT Training Structure

c *HRB Postdoctoral Fellowship/Emerging Investigator Awards/Research Leader*

The HRB funded postdoctoral pathway is continued with a series of personal fellowships to allow trainees to grow in seniority towards research independence and demonstration of international impact (i.e., Research Leader).

2 National Structured PhD Programmes in Healthcare Research

The HRB funds several structured PhD programmes in particular thematic areas. Enrolment is open to a broad range of individuals interested in healthcare research (not limited to HCPs). Examples include:

a *HRB Structured Population & Health Services Research Education (SPHeRE) Programme*

SPHeRE (Structured Population & Health Services Research Education) is a structured PhD programme run jointly by RCSI and eight partner universities across Ireland (HRB, n.d.). The objective of the programme is to train population health and health service researchers and has traditionally attracted applicants from non-clinical backgrounds who receive a traditional PhD stipend, though several GPs have undertaken PhDs through SPHeRE, with alternative funding on clinician researcher scales.

b *HRB Collaborative Doctoral Award (CDAs)*

The HRB funds a series of CDAs around thematic areas e.g., multimorbidity, stroke. These programmes fund 4-5 PhD candidates each from diverse backgrounds with PhD stipends and salary support for clinicians, allied health professionals and other health related disciplines.

Unstructured Training posts

a *Post CSCST "Aspire" Fellowship*

A National Doctor's Training Programme/HSE funded fellowship for trainees following completion of CSCST. The initiative grew from a 2014 Department of Health Report recommending supports to retain medical expertise in Ireland and support the development of specific expertise – notably this initiative was targeted only at hospital based medical specialties originally (Department of Health, 2014). This is a one-year post consisting of a split clinical academic post that is coordinated by the Irish College of General Practitioners alongside an academic supervisor (usually in a Department of General Practice). See Box 4.1 for a case example.

b *HSE Academic Clinical Fellowship*

A fellowship running since 2014 arising from the evaluation of an earlier HSE/ICGP *Senior Registrar* Scheme. The ICGP-Postgraduate Resource Centre initiated the Senior Registrar scheme in General Practice in 1999 with the support of the Department of Health & Children. It was a collaborative endeavour between AUDGPI, ICGP, HSE that involved recent graduates of specialist GP training schemes completing a two-year post comprising two activities - clinical and academic practice. The lessons from the review of the Senior Registrar scheme to some extent informed the subsequent fellowships, however several recommendations were not enacted [See Box 4.2]. The HSE Academic Clinical Fellowship has been offered biannually with one post competitively awarded to a GP Department. It is coordinated by the HSE, ICGP and AUDGPI and offers a three-year programme of research, education, and clinical practice training – ideally focussed on undertaking an MD or PhD, though the timeframe makes completion of a PhD very challenging.

c *Higher Education Institutes (HEI) Fellowships*

Several HEIs offer training opportunities for clinical academics that are funded philanthropically or through other local arrangements. Examples include the UCD Newman Fellowship, and RCSI StAR MD/PhD programme. These posts can have challenges in terms of clinical placements, for example, the RCSI StAR model incorporates clinical work in a hospital setting.

d *Other*

There are various other possible routes to secure funded training posts. The Irish Research Council (IRC) employer training fellowships supports funding from industry for staff development.

Figure 4.3 GP Clinical Academic Training Opportunities in Ireland

Box 4.1 Case Study 5 - Post-CSCST Fellowship UCC

The UCC Post-Certificate of Satisfactory Completion Specialist Training (CSCST) Fellows have developed clinical and research expertise in the areas of dementia palliative care and integrated care of the older person. They have developed expertise in synthesising evidence, undertaking scoping reviews of the literature, writing & submitting ethics application, performing qualitative research, interviewing participants, analysing qualitative data and academic writing. They have published papers in Forum and in peer-reviewed journal and further studies are ongoing. They have been involved in both undergraduate and postgraduate teaching and assessment activities, gaining experience delivering lectures, seminars, and small-group tutorials. They have collaborated with multidisciplinary colleagues from across the College of Medicine and Health on novel inter-professional educational activities, developing e-learning programmes and multidisciplinary dementia care workshops. Working with policy-makers, they have collaborated with the HSE's National Dementia Office, the Integrated Care of the Older Persons Programme (ICPOP) and Healthlink on a range of projects, including the Dementia Advisor Service, Memory Technology Resource Rooms and local and national care pathways.

Benefits

- Structured, supervised clinical and research educational experience.
- Development of clinical expertise in areas of emerging need in general practice
- Advancement of academic general practice, teaching and research
- Enhancement of audit and research skills, with excellent opportunities to progress to publication in peer-reviewed journals.
- Development of leadership skills, working with policymakers in national organisations
- Working with older patients, carers, and multidisciplinary healthcare professional colleagues, to co-develop research and clinical care pathways.

Challenges

- Time frames: Achieving desired outputs within a short period of time.
- Career prospects: Academic general practice career opportunities following completion of the Fellowship.
- Multi-tasking: Juggling clinical and academic commitments and workloads.

Box 4.2 Case Study 6 'Senior Registrar Scheme in General Practice'

The original aims of the SR scheme were:

- To promote the development of academic general practices
- To promote integration between undergraduate and postgraduate general practice teaching / training
- To promote research in general practice
- To provide a career pathway for GP graduates interested in an academic career.

In 2010, the Medical Education and Training Directorate, Health Services Executive commissioned a review of the scheme including a stakeholder consultation. The review identified many **benefits of the Scheme.**

- For the SR (an enhanced skill set, capacity to make a wider professional contribution to their discipline and developing 'special interest' clinical skills (e.g., dermatology), mentorship and career development)
- For practices (new clinical services and enhanced capacity for research, audit and education), and
- For specialist training programmes (having a role-model highlighting value of academic practice to trainees), primary care and the discipline of general practice (more inter-agency collaboration, further integration between undergraduate and postgraduate activity) and patients (e.g., access to expanded range of clinical services).

Summary of review recommendations:

- The scheme should be continued and expanded to involve other regions.
- The METR (HSE) should establish, with other key stakeholders (ICGP, AUDGPI and patient representatives) a steering committee to agree aims and objectives for the scheme.
- The aims of the scheme should be broadened to specifically reflect benefits for patients and strategic priorities in primary care and these should be reflected in specific outcomes for individual SRs (e.g., higher degrees)
- Two years is the minimum timeframe in which meaningful outcomes can be achieved.
- SRs should be supported by formal links with a university department, a specialist GP training programme, a nominated academic practice and ICGP.
- Parallels with other models of post-specialist training internationally are noted and, in that regard, consideration should be given to developing a formal 'Fellowship in General Practice' scheme that would allow participants to gain academic skills and qualifications, special clinical skills and therefore contribute to the future development of the discipline of General Practice in a leadership role.

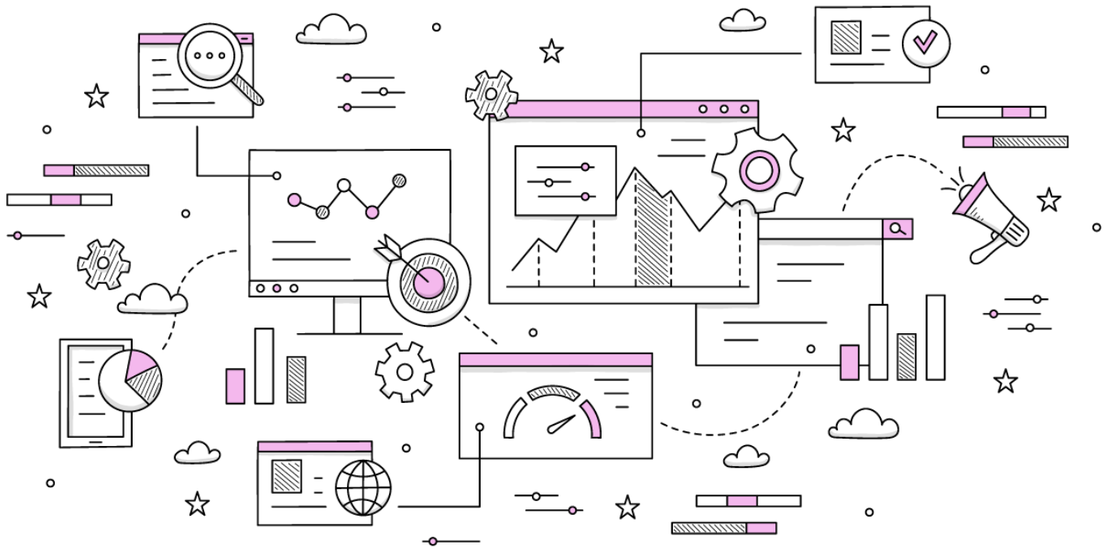
4.4 Research Training in the ICGP National General Practice Specialty Training Programme

Completing a research project or an audit is a mandatory component of general practice training in Ireland and is necessary for the satisfactory completion of specialist training. Research and audits are typically conducted in the third and fourth years of training. Research projects provide trainees with a basic knowledge of research methods, helping them to critically evaluate data, interpret findings and understand the steps involved in the research process, through insights gained during that process.

Research may be performed by trainees on an individual basis or as part of a team. Heretofore, projects have typically been supervised by directing staff on individual schemes, with varying degrees of collaboration with academic university departments. Projects are frequently delivered over short time periods (e.g., 6 – 9 months) and encompass different research paradigms.

Audits are usually conducted in training practices and examine a specific aspect of that practice against a recognised audit standard. Trainees are encouraged to complete an audit cycle where possible. Some schemes also offer basic instruction in quality improvement methods in lieu of a traditional audit.

The ICGP values research skills training highly and has an extant department of research that provides support, grants, and a research ethics service to the college a whole, including general practice trainees. Traditional structures have led to variability in the quality and quantity of research produced by trainees, and variability in the supervision they have received. The Transfer of Training Agreement provides a unique opportunity to formalise, support, and enhance the research efforts of general practice trainees. Initiatives may incorporate eLearning resources on research methods, an enhanced role for the research unit of College within GP training, and closer collaboration with academic university departments of general practice. Research supports may range from local, small-scale resourcing, to a full academic track incorporated into the national training programme.



4.5 An international example of a clinical academic training pathway

Chapter 2 Section 2.7 provides an overview of international examples of GP Training integrating with University Departments of General Practice. This subsequent section will describe in more detail the most well-developed integrated training programme internationally.

The National Institute for Health Research (NIHR) in the UK has pioneered integrated clinical academic training – particularly in relation to General Practice. The NIHR launched the Integrated Academic Training (IAT) programme in England in 2006. This is a partnership between the NIHR, medical schools, NHS organisations and Health Education England (HEE). It is delivered via number of schemes as detailed in Figure 4.4

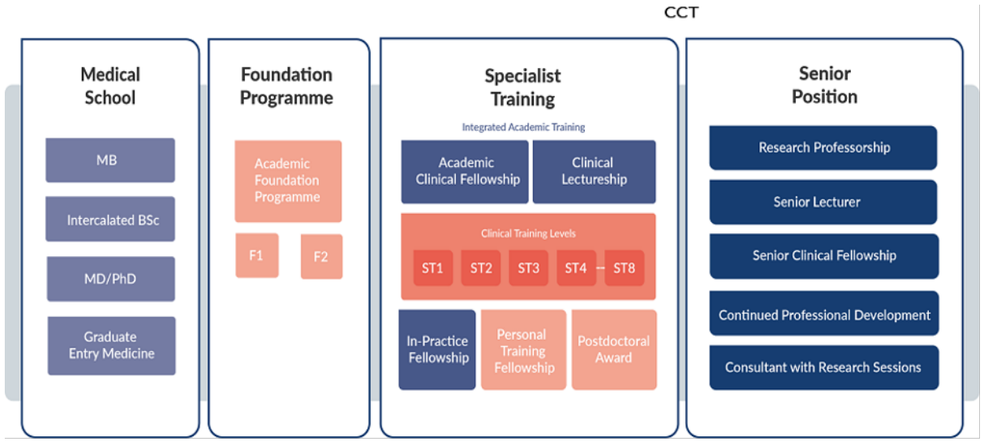


Figure 4.4 NIHR Integrated Academic Training Pathway (Medicine)

All medical school graduates complete a foundation programme (equivalent to Internship) which may have an academic component before proceeding to specialist training. Non-academic GP training in the UK is three years and comprises a familiar mixture of hospital and General Practice based placements coordinated by Vocational Training Schemes (VTS) and Health Education England.

Academic GP Specialist training

- ***Academic Clinical Fellowship (ACF)***

  NIHR Academic Clinical Fellowships (ACFs) are highly competitive, tailored training posts, which incorporate components of academic training. ACFs are designed for clinically qualified candidates who can demonstrate outstanding potential for a career in academic medicine. This training pathway comprises 75% clinical and 25% research training. This is extended to four years for GP trainees (as opposed to three years for non-academic trainees). Local arrangements are put in place to access master's level research training and the area of research is tailored to local expertise and the applicant's interest. In addition to attaining the CCT of non-academic colleagues, the ACF gains exposure to a research environment and dedicated time to prepare an application for a follow on research training fellowship (for a PhD or MD). ACFs are employed by the NHS organisation and hold honorary contracts with the university. The NIHR **pays the full costs** of the trainee (and travel/training costs).

NIHR Personal awards

These are a series of personal awards from pre to postdoctoral stage. Different arrangements prevail nationally around a combination of local HEI and national HEE funding for the posts with some or no salary contribution from General Practices. They are all highly competitive with eligibility requirements around existing expertise or demonstrated commitment/likelihood of academic success. They are advertised regionally by the local deaneries and nationally by the NIHR.

- ***NIHR In-Practice Fellowship (IPF)***

  This fellowship is unique to GPs, recognising the structure of GP specialist training means many trainees have not had the opportunity to avail of training prior to completion of CSCST. GPs can avail of this specific personal award – the In-Practice Fellowship. This provides pre doctoral academic training to fully qualified GPs to support 50% salary buy out to continue research and preparing for a doctoral research fellow (DRF).

- ***NIHR Doctoral Research Fellowship (DRF)***

  A Doctoral Research Fellowship supports trainees to undertake a minimum 4-year placement to complete a PhD. For GPs this fellowship is undertaken post CCT and typically as a progression from a successful ACF or IPF position.

- ***NIHR Academic Clinical Lectureship (ACL)***

  An Academic Clinical Lecturer, for GPs, is offered to those already holding a PhD and post CSCST (in contrast to other specialities) and provides a 4-year period to continue a 50/50 academic/clinical career development.

Supervision

There is a significant governance infrastructure for the IAT programme and at an individual level; the trainee has academic, educational, and clinical supervisors in addition to a personal tutor, programme director, IAT leads and HEE contacts. Flexibility and less than full time working is acceptable at all stages.

4.6 Proposed model for integrated GP clinical academic training

Our report presents a proposed model for integrated GP clinical academic training – beginning at undergraduate level and progressing through to substantive post opportunities. This is illustrated in Figure 4.5.

Guiding principles

- ***Flexibility / Part-time working / Inclusiveness***

  Nationally funded clinical academic training should be a flexible training pathway. Doctors on this pathway should be able to focus their academic training in their academic or research area, while also undertaking broad based training. Time spent in academic experiences should be counted within training, but these doctors may occasionally take longer to reach the exit point of postgraduate training, if for instance they spend further time undertaking doctoral research studies, caring responsibilities etc.

- ***Consideration of local needs*** – designing placements around local health needs (urban/rural deprivation, workforce, and capacity).

- Departments of GP in the Medical Schools and the ICGP National GP Training Scheme will **work collaboratively** to promote Academic General Practice, across the spectrum from medical students to interns and GP trainees, by identifying, nurturing, and facilitating those who wish to pursue academic GP opportunities.

- **Adequate resourcing** of the training programme is essential for success. Consideration of administrative support, strategic management, accreditation, mentorship, event management, etc. all needs attention.

Figure 4.5 Proposed model for integrated GP clinical academic training

Recommendation 7

Provide GP research experience at undergraduate level through intercalated degrees (BSc, MSc, PhD) and research electives.

Undergraduate

iBSc / MSc / MRes

An iBSc allows current medical students to pursue an individual subject, of their choice, in considerable depth. The iBSc is suitable for students who have successfully completed two years of an undergraduate medical programme. This is not routinely offered – current examples include a UCC course offering intercalating medical students the opportunity to undertake an MRes in Medical Sciences (MRes). In the UK, UCL and KCL have very popular programmes offering intercalated degrees in Primary Care. Specific activities include improving clinical and consultation skills, focus on quality improvement, leadership, motivational interviewing, and research.

Similarly, opportunities for medical students to become involved in General Practice research, for example by doing a summer research elective, do occur, but they are not always availed of to the same extent as other clinical disciplines. The working group recommends the promotion and provision of GP research opportunities to medical students, to help ignite interest and motivation for further research skills training and development.

Recommendation 8

Promote Academic Internships in General Practice

Academic Internship Track (AIT)

The existing AIT is now relatively well developed with a governance structure and reasonable visibility among final year medical students. However, there is limited awareness of opportunities for academic attachments to be undertaken in GP Academic Departments. Senior Academic GPs should be represented on the governance and selection panels for AIT. Promotion of the programme should include information on academic GP pathways and consideration of ring faced placements in GP departments.

Implementation

The working group recommends the following in support of implementing this recommendation:

- Senior Academic GP involvement in AIT governance & selection panels
- Ring-fenced training spots for Academic GP placements annually
- Increased visibility of Academic GP Intern track via ICGP, AUDGPI etc. promotion

Recommendation 9

Develop and resource a GP Specialist Training – Academic Pathway

Specialist Training

- **GP Specialist Training – Academic Pathway**

This report recommends establishing a structured GP Specialist Training – Academic Pathway, resourced across Ireland within the existing ICGP Specialist Training Programme. This proposed pathway, is informed by the UK model, and will address the clinical, workforce, teaching and academic needs issues as discussed in earlier chapters.

The NHS/HEE currently provides an academic route for 5% of all GP trainees, with Scottish training bodies providing 24 academic GP training posts each year. Our recommended academic GP training programme will comprise an additional 10% (n=30) on current GP training places (n=350 by 2025/2026). These thirty additional training places will ensure that the proposed academic expansion does not contribute to the current severe deficit in necessary graduate numbers.

Structure - Trainee recruitment, curriculum, and progression

The Academic Pathway GP training will extend GP specialist training to five years. Academic Pathway trainees will be recruited within the existing GP training programme structure – with the allocation of academic training positions being competitively awarded. All training sites may offer an Academic Pathway option, partnering with University Departments and nominated academic supervisors. Trainees will receive similar core clinical training (e.g., medicine, paediatrics, psychiatry, O&G, Emergency medicine) with integrated academic training attachments e.g., two days/week academic placement combined with a clinical attachment. Trainees will benefit from both a clinical and academic supervisor pathway throughout their training. Academic trainees will be required to fulfil academic core competencies (curriculum to be developed) with experiential learning and the expectation of formal qualifications (e.g., MSc; MPH; MMEd). Career development will support progression to post Academic Pathway training opportunities e.g., Post CSCST Fellowship, doctoral training.

Training programme:

The academic programme will have governance with ICGP PGTC/Academic council with a nationally agreed curriculum. The ICGP GP Training Programme will nominate six Academic Pathway Assistant Scheme Directors, to align with each of the medical school Departments of GP, as well as a National Scheme Director for GP Academic Pathway. The GP training programme will identify and recruit the additional GP trainers in participating schemes. The ICGP has submitted a proposal for the necessary resources, to support the additional GP training positions and academic programme supports.

GP University Departments:

GP University Departments will appoint an academic GP to oversee *Academic Pathway* trainees and identify suitable academic supervisors. This will foster strong links between clinical and academic medicine, improving patient care.

Recommendation 10

Actively support promotion of the ICAT programme for GP trainees.

This report supports the continued efforts to tailor the HRB ICAT programme to accommodate GP trainees, and we support efforts to promote and actively encourage applications from GP trainees. Consideration needs to be given to increasing the competitiveness of GP trainees at interview, by encouraging student research projects, undergraduate intercalated degrees and academic internships in General Practice (see Recommendations 7, 8). The report also welcomes the change to allow GP trainees to apply at any stage in their first three years of specialist training and the involvement of senior academic GPs in the governance of the programme. In addition, it is recommended that heads of departments of General Practice could work with their university representatives to ensure more representation of GP trainees on the programme. Continued promotion of the programme for GP trainees should be actively supported by ICAT, ICGP, AUDGPI, NDTP, and local training schemes etc. This needs to continue and do so using a multifaceted approach. A suggested programme of training for GP trainees within ICAT is presented in Appendix 7.

Recommendation 11

Develop post specialist training opportunities for GPs to develop an academic career.

- Develop and support pre-doctoral and doctoral training fellowships for General Practitioners
- Encourage co-funding of fellowships under specific themes (methods, clinical areas)
- Support GP clinical academics to secure post-doctoral training awards

Our report recommends a series of steps to develop the post specialist training opportunities for GPs developing an academic career. This should recognise those GPs who have had no/limited academic training as well as those progressing from earlier doctoral training (e.g., ICAT etc.). We suggest a combination of expanding some existing schemes (Post CSCST fellowship; HSE Academic Clinical Fellowship) to address recognised weaknesses and improving visibility of HRB post-doctoral awards to academic GPs.

- Clinical Fellowship

This proposed GP clinical fellowship is ideally suited to GP trainees immediately following attainment of CSCST. Similar in format to the current post-CSCST fellowship it would offer a combination of clinical and academic experience but extended to two years. This reflects the experience of current fellows that one year is insufficient to build a collaboration, attain qualifications or submit applications for further funding. The primary objective of the fellowship is to provide newly qualified GP trainees with academic experience and dedicated time to prepare a doctoral fellowship application. Academic GP departments should be contracted (and resourced) to host the fellowship with an academic and clinical supervisor nominated. Administrative support should be funded to provide coordination nationally for training supports, funding allowance and liaison with the Academic Academy (see below).

- Doctoral Fellowship

This fellowship is an adaption of the current HSE Academic Clinical Fellowship. This would be extended to four years to allow sufficient time to undertake a PhD. It would be open for applications on annual basis with intake either from those progressing from a clinical fellowship or directly from the GP Academic Track programme. Multiple fellowships could be advertised – with co-funding provided by various funding and charitable organisations under a theme/methodology of interest e.g., Science Foundation Ireland, Diabetes Ireland.

- Postdoctoral awards

The existing HRB clinical academic training awards are well designed and funded. The preceding training fellowships should ideally position academic GP trainees to be competitive for postdoctoral fellowships, emerging clinician scientists and research leadership awards.

Recommendation 12

Consolidation and expansion in GP Clinical Academic appointments at all levels

Recruitment and retention of high-quality GP clinical academics will be challenging at all stages of the proposed career pathway. The working group recommends that consolidation and expansion in Senior GP Clinical Academic appointments, be addressed as a means to both attract and retain high calibre GP clinical academics. Mentorship, advocacy, and leadership training will be necessary. The strategic development and coordination of training, career development and research capacity should be guided by a GP Clinical Academic Academy. This membership should be broad – including those undertaking training through the routes described and those supporting academic career development. The Academy will identify training needs, host networking and training events, develop grant programmes and a mentorship programme, liaise with external bodies etc.

Chapter 5

Key recommendations and implementation priorities

This chapter will:

1. Outline the priority activities, responsible agents, and the funding support necessary to ensure the recommendations of this report are implemented.
2. Propose an indicative timeframe for implementation.
3. Consider barriers and enablers to implementation of the recommendations of this report.

5.1 Introduction

This chapter is informed by the recommendations from the earlier chapters on education, research, and clinical academic pathways. In addition, this chapter makes two further recommendations (see below) necessary to enable the operationalisation of this report, and to maximise its impact.

The working group recognises wider discussions on the future of general practice, and the imperative to address current severe workforce challenges by promoting general practice as a career option. The identification, quantification and ring-fencing of robust resources and supports to promote education and training in general practice along the career trajectory from medical student through to GP intern, Registrar and College Member, with academic career pathways, is important. It is acknowledged that the recommendations for funding and implementation in this report should align with wider discussions on the future of general practice by stakeholders such as ICGP, Irish Medical Organisation, AUDGPI, National Doctors Training and Planning, Medical Schools Council, Department of Health, HSE, Medical Council and others. In particular we are informed by "Shaping the Future of General Practice", which outlines key solutions to the growing shortage of GPs in Ireland. It is envisaged that the recommendations of this report will play a key part in addressing this problem, if implemented effectively and in a timely manner. It will promote the retention of trained GPs, by providing enhanced career opportunities for GPs, encouraging GPs to stay in practice as they can also engage in a range of other professional activities. It will also enable the effective implementation of health policy in Ireland, by supporting Sláintecare population health planning, Regional Health Authority alignment and linkages between ICGP, medical schools and healthcare structures regionally / locally.

The chapter outlines and summarises the key recommendations from the report and then considers how they might be implemented and especially the stakeholder agencies whose support will be key to their successful implementation.

5.2 Key recommendations

Education:

- **Recommendation 1:** Develop and implement a national funding model that supports the hosting and delivery of undergraduate general practice placement for medical students in all medical schools. It is proposed that ring-fenced funding be identified and provided to medical schools in order to support a radical expansion in the time that medical students spend in general practice; and this would include funding for the coordination and delivery of clinical placements related infrastructure and be administered by medical schools on a 'money follows the student' basis. Further, it is proposed that similar ring-fenced funding would be identified and provided to support expansions in GP training and intern places.
- **Recommendation 2:** Expand GP intern places nationally, increasing incrementally and monitoring for evidence of impact. While the optimum number of GP intern practices is to be determined by evaluation of incremental increases, it is envisaged that it will be of the order of at least 50 GP practices. This would result in 200 GP interns – each affiliated with a Medical School Department of General Practice.
- **Recommendation 3:** Establish 'GP Hubs' affiliated with each Medical School Department of GP, and local GP Training Scheme. This would involve selection, support, and resourcing, of suitable General Practice / Primary Care Centre Practices to train interns, GP Registrars, 2-4 students at a time. This would involve a one part time GP academic post, per Medical School, shared between Department of GP and the local training scheme(s).
- **Recommendation 4:** Encourage all GP trainees to be involved in the education of medical students – via the formal and informal medical curricula. This would involve a specific plan for involving GP Trainees and Registrars, GP intern and medical student in near-peer teaching, in both hospital and GP settings.
- **Recommendation 5:** Establish an optional 'Rotation in Academic General Practice- Teaching and Scholarship' for GP trainees during hospital training. This would involve two positions in each medical school to accommodate six GP registrars per year per school with a focus on Education or Research with specific learning outcomes / competencies for the GP registrar to attain.
- **Recommendation 6:** Create 1-2 Professor / Senior Academic posts in GP Education in each medical school. This would involve one full time equivalent post, per medical school, with specific remit to provide leadership for supporting and building networks of GPs involved in teaching medical students and GP trainers, to engage and collaborate with GP training through supervision of the Academic GP trainee and GP Hubs, and other involvement of, and support for, GP trainees in medical student and GP intern education.

Research & Clinical Academic Training:

- **Recommendation 7:** The provision of GP research experience at undergraduate level through intercalated degrees (BSc, MSc, PhD) and research electives.
- **Recommendation 8:** Establish an Academic GP Internship Track. This would include Senior Academic GP involvement in governance / selection panels, ring-fenced training spots for Academic GP placements annually, increased visibility and promotion of Academic GP Intern track via ICGP, AUDGPI promotion, etc.
- **Recommendation 9:** Develop and resource a GP Specialist Training – Academic Pathway. This would include the development and continued support for a GP Specialist Training – Academic Pathway, recruitment, and support for Assistant Scheme Directors in each Medical School, and a National Programme Director for Clinical Academic Training.
- **Recommendation 10:** Actively support promotion of the ICAT programme for GP trainees.
- **Recommendation 11:** Develop post specialist training opportunities for GPs to develop an academic career. This would include support for pre-doctoral and doctoral training fellowships for General Practitioners, funding for fellowships under specific thematic areas, support for GP clinical academics to secure post-doctoral training awards.
- **Recommendation 12:** Consolidation and expansion in GP Clinical Academic appointments at all levels. This would include consolidation and expansion in senior GP Clinical Academic appointments, to include development of / support for a GP Clinical Academic Academy.

Two further recommendations are necessary to enable the delivery of the education and research recommendations.

Recommendation 13

Align regional Training Schemes with medical schools, with the establishment of a structured framework to support collaboration and maximise synergies between Medical Schools and GP Training

Structural:

- Align Regional Training Schemes with medical schools, with the establishment of a structured framework to support collaboration / maximise synergies between Medical Schools and GP Training that would include funding for shared posts / accommodation / access to IT, Library and other services, input to governance, liaison with general practices, etc.

  The desire for closer alignment between the agencies responsible for GP Training and medical degree programmes (specifically the ICGP and AUDGPI / medical schools) was a key driver for the establishment of this working group. In preparing this report, several examples of close 'on the ground' collaboration between ICGP / GP Training and AUDGPI / medical schools, have been identified. These include the provision of office accommodation, shared teaching, mentorship, access to facilities such as IT, Library, teaching space, etc. Many such examples of these can be found locally at each medical school / GP Training Programme and are described in this report. The benefits for stakeholders of such collaboration are immense and especially so, while medical schools or GP Training Programmes are in the early years of their existence. In Ireland, General Practice and GP Training were crucial enablers to the establishment of a new medical school in Ireland's Midwest region (Cullen et al 2012).

  However, the Working Group is concerned that these collaborations exist largely due to local relationships between key individuals and advocates strongly for the establishment of a structured framework to support collaboration between medical schools and GP training, which is essential for encouraging General Practice as a career, supporting research and education in the specialty, ultimately benefiting patient care. The Working Group recommends the following:

- Posts (Assistant Scheme Director, Professor(s) in GP Education, / Senior Lecturer) that are shared between medical school and GP Training.
- Funding for shared access to infrastructure to enable co-location of GP Training Schemes in Medical Schools / Universities (e.g., office accommodation, access to teaching space / IT / Library facilities, etc).
- Providing GP trainees with access to University IT services (email facilities, software, etc), through locally agreed mechanisms, for example by registering GP trainees as students at the University.
- Involvement of Programme Directors in the governance of teaching, assessment and research at the university and involvement of the relevant lecturer/ heads of subject / Professors of GP / GP Education, in the governance of GP Training locally and regionally.
- The provision of Honorary Academic Titles to Programme Directors in recognition of their involvement in university activity.

Recommendation 14

Establish a high-level implementation working group, representative of relevant stakeholders, with responsibility for enacting the report recommendations.

Enactment:

We recognise there are many potential barriers (e.g., funding, policy context, competing demands for resources, capacity constraints, etc.) which may make the implementation of this report a challenge. However, the need for a concerted effort to address the workforce crisis in general practice, Sláintecare and prioritisation of shifting to a community-based model of healthcare delivery are key enablers at a policy level. Such is the pressing nature of these challenges that the recommendations contained in this report should be implemented within an expedited timeframe. Therefore, Recommendation 14 is to set up a high-level implementation group, involving decision makers from the relevant stakeholder groups to ensure the prioritisation of this report.

5.3 Implementation considerations

Table 5.1 outlines the initial resources required to support these 14 recommendations and identifies key stakeholders who will be responsible for ensuring the recommendations are implemented. It is also envisaged that a lead stakeholder be identified for each recommendation.

The resources include:

- Ring-fenced funding be provided to medical schools to support a radical expansion in the time that medical students spend in general practice.
- Ring-fenced funding to support expansions in GP training and intern places.
- Additional GP interns (aiming for 200 internships per annum)
- Academic Hubs (i.e., suitable General Practices / Primary Care Centres to support education and training at scale – four per medical school for an initial period of two years, with evaluation and review, and further expansion)
- Involvement of GP Trainees / Registrars, GP interns and medical students in near-peer teaching
- Rotation in Academic General Practice for GP Trainees (two posts per medical school)
- The appointment of 1-2 Professor / Senior academic posts in GP Education at each medical school, with an explicit mandate to support activities that promote collaboration between medical schools and GP Training, with the potential to support health policy implementation nationally and locally.
- Supports to promote research experience for medical students at undergraduate level to undertake intercalated BSc / MSc research degrees, complete research electives.
- Academic General Practice Internship Track (1-2 posts in each medical school)
- Clinical Academic General Practice Specialist Training Pathway (1-2 posts in each medical school / GP Training programme per annum)
- Funding to support ICAT Programme places for GP trainees.
- Post CSCST Training opportunities – development of Clinical Fellowships of 2-year duration, and Doctoral Research Fellowships of 4 years duration
- Consolidation and expansion in Senior GP Clinical Academic appointments at all levels.
- Practical supports to promote alignment of GP Training Schemes with medical schools regionally (e.g., funding for accommodation / access to IT, Library, teaching space and other services; input to governance, practice liaison, funding for shared posts, registration of GP Trainees as students, involvement of Programme Directors in the governance of teaching and research at the university / involvement of heads of subject / professors in the governance of GP Training locally, provision of Honorary Academic Titles to Programme Directors, etc.), provision of shared staff development opportunities

Table 5.1 Resources required to support implementation

Recommendation	Description / comment	Agent responsible
1. Develop and implement a national funding model that supports the hosting and delivery of undergraduate general practice placements for medical students in all medical schools	It is proposed that ring-fenced funding be identified and provided to medical schools in order to support a radical expansion in the time that medical students spend in general practice; and this would include funding for the co-ordination and delivery of clinical placements related infrastructure and be administered by medical schools on a 'money follows the student' basis. It is proposed that similar ring-fenced funding would be identified and provided to support expansions in GP training and intern places.	Department of Health (DOH) and Medical Schools Council in conjunction with HSE, HEA, Universities, AUDGPI
2. Expand GP intern places nationally, increasing incrementally and monitoring for evidence of impact	200 GP interns – each affiliated with Medical School Dept of GP and based in GP practice 4 days a week 0.5 days a week on Intern training	TBC, NDTP HSE DOH Medical Council
3. Establish 'GP Hubs' affiliated with each Medical School Department of GP, and local GP Training Scheme.	Select suitable General Practice / Primary Care Centre Practices 1 GP Intern (3-month posts- 4 per year) 2 GP Registrars (one 3rd year, one 4th year) 2-4 students at a time (depends on placement duration – aim for minimum 4 weeks) Introduce and operate 4 Hubs per medical school for 2 years, evaluate and review progress, then expand nationally. Total throughput annually per Academic Practice would therefore be: 4 interns / 2 GP registrars / 16-32 students per year based on 32 weeks of teaching term.	ICGP HSE NDTP Medical Intern Unit Departments of GP
4. Encourage all GP trainees to be involved in the education of medical students – via the formal and informal medical curricula.	Specific plan for involving GP Trainees and Registrars, GP intern and medical student in near-peer teaching, both in hospital and GP settings Support for • Development of teaching skills to for GP Trainees • Running GP Journal Clubs open to NCHD GP trainees and medical students. • Student GP societies supported to engage directly with GP trainees, including those in NCHD positions as part of Year 1.2 GP training. • Open evenings • Medical student attendance at an example Day release • Involvement of GP Trainees in teaching medical students, directly as part of the medical curriculum	Universities / Medical Schools Departments of GP Professor of GP Education ICGP National Director of GP Training

5.	Establish an optional 'Rotation in Academic General Practice-Teaching and Scholarship' for GP trainees during hospital training.	Two posts in each medical school to accommodate maximum of 6 GP registrars per year per school = 36 annually = 14% of annual trainee intake (total trainee intake 258), depending on uptake of the rotation Maintain 1-2 days per week clinical practice and 1 day per week at Day release. 2-3 days per week commitment in the Medical School - Focus on Education or Research with specific learning outcomes / competencies for the GP registrar to attain.	ICGP, AUDGPI, Medical Schools (Departments of GP) Professor of GP Education, ICGP National Director of GP Training, HSE
6.	Create 1-2 Professor/ Senior posts in GP Education in each medical school	1-2 posts with specific remit to provide academic leadership for supporting and building networks of GPs involved in teaching medical students and GP trainers, with a remit to engage and collaborate with GP training through supervision of the Academic GP trainee and GP Hubs, and other involvement of and support of, GP trainees in medical student and GP intern education. As well as the medical school for which s/he works, s/he would have close links with GP Training, Academic Hub Practices, HSE and an explicit mandate to support activities that promote collaboration between medical schools and GP Training.	Universities / Medical Schools / HSE Departments of GP / HEA / ICGP
7.	The provision of research experience at undergraduate level through intercalated degrees (BSc, MSc, PhD) and research electives etc.	An increase in the number of stipends provided to support research electives in General Practice and Primary Care by agencies such as the HRB.Funding to support bursaries / stipends to support 1-2 students per annum to complete an intercalated BSc / MSc research degree	Medical schools / Departments of GP / HRB
8.	Establish an Academic GP Internship Track.	This would include Senior Academic GP involvement in governance / selection panels, ring-fenced training spots for Academic GP placements annually, increased visibility and promotion of Academic GP Intern track via ICGP, AUDGPI promotion, etc.	DoH, HEA, NDTP, Medical Schools
9.	Establish GP Specialist Training – Academic Pathway.	This would include the development and continued support for a GP Specialist Training – Academic Pathway, recruitment, and support for Assistant and National Academic Programme Directors, appointment of a national GP Medical Education lead. 1 Assistant Scheme Director per Medical School, and 1 National Clinical Academic Scheme Director, with a mandate to support the Clinical Academic Pathway GP trainees, and to support GP Trainee research	ICGP, Medical Schools (Departments of General Practice), HSE, NDTP

10.	Support and promotion of ICAT Programme for GP trainees.	This would include additional senior academic GP involvement in ICAT governance and active support for and promotion of the ICAT programme for GP trainees.	ICAT programme, medical schools
11.	Establish Post CSCST Training.	This would include support for pre-doctoral and doctoral training fellowships for General Practitioners, funding for fellowships under specific thematic areas, support for GP clinical academics to secure post-doctoral training awards.	ICGP, Medical Schools (Departments of General Practice), HSE
12.	Consolidation and expansion in GP Clinical Academic appointments at all levels	This would include consolidation and expansion in senior GP Clinical Academic appointments, to include development of / support for establishing a GP Clinical Academic Academy.	ICGP, Medical Schools (Departments of General Practice), HSE, DoH, HEA
13.	Align Regional Training Schemes with medical schools, with the establishment of a structured framework to support collaboration / maximise synergies between Medical Schools and GP Training	To include: - Funding for accommodation / access to IT, Library, teaching space and other services - Input to governance, liaison with general practices, etc. - Funding and revised job description for shared posts (e.g., Assistant Scheme Director / Lecturer in General Practice, recognising that many individuals have two independent half time jobs. - Access to IT services, email, facilities, software, etc) through locally agreed mechanisms. - Involvement of Programme Directors in the governance of teaching, assessment and research at the university and involvement of the relevant heads of subject / professors in the governance of GP Training locally and regionally - Provision of Honorary Academic Titles to Programme Directors in recognition of their involvement in university activity.	ICGP, Medical Schools (Departments of General Practice), HSE
14.	Establish a high-level implementation working group, representative of relevant stakeholders, with responsibility for enacting the report recommendations.	This will be representative of relevant stakeholders, and will have responsibility for enacting the report recommendations, within the specified timeframe.	Including, but not restricted to, ICGP, AUDGPI, HSE, DoH, IMO, HEA, Medical Schools Council, patient, student, and GP trainee representatives

Appendix 1
Structured Partnership Working Group terms of reference and meeting schedules.

Terms of Reference

1. Terms of reference of the working group were agreed as follows.

- **Working group membership-** AUDGPI (MK, NH, WC, PR) ICGP (FF, MR, BO'M, DQ)
- **Remit-** the purpose is to explore the potential for Medical School Departments of General Practice and the ICGP to formalise ways in which they can collaborate across a wide breadth of domains: education, clinical placements, research, academic training, and wider contribution.

The **output** from this working group will be a **report** detailing.

1. A robust, evidence based, rationale for closer collaboration, advantages and benefits of partnership, particularly highlighting benefits to GP as a professional discipline. Keen focus on positively influencing future career choice for medical students towards a career in GP and increasing applications to GP training.
2. A survey of local arrangements currently operating between the medical schools and GP training schemes
3. Comparisons with international examples
4. Mapping out the potential breadth and depth of collaboration including, but not limited to: securing high quality GP clinical placements for students, supporting educational/ academic roles for newly qualified GPs, contributing to teaching and research supervision, supporting opportunities for structured academic career training , such as supporting GP trainees interested in ICATs and HRB doctoral training and developing career pathways
5. Perceived barriers/ challenges / threats and suggestions for overcoming these.
6. Governance of any proposed partnership- including resource implications
7. Methods for reviewing and evaluating the partnership, including measurable outputs.

- **Timeline –** The working group will produce the final report by summer 2022. Meetings will take place 3 weekly, with email communication in-between. Meeting schedule below, MK to circulate zoom links.
- **Reporting structure-** The working group will report to the GP Training Taskforce Advisory Group and the AUDGPI executive.

Schedule of Meetings

Meeting - 1 -

via Zoom meeting 11- 11. 35 am 28.01.22.

In attendance: Fintan Foy (ICGP), Brian O'Malley (ICGP), Patrick Redmond (AUDGPI), Walter Cullen (AUDGPI), Nigel Harte (AUDGPI), Maureen Kelly Chair (AUDGPI).

Apologies: Martin Rouse (ICGP) **Not in attendance** Diarmuid Quinlan (ICGP),

Meeting - 2 -

via Zoom 11.03.2022 11-12 noon.

In attendance: Fintan Foy (ICGP), Patrick Redmond (AUDGPI), Walter Cullen (AUDGPI), Nigel Harte (AUDGPI), Maureen Kelly Chair (AUDGPI).

Apologies received: Martin Rouse (ICGP), Diarmuid Quinlan (ICGP), Brian O'Malley (ICGP)

Meeting - 3 -

via Zoom March 31st 1- 1.40 pm.

In attendance: Brian O'Malley (ICGP) Patrick Redmond (AUDGPI), Walter Cullen (AUDGPI), Nigel Harte (AUDGPI), Maureen Kelly Chair (AUDGPI).

Apologies received: Fintan Foy (ICGP), Martin Rouse (ICGP), Diarmuid Quinlan (ICGP)

Meeting - 4 -

via Zoom May 5th 1- 2.05 pm.

In attendance: Martin Rouse (ICGP), Brian O'Malley (ICGP), Walter Cullen (AUDGPI), Nigel Harte (AUDGPI) Maureen Kelly Chair (AUDGPI)

Apologies received: Patrick Redmond (AUDGPI), Diarmuid Quinlan (ICGP), Andrew Murphy (Invited presenter)

Meeting - 5 -

via Zoom June 2nd 1- 2.05 pm .

In attendance: Martin Rouse (ICGP), Brian O'Malley (ICGP), Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Diarmuid Quinlan (ICGP), Patrick Redmond (AUDGPI).

Apologies received Nigel Harte (AUDGPI) Fintan Foy (ICGP), Diarmuid Quinlan (ICGP)

Meeting Date

June 23rd 1- 2.05 pm

In attendance: Martin Rouse (ICGP), Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Diarmuid Quinlan (ICGP), Patrick Redmond (AUDGPI)

Apologies received: Nigel Harte (AUDGPI) Fintan Foy (ICGP) Brian O'Malley (ICGP)

Email Communication took place during July/ August

Meeting - 7 -

via Zoom – Sept 1st 1- 2.15 pm

In attendance: Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Patrick Redmond (AUDGPI) Brian O'Malley (ICGP)

Apologies received: Nigel Harte (AUDGPI) Fintan Foy (ICGP) Martin Rouse (ICGP), Diarmuid Quinlan (ICGP)

Meeting - 8 -

Date Oct 6th 1- 2.15 pm Venue –Zoom 1-2pm

In attendance: Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Patrick Redmond (AUDGPI) Brian O'Malley (ICGP), Martin Rouse (ICGP)

Apologies received: Fintan Foy (ICGP) Diarmuid Quinlan (ICGP), Nigel Harte (AUDGPI)

Meeting - 9 -

Date – Oct 20th 1- 1.45 pm Venue –Zoom 1-2pm

In attendance: Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Patrick Redmond (AUDGPI) Brian O'Malley (ICGP), Martin Rouse (ICGP), Diarmuid Quinlan (ICGP)

Apologies received: Fintan Foy (ICGP) Not in attendance Nigel Harte (AUDGPI)

Meeting - 10 -

Date – Nov 17th 1- 2 pm Venue –Zoom 1-2pm

In attendance: Walter Cullen (AUDGPI), Maureen Kelly Chair (AUDGPI) Patrick Redmond (AUDGPI) Brian O'Malley (ICGP), Diarmuid Quinlan (ICGP)

Apologies received: Fintan Foy (ICGP) Martin Rouse (ICGP) Nigel Harte (QUB)

Weekly follow up occurred between these meetings, via email, phone and smaller zoom meetings between subgroups of the working group to complete designated report chapters.

Meeting - 11 -

Dec 6th, 2022, Venue Dublin

Presentation and consultation with AUDGPI executive on near final draft report

Meeting - 12 -

Jan 4th, 2023, Venue Zoom 1-2pm

In attendance: Walter Cullen Chair (AUDGPI), Patrick Redmond (AUDGPI) Brian O'Malley (ICGP), Diarmuid Quinlan (ICGP) Fintan Foy (ICGP) Martin Rouse (ICGP)

Apologies received: Maureen Kelly (AUDGPI), Review of feedback and incorporation into final draft.

Meeting - 13 -

Jan 18th, 2023, Venue Zoom

Presentation and consultation with Taskforce Advisory Group on near final draft report

Meeting - 14 -

Feb 2nd, 2023, Venue Zoom 1-2pm

In attendance: Walter Cullen Chair (AUDGPI), Maureen Kelly (AUDGPI) Patrick Redmond (AUDGPI) x Diarmuid Quinlan (ICGP)

Apologies received: Brian O'Malley (ICGP) Fintan Foy (ICGP) Martin Rouse (ICGP) Review of feedback and incorporation into final draft.

Appendix 2
Summary of GP teaching, assessment, and placement weeks in Irish Medical Schools

Medical School	Summary of GP teaching input into medical curriculum	Weeks on Clinical Placement in GP
UG	**Years 1 and 2** Not co-ordinated by the Dept. of GP, but GPs and GP lecturers contribute to generic clinical competencies: Introduction to history taking and clinical skills (Integrated modules) - ECTS vary between modules **Year 4–Main GP Teaching =** 15 ECTS (10 ECT in GP Module and contributes 5 ECT to an Integrated Advanced Clinical Skills Module) - 8 fulltime weeks of teaching in total inclusive of lectures, small group tutorials, simulated GP surgeries, clinical skills laboratory and GP clinical placement **Summative assessment** via Clinical Placement GP Tutor Assessment, Clinical Skills Log, MCQ, OSCE and Case Study **Network of GPs who take medical students n=120** **Final Degree Award is split over the last two years of the programme - Modules coordinated by GP accounts for 8% of the Final Degree award.** **Please note- Major curriculum review underway which may extend the GP footprint in the curriculum*	**Total 4 weeks** 2 weeks spent in 2 different practices, one in each Semester in Year 4
RCSI	**Years 1&2 *** - Introduction to Clinical Practice/ Clinical competencies for 18 months/ History/ examination of four systems/EPC **Year 3** - Possibility to do optional Student Selected Component in GP research **Year 4** - 6 weeks rotation in GP - 2 weeks in GP department teaching & 4 weeks on GP clinical attachment = 12 ECTS **Summative assessment via** Clinical Placement GP Tutor Assessment, MCQ, and Portfolio **Network of GPs who take medical students n= circa 100** **Final Degree Award is split over the last two years of the programme - Modules coordinated by GP accounts for 12% of the Final Degree award.** **Please note - Transforming Healthcare Education Project (THEP) curriculum to commence in September 2022. Greater integration, problem-based learning etc. This will cascade and replace the current description of Year 1-5.*	**Total 4 weeks**
UCC	**Years 1 & 2** – Contribute to Year 1 module and co-ordinate module for Year 2 that includes early patient contact 10 ECTs. **Year 3** – Clinical Science & Practice comprising lectures, small group teaching & 4 week GP clinical attachment 5 ECTs ***Summative assessment*** *- MEQ, MiniCEX, Tutor Evaluation* **Year 5** – Internal Medicine, Geriatric Medicine & General Practice Integrated attachment comprising 4-week GP attachment & small group tutorials. 20 ECTs ***Summative Assessment*** *– MiniCEX, SBA MCQ, Short Cases Clinical Exam* **Network of GPs who take medical students n= circa 101** **Final Degree Award Modules coordinated by GP accounts for 10% of the Final Degree award**	**Total 8 weeks** 4 weeks in Year 3 4 weeks in Year 5
UCD	General Practice coordinates and delivers – 1) Clinical Science & Healthcare Informatics (Stage 2, 5 ECTs): 2) General Practice & Professionalism (Stage 4, 5 ECTs) incorporating 1 wk clinical placement 3) Primary Care Medical Practice (Stage 2 Graduate Entry Programme, 5 ECTs, incorporating 1 wk clinical placement); 4) Medicine in The Community (Stage 5, 10 ECTs) incorporating 2 weeks clinical placement. and 5) Clinical Elective Module (Stage 6) with option to do 3-6 week placement in GP General Practice also contributes to other modules across the medical degree programme, including: PBL (Graduate Entry); Clinical Skills, Therapeutics; Pathology, Professional Completion. **Summative Assessment**- MCQ, SAQ, OSCE, Group project, Portfolio, Case report, Long case and Viva **Network of GPs who take medical students n=142** **Final Degree Award is split over the last two years of the programme – Modules coordinated by General Practice account for 8% of the Final Degree award**	**Total: 3 weeks** (+ optional 3-6 weeks elective)
UL	**Years 1 and 2:** Not co-ordinated by the GP Depart, but GPs from the GP tutor network are contracted to teach/ facilitate learning on the following programmes – 1) Early Patient Contact programme 2 ECT/ 2) Special study module (Medwell-an integrated exercise and teaching module 1 ECT, 3) Clinical Skills: Introduction to history taking/ clinical skills & The Problem Based Learning Program (knowledge). The latter = 45 ECTS in both Year 1 + 2. The Dept. of GP examine/assess frequently at these year 1 + 2 Exams. **Year 3:** GP Programme- 18 weeks of a LIC in a single general practice supported by a weekly full day each week of seminars, small group teaching and professional competence activities- 25 ECTs. **Formative and Summative assessment** via In-training Assessment (ITA) form (Early Form 1 is Formative, End Placement Form 2 is Summative), clinical case presentation (S) and log-book(S); EMQ (S), MCQ(S) (Written papers); and Long Case exam (S). **Research SSM (Year 3 & 4):** Dept. GP staff supervise students on a variety of students led research projects (Year 3 and over summer between years 3 + 4)- **Network of GPs who take medical students n=201** **Modules coordinated by General Practice accounts for 16.6% of final degree award**	**Total 18 weeks** 18-week longitudinal placement in a single GP practice in Year
TCD	**Year 1. Family Case Study.** Part of wider module on Human Health and Behaviour. Students have a GP tutor and visit a mother with a new baby – 4 visits over the year. **Year 4 Public Health and Primary Care Module** 8 Weeks comprising 4-week GP practice placements (2 x 2 weeks each) and 4 weeks of in-house teaching across range of general practice primary care, epidemiology, public health, health systems and health equity topics. **Summative Assessment:** Portfolio which contains records of practice Mini-CEX assessment, MCQ at end of year and MEQ at end of each rotation. **Network of GPs who take medical students n=154** **Final Degree Modules coordinated by GP are not part of final degree award,** but GPs examine in Final Clinical Exams including cases based out in general practices. Students have about 1:10 chance of having a GP clinical long case	**Total 4 weeks** 2 weeks Inner (in or around Dublin) 2 weeks Outer (across Ireland)

Legend- EPC Early patient contact; ECTs European Credit Transfer and Accumulation System (see Chapter 2 for explanation); LIC Longitudinal Integrated Clerkship, MCQ Multiple Choice Question, PBL Problem based learning, OSCE Objective Structured Clinical Examination

Appendix 3
Detailed description of current collaborations between Departments of GP and GP Training Schemes

Name of Medical School	University of Galway	University College Cork	Univeristy of Limerick	University College Dublin	Trinity College Dublin	Royal College of Surgeons in Ireland
Name of principle collaborating Scheme(s) (where there are less established/ occasional collaborations, with other schemes these are described in brackets)	Western Sligo (Donegal)	Cork Southeast	Mid-Western	UCD / Dublin Mid Leinster (UCD/DML) & North Dublin City	TCD	RCSI
University accommodation provided for Training Scheme Day release/ +/- scheme staff offices	No formal arrangements Sligo scheme has shared UG accommodation on a short term, informal basis (Donegal Scheme occasionally shares UG accommodation informally)	Yes – long-standing formal arrangement with Cork Scheme	Yes – long-standing formal arrangement with Mid-West Scheme	Yes –long-standing formal arrangement with UCD/DML	Yes	Yes-long-standing formal agreement
IT services e.g., email, software,	No	Yes, hardware and internet access provided for scheme staff	No	No	Could have access through academic roles	Yes –emails, Moodle access and IT support and staff cards for scheme staff
Library services	No	No	informal	No		Yes – full access
GP Scheme Directing Team contributing to teaching/ assessment of medical students	Only if Scheme member in shared post with Dept. of GP (see below re shared staff*)	No formal arrangements	Yes – e.g., specialised expert areas like Musculoskeletal	Yes – occasional teaching	Yes, occasional lectures/ workshops	No
GP Scheme Directing Team contributing to education / support of medical students in other ways	Yes – RCGP Undergrad Case competition-Joint judging panel and Open evenings/ career information for Interns/ senior year medical students	Yes-RCGP undergraduate case competition	Yes – RCGP undergraduate case competition. Support for Wonca conference. Student society talks. Open evening	Yes RCGP Undergrad Case competition - Joint judging panel. Career information sessions.	Yes. Has been overlap between posts for over a decade though this has changed recently. Scheme director has academic appointment in our Dept. – currently on sabbatical	Yes – RCGP Undergrad Case competition-Joint judging panel
Department of General Practice staff contributing to teaching of GP trainees	Yes- through Module in Academic GP (see case study) and Department of GP Research staff delivering occasional workshops on topics related to their research content, or research skills, ethics etc. Informal & occasional	Yes, dermatology and prescribing sessions	No – but did previously	Yes – occasional teaching	Yes, Research Methods teaching	Occasional invited lectures around career development & introduction to academic GP
GP Trainees contributing to teaching of medical students	Yes- through "Module in Academic GP" (see text) for Western Scheme and in Sligo GP trainees were previously involved in both teaching delivery and OSCE examinations	No	Yes- informally on GP placement and planning for more structured opportunities	No	Recent graduates contribute to undergraduate teaching	Med Ed opportunities – Registrars invited to co-deliver departmental teaching/ assessment activities- uptake variable

Staff development – GP Scheme Directing team contributing to, or attending staff development	Yes – through annual "Teach the Teacher" (see case study)	Starting this academic year GP workshop hosted by GP Dept. will focus on medical education CPD	No	No	Not formally	No
GP trainees contributing to, or attending post graduate education or training opportunities – such as Masters / Diplomas / Formal courses	Not formally arranged, but some trainees opt to do so- e.g., the Post Graduate Certificate in Clinical Education	No	No	Yes, Participation by GP Trainees in graduate taught programmes (e.g., Graduate Diploma in Primary Care Mental Health, Pre-Hospital Emergency Care)	No	No
Department of General Practice staff contributing to / or supporting GP trainee research	Informal only –except in the case of individuals with dual roles – see below	Informal only	Yes, informal, and currently developing this further	No	Yes. Teaching on Research Methods and some supervision	Informal advice given – but see shared posts below
GP Scheme Directing Team contributing to / or supporting Department of General Practice led research	Occasional involvement – e.g. by Assistant Scheme Director being involved in data collection, or by facilitating research instruments to be piloted with the Scheme Directing Team	No	Yes informal	No	Has been done in past. No current projects	No

Department of General Practice staff governance roles in GP Training	Yes – through steering committee	Yes – through steering committee	No	Yes – through steering committee of DNIC scheme	Yes – through steering committee	Yes- through steering committee
GP Training Scheme Team governance roles / or recognised position in Department of GP	No	No	Informal – some may have adjunct honorary post because they also take students	Yes – Appointment of GP Trainers / Scheme Directors as adjunct faculty at UCD School of Medicine	Scheme Directing team have held academic appointments and contributed as Assistant Professors/ lecturers	No
Shared personnel –are some members of the Scheme Directing team are also employed as staff in the Medical School Departments of GP	Yes – one Department staff member works as a member of the Western Scheme Directing team, and previously two others also did so (Sligo and Western) Many of the collaborations described above were led by these individuals	No	Informal – some Scheme Teams are appointed adjunct UL SOM staff, and some have independent dual contracts	Previously one UCD Scheme Directing team member also worked in the Dept. of GP UCD	No but Admin person co-located and very much a part of the Departmental community	In the past, there were shared lectureship positions with RCSI Training Scheme and RCSI – with specific contribution to VTS teaching around research methods and EBM. Not active currently

Appendix 4
International GP Training Summaries and Sources of Information

Countries are presented in alphabetical order.

Canada

- ***Contextual Information–*** Canada has 17 medical schools and medical degree programmes are generally 4 years duration. Medical school entrants usually have an undergraduate degree or at least a minimum of 2 years college education +/- experience in the healthcare field. On completion of their degree, graduates must pass a licensing examination known as the MCCEE, or Medical Council of Canada Evaluating Examination. There are approx. 3,000 medical school graduates per year in Canada. There is not specific internship year- it is embedded in the first year of residency training in your chosen speciality.
- ***GP Training*** is overseen and accredited by the College of Family Physicians of Canada (CFPC). In 2020 there were 1573, GP training posts available, and this represents a steady increase since 2013 (CARMS 2021). GP specialist training is a 2-year programme, with current debate re extending the training period by another year (CFPC 2022). At the completion of training doctors must pass the CFPC exam to be certified in the specialty of family medicine
- ***Collaboration*** Residency Training in Canada is within the remit of the medical schools, guided by a set of standards set by the Canadian Residency Accreditation Consortium (CanRAC). Each medical school offers several postgraduate residency programmes, in various specialities, governed by a Post Graduate Residency committee. All residents in-training are employed and trained on the same basis regardless of medical discipline or particular training programme. The medical schools post-graduate specialist training is funded by a capitation grant for each resident.
- The Departments of Family Medicine in the 17 medical schools have separate sub-departments that develop and deliver GP training. While they are all working off the same basic national curriculum (comprising 99 training topics), the content of each training programme is determined individually by each Medical School. This allows for some special interests- e.g., rural and remote GP.
- Education is delivered longitudinally throughout the 2 years residency, including face-to-face teaching, electronic learning platforms, videoconference, seminars, and workshops.
- In general, GP trainees spend at least 6-8 months in General Practice, often with an additional half day in the same GP for the remainder of their hospital training. Trainees usually have a protected half-day education weekly, supported by block educational modules that can be delivered over a few days to a few weeks. Most practices that take GP trainees are academic General Practices, and cater for several GP trainees at a time (approx. 6-8)
- Many Universities offer a third year of training in advanced clinical skills – e.g., emergency medicine, low risk obstetrics, women's health, and sports medicine.
- GP training does not incorporate a higher degree- either master's or doctoral degree, as part of GP training.

Sources for Canada

- *The Canadian Resident Matching Service (CaRMS) 2021 https://www.carms.ca/pdfs/2021-carms-forum.pdf*
- *Pullon S. Training for family medicine in Canada and general practice in New Zealand: how do we compare. J Prim Health Care. 2011 Mar 1;3(1):82-5.*
- *Associate Professor Martina Kelly, University of Calgary Personal Communication to Maureen Kelly Feb/ Mar 2022, and by Zoom meeting Feb 9th 2022*
- *CFPC 2022 Preparing our Future Family Physicians: An educational prescription for strengthening health care in changing times. The College of Family Physicians of Canada (CFPC) available from https://www.cfpc.ca/CFPC/media/Resources/Education/AFM-OTP-Report.pdf*

Finland

- ***Contextual Information Finland–*** has 5 medical schools, and entry is direct from secondary school. Medicine is a 6-year degree programme delivered by universities. There are approx. 650 medical graduates per year. There is no requirement to do an intern year, once graduated medical students are doctors, and are licenced to practice.
- ***GP Training*** – GP specialist training is a 6-year programme. GP intake is 180 trainees per year, nationally, and this number is increasing. The call for applications opens twice a year and involves participating in a one-day seminar and a 4-week web course aiming at the applicant developing a personal learning plan (PLP). Both are assessed as part of the selection process.
- GP specialist training is undergoing a major paradigm shift to competency-based education.
- ***Collaboration*** Training is overseen (legally and educationally) by the Departments of GP in the Medical schools, but the day-to-day training is delivered in the service setting, by agreement with a Primary Health Care Unit, and located in the joint hospital district of the respective university. The speciality training team in the Primary Health Care Unit; develop and deliver the faculty development of the trainers, in close collaboration with a medical school, and ongoing development of the post graduate medical education.
- GP specialist training programme includes 120 hours of theoretical education, part of it is delivered by medical schools/Dept. of GP and Primary Care Units
- Training comprises at least 18 months working in other clinical specialties and 4.5 years working within primary health care under supervision of a GP trainer. The trainer is available for consultations, and she/he has supervision meetings 1-2 hours weekly depending on the phase of the education. Approximately half of these meeting can be organised in trainee groups.
- There is also an obligatory 9-month service in health centres for trainees in all specialties.
- GP training does not incorporate a higher degree- either master's or doctoral degree, as part of GP training.

Sources for Finland

- Source – Dr Helin Salmivaara Arja Several personal communications to M Kelly Feb 2022
- EURACT database https://euract.woncaeurope.org/specialist-training-database/finland

Germany

- ***Contextual Information*** - Germany has 39 medical schools, with approx. 30 with Departments of General Practice. Entry is direct from secondary school. Medicine is a 6.25-year degree programme (two years of basic sciences, three years of clinical sciences, and 1.25 final year clinical work). There is no separate internship, this is embedded into the undergraduate degree. The formal role of medical schools ends upon graduation of the medical student with the medical degree the "approbation". There are approx. 10,000 medical school graduates per year, but this can vary year on year.
- ***GP Training*** GP specialist training is a 5-year programme and approx. 1,600 GPs complete GP training annually. The qualification of specialist (Facharzt) requires clinical training in your chosen field, that usually commences immediately after undergraduate studies. Each state has its own Medical Board (Ärztekammer) that oversees all postgraduate specialty training. GP training lasts 5 years comprising at least two years regular GP clinical work, 12 months in medicine, 6 months of a chosen subject that is recommended to be paediatrics, surgery, or psychiatry & 18 months self-selected topics. In addition, residents have a complete a course in psychosomatic medicine (1-week fulltime) and BALINT-groups. At the end of the training period residents must provide proof of completing all posts and pass an oral exam.
- Historically GP training was virtually completely self-directed and self-created, with no regular weekly day release, or other formal scheduled educational activity. In 2008 the German College of General Practitioners and Family Physicians (DEGAM) commissioned a report that was strongly critical of the lack of formal GP training and GP training subsequently significantly changed to a more formalised training pathway.
- ***Collaboration*** In 2007 the first Competence Centre for General Practice in Germany was established at the Heidelberg University Hospital with the aim of increasing the attractiveness of general practice as a career. This programme offers structured clinical rotations, a taught seminar curriculum for GP trainees, a train the trainer programme, mentoring support and networking. These were financed originally by an agreement with local government departments, local health employer and more recently by medical insurance firms.
- As part of the structured rotations an ***"Academic Umbilical"*** pathway allows for up to 6 months full time, or 1 year part time, of the required 5 years GP training to be spent in Academic GP. This is available only to a small number of GP trainees in specified Departments of GP- where they work delivering teaching to medical students, tutorials, lectures, get involved in research and medical education research.

Sources for Germany

- Mestres-Ventura, P. and Becker, K.W., 2012. Studying medicine in Germany. Educ Med, 15, pp.69-76.
- Schwill, S., Magez, J., Joos, S., Steinhäuser, J., Ledig, T., Rubik, A., Niebling, W., Szecsenyi, J. and Flum, E., 2017. New paths in post-graduate medical training in general practice–8 years of experience with the pilot project Verbundweiterbildungplus Baden-Württemberg. GMS journal for medical education, 34(5).
- Dr Simon Schwill, Personal communications to M Kelly Feb 2022 & zoom meeting Feb 17th
- https://euract.woncaeurope.org/specialist-training-database/germany

Norway

- ***Contextual Information*** – Norway - has 4 medical schools and entry to medical school is usually directly from second level. Medicine is a 6-year degree programme, or 7 years of an intercalated research degree is taken. This is followed by a 1.5-year internship (one year hospital +6 months GP). Internship training is delivered by the health authority. There are approx. 520 medical school graduates per year.
- ***GP Training*** – GP specialist training is a 5-year programme and approx. 130-270 GPs complete GP training annually. Applicants who wish to enter GP specialty training must first join a practice by buying a patient list (i.e., buying into a surgery) or acting as a locum on someone else's patient list, with approval of the municipality, who appoint GPs.
- GP training comprises 4–4.5 years of clinical work in primary care (at least two years must be regular GP clinical work) and 0.5-1 year of hospital work. During the entire period, there is individual supervision one hour per week with a GP trainer. There is also a two-year (120 hours) group training program (groups of 7-10 trainees led by a GP trainer). Furthermore, there are 5 compulsory courses: general introduction to general practice, GP role and cooperation with other agents/institutions, preventive medicine, research/how to assess knowledge, and acute medicine and at least 6 two-day courses from different clinical areas (of choice). There are detailed learning goals, assessed by the supervisor.
- ***Collaboration*** - GP specialist training is delivered and run by the Health Care Authority. The connection to the University GP departments is that some of the compulsory courses are delivered by University GP departments, mainly the research/how to assess knowledge course, but also some of the general introduction to general practice courses. This research training does not carry any additional award – it is part of satisfactory completion of training. The university delivered courses are generally remote and are designed and delivered specifically for GP training. The other compulsory courses are provided by The Norwegian Medical Association, and a handful of foundations, hospitals.
- GP training does not incorporate a higher degree- either master's or doctoral degree, as part of GP training. If you have completed your GP training, this will count as 5 of the 30 ECTS credits you need for the educational component of the PhD program.

Sources for Norway

- Odd Martin Vallersnes Personal communication to M Kelly Feb 2022
- https://euract.woncaeurope.org/specialist-training-database/ Norway

The Netherlands

- ***Contextual information*** **-** The Netherlands has 8 medical schools. Entry to medical school is predominately directly from school leaver education. Medicine is a 6 year degree programme and awards a Bachelor's Degree in Medicine (after 3 years, mostly theoretical) followed by a Master's degree in Medicine (next 3 years- mostly clinical). On completion, graduates are known as "basic doctors". There is no requirement to complete an internship, but on practice many graduates spend some time as "resident not in training" before embarking on a training scheme. There are approx. 2500 medical school graduates per year.
- ***GP Training*** – GP Training intake is approx. 750 trainees per year, nationally, and this number is increasing. GP specialist training is a 3-year programme. It entails 2 years of clinical work in general practice, and 1 year comprising a minimum of 6 months in hospital; and 3 months mental health/ chronic illness setting.
- ***Collaboration*** - GP specialist training is delivered and run by the 8 Departments of General Practice, in the medical schools across the Netherlands. The Department of GP are structured to facilitate this by having sub-departments. E.g., in University of Amsterdam the Dept. of GP has five divisions – Undergraduate, Postgraduate (GP Training), Research, Networks and a Clinical GP Unit. Each sub-department has its own team of GPs / academics/ researchers involved in the work of that division.
- Employment arrangement can differ across the various institutions, but generally, the funding stream to support GP training is separate from the funding for medical student education.
- Staff involved in delivering GP training are provided by the University Medical School (e.g., recruitment / contracts etc. supported by their HR department) but funded from GP training budget. GPs and behavioural scientists deliver GP training. There tends not to be shared posts- between GP training and the undergraduate medical programme, but there is strong collaboration and shared projects.
- GP trainees have each week a full day of 'off the job' training- partly at the university for reflection, workshop, training of specific skills. Partly based on their own training needs.
- There is significant interaction between the GP trainees at various stages of training and medical students. GP registrars are involved in teaching medical students and supervising them clinically. GP trainees in clinical practice deliver a lot of the Early Patient Contact programme teaching and supervision; they are encouraged to give lectures during their hospital posts. In Year 3, some GP registrars opt for a 3/12 post as a GP educator, sometimes taken all together or spread through-out the year in smaller time slots.
- At the end of training the GP trainees are awarded a professional qualification in general practice.
- There is a special programme for GP residents who also want to pursue PhD training, "aioto-traject" (family doctor in training who is also trained to be a researcher) – combined GP training / PhD track, of 6 years duration. The pattern usually is to alternate research year and GP training year. Each medical school has approx. 5 such GP /PhD trainees per year.
- The GP trainees are employed during their training and are paid by the health authority while training.

Sources for the Netherlands

- *Dr Marianne Mak van der Vossen Personal communications to M Kelly Feb 2022*
- *Dr Marianne Mak van der Vossen- zoom meeting Jan 28th, 2022*
- *Dr Judy JM van Es zoom meeting Feb 25th, 2022*
- *https://euract.woncaeurope.org/specialist-training-database/ Netherlands*

Appendix 5
For illustrative purposes a typical weekly plan for the Rotation in Academic General Practice- Teaching and Scholarship

Week	Activity
Week 1	**One day – Introduction to the Department** • Meetings with members of staff, to gain an understanding of the breadth of experience and roles that exist in the discipline. • Overview of medical student taught programmes. • Introduction to Department resources and supports – library access, IT support, Departmental meetings, and networks.
	Two day taught module – "Teach the Teacher" delivered online nationally with local support face to face. • Principles of learning • Basics of large group teaching- developing a delivering large group lectures/ how to make large group lectures interactive / how to teach online. • Basics of small group teaching/ group involvement/ group facilitation skills /small group feedback skills/ agenda led outcome-based feedback. • How to teach a clinical skill • Giving feedback
Week 2	• Assignment of individual Staff mentor to each GP registrar • Using the GP Trainee LOGBOOK- Development of individual GP registrar learning plan / personal goals • Shadowing of teaching activities within the Dept.- range of teaching styles • Allocation of GP registrar's own teaching role with students • Co-delivering teaching with staff mentor, and feedback provided
Week 3 Week 4 Week 5	• Development and Delivery of own teaching material for medical students. • Example content - Clinical skills (e.g., blood pressure, venepuncture, IM injections) Communication skills, videoed consultation feedback. • Chronic disease management • First round of Peer observation of teaching and one to one feedback on GP registrar provided by Mentor. • Teacher skills development – attending clinical education journal club and presenting at the journal club
Week 6	• Midway review of GP registrar learning plan/ personal goals with mentor • Prepare and deliver talk to the GP Student Society –- How I decided on a GP Career – What being a GP means to me • Interview with Student magazine • Attend AUDGPI Early Career Seminar X 1 day
Week 7	**Training Update –Two day taught module – "Teach the Teacher"** delivered online nationally with local support face to face. • Principles of Assessment in GP • Written Assessments (MCQs / Case Studies/ EMQs) • Practical Assessments (OSCEs work-based assessments) • MCQ writing workshop • OSCE station writing workshop · Standard setting in high stakes assessment
Week 8	• Second round of Peer observation of teaching and one to one feedback on GP registrar provided by Mentor. • Developing new MCQ questions based on taught sessions • Piloting the MCQ paper and re drafting
Week 9	• Assessment commitment X 1 day – OSCE • All Island Case Study Competition – attending the medical student presentations and co – judging the winning entry • Facilitating the Student GP Society Journal Club
Week 10	• Assessment standard setting – Modified Angoff • Student exam preparation revision classes • Mentoring session – career development
Week 11	• Attend AUDGPI/ ICGP Annual Scientific meeting and present their Peer observation of Teaching Audit • Give a talk at the INTERN Open Evening on – What it is like to be a GP trainee. • Marking Case reports · Collating student feedback on the GP module
Week 12	• Final review with academic mentor • Mentoring session – career development • Completion of Audit – Peer Observation of Teaching and Present at ICGP Summer Meeting • Support for exam marking standard setting. • Results collation and presentation at pre-exam boards • Contribution to GP extern evaluation of programme

Appendix 6
An example of structured week in a Vertically Integrated practice, for illustrative purposes only

	Medical Student	GP Intern	GP Reg 3rd yr	GP Reg 4th yr	GP Trainer
Monday AM	Practice orientation with GP Intern	Medical Student orientation	Seeing patients	Seeing patients	Seeing patients
Monday Lunch	***Case Based discussion tutorial – facilitated by GP Trainer to all levels of learners***				
Monday PM	Shadowing 3rd year GP registrar	Parallel consulting with GP Trainer	Medical student shadowing	Seeing patients	Parallel consulting with GP Intern
Tuesday AM	Practice manager session	Phlebotomy clinic with Practice nurse	At day release	Seeing patients	Seeing patients
Tuesday PM	Parallel consulting with GP Trainer	Parallel consulting with 4th yr GP Reg		Parallel consulting with GP Intern	Parallel consulting with Medical Student
Wednesday AM	Nursing home visit with GP trainer	Nursing home visit with GP trainer	Seeing patients	At day release	Nursing home visit with Intern & student
Wednesday PM	Vaccination clinic with Practice nurse	Parallel consulting with 3rd yr GP Reg	Parallel consulting with GP Intern		Seeing patients
Thursday AM	***Tutorial with all levels of learners – content delivered by learners on rota, input and facilitation by GP Trainer***				
Thursday PM	Parallel consulting with 4th year GP Reg	At Intern training	Seeing patients	Parallel consulting with medical student	Seeing patients
Friday AM	Chronic Disease clinic / co-consulting with GP trainer	Prescription review with 4th GP Reg	Chronic Disease clinic parallel consulting with GP Trainer	Prescription review with GP Intern	Chronic Disease clinic parallel consulting 3rd Yr Reg / student co-consulting
Friday Lunch time	***Practice meeting – all staff & all learners - Quality Improvement Project review and updates***				

Appendix 7
A suggested programme of training for GP trainees within ICAT

Training Year	ICAT Year	Year	Composition	Funded By	University Appointment	Academic Goal
1		GP SHO 1	100% Clinical	PGTB		Apply ICAT – if successful defer start to year 3
2		GP SHO 2	100% Clinical	PGTB		Apply ICAT (second chance)
3	1	GP Reg 1	80% Clinical 20% Academic	PGTB	Clinical Lecturer	Write PhD proposal and defend @ year end
4	2	GP PhD	80% Academic 20% Clinical	ICAT	Clinical Lecturer	PhD
5	3	GP PhD	80% Academic 20% Clinical	ICAT	Clinical Lecturer	PhD
6	4	GP PhD	80% Academic 20% Clinical	ICAT	Clinical Lecturer	PhD
7	5	GP Reg 2	80% Clinical 20% Academic	PGTB	Clinical Lecturer	PhD Write up, PhD Viva

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