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Manuscript title. Academic primary care: challenges and opportunities

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**History**

The rise of academic general practice in the UK has been remarkable: from the first professor of general practice, Richard Scott in 1963, and a small academic discipline; to a vibrant community reflected through the Society for Academic Primary Care (SAPC), and a renewed commitment to world leading research through the fourth round of investment in the National Institute for Health Research (NIHR) School for Primary Care Research (SPCR) in England.(1)

Just as academic general care has evolved, the clinical services provided by health and care professionals in this setting have expanded. General practice is embedded within diverse primary care teams comprising of various professionals: GPs, advanced nurse practitioners, physician associates, clinical pharmacists, first contact practitioners, social workers, and paramedics to name some. In 2010, Howie warned for the need of a contemporary identity, for the scientific discipline of general practice to continue to make significant contributions moving forwards.(2)

**Current context**

Renamed as academic primary care to reflect the expansion of the clinical setting and intellectual work involved in the discipline; academic primary care delivers the scholarship (research and teaching) of community-based clinical practice: needed for excellent primary care. Primary care research is delivered in community settings mostly led by academic university departments, and primary care teaching occurs across university, NHS, and third sector settings.

With the growth in the number of medical students, exposure and training in primary care remains essential in the training of tomorrow’s clinicians, and in encouraging future GP careers. The quality of primary care research is world-leading;(3, 4) but the capacity of primary care academics, including GPs, remains of concern. With only a small increase in UK senior academic GPs from 224 full time equivalents (FTE) in 2015 to 254 FTE in 2020, senior academic GPs comprise just 8% of the UK clinical academic workforce.(5) Academic GPs are a vital component of academic primary care because they bring clinical conceptualisation and context for greater impact on patients, practice, and the NHS.

But when general practice is fighting additional pressures from COVID-19, on a backdrop of chronic underinvestment, rising patient and service demand, and recruitment concerns, why is academic primary care important? Hobbs recently outlined why research matters to GPs, such as answering the ‘what to do’ questions.(6) Academic primary care can generate solutions to the current and future difficulties in practice, turning challenges into opportunities.

However, is the current identity of academic primary care one that service practitioners can resonate with and be inspired by? Initiatives like WiseGP (championing clinical scholarship in daily general practice), the NIHR Clinical Research Networks (CRN), and The Scottish Deep End Project, aim to address this by connecting, promoting, and developing the academic skills of GPs and primary care practitioners in practice, and should be credited for a bottom-up grassroots approach.

**COVID-19 response**

The contribution of academic primary care during COVID-19 is not to be underestimated. The research response can be underlined by the adaptive platform PRINCIPLE randomised controlled trial (RCT) which is directly influencing the management of COVID-19 in the community, and the first study to describe people’s experiences of living with long COVID.(7, 8) The Royal College of General Practitioners (RCGP) Research Surveillance Centre, funded by UK Health Security Agency, which collects and monitors data from practices has been extended to facilitate the weekly surveillance of COVID cases recorded in electronic primary care records, and for virology and serology testing.(9) Primary care researchers continue to contribute evidence on service delivery during the pandemic and on the management of COVID-19 (e.g., NIHR funded PANORAMIC platform RCT testing novel antivirals for early COVID treatment).(10) The role of educators has been crucial: primary care educators and the RCGP have rapidly innovated to provide new educational opportunities, including on the art of remote consulting.

**Challenges**

There are four main challenges for academic primary care moving forward. First is the need for credibility and buy in from service practitioners, primary and secondary care teams, policy makers, and patients and the public. This will facilitate the implementation of evidence and completion of research driven by patients and stakeholders. Second is the urgent need for further and sustained multi-professional capacity in academic primary care to facilitate innovative educational programmes and address the growing complexity of patient presentations and changes in health policy within a fast-changing primary care context. Even though progress has been made, we still lack good quality evidence in many areas of practice, such as mental illness and chronic pain, and increasing the numbers of senior GP and non-clinical academics will be critical in tackling this.

Third is the provision of primary care research and infrastructure funding, targeting areas of greater need, to enable robust evidence grounded in a primary care context to be suitable for adoption in practice to improve patient outcomes in the community, enhance NHS efficiency savings, and reduce treatments costs across primary and secondary care systems. Finally, it is crucial for integrated care systems to foster cross-sector working across public health and social care to provide holistic and realistic solutions to the problems that matter most to patients and their families.

**Opportunities**

A barrier to attracting new GPs into practice is that general practice is perceived to lack prestige and challenge.(12) The importance of role models is well documented.(13) The SAPC are leading to address this, and initiatives like Primary care Academic CollaboraTive (a UK network of interested primary care professionals who collectively encourage, design and undertake research to improve patient care) alongside more visible GP educators and departments of primary care will help. University departments need to showcase and engage their work with the public, host student/trainee symposia, have readily accessible mentorship, and advertise supervision on student projects, to highlight, inspire, and advocate the intellectual challenge of general practice. The NIHR CRN primary care speciality group, primary care incubator, and the Associate Principal Investigator Scheme are avenues to boost engagement and involvement in research with frontline NHS practitioners.

There are research funding schemes that offer GPs and primary care colleagues the ability to address evidence gaps around multimorbidity, complex mental health presentations, and workforce pressures, while supporting capacity building. These include the RCGP Scientific Foundation Board, NIHR and NIHR SPCR Fellowships, MRC Clinical Research Training Fellowships, and Wellcome Clinical PhD Programme for Primary Care, which support Masters and PhD level training for the next generation of primary care research leaders. These entry points into an academic career are important but they need to be accessible to all primary care professionals. In the Netherlands there are options of doctoral research training in vocational training schemes for GP registrars linked to an academic university department: this could be a template for Health Education England (HEE) and UK academic departments to help grow early career academic capacity, promote research in practice settings, and improve credibility and retention.(11)

**Future identity**

Academic primary care needs to be visible and accessible: striving for broad inclusion and diversity in the discipline. This should be a collective effort from heads of academic departments and medical schools, funders like MRC and NIHR, the RCGP, HEE, and SAPC: each have a key role to play. A positive, welcoming, and forward-thinking culture within academic primary care needs to be promoted and protected. Teams should harness the expertise of a wide range of professionals and people with lived experience to meet the growing challenges of primary care. There will be new significant trials for NHS primary care moving forward: academic primary care, if strengthened and valued, can make important contributions in navigating these.

Competing interests

FM was RCGP Clinical Fellow in Mental Health from 2015-20 and is a RCGP Clinical Advisor and Mental Health Representative. HA sits on the RCGP Scientific Foundation Board. JR leads WiseGP: a joint RCGP/SAPC initiative which has received NIHR SPCR funding; chairs the SAPC Heads of Departments group, and is panel Chair for the NIHR In-Practice Fellowship scheme. CDM is current Director of the NIHR SPCR, Wellcome Clinical PhD Programme for Primary Care, and was past chair of the NIHR primary care incubator

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