

Evidence Brief: Primary Care Workforce

Contents

Key publications – the big picture	3
Case Studies.....	5
HEE Star	7
Statistics.....	7
HEE National Data Programme.....	7
Published Peer Reviewed Research	8
Covid-19	8
Workforce Transformation	11
New ways of working.....	12
Recruitment, retention, and supply	18
New and expanded roles.....	23
Staff perceptions.....	27
Leadership.....	27
Workforce planning and demographics	28
Staff health and wellbeing	31
Workforce.....	33
Training, education, upskilling and competencies	38
Technology.....	44
Competency Frameworks	45
*Help accessing articles of papers	46

Produced by the HEE Knowledge Management team Evidence Briefs offer a quick overview of the published reports, research, and evidence on a workforce-related topic.

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Evidence Brief: Primary Care Workforce

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Key publications – the big picture

[Untapped Potential: District Nursing Services and the Avoidance of Unplanned Admission to Hospital](#) November 2021, Queen's Nursing Institute

This report outlines how there is untapped potential for admission avoidance work to be undertaken by existing district nursing teams. While capacity remains a significant issue, district nursing team leaders in particular have the capability to manage patients safely and effectively at home with a range of acute and long term conditions. Many district nursing services have 24 hour operations that enable the provision of care which is integrated into wider community health services. This report reaffirms the value that the District Nurse Specialist Practice Qualification brings to team leaders who are at the forefront of providing care to people in their homes and in our communities. This report also marks the second anniversary of the QNI International Community Nursing Observatory (ICNO). During the past two years the ICNO has carried out important workforce intelligence research exploring a range of specialist fields of nursing in the community including a focus on Care Home Nursing and General Practice Nursing during the pandemic. The ICNO's work on District Nursing Workforce Standards is expected soon and we look forward to continuing to influence practice, education and policy now and into the future.

[A healthier future: how to make general practice work better for everyone](#) November 2021, Social Market Foundation

This is a collection of essays about general practice in England and its future. The authors offer analysis and prescriptions based on expertise developed working in fields including medicine, NHS management, economics and the Civil Service.

[Our plan for improving access for patients and supporting general practice](#) October 2021, NHS

NHS England and NHS Improvement is working with systems to strengthen their existing plans to increase numbers of GPs towards the 6,000 Government manifesto commitment. A record 3,793 GP specialty training places were filled in the first recruitment round this year, and the ambition is to get to 4,000 in the second round. The latest comparable data (June 2021 compared to June 2019) showed that there were now over 1,200 more full-time equivalent (FTE) GPs than two years before, with a headcount increase of almost 2,500. But much more still needs to be done. We are expecting all parts of the country to have established a digital locum bank model or equivalent by December and the Winter Access Fund can support optimal use. GP expansion plans, already being finalised by every system, will need to include significantly increased uptake in the use of GP recruitment and retention initiatives including the GP fellowship scheme, the mentorship scheme and the new to partnership payment. With assistance from BMA GPC, RCGP and HEE, NHS England will work to communicate these schemes widely and effectively, and examine further steps that may be required, including by setting up a new national advisory group.

[Primary care networks: two years on](#) August 2021, NHS Confederation

A report on the progress made by primary care networks and the challenges they have faced, two years since their creation.

[General practice in crisis: an action plan for recovery](#) July 2021, Royal College of General Practitioners

This Action plan calls for:

- A 'ramping up' of efforts to deliver the 2019 Conservative manifesto target of 6000 more full time equivalent (FTE) GPs in the next three years

Evidence Brief: Primary Care Workforce

- A system-wide programme to eradicate bureaucratic burdens and unnecessary workload by 2024, allowing GPs more time to care for patients and prevent GP burnout
- Improving the recruitment and integration of at least 26,000 other members of staff into the general practice workforce by 2024
- General practice infrastructure that is fit for purpose by 2024, to allow GPs to deliver care in a safe way from modern buildings and using reliable technology
- GPs to have a strong voice in integrated care systems in order to eliminate the waste associated with fragmented services, and in designing care for the communities they serve

[ICS Design Framework: key points for primary care](#) June 2021, NHS Confederation
Points of note to primary care in NHS England and NHS Improvement's framework on minimum standards and expectations for integrated care systems.

[The future role of remote consultations and patient 'triage': general practice and COVID-19 recovery](#) May 2021, Royal College of General Practitioners
The future role of remote consultations & patient 'triage' is the first in a series of RCGP reports, setting out how general practice should function in a post-COVID environment. Remote consultations have played a significant role in GP's being able to continue to provide care throughout the pandemic, whilst ensuring effective infection control in practices.
As the vaccination programme is rolled out and social distance restrictions ease however, we expect to see a rebalancing of remote and face-to-face consultations. This poses a challenge for the Government and health systems, to build upon the benefits that have emerged from new ways of working during

the pandemic, whilst ensuring that relational care and health inequalities do not suffer in the longer-term.

[Remote working toolkit for general practices and primary care networks](#) March 2021, The King's Fund
Building [effective teams in general practice](#) is difficult. But building effective teams when members of the team are not working in the same location can be even more challenging. Remote working is on the increase – not least because the Covid-19 pandemic has meant that over the past year many general practice staff have found themselves working at home, or in a practice but needing to work at a distance from other members of the team. And the introduction of primary care network (PCN) roles that cover multiple practices means teams are not always physically located together. The rapid implementation of remote consulting tools provides the ability to work more flexibly and from different locations, but primary care leaders need to learn how to build effective teams in a different way.

[The role of primary care in integrated care systems](#) 2021, NHS Confederation
This report sets out the views of our primary care members on the underpinning principles needed for strong primary care involvement at system and place.

[Primary Care Estate: delivering value and improving care](#) September 2020, Good Governance Institute
A paper to explore the commissioning of primary care premises by Clinical Commissioning Groups (CCG), Primary Care Networks (PCN) and trusts and the influence of healthcare integration and digital access to primary care, post-Covid-19.

Evidence Brief: Primary Care Workforce

[Realising the neighbourhood NHS: delivering a new deal for primary care in England](#) February 2020, Institute for Public Policy Research

We need a 'new deal' for general practice to overcome these challenges. We argue this should be made up of four main components across England.

- Create neighbourhood care providers (NCPs) to deliver the 'neighbourhood NHS'.
- Offer all GPs the right to NHS employment.
- Reform new GP roles to create career progression, time to care and realistic workload.
- A radical transformation of the primary care infrastructure.

[Long Term Plan – Areas of Work: Primary Care](#) NHS

This is Primary Care – and for the first time in a generation, this specialty is changing, thanks to our highly-valued people, supported with a new long-term package of funding, new ways of working and improved technology. Primary Care will lead on improving the 'whole person' health of a local population, with a greater understanding of [mental health](#), the benefits of [social prescribing](#), [personalised care](#), [medicines management](#) and how to [age well](#) than ever before. Totally new types of care for patients will be offered, particularly for complex conditions and things like anxiety and stress, as the NHS moves from treating illness, to identifying and helping people as soon as they notice something isn't quite right.

[The General Practice Nursing Workforce Development Plan](#)

March 2017, Health Education England

This report promotes the importance of general practice nursing, as well as providing details of potential workforce issues and provides appropriate recommendations. It sets out clear recommendations to improve the recruitment, retention and return of the general practice nursing workforce.

[General Practice Nurse Specialty Training: a new approach to GP nursing](#) Health Education England

Registered Nurses who want to make general practice their career choice find securing their first role difficult. Most employers prefer nurses with experience, but without experience there's no job and without a job there's no opportunity for experience. Experienced general practice nurses (GPNs) are in short supply. Across England it's estimated that around one third of all nurses will be due to retire in the next five years. As the focus on keeping people out of hospital increases, there's an urgent need to maintain a pipeline of new GPNs.

Case Studies

[General Practice case studies](#) NHS England

The case studies here demonstrate some positive examples of the NHS delivering improved high quality care in a number of different settings across the country. They provide some context and background to the challenges being faced by the NHS and the solutions developed to ensure better, cost effective outcomes for patients and the public.

[Multi-professional team-working: the experiences and lessons from COVID-19](#) October 2021, Academy of Medical Royal Colleges

The report focuses on what lessons we have learned about the enablers for and barriers to effective multi-professional team-working. Drawing on interviews with workers across different specialties, healthcare settings and regions, it explores five key themes that have shaped experiences of multi-professional team-working during the pandemic. These areas should form the backbone of future work to 'reset' team-working after the pandemic, since they offer opportunities to improve and embed

Evidence Brief: Primary Care Workforce

collaboration and integration across occupational groups. If the system can address these issues, we can fully realise the benefits of a multi-professional workforce for patient care. See the following primary care related case studies:

- Case Study 3: Enhanced visibility of podiatrists in Greater Glasgow and Clyde and Lanarkshire Health Board (p. 15)
- Case Study 8: Remote consultations for highly specialised services, University Hospital Southampton NHS FT (p. 28)
- Case Study 9: Parish nursing for vulnerable patients, The Steeple Church, Dundee (p. 34)

[CapitalNurse programme: Supporting nursing workforce challenges](#) January 2020, NHS Employers
Find out how nurse leaders, academics and workforce colleagues have worked together as 'CapitalNurse' to meet nursing workforce challenges.

[Integrated care in action – primary care](#) March 2019, NHS Long Term Plan
For many people, their first point of contact with the health service is through primary care (such as GPs, pharmacy, dentistry and eye health). There are almost four times as many patient contacts with these services compared to hospitals. This case study shows how integrated care systems are redesigning primary care services.

[Clinical pharmacists in general practice: The Old School Surgery, Bristol](#) March 2019, NHS Long Term Plan
This video case study explains the role of clinical pharmacists in general practice, clarifying when and why patients might see a clinical pharmacist.

[Musculoskeletal \(MSK\) First Contact Practitioners: The Deepings Practice](#) March 2019, NHS Long Term Plan
GP Dr Majid Akram and physiotherapist Phil Richards discuss how the successful implementation of a new musculoskeletal (MSK) first contact practitioner role at The Deepings Practice in South Lincolnshire has resulted in better outcomes for patients and helped to reduce GP workload.

[Paramedic-led home visiting service in Wokingham](#) January 2019, NHS Long Term Plan
A group of GP practices in Wokingham, Berkshire are to provide a better and more responsive service for their patients. Their teams of health professionals are working with other health and care services to manage the many different needs of their patients. This includes a service where patients that need an urgent home visit are quickly seen by a paramedic to understand what further support or treatment is needed with patients with the most complex needs are seen by their GP. These prompt home visits have increased the number of patients that can be managed at home, reducing the number of people needing to go to hospital with one patient saying: "I was happy to be seen so quickly and the paramedic assured me there was no concern." GPs have more time to spend with patients with complex needs and closer working an earlier involvement in social services and community teams means patients get a better service, specific to their needs.

[Improving care for patients with long term conditions](#) January 2019, NHS Long Term Plan
David, a patient at New Court Surgery, described how access to GP online services such as his GP record and online test results, helps him to better manage his health. Staff at the surgery also explain how access to GP online services is revolutionising and improving care for patients with long term

medical conditions, including those who, like David, have diabetes.

[Integrated care for children's health in London](#) January 2019, NHS Long Term Plan

Our health and care system needs to adapt to the changing care needs of children and young people. One in ten of our children suffer mental health problems, which can affect them for life if they don't get the right support early. In North West London they have set up GP child health hubs which bring together primary care, mental health and acute community services to look at all the aspects of a child's health and wellbeing. The result is better care for children and their families.

[Healthier Fleetwood: transforming care for patients](#) January 2019, NHS Long Term Plan

GP practices in Fleetwood, Lancashire are working in partnership with local residents, charities and other health services to change the way they provide care from simply managing people's illnesses towards helping people improve their lifestyles and preventing illnesses from developing. The Healthier Fleetwood scheme is based in the local Health and Wellbeing Centre puts on events such as free sports lessons, a Harmony and Health singing group and mental health support classes to support local people to make life changes to support their long-term health and wellbeing.

HEE Star

More resources and tools are available in the **Primary Care** section of the [HEE Star](#)

Statistics

You can find relevant statistics on the [Health and Care Statistics Landscape](#) under "**Health and Care**" and use the "**Primary and dental care and oral health**" filter

[General Practice Workforce Series](#) NHS Digital

The General Practice Workforce series of Official Statistics presents a snapshot of the primary care general practice workforce. A snapshot statistic relates to the situation at a specific date, which for these workforce statistics is the last calendar day in the reporting period. Until July 2021, the snapshots have been produced each quarter and were a record as of 31 March, 30 June, 30 September, and 31 December. However, from July 2021, as requested by our stakeholders, we are collecting and publishing data on the general practice workforce on a monthly basis, and the snapshot will therefore relate to the last calendar day of each month, including weekends and public holidays

HEE National Data Programme

HEE staff can look at the [National Data Warehouse \(NDL\)](#) SharePoint site to find out more about datasets and Tableau products.

Published Peer Reviewed Research

Covid-19

[The impact of COVID-19 on primary health care delivery in Australia](#) September 2021, Journal of Advanced Nursing
Aims: To validate the 'safe and effective staffing tool' and explore the impact of COVID-19 on the quality of Australian primary health care (PHC). Design: A national survey was conducted from October to December 2020. Methods: The online survey was distributed via social media and professional organisations to PHC nurses. Results: Three-hundred fifty-nine PHC nurses participated. A two-factor solution was found with factors named; 'Perception of quality of care provided' and 'Personal satisfaction with care delivered'. Cronbach's alpha demonstrated good internal consistency for the total scale ($\alpha = .915$) and each subscale ($\alpha = .879/\alpha = .864$). Nearly three-quarters of participants (71.3%) were satisfied with the quality of care they delivered. Participants working in general practice, and those with more nursing experience had significantly higher scores in the factor 'perceptions of quality of care provided' and the total 'quality and satisfaction with care'. A lack of time, inadequate supervision and support, and performing non-nursing duties were reported to be impacting care quality. Most participants (80.5%) reported that COVID-19 had impacted negatively on the detection and management of non-COVID related health conditions. Conclusion: The 'safe and effective staffing tool' is a valid and reliable measure of perceived quality of care and satisfaction with care delivered. Many PHC nurses perceive that there has been an overall reduction in the quality of care delivered due to COVID-19 and feel that there is a lack of adequate supervision and workplace support. Given the limited baseline data, further research is required to understand the extent that COVID-19 impacts these findings. However, this

study demonstrates that strategies need to be implemented to support PHC nurses to provide high-quality care to optimise health outcomes and maintain nurse satisfaction. Impact: This is the first attempt to evaluate care quality in Australian PHC. Policymaking requires this evidence to drive changes to better support PHC nurses.

[The impact of COVID-19 on primary care in Europe](#) June 2021, The Lancet Regional Health: Europe
COVID-19 continues to dominate the policy agenda across Europe. By 15 May 2021, there had been nearly 54 million cases of COVID-19, resulting in a million deaths in the European Region [1]. Countries in central and eastern Europe have been particularly badly hit, with some of the world's highest per capita death rates [2]. Primary care has already played a crucial role in the health system response to COVID-19 and will continue to do so as we recover, but only if it is supported, as we now describe. Primary care workers have struggled. Those in many countries, including Poland, Finland, Sweden, Greece, Ireland, and Germany have described some of the difficulties they faced when the pandemic began. As frontline health workers they confronted the fear and reality of becoming infected, the struggle to support their families, and the lack of resources such as personal protective equipment [3,4]. They had to rapidly rethink the way they delivered care as they embarked on remote consultations, while recognising that many of their most vulnerable patients were digitally excluded: likely contributing to widening socioeconomic inequalities [3]. Yet they came together with colleagues, providing mutual support as they adjusted to new ways of working, and a rapidly changing evidence-base [3]. A study utilising the rich data available in England reported large reductions in primary care consultations for cardiorespiratory conditions including myocardial infarction and asthma, and especially so for diabetic emergencies, depression, and self-

harm [[5]]. In Germany, there was a substantial fall in new cancer diagnoses in general practice [[6]].

[A rapid review of the impact of COVID-19 on the mental health of healthcare workers: implications for supporting psychological well-being](#) January 2021, BMC Public Health

Background: Health and social care workers (HSCWs) have carried a heavy burden during the COVID-19 crisis and, in the challenge to control the virus, have directly faced its consequences. Supporting their psychological wellbeing continues, therefore, to be a priority. This rapid review was carried out to establish whether there are any identifiable risk factors for adverse mental health outcomes amongst HSCWs during the COVID-19 crisis. Methods: We undertook a rapid review of the literature following guidelines by the WHO and the Cochrane Collaboration's recommendations. We searched across 14 databases, executing the search at two different time points. We included published, observational and experimental studies that reported the psychological effects on HSCWs during the COVID-19 pandemic. Results: The 24 studies included in this review reported data predominantly from China (18 out of 24 included studies) and most sampled urban hospital staff. Our study indicates that COVID-19 has a considerable impact on the psychological wellbeing of front-line hospital staff. Results suggest that nurses may be at higher risk of adverse mental health outcomes during this pandemic, but no studies compare this group with the primary care workforce. Furthermore, no studies investigated the psychological impact of the COVID-19 pandemic on social care staff. Other risk factors identified were underlying organic illness, gender (female), concern about family, fear of infection, lack of personal protective equipment (PPE) and close contact with COVID-19. Systemic support, adequate knowledge and resilience were identified as factors protecting against adverse mental health outcomes. Conclusions: The evidence to date

suggests that female nurses with close contact with COVID-19 patients may have the most to gain from efforts aimed at supporting psychological well-being. However, inconsistencies in findings and a lack of data collected outside of hospital settings, suggest that we should not exclude any groups when addressing psychological well-being in health and social care workers. Whilst psychological interventions aimed at enhancing resilience in the individual may be of benefit, it is evident that to build a resilient workforce, occupational and environmental factors must be addressed. Further research including social care workers and analysis of wider societal structural factors is recommended.

[Community health workers and non-clinical patient navigators: A critical COVID-19 pandemic workforce](#) 2021, Preventative medicine Abstract only*

The COVID-19 pandemic has resulted in substantial morbidity and mortality and challenged public health agencies and healthcare systems worldwide. In the U.S., physical distancing orders and other restrictions have had severe economic and societal consequences. Populations already vulnerable in the United States have experienced worse COVID-19 health outcomes. The World Health Organization has made recommendations to engage at risk populations and communicate accurate information about risk and prevention; to conduct contact tracing; and to support those affected by COVID-19. This Commentary highlights the ways in which an existing and cost-effective, but underutilized workforce, community health workers and non-clinical patient navigators, should be deployed to address the COVID-19 pandemic. Community health workers and non-clinical patient navigators have skills in community engagement and health communication and are able to gain the trust of vulnerable communities. Furthermore, many community health workers and non-clinical patient navigators have skills in assisting

community members with meeting basic needs and with navigating public health and healthcare systems. Members of this workforce are more than prepared to conduct contact tracing. State, local, tribal, and territorial public health agencies and healthcare systems should be collaborating with national, state, and local organizations that represent and employ CHWs/non-clinical patient navigators to determine how to better mobilize this workforce to address the COVID-19 pandemic. Furthermore, Congress, the Centers for Medicare & Medicaid Services (CMS), and individual states need to adopt policies to sustainably fund their critically needed services in the long term. Copyright © 2021 Elsevier Inc. All rights reserved.

[The primary care response to COVID-19 in England's National Health Service](#) June 2020, Journal of the Royal Society of Medicine

Health systems across the world have had to make radical changes to help manage the COVID-19 pandemic in their own countries.¹ As the patient's first point of contact is with the health system, these changes have had a dramatic effect on primary care, including England's National Health Service (NHS).

[Lessons on the COVID-19 pandemic, for and by primary care professionals worldwide](#) May 2020, European Journal of General Practice

The COVID-19 pandemic has modified organisation and processes of primary care. In this paper, we aim to summarise experiences of international primary care systems. We explored personal accounts and findings in reporting on the early experiences from primary care during the pandemic, through the online Global Forum on Universal Health Coverage and Primary Health Care. During the early stage of the pandemic, primary care continued as the first point of contact to the health

system but was poorly informed by policy makers on how to fulfil its role and ill equipped to provide care while protecting staff and patients against further spread of the infection. In many countries, the creativity and initiatives of local health professionals led to the introduction or extension of the use of telephone, e-mail and virtual consulting, and introduced triaging to separate 'suspected' COVID-19 from non-COVID-19 care. There were substantial concerns of collateral damage to the health of the population due to abandoned or postponed routine care. The pandemic presents important lessons to strengthen health systems through better connection between public health, primary care, and secondary care to cope better with future waves of this and other pandemics.

[Covid-19 and primary care in six countries](#) 2020, BJGP
With the focus of the COVID-19 pandemic on the many challenges in public health, acute and long-term care, what has happened within primary care has remained largely below the radar. Yet primary care physicians (family doctors and GPs) can constitute up to 50% of the medical workforce¹ and are highly susceptible to contracting emerging infectious diseases themselves, as they are often the first point of contact people have with the health system.² This article comments on what is happening to primary care provision in six well-resourced countries: Australia, New Zealand (NZ), Canada, the Netherlands, the UK, and the US. Although primary care has been on the front line with COVID-19 cases, this has come at great cost. In all six countries, primary care physicians participated in the initial assessment and triage of people with possible COVID-19, although how that was done varied between countries, and was rarely in the physician's office ([Table 1](#)). They decided who could be managed at home, and who needed specialist referral or hospital admission. Physicians often deferred routine follow-up visits in their offices, instead

offering patients remote assessments by telephone, email, and videoconferencing, and assisting in assessment centres.

[Primary care networks: the impact of covid-19 and the challenges ahead](#) 2020, British Medical Journal

In 2019, general practices in England came together to form 1259 primary care networks. NHS England sees these networks as a route to improving collaboration between general practice and other community based providers, expanding the multidisciplinary workforce, and becoming the building blocks for integrated care systems as part of the NHS long term plan.¹ Despite disquiet about whether the funding offered for the expected workload is adequate and concerns that participating in the networks threatens GPs' independent contractor status, nearly all practices (98%) renewed their contract for a second year alongside their practice based contract.²³⁴

[COVID-19: a danger and an opportunity for the future of general practice](#) 2020, British Journal of General Practice

For decades there have been calls for general practice to change established ways of working. In response we have seen pockets of innovation from a few, amid a cautious evolutionary process of adaptation from the majority. With good reason, many GPs were attached to their time-honoured working practices. No need was seen by most for radical transformation. Over a few weeks between mid-March and early April 2020, general practice changed utterly, and voluntarily, in response to the COVID-19 pandemic. Before the crisis a minority of practices used doctor-led triage as the access point for services; within weeks nearly all were doing so. Royal College of General Practitioners (RCGP) analysis of general practice appointments data shows that before the crisis >70% of consultations were carried out face-to-face; within weeks the figure was 23%.¹ Before the crisis clinical workload had become unsustainable; within weeks year-on-year comparisons

showed that the number of consultations carried out by practices had reduced by 24%.¹ Before the crisis administrative tasks and regulatory compliance diverted practices from direct patient care; within weeks year-on-year comparisons reported a 30% reduction in time spent on such activities.¹

Workforce Transformation

[Advanced Clinical Practitioners in Primary Care in the UK: A Qualitative Study of Workforce Transformation](#) 2020,

International Journal of Environmental Research & Public Health

Escalating costs and changing population demographics are putting pressure on primary care systems to meet ever more complex healthcare needs. Non-medical 'advanced clinical practitioner' (ACP) roles are increasingly being introduced to support service transformation. This paper reports the findings of a qualitative evaluation of nursing ACP roles across General Practices in one region of the UK. Data collection involved telephone interviews with 26 participants from 3 different stakeholder groups based in 9 practice sites: ACPs (n = 9), general practitioners (n = 8) and practice managers (n = 9). The data was analysed thematically. The study found a high degree of acceptance of the ACP role and affirmation of the important contribution of ACPs to patient care. However, significant variations in ACP education, skills and experience led to a bespoke approach to their deployment, impeding system-wide innovation and creating challenges for recruitment and ongoing professional development. In addition, a context of high workforce pressures and high service demand were causing stress and there was a need for greater mentorship and workplace support. System wide changes to ACP education and support are required to enable ACPs to realise their full potential in primary care in the UK.

New ways of working

[Future-proofing the primary care workforce: A qualitative study of home visits by emergency care practitioners in the UK](#)

December 2021, European Journal of General Practice
Background: Broadening the skill-mix in general practice is advocated to build resilience into the primary care workforce. However, there is little understanding of how extended-scope practitioners from different disciplines, such as paramedicine and nursing, embed into roles traditionally ascribed to general practitioners (GPs). Objectives: This study sought to explore patients' and professionals' experiences of a primary care home visiting service delivered by emergency care practitioners (ECPs), in place of GPs; to determine positive impacts/unintended consequences and establish whether interdisciplinary working was achieved. Methods: Three practices in England piloted an ECP (extended-scope practitioners with a paramedic or nursing background) home visiting service (November 2018-March 2019). Following the pilot, focus groups were conducted with each of the three primary healthcare teams (14 participants, including eight GPs), and one with ECPs (five participants) and nine individual patient interviews. Data were analysed using a modified framework approach. Results: The impact of ECP home visiting on GP workload and patient care was perceived as positive by patients, GPs and ECPs. Initial preconceptions of GPs and patients about the ECP role and expertise, and reservations about the appropriacy of ECPs for home visiting, were perceived to have been overcome by the expertise and interpersonal skills of ECPs. Fostering a culture of collaboration between ECPs and GPs was instrumental to remodelling professional boundaries at the practice level. Conclusion: Broadening the skill-mix to incorporate extended-scope practitioners such as ECPs, to deliver primary care home

visiting, presents an opportunity to increase resilience in the general practice workforce.

[Community frailty team workforce development - a personal reflection](#) 2021, Journal of Integrated Care Abstract only*

Purpose: This paper represents a personal view of a newly appointed consultant practitioner trainee in frailty. This role was created as a result of a rapid workforce review of a Frailty Support Team (FST) in response to the COVID-19 pandemic. Design/methodology/approach: The FST traditionally worked alongside other community services. A "One Team" approach was developed whereby prior silos of community nursing, therapy and frailty teams became a single, locality based and mutually supportive integrated community service. This significantly increased capacity for an urgent community response for older people with complex needs and improved clinical management and coordination of care. As a workforce review identified the need for skills development, new roles for trainee advanced frailty practitioners (AFPs) and a consultant practitioner trainee in frailty were established. Finding(s): Staff experience of the "One Team" model was positive. The changes were thought to encourage closer and more efficient working between primary care and a range of community health services. The improved communication between professionals enabled more personalised care at home, reducing pressure on emergency hospital services. A rapid review of the workforce model has enabled the enhanced team capacity to cover a wider geographical area and improved recruitment and retention of staff by introducing a new pathway for career progression within the expanding specialism of frailty. Originality/value: The challenge of COVID-19 has prompted rapid service redesign to create an enhanced "One Team in the community." The innovative workforce model looks beyond traditional roles, values the experience and capabilities of staff and develops the skills and confidence required to provide a

more integrated and person-centred specialist community pathway for people living with frailty. Copyright © 2021, Emerald Publishing Limited.

[Facilitators and Barriers to Interdisciplinary Communication between Providers in Primary Care and Palliative Care](#) March 2019, Journal of Palliative Medicine *Abstract only**

The objective of this study was to understand the facilitators and barriers to optimal, coordinated interdisciplinary provision of CBPC. Conclusion(s): Our findings suggest that processes are needed that promote communication, including structured communication strategies between PCPs and SPC providers, clarification of role boundaries, enrichment of nonspecialty providers' competence in GPC, and enhanced access to CBPC.

[NHS long term plan: three new models of care that could be replicated across England](#) January 2019, British Medical Journal Athens log in required*

One of the flagship pledges in the NHS's eagerly awaited long term plan,¹ published on 7 January, was to create joined up integrated care systems in every area of England by April 2021. Local organisations from the NHS and local government will be expected to work more closely "in a pragmatic and practical way" to deliver the "triple integration" of primary and secondary care, physical and mental health services, and health and social care.

[What works in delivering effective enhanced primary care support in care homes?](#) October 2018, CordisBright

As an independent evaluator of seven NHS Vanguard projects, we have been exploring and sharing key findings relevant to new models of health and social care. There were six enhanced health in care home (EHCH) vanguards across England, working to improve the quality of life, healthcare and health

planning for residents through the provision of in-reach primary, secondary and community services and support.

[Releasing GP capacity with pharmacy prescribing support and New Ways of Working: A prospective observational cohort study](#) October 2018, British Journal of General Practice

Background General practice in the UK is experiencing a workforce crisis. However, it is unknown what impact prescribing support teams may have on freeing up GP capacity and time for clinical activities. Aim To release GP time by providing additional prescribing resources to support general practices between April 2016 and March 2017. Conclusion Specialist clinical pharmacists are safe and effective in supporting GPs and practices with key prescribing activities in order to directly free GP capacity. However, further work is required to assess the impact of such service developments on prescribing cost-efficiency and clinical pharmacist medication review work.

[GP/GPN partner* perspectives on clinical placements for student nurses in general practice: can a community of practice help to change the prevailing culture within general practice?](#)

September 2018, BMC Family Practice

BACKGROUND The UK Government document 5 year forward view describes the need to move chronic disease management from secondary to primary care, which will require a significant increase in the numbers of General Practice Nurses (GPNs). Until recently, there has been no specific recruitment strategy to address this increased need. In recent times, a number of solutions have been suggested to address this impending GPN recruitment crisis. For example, Health Education England (HEE) commission General Practitioners (GPs), who are members of the Advanced Training Practice Scheme (ATPS), to provide placements for student nurses within general practice. CONCLUSIONS Despite all the challenges, the

evidence is that, through the Community of Practice (CoP), the ATPS scheme is beginning to 'bear fruit', and there is a subtle but discernible move by GPs from a 'why would we?' to 'why wouldn't we?' invest in education and training for nurses in general practice. N.B. The term GPN partner* denotes a GPN who is a 'full partner' in the practice business, holding the same NHS contracts and the same status as a GP. For the purposes of the paper itself, the term GP will be used to denote both types of partner.

[Nurses as substitutes for doctors in primary care](#) July 2018, The Cochrane Database of Systematic Reviews

OBJECTIVES Our aim was to investigate the impact of nurses working as substitutes for primary care doctors on:• patient outcomes;• processes of care; and• utilisation, including volume and cost. **CONCLUSIONS** This review shows that for some ongoing and urgent physical complaints and for chronic conditions, trained nurses, such as nurse practitioners, practice nurses, and registered nurses, probably provide equal or possibly even better quality of care compared to primary care doctors, and probably achieve equal or better health outcomes for patients. Nurses probably achieve higher levels of patient satisfaction, compared to primary care doctors. Furthermore, consultation length is probably longer when nurses deliver care and the frequency of attended return visits is probably slightly higher for nurses, compared to doctors. Other utilisation outcomes are probably the same. The effects of nurse-led care on process of care and the costs of care are uncertain, and we also cannot ascertain what level of nursing education leads to the best outcomes when nurses are substituted for doctors.

[Influences on the adoption of patient safety innovation in primary care: a qualitative exploration of staff perspectives](#) May 2018, BMC Family Practice

BACKGROUND Primary care is changing rapidly to meet the needs of an ageing and chronically ill population. New ways of working are called for yet the introduction of innovative service interventions is complicated by organisational challenges arising from its scale and diversity and the growing complexity of patients and their care. One such intervention is the multi-strand, single platform, Patient Safety Toolkit developed to help practices provide safer care in this dynamic and pressured environment where the likelihood of adverse incidents is increasing. Here we describe the attitudes of staff toward these tools and how their implementation was shaped by a number of contextual factors specific to each practice. **CONCLUSIONS** The concept of a balanced toolkit to address a range of safety issues proved popular. A number of barriers and facilitators emerged in particular those tools that provided relevant information with a minimum impact on practice resource were favoured. Individual practice circumstances also played a role. Practices with IT aware staff were at an advantage and those previously utilising patient safety initiatives were less likely to adopt additional tools with overlapping outputs. By acknowledging these influences we can better interpret reaction to and adoption of individual elements of the toolkit and optimise future implementation.

[Clinical pharmacists in primary care: a safe solution to the workforce crisis?](#) April 2018, Journal of the Royal Society of Medicine

Pharmacists have been working in primary care teams for some time in non-patient roles. Areas in which they support practices include auditing for performance targets, implementation of enhanced services, preparation for inspections by the CQC, training staff in repeat prescribing and providing medicines information for other clinicians. However, these roles currently vary from practice to practice. The wide spread integration of pharmacists in both patient facing and non-patient-facing roles

therefore has the potential to have impact in three key areas: safety of prescribing; improved health outcomes; and access to primary care through reduction of general practitioner workload.

[Holistic health care: Patients' experiences of health care provided by an Advanced Practice Nurse](#) February 2018, International Journal of Nursing Practice

INTRODUCTION Advanced Practice Nurse (APN) is a fairly new role in the Swedish health care system. AIM To describe patients' experiences of health care provided by an APN in primary health care. CONCLUSION The APNs way of providing health care and promoting health seems beneficial in many ways for the patients. The individual and holistic approach that characterizes the health care provided by the APNs is a key aspect in the prevailing change of health care practice. The transfer of care and the increasing number of older adults, often with a variety of complex health problems, call for development of the new role in this context.

[New ways of working; delivering better care for people with long-term conditions](#) September 2017, London Journal of Primary Care

BACKGROUND The cost-effectiveness of the traditional outpatient model for specialist care provision is increasingly being questioned in view of the changing patient needs, workforce challenges and technological advances. SETTING This report summarises two RCGP London events showcasing new ways of delivering care for long-term conditions. DISCUSSION-CONCLUSIONS Different models to the traditional outpatient long-term condition care are feasible and can result in improvements in the quality of care and staff satisfaction. However, such initiatives require careful planning, close collaboration between health care professionals and allocation of appropriate resources and training within primary care. There is also a need for systematic evaluation of such

pilots to assess their cost-effectiveness and their acceptability to clinicians and patients. This requires systematic collection of population level data, agreement on the key outcomes for evaluation and a commitment of all stakeholders to sharing learning and resources to enable continuous improvement.

[Exploring the value of mental health nurses working in primary care in England: A qualitative study](#) August 2017, Journal of Psychiatric and Mental Health Nursing

ABSTRACT Aims/Question General practice is typically the first point of access to healthcare. This study explores what value a Primary Care Liaison Nurse (PCLN) service, established in 2011, can bring to people with mental health problems in primary care. Method Semi-structured interviews were used to elicit participants' experiences and perspectives on the value of a PCLN service. Participants included ten interviews with seven general practitioners and three senior practitioners working in primary care mental health services. Thematic analysis, based on a 6-phase approach, was used to describe and explore the data collected. Results Five main themes were derived from the thematic analysis of the interviews relating to: integration; clinical effectiveness; patient centred care; access; and efficiency. Discussion The study suggests that the PCLN service can improve the quality of care and is generally highly valued by its stakeholders. The study identifies particularly valued elements of the service, including having a duty worker, as well as aspects which could be improved, such as patient criteria. Implications for practice This is a relatively new service and the cost-effectiveness is not yet fully understood; however, commissioners may want to consider the potential benefits of a similar service in their area.

[Offers of appointments with nurse practitioners if a requested physician is unavailable](#)

April 2017, Journal of the American Association of Nurse Practitioners

BACKGROUND AND PURPOSE Access to primary care remains a problem for a substantial portion of the U.S. population, and is predicted to worsen due to an aging population and the increasing burden of chronic diseases. Better integration of nurse practitioners (NPs) into the primary care workforce is a possible solution. We examine offers of appointments with NPs if a requested primary care physician is unavailable. **CONCLUSIONS** Of 922 calls to primary care physicians serving the general adult population, 378 (41%) offered appointments with the requested physician. Alternate providers were offered by 63 (7%), including nine offers with NPs (<1%). Mean wait-to-appointment for NPs (3.6 days) was statistically significantly shorter (p-values < .01) than for requested physicians (22.5 days) or non-NP alternate providers (23.9 days).

[Expanding pharmacy roles and the interprofessional experience in primary healthcare: A qualitative study](#)

January 2017, Journal of Interprofessional Care Abstract only*

The pharmacist role is undergoing significant changes which are reshaping the way primary healthcare is delivered throughout England. Due to increased physician workload and focus on primary healthcare, the pharmacist role has expanded to provide enhanced patient services, integrating into general practice (GP) settings and working more closely as a member of the healthcare team. However, the experiences of pharmacists and team members are yet to be explored. The proposed study aims to explore the experiences, thoughts, and perceptions of a purposive sample of pharmacists, physicians, and nurses working in 10 GP clinics throughout the southeast of England. Interprofessional relationships, power dynamics, changing professional roles, and barriers and facilitators to the

integration of the pharmacist role will be explored. An exploratory multiple case study design will be used to investigate interprofessional experiences within and between clinics. In-depth interviews will be completed with each participant. A thematic analysis will identify themes and patterns from the interview data. Results are expected to produce recommendations to help facilitate the integration of pharmacists in their new role and will have implications for interprofessional collaboration and interprofessional education which are important for delivering safe and effective care.

[Barriers and facilitators to integration of physician associates into the general practice workforce: a grounded theory approach](#)

2017, The British Journal of General Practice (Journal of RCGP)

AIM To investigate the barriers and facilitators to the integration of PAs into the general practice workforce. **CONCLUSION:** This study highlights the complex factors that may impede the introduction of PAs into UK primary care. A conceptual model is proposed to help regulators and educationalists support this integration, which has relevance to other proposed new roles in primary care.

[Task shifting from physicians to nurses in primary care in 39 countries: a cross-country comparative study](#)

December 2016, European Journal of Public Health

BACKGROUND: Primary care is in short supply in many countries. Task shifting from physicians to nurses is one strategy to improve access, but international research is scarce. We analysed the extent of task shifting in primary care and policy reforms in 39 countries. **CONCLUSIONS:** Many countries have implemented task-shifting reforms to maximise workforce capacity. Reforms have focused on removing regulatory and to a lower extent, financial barriers, yet were often lengthy and controversial. Countries early on in the process are primarily

reforming their education. From an international and particularly European Union perspective, developing standardised definitions, minimum educational and practice requirements would facilitate recognition procedures in increasingly connected labour markets.

[Integrating dietitians into primary health care: benefits for patients, dietitians and the general practice team](#) December 2016, Journal of Primary Health Care

INTRODUCTION Dietetic service delivery in primary health care is an emerging area of dietetic practice in New Zealand. **AIM** This paper aims to describe the dietetic services being delivered in this setting and dietitians' perceptions of the factors that have an effect on their ability to deliver an optimal service. **DISCUSSION** Dietitians working in primary health care recognise the importance of being well integrated into a multidisciplinary general practice team. This enables them to deliver more collaborative and coordinated nutrition care alongside their colleagues, to benefit patient care. Establishing flexible dietetic service delivery contracts, which support integration and take into account funding and workforce capacity requirements, may help ensure that the unique skill set of a dietitian is utilised to best effect.

[Transitioning from acute to primary health care nursing: an integrative review of the literature](#) August 2016, Journal of Clinical Nursing *Abstract only**

AIMS AND OBJECTIVES This paper seeks to explore the transition experiences of acute care nurses entering employment in primary health care settings. **CONCLUSION** There is a lack of research specifically exploring the transitioning of acute care nurses to primary health care settings. To better understand this process, and to support the growth of the primary health care workforce there is an urgent need for further well-designed research.

[Applying the guidelines for pharmacists integrating into primary care teams](#) July 2016, Canadian Pharmacists Journal (CPJ)

BACKGROUND In 2013, Jorgenson et al. published guidelines for pharmacists integrating into primary care teams. These guidelines outlined 10 evidence-based recommendations designed to support pharmacists in successfully establishing practices in primary care environments. The aim of this review is to provide a detailed, practical approach to implementing these recommendations in real life, thereby aiding to validate their effectiveness. **CONCLUSION** We believe these guidelines hold up to real-life integration and emphatically recommend their use for new and existing primary care pharmacists.

[Achieving change in primary care--causes of the evidence to practice gap: systematic reviews of reviews](#) March 2016, Implementation Science

BACKGROUND This study is to identify, summarise and synthesise literature on the causes of the evidence to practice gap for complex interventions in primary care. **CONCLUSIONS** This comprehensive review of reviews summarises current knowledge on the barriers and facilitators to implementation of diverse complex interventions in primary care. To maximise the uptake of complex interventions in primary care, health care professionals and commissioning organisations should consider the range of contextual factors, remaining aware of the dynamic nature of context. Future studies should place an emphasis on describing context and articulating the relationships between the factors identified here.

[Community paramedicine model of care: an observational, ethnographic case study](#) February 2016, BMC Health Services Research

BACKGROUND Community paramedicine programs have emerged throughout North America and beyond in response to

demographic changes and health system reform. Our aim was to identify and analyse how community paramedics create and maintain new role boundaries and identities in terms of flexibility and permeability and through this develop and frame a coherent community paramedicine model of care that distinguish the model from other innovations in paramedic service delivery. CONCLUSIONS Community engagement and situated practice distinguish community paramedicine models of care from other paramedicine and out-of-hospital health care models. Successful community paramedicine programs are integrated with health, aged care and social services and benefit from strong governance and paramedic leadership.

[Exploring interprofessional collaboration during the integration of diabetes teams into primary care](#) February 2016, BMC Family Practice

BACKGROUND: Specialised diabetes teams, specifically certified nurse and dietitian diabetes educator teams, are being integrated part-time into primary care to provide better care and support for Canadians living with diabetes. This practice model is being implemented throughout Canada in an effort to increase patient access to diabetes education, self-management training, and support. Interprofessional collaboration can have positive effects on both health processes and patient health outcomes, but few studies have explored how health professionals are introduced to and transition into this kind of interprofessional work.

CONCLUSIONS Our findings provide insight into how healthcare professionals who have not traditionally worked together in primary care are collaborating to integrate health services essential for diabetes management. Based on the experiences and personal reflections of participants, establishing new ways of working requires negotiating space and place to practice, role clarification, and frequent and effective modes of formal and informal communication to

nurture the development of trust and mutual respect, which are vital to success.

Recruitment, retention, and supply

[Whole of Community Facilitators: An Exemplar for Supporting Rural Health Workforce Recruitment through Students' Professional Experience Placements](#) 2021, International

Journal of Environmental Research & Public Health

The Whole of Community Facilitator model provides support for healthcare students' professional experience placements (PEP) in rural regions in Tasmania. In Tasmania, rural PEP is challenged as healthcare facilities are often small and have limited capacity for staff to devote considerable time to supervising students during PEP. Recruitment and retention of the rural health workforce in Tasmania is sometimes difficult because the island State is geographically distant from mainland Australia, and predominantly classified as a regional, rural, or remote area. The University of Tasmania, College of Health and Medicine (the College) explored various initiatives to support rural workforce sustainability, and the project discussed addresses this issue by promoting rural healthcare facilities as potential employment destinations for students upon completion of their course. The model supports the delivery of high-quality supervision to students whilst undertaking rural PEP, to foster positive experiences and potentially influence their future career choices. A successful exemplar was trialled in 2012 and implemented statewide in 2017 using a Whole of Community Facilitation (WOCF) model. The initiative supports host facilities, supervisors, host staff, and students and promotes positive placement experiences. The initiative was designed in consideration of Tasmania's rurality, and uses a flexible and responsive framework.

[Management and treatment of HIV: are primary care clinicians prepared for their new role?](#) 2020, BMC Family Practice

BACKGROUND: Current literature suggests the number of HIV clinicians in the United States is diminishing. There are 294,834 primary care providers (PCP) in the United States, and, of these, 3101 provide care to HIV-positive patients. More PCPs to treat and manage HIV patients may be the solution to alleviate the HIV provider shortage. However, PCPs also face challenges, including workforce shortages. We surveyed PCPs to determine perceived barriers, beliefs, and attitudes about their readiness to manage and treat HIV patients. **METHODS:** Following a quantitative, descriptive, cross-sectional survey design, currently practicing clinicians in primary care (physicians, residents, physician assistants, family nurse practitioners) were emailed a link to the study survey. Three hundred forty-seven family medicine clinicians from 47 states met the study inclusion criteria. **RESULTS:** Most (245/347, 70.6%) of the PCPs agreed that PCPs should take care of HIV patients. PCPs practicing HIV medicine (n = 171) were more likely than those not practicing HIV medicine (n = 176) to agree that PCPs should help with the HIV provider shortage (U = 10,384, p < 0.001) and that PCPs are the best solution to the HIV provider shortage (U = 10,294, p < 0.001). The majority (206, 59.4%) believed PCPs are the best solution for the HIV provider shortage. Of 133 physician assistants (PAs) and family nurse practitioners (NPs), seventy (52.6%) believed they could be ready to manage HIV patients with some training. **CONCLUSION:** The HIV provider shortage in the United States is likely to continue. To alleviate the provider shortage, PCPs should be offered additional training, decreased workload, and increased compensation when treating and managing HIV patients. Also, encouraging PAs and family NPs to be involved with HIV medicine may be a solution.

[Work satisfaction and future career intentions of experienced nurses transitioning to primary health care employment](#)

September 2018, Journal of Nursing Management
AIM To explore registered nurses' reflections on transitioning from acute to primary health care employment, and future career intentions. **CONCLUSION** Our findings provide guidance to managers in seeking strategies to recruit and retain nurses in primary health care employment.

[Universities and primary care organisations working together to recruit GPs: a qualitative evaluation of the Enfield clinical teaching fellow programme](#) April 2018, BJGP Open

Aim To evaluate an academic service collaboration on GP recruitment between a primary care organisation (PCO), Enfield CCG, and a university, University College London (UCL). **Design & setting** Evaluation of an academic service collaboration in the Enfield CCG area of north east London. **Conclusion** The evaluation showed that the collaboration of an NHS PCO and a higher education institution can work, and the prestige of being associated with a university and clinical variety ensured GP recruitment in an area that had previously struggled. However, the project's costs were high, which affected perceptions of its value.

[Twelve tips for the recruitment and retention of general practitioners as teachers of medical students](#) March 2018,

Medical Teacher Abstract only*
BACKGROUND Primary care physicians have become a fundamental aspect of teaching in modern medical school curricula worldwide with a significant proportion of undergraduate teaching taking place in primary care. There are calls for this to increase with more patient care occurring in the community but teaching capacity in primary care is a potential challenge. Medical schools, therefore, need strategies to be able to increase their primary care physician teaching

Evidence Brief: Primary Care Workforce

workforce. CONCLUSIONS The solutions to recruiting and retaining GPs to teach undergraduate medical students are clearly multifactorial and complex. We hope that by presenting suggestions from UK GP heads of teaching as these twelve tips provides some helpful, thought-provoking ideas and inspiration for both the UK and internationally.

[Factors associated with final year nursing students' desire to work in the primary health care setting: Findings from a national cross-sectional survey](#) February 2018, Nurse Education Today *Abstract only**

OBJECTIVES This study sought to identify factors associated with final year nursing students' desire to work in primary health care setting including demographic factors, expectations of future employment conditions, and job content. It also explored expectations of graduate transition programs based in primary health care. CONCLUSIONS Collaborative efforts from primary health care nurses, health professionals, academics and policy makers are needed to attract new graduate nurses to primary health care.

[Career planning for the non-clinical workforce - an opportunity to develop a sustainable workforce in primary care](#) March 2017, Education for Primary Care Athens log in required*

Many health and social care systems worldwide have been developing a variety of navigator and signposting roles to help patients negotiate care through increasingly complex systems and multiple provider agencies. This UK project aims to explore, through a combination of job description review and workshops of stakeholders, the common competencies and features of non-clinical roles. The information is collated to develop common job descriptions at four key levels. These form the basis for a career pathway supported by portfolio-based educational programmes, embracing Apprenticeship Training Programmes. The programmes have the potential to support

recruitment and retention of an increasingly skilled workforce to move between traditional health and social care provider boundaries. This offers the opportunity to release clinicians from significant administrative workload and support patients in an integrated care system.

[Practice environments and job satisfaction and turnover intentions of nurse practitioners: Implications for primary care workforce capacity](#) 2017, Health Care Management Review *Abstract only**

PURPOSE We examined NP practice environments in primary care organizations and the extent to which they were associated with NP retention measures. PRACTICE IMPLICATIONSNPs were more likely to be satisfied with their jobs and less likely to report intent to leave if their organizations support NP practice, favorable relations with physicians and administration, and clear role visibility. Creating productive practice environments that can retain NPs is a potential strategy for increasing the primary care workforce capacity.

[Why Aren't More Primary Care Residents Going into Primary Care?](#) December 2016, A Qualitative Study Journal of General Internal Medicine

OBJECTIVE We aimed to explore contextual and programmatic factors within primary care residency training environments that may influence career choices. CONCLUSIONS Addressing aspects of training that may discourage residents from careers in primary care such as lack of diversity in outpatient experiences and resident frustration with their inability to address social needs of patients, and strengthening aspects of training that may encourage interests in careers in primary care such as mentorship and protected time away from inpatient responsibilities during primary care rotations, may increase the proportion of residents enrolled in primary care training programs who pursue a career in primary care.

[When Do Primary Care Physicians Retire? Implications for Workforce Projections](#) July 2016, Annals of Family Medicine
PURPOSE Retirement of primary care physicians is a matter of increasing concern in light of physician shortages. The joint purposes of this investigation were to identify the ages when the majority of primary care physicians retire and to compare this with the retirement ages of practitioners in other specialties. CONCLUSIONS Primary care physicians in our data tended to retire in their mid-60s. Relatively small differences across sex, practice location, and time suggest that changes in the composition of the primary care workforce will not have a remarkable impact on overall retirement rates in the near future.

[A systematic review of strategies to recruit and retain primary care doctors](#) April 2016, BMC Health Services Research
Background: There is a workforce crisis in primary care. Previous research has looked at the reasons underlying recruitment and retention problems, but little research has looked at what works to improve recruitment and retention. The aim of this systematic review is to evaluate interventions and strategies used to recruit and retain primary care doctors internationally. Conclusions: This is the first systematic review of interventions to improve recruitment and retention of primary care doctors. Although the evidence base for recruiting and care doctors is weak and more high quality research is needed, this review found evidence to support undergraduate and postgraduate placements in underserved areas, and selective recruitment of medical students. Other initiatives covered may have potential to improve recruitment and retention of primary care practitioners, but their effectiveness has not been established.

[Are nurses well placed as care co-ordinators in primary care and what is needed to develop their role: a rapid review?](#) March 2016, Health & Social Care in the Community
Care co-ordination is reported to be an effective component of chronic disease (CD) management within primary care. While nurses often perform this role, it has not been reported if they or other disciplines are best placed to take on this role, and whether the discipline of the co-ordinator has any impact on clinical and health service outcomes. We conducted a rapid review of previous systematic reviews from 2006 to 2013 to answer these questions with a view to informing improvements in care co-ordination programmes. Eighteen systematic reviews from countries with developed health systems comparable to Australia were included. All but one included complex interventions and 12 of the 18 involved a range of multidisciplinary co-ordination strategies. This multi-strategy and multidisciplinary made it difficult to isolate which were the most effective strategies and disciplines. Nurses required specific training for these roles, but performed co-ordination more often than any other discipline. There was, however, no evidence that discipline had a direct impact on clinical or service outcomes, although specific expertise gained through training and workforce organisational support for the co-ordinator was required. Hence, skill mix is an important consideration when employing care co-ordination, and a sustained consistent approach to workforce change is required if nurses are to be enabled to perform effective care co-ordination in CD management in primary care.

[Understanding quit decisions in primary care: a qualitative study of older GPs](#) February 2016, BMJ Open
OBJECTIVE To investigate the reasons behind intentions to quit direct patient care among experienced general practitioners (GPs) aged 50-60 years. CONCLUSIONS This research highlights aspects of the current professional climate for GPs

that are having an impact on retirement decisions. Any future changes to policy or practice to help retain experienced GPs will benefit from this informed understanding of GPs' views. Key factors to take into account include: making the GP workload more manageable; managing change sympathetically; paying attention to GPs' own health; improving confidence in the future of general practice; and improving GP morale.

[Australian academic primary health-care careers: a scoping survey](#) 2016, Australian Journal of Primary Health Athens log in required*

This study was undertaken to provide a snapshot of the academic primary health-care workforce in Australia and to provide some insight into research capacity in academic primary health care following changes to funding for this sector. A convenience sample of individuals self-identifying as working within academic primary health care (n=405) completed an anonymous online survey. Respondents were identified from several academic primary health-care mailing lists. The survey explored workforce demographics, clarity of career pathways, career trajectories and enablers/barriers to 'getting in' and 'getting on'. A mix of early career (41%), mid-career (25%) and senior academics (35%) responded. Early career academics tended to be female and younger than mid-career and senior academics, who tended to be male and working in 'balanced' (teaching and research) roles and listing medicine as their disciplinary background. Almost three-quarters (74%) indicated career pathways were either 'completely' or 'somewhat unclear', irrespective of gender and disciplinary backgrounds. Just over half (51%) had a permanent position. Males were more likely to have permanent positions, as were those with a medical background. Less than half (43%) reported having a mentor, and of the 57% without a mentor, more than two-thirds (69%) would like one. These results suggest a lack of clarity in career

paths, uncertainty in employment and a large number of temporary (contract) or casual positions represent barriers to sustainable careers in academic primary health care, especially for women who are from non-medicine backgrounds. Professional development or a mentoring program for primary health-care academics was desired and may address some of the issues identified by survey respondents.

[Bolstering the pipeline for primary care: a proposal from stakeholders in medical education](#) 2016, Medical Education Online

The Association of American Medical Colleges reports an impending shortage of over 90,000 primary care physicians by the year 2025. An aging and increasingly insured population demands a larger provider workforce. Unfortunately, the supply of US-trained medical students entering primary care residencies is also dwindling, and without a redesign in this country's undergraduate and graduate medical education structure, there will be significant problems in the coming decades. As an institution producing fewer and fewer trainees in primary care for one of the poorest states in the United States, we propose this curriculum to tackle the issue of the national primary care physician shortage. The aim is to promote more recruitment of medical students into family medicine through an integrated 3-year medical school education and a direct entry into a local or state primary care residency without compromising clinical experience. Using the national primary care deficit figures, we calculated that each state medical school should reserve 20-30 primary care (family medicine) residency spots, allowing students to bypass the traditional match after successfully completing a series of rigorous externships, pre-internships, core clerkships, and board exams. Robust support, advising, and personal mentoring are also incorporated to ensure adequate preparation of students. The nation's health is at risk. With full implementation in allopathic

medical schools in 50 states, we propose a long-term solution that will serve to provide more than 1,000-2,700 new primary care providers annually. Ultimately, we will produce happy, experienced, and empathetic doctors to advance our nation's primary care system.

New and expanded roles

Determinants of primary care workforce variation in England

June 2020, British Journal of General Practice Abstract only*

BACKGROUND: The General Practice Forward View (GPFV) outlined how the government plans to attain a strengthened model of general practice. A key component of this proposal is an expansion of the workforce by employing a varied range of practitioners, in other words 'skill mix'. A significant proportion of this investment focuses on increasing the number of 'new' roles such as clinical pharmacists, physiotherapists, physician associates, and paramedics. **AIM:** The aim of this study is to examine what practice characteristics are associated with the current employment of these 'new' roles. **METHOD:** The study uses practice level workforce data (2015-2019), publicly available from NHS Digital. The authors model FTE of specific workforce groups (for example, advanced nurse) as a function of deprivation, practice rurality, patient demographics (total list size and percentage of patients aged >65 years) and FTEs from other staff groups. **RESULTS:** Although analysis is ongoing, initial estimation suggests that the employment of 'new' roles has occurred in larger practices (in terms of list size), in practices with a higher proportion of patients living in deprived areas and practices with a larger proportion of patients aged >65 years. FTE for advanced nurses is negatively associated with GP FTE. **CONCLUSION:** A negative correlation between advanced nurse FTE and GP FTE is potentially suggestive of substitution between roles, deliberate or otherwise. For example, practices may employ 'new' roles if

they are unable to recruit GPs or they may recruit staff to free up GP time. Further work is needed to confirm these findings and to explore the reasons behind practice employment decisions. Copyright © British Journal of General Practice 2020.

Successfully developing advanced practitioner roles: policy and practice mechanisms

March 2019, Journal of Health Organisation and Management Abstract only*

PURPOSE: The purpose of this paper is to lay out how advanced practitioner development occurs in New Zealand primary health care settings. The paper specifically focuses on mechanisms occurring across policy creation and in practice leading to successful role development. **FINDINGS:** Three final mechanisms were found to influence successful advanced practitioner role development: engagement in planning and integrating roles; establishing opportunities as part of a well-defined career pathway; and championing role uptake and work to full scopes of practice.

Skill-mix change and the general practice workforce challenge

2018, British Journal of General Practice

Faced with an ageing population living with increasingly complex health needs and a shortage of GPs and nursing staff, primary care is experiencing unprecedented pressure. Workforce transformation based around new models of care and 'skill-mix' change in the form of 5,000 new 'non-medical role' to operate alongside GPs is an aspirational solution, though generating the right balance of GPs/ non-GPs is not without controversy. Although practice nurses have been working in extended roles in general practice for a long time there are other 'new' roles emerging.

Evidence Brief: Primary Care Workforce

[PAs in primary care: Current status and workforce implications](#)

September 2017, JAAPA (official journal of the American

Academy of Physician Assistants) Abstract only*

OBJECTIVES Understanding the PA primary care workforce is an initial step toward greater use of primary care PAs in new healthcare delivery models. This study sought to describe primary care PA practice as it compares with PA practice in other specialties. **METHODS** Data from two 2015 national American Academy of Physician Assistants surveys were analyzed using descriptive statistics. Statistically significant differences between primary care and specialty PAs were assessed using tests of column proportions and tests of column means. **RESULTS** Compared with PAs in specialties, primary care PAs were older, saw more patients per week, and spent less time consulting with physicians. In addition, higher percentages were Hispanic, had a record of military service, and had plans to leave their specialty or retire. **CONCLUSIONS** Primary care PAs appear to possess unique strengths; however, challenges to maintaining a primary care PA workforce are substantial.

[New roles for clinical pharmacists in general practice](#) April 2017, Prescriber Abstract only*

In 2015, NHS England launched its scheme to fund, recruit and employ more clinical pharmacists in GP practices. Since then, pharmacists have been playing an increasingly essential role in general practice, not only by reducing the workload of GPs but by bringing additional skills and knowledge on medicines optimisation, particularly in cases of complex polypharmacy.

[A comparison of job descriptions for nurse practitioners working in out-of-hours primary care services: implications for workforce planning, patients and nursing](#) March 2017, Journal of Clinical Nursing

Aims and objectives To compare and contrast job descriptions for nursing roles in out-of-hours services to obtain a general understanding of what is required for a nurse working in this job. **Background** Out-of-hours services provide nursing services to patients either through telephone or face-to-face contact in care centres. **Conclusion** This study highlights key differences and some similarities between roles and job titles in out-of-hours nursing but requires a larger study to inform workforce planning. **Relevance to clinical practice** Out-of-hours nursing is a developing area of practice which requires clarity to ensure patient safety and quality care.

[Expanding the Role of Registered Nurses in Primary Care: A Business Case Analysis](#)

March 2017, The Journal of Medical

Practice Management (MPM) Athens log in required*

Primary care is evolving in response to payment reform, changes in the primary care workforce, and development of new models of work emphasizing team care. The role of registered nurses in these new models is being reexamined and reimagined, with increased registered nurse engagement in chart review prior to visits, histories and physicals, preliminary patient assessment, patient education and coaching in ordered care, delivery of care under standardized orders and protocols, transition planning, and care coordination. The business case for employing registered nurses in these new roles has not been fully addressed. This article examines the business case and financial issues in this expansion of practice. Under both fee-for-service and value-based, capitated, or shared saving models of reimbursement, there are strategies for increasing the number of registered nurses in primary care practices, and expanding the engagement of registered nurses that can increase net revenues for primary care practices, even when the costs of the additional staffing are taken into account.

Evidence Brief: Primary Care Workforce

[New Roles for Medical Assistants in Innovative Primary Care Practices](#) February 2017, Health Services Research

OBJECTIVE To identify and describe new roles for medical assistants (MAs) in innovative care models that improve care while providing training and career advancement opportunities for MAs. **CONCLUSIONS** New MA roles are part of a larger attempt to reform workflow and relieve primary care providers. Despite some evidence of success, spread has been limited. Key challenges to adoption included leadership and provider resistance to change, cost of additional MA training, and lack of reimbursement for nonbillable services.

[Registered Nurses in Primary Care: Emerging New Roles and Contributions to Team-Based Care in High-Performing Practices](#) 2017, The Journal of Ambulatory Care

The years since the passage of the Affordable Care Act have seen substantial changes in the organization and delivery of primary care. These changes have emphasized greater team involvement in care and expansion of the roles of each team member including registered nurses (RNs). This study examined the roles of RNs in 30 exemplary primary care practices. We identified the emergence of new roles and activities for RNs characterized by greater involvement in face-to-face patient care and care management, their own daily schedule of patient visits and contacts, and considerable autonomy in the care of their patients.

[Expanded roles of registered nurses in primary care delivery of the future](#) 2017, Nursing Outlook Abstract only*

PURPOSE This paper explores the challenges and opportunities in primary care delivery in the 21st century and examines the likelihood of expanded roles for RNs to improve quality and add capacity to the primary care workforce. **CONCLUSION** For RNs to assume an expanded role in primary care, several barriers need to be overcome: (1) the widespread

introduction of payment reform that reimburses RNs to independently provide care for patients, and (2) nursing education reform that includes primary care nursing skills (3) scope of practice clarification for non-advanced practice RNs working under standardized procedures.

[Acceptability of physiotherapists as primary care practitioners and advanced practice physiotherapists for care of patients with musculoskeletal disorders: a survey of a university community within the province of Quebec](#) September 2016, BMC

Musculoskeletal

BACKGROUND Musculoskeletal (MSK) disorders represent a great burden on the health care system. The use of physiotherapists in their autonomous roles and in advanced practice roles may help increase access to care. Thus, the aim of this survey was to assess the perceptions of a university community sample within the province of Quebec about physiotherapists as primary care practitioners and advanced practice physiotherapists (APPs) for the treatment of patients with musculoskeletal disorders. **CONCLUSIONS** Respondents are satisfied and have confidence in physiotherapists as primary care practitioners; they also support the intended new roles of the APPs in the health care system. Caution should be taken in generalizing these results from this particular sample. These results need to be corroborated in the general population.

[Rethinking the Primary Care Workforce - An Expanded Role for Nurses](#) September 2016, New England Journal of Medicine Athens log in required*

The article discusses the growing demand of physicians played by nurse practitioners (NP) and primary care in the U.S. according to workforce experts. The number of retirees exceeds the new entrants and could cause decline on primary care physician workforce which includes doctors and international

medical graduates. The author believes that despite the shortage of primary care physicians in increased in chronic diseases, it forces towards stronger NPs and registered nurses on primary care.

[New roles in pharmacy - learning from the All Wales Common Ailments Scheme](#)

August 2016, The International Journal of Pharmacy Practice Athens log in required*

OBJECTIVES The objective of this study was to explore the perceptions of stakeholders on a national pilot of a new service, the 'Choose Pharmacy' Common Ailments Service (CAS) in Wales. **CONCLUSION** SCAS was welcomed by stakeholders in terms of its potential benefits. Results are therefore encouraging for policy makers involved in the implementation of other new roles within community pharmacy in the UK and beyond.

[Pharmaceutical Role Expansion and Developments in Pharmacist-Physician Communication](#)

2016, Health Communication

Expanded clinical pharmacist professional roles in the team-based patient-centered medical home (PCMH) primary care environment require cooperative and collaborative relationships among pharmacists and primary care physicians (PCPs), but many PCPs have not previously worked in such a direct fashion with pharmacists. Additional roles, including formulary control, add further elements of complexity to the clinical pharmacist-PCP relationship that are not well described. Our objective was to characterize the nature of clinical pharmacist-PCP interprofessional collaboration across seven federally funded hospitals and associated primary care clinics, following pharmacist placement in primary care clinics and incorporation of expanded pharmacist roles. In-depth and semistructured interviews were conducted with 25 practicing clinical pharmacists and 17 PCPs. Clinical pharmacists' indirect

communication practices may hold important implications for patient safety in the context of medication use, and it is important to foster effective communication skills and an environment where all team members across hierarchies can feel comfortable speaking up to reduce error when problems are suspected. Also, the lack of institutional communication about managing drug formulary issues and related electronic nonformulary request processes was apparent in this study and merits further attention for both researchers and practitioners.

[Quality of primary care by advanced practice nurses: a systematic review](#)

International August 2015, Journal of Quality in Health Care Abstract only
The purpose was the conduct a systematic review of randomised controlled trials (RCTs) of the safety and effectiveness of primary care provided by advanced practice nurses (APNs) and evaluate the potential of their deployment to help alleviate primary care shortages. There were few differences in primary care provided by APNs and physicians; for some measures APN care was superior. While studies are needed to assess longer term outcomes, these data suggest that the APN workforce is well-positioned to provide safe and effective primary care.

[Physician associates and GPs in primary care: a comparison](#)

2015, British Journal of General Practice
This study aimed to compare outcomes and costs of same-day requested consultations by PAs with those of GPs. **Conclusion:** the processes and outcomes of PA and GP consultations for same-day appointment patients are similar at a lower consultation cost. PAs offer a potentially acceptable and efficient addition to the general practice workforce.

Staff perceptions

[Job satisfaction and career intentions of registered nurses in primary health care: an integrative review](#) August 2018, BMC Family Practice

Background: There has been a significant growth of the international primary health care (PHC) nursing workforce in recent decades in response to health system reform. However, there has been limited attention paid to strategic workforce growth and evaluation of workforce issues in this setting. Understanding issues like job satisfaction and career intentions are essential to building capacity and skill mix within the workforce. This review sought to explore the literature around job satisfaction and career intentions of registered nurses working in PHC. Methods: An integrative review was conducted. Conclusion: This review identifies gaps in our understanding of job satisfaction and career intentions in PHC nurses. With the growth of the PHC nursing workforce internationally, there is a need for robust, longitudinal workforce research to ensure that employment in this setting is satisfying and that skilled nurses are retained.

[Registered nurses transitioning from acute care to primary healthcare employment: A qualitative insight into nurses' experiences](#) February 2018, Journal of Clinical Nursing Abstract only*

AIMS AND OBJECTIVES To describe the experiences of acute care registered nurses transitioning to primary healthcare settings. CONCLUSIONS Transitioning to primary healthcare employment provides unique challenges which must be considered by employers if they are to attract and retain experienced acute care registered nurses

[Pharmacists' perceptions of their emerging general practice roles in UK primary care: a qualitative interview study](#)

September 2017, The British Journal of General Practice
AIM To explore pharmacists' perceptions of primary care roles including the potential for greater integration of their profession into general practice. CONCLUSION There is enthusiasm and willingness among pharmacists for new, extended roles in primary care, which could effectively relieve GP workload pressures. A definition of the role, with examples of the knowledge, skills, and attributes required, should be made available to pharmacists, primary care teams, and the public. Training should include clinical skills teaching, set in context through exposure to general practice, and delivered motivationally by primary care practitioners.

Leadership

[Transformational leadership to promote nurse practitioner practice in primary care](#) November 2018, Journal of Nursing Management Abstract only*

AIM This study investigated transformational leadership from the perspectives of primary care nurse practitioners. CONCLUSION Transformational leadership can be applied to promote nurse practitioner practice in primary care. Future research should explore how transformational leadership affects nurse practitioner care and outcomes. IMPLICATIONS FOR NURSING MANAGEMENT Leaders in primary care practices should consider applying transformational leadership principles to promote nurse practitioner practice.

Workforce planning and demographics

[An integrated primary care workforce planning toolkit at the regional level \(part 1\): qualitative tools compiled for decision-makers in Toronto, Canada](#) 2021, Human Resources for Health

BACKGROUND: A regional health authority in Toronto, Canada, identified health workforce planning as an essential input to the implementation of their comprehensive Primary Care Strategy. The goal of this project was to develop an evidence-informed toolkit for integrated, multi-professional, needs-based primary care workforce planning for the region. This article presents the qualitative workforce planning processes included in the toolkit. **METHODS:** To inform the workforce planning process, we undertook a targeted review of the health workforce planning literature and an assessment of existing planning models. We assessed models based on their alignment with the core needs and key challenges of the health authority: multi-professional, population needs-based, accommodating short-term planning horizons and multiple planning scales, and addressing key challenges including population mobility and changing provider practice patterns. We also assessed the strength of evidence surrounding the models' performance and acceptability. **RESULTS:** We developed a fit-for-purpose health workforce planning toolkit, integrating elements from existing models and embedding key features that address the region's specific planning needs and objectives. The toolkit outlines qualitative workforce planning processes, including scenario generation tools that provide opportunities for patient and provider engagement. Tools include STEEPLED Analysis, SWOT Analysis, an adaptation of Porter's Five Forces Framework, and Causal Loop Diagrams. These planning processes enable the selection of policy interventions that are robust to uncertainty and that are appropriate and acceptable at the regional level. **CONCLUSIONS:** The qualitative inputs that inform health

workforce planning processes are often overlooked, but they represent an essential part of an evidence-informed toolkit to support integrated, multi-professional, needs-based primary care workforce planning.

[An integrated primary care workforce planning toolkit at the regional level \(part 2\): quantitative tools compiled for decision-makers in Toronto, Canada](#) 2021, Human Resources for Health

BACKGROUND: Health workforce planning capability at a regional level is increasingly necessary to ensure that the healthcare needs of defined local populations can be met by the health workforce. In 2016, a regional health authority in Toronto, Canada, identified a need for more robust health workforce planning infrastructure and processes. The goal of this project was to develop an evidence-informed toolkit for integrated, multi-professional, needs-based primary care workforce planning for the region. This article presents the quantitative component of the workforce planning toolkit and describes the process followed to develop this tool. **METHODS:** We conducted an environmental scan to identify datasets addressing population health need and profession-specific health workforce supply that could contribute to quantitative health workforce modelling. We assessed these sources of data for comprehensiveness, quality, and availability. We also developed a quantitative health workforce planning model to assess the alignment of regional service requirements with the service capacity of the workforce. **RESULTS:** The quantitative model developed as part of the toolkit includes components relating to both population health need and health workforce supply. Different modules were developed to capture the information and address local issues impacting delivery and planning of primary care health services in Toronto. **CONCLUSIONS:** A quantitative health workforce planning model is a necessary component of any health workforce planning toolkit. In combination with qualitative tools, it supports

integrated, multi-professional, needs-based primary care workforce planning. This type of planning presents an opportunity to address inequities in access and outcome for regional populations. Copyright © 2021. The Author(s).

[Primary care workforce paradox: A physician shortage and a PA and NP surplus](#) 2021, Jaapa

OBJECTIVE: Primary care workforce projections continue to predict significant physician shortages. An oversupply of primary care physician assistants (PAs) and NPs also is predicted. This paradox calls into question the assumptions that underlie workforce projection models, which likely underestimate the primary care contributions of PAs and NPs. **METHODS:** Federally qualified health center data from the 2016-2019 Uniform Data System were used to calculate the number of clinic visits per full-time equivalent (FTE) physician, PA, and NP. Visits per FTE were compared across provider type to determine provider-specific productivity ratios. **RESULTS:** The combined PA and NP productivity ratio increased relative to physicians in each year, ranging from 0.85 in 2016 to 0.88 in 2019. Clinic visits per FTE for PAs and family physicians were nearly equivalent. **CONCLUSIONS:** Primary care workforce projection models should be reexamined to more accurately capture the productivity of PAs and NPs. Copyright © 2021 American Academy of Physician Assistants.

[The pharmacy workforce in public primary healthcare centers: promoting access and information on medicines](#) 2020, Pharmacy Practice Abstract only*

Background: Only few studies have analyzed the pharmaceutical workforce in primary healthcare centers, and a global recommendation calls for better understanding of the trends that shape workforce development and capacity. **Objective:** To analyze the distribution of the pharmaceutical workforce in primary healthcare centers in the national health

system [Sistema Unico de Saude (SUS)] in Brazil. **Methods:** The study was conducted using data from the National Survey on Access, Use and Promotion of Rational Use of Medicines in Brazil. Secondary data referring to the socioeconomic indicators of each municipality were obtained from national public databases. Data stratification in geographic regions was considered, and data on workers in the management of the municipal pharmaceutical services and medicines dispensing centers were analyzed. Crude and adjusted prevalence ratios were calculated by Poisson regression in the study investigating the factors associated with low and high-density pharmacists per 10,000 inhabitants. **Results:** The results showed that most Brazilian municipalities have a rate of 1 or more pharmacist per 10,000 inhabitants in primary healthcare public facilities, with a higher concentration of pharmacists in small municipalities. Even in Brazilian municipalities with lower economic capacity, the conditions of access to medicines and pertinent information on medicines were directly related to the number of pharmacists available in these centers. **Conclusions:** This study showed a high number of pharmacists in the public health system. The higher density of pharmacists in primary healthcare public facilities correlated to increased access to medicines information and better municipal social development. Copyright: © Pharmacy Practice and the Authors.

[Modern work patterns of "classic" versus millennial family doctors and their effect on workforce planning for community-based primary care: a cross-sectional survey](#) 2020, Human Resources for Health

BACKGROUND: There are ongoing accessibility challenges in primary care in British Columbia, Canada, with 17% of the population not having a regular source of care. Anecdotal evidence suggests that physicians are moving away from a community-based comprehensive practice model, which could contribute to shortages. Thus, we aimed to identify and

Evidence Brief: Primary Care Workforce

describe how family physicians are currently organizing their primary care practices in a large health region in British Columbia and to examine differences between newer graduates and more established physicians. METHODS: Data for this cross-sectional study were drawn from an annual physician privileging survey. N = 1017 physicians were invited to participate. We categorized practice style into five distinct groupings and compared features across respondent groups, including personal and practice location characteristics, hospital and teaching work, payment and appointment characteristics, and scope of practice. We discuss the implications of styles of practice and associated characteristics on health workforce policy and planning. RESULTS: We received responses from 525 (51.6%) physicians. Of these, 355 (67.6%) reported doing at least some community-based primary care. However, only 112 (21.3%) provided this care full time. Most respondents supplemented community-based work with part-time hours in focused practice, hospitals, or inpatient facilities. We found diversity in the scope and style of practice across practice models. Compared to established physicians, new graduates (in practice less than 10 years) work more weekly hours (more patient care, and paperwork in particular). However, we found no difference between new and established physicians in the odds of providing any or full-time community-based primary care. CONCLUSIONS: Despite a lack of formalized structural reform in British Columbia's primary care system, most physicians are finding alternative ways to model their practice and shifting away from work at single-location, community-based clinics. This shift challenges assumptions that are relied on for workplace planning that is intended to ensure adequate access to longitudinal, community-based family medicine.

[Integrating a nationally scaled workforce of community health workers in primary care: a modelling study](#) December 2018, Journal of the Royal Society of Medicine
OBJECTIVE To model cost and benefit of a national community health worker workforce. CONCLUSION A scaled community health worker workforce integrated into primary care may be a valuable policy alternative. Pilot studies are required to establish feasibility and impact in NHS primary care.

[Creating a Primary Care Workforce: Strategies for Leaders, Clinicians, and Nurses](#) June 2018, Journal of Clinical Psychology in Medical Settings Abstract only*
Many primary care clinics struggle with rapid implementation and systematic expansion of primary care behavioral health (PCBH) services. Often, an uneven course of program development is due to lack of attention to preparing clinic leadership, addressing operational factors, and training primary care providers (PCPs) and nurses. This article offers competency tools for clinic leaders, PCPs, and nurses to use in assessing their status and setting change targets. These tools were developed by researchers working to disseminate evidence-based interventions in primary care clinics that included fully integrated behavioral health consultants and were then used by early adaptors of the PCBH model. By deploying these strategies, both practicing and teaching clinics will take a big step forward in developing the primary care workforce needed for primary care teams, where the behavioral health needs of a patient of any age can be addressed at the time of need.

[Experiences of primary care physicians and staff following lean workflow redesign](#) April 2018, BMC Health Services Research
BACKGROUND In response to growing pressures on primary care, leaders have introduced a wide range of workforce and practice innovations, including team redesigns that delegate

some physician tasks to nonphysicians. One important question is how such innovations affect care team members, particularly in view of growing dissatisfaction and burnout among healthcare professionals. We examine the work experiences of primary care physicians and staff after implementing Lean-based workflow redesigns. This included co-locating physician and medical assistant dyads, delegating significant responsibilities to nonphysician staff, and mandating greater coordination and communication among all care team members. CONCLUSIONS Our findings partially align with expectations of work redesign as a route to improving physician and staff experiences in delivering care. Although teamwork and engagement increased, the redesigns in our study were not enough to moderate long-standing challenges facing primary care. Yet higher levels of empowerment and engagement, as observed in the pilot clinic, may be particularly effective in facilitating improvements while combating fatigue. To help practices cope with increasing burdens, interventions must directly benefit healthcare professionals without overtaxing an already overstretched workforce.

[Primary Care Teams and Pharmacist Staffing Ratios: Is There a Magic Number?](#) March 2018, *Annals of Pharmacotherapy*
Abstract only*

Primary care physician (PCP) shortages are predicted for 2025, and many workforce models have recommended the expanded integration of nurse practitioners and physician assistants. However, there has been little consideration of incorporating clinical pharmacists on primary care teams to address the growing number of patient visits that involve medication optimization and management. This article summarizes various estimates of pharmacist staffing ratios based on number of PCPs, patient panel size, or annual patient encounters. Finally, some steps are offered to address the practice- and policy-

based implications of expanding primary care pharmacist activities at the local and state levels.

[Factors associated with less-than-full-time working in medical practice: results of surveys of five cohorts of UK doctors, 10 years after graduation](#) October 2016, *Human Resources for Health*

BACKGROUND The greater participation of women in medicine in recent years, and recent trends showing that doctors of both sexes work fewer hours than in the past, present challenges for medical workforce planning. In this study, we provide a detailed analysis of the characteristics of doctors who choose to work less-than-full-time (LTFT). We aimed to determine the influence of these characteristics on the probability of working LTFT. CONCLUSIONS Family circumstances (children and partner status) affect the working patterns of women and men differently, but both sexes respond similarly to the constraints of their clinical specialty and seniority. Thus, although women doctors comprise the bulk of LTFT workers, gender is just one of several determinants of doctors' working patterns, and wanting to work LTFT is evidently not solely an issue for working mothers.

Staff health and wellbeing

[Developing a Global Community of Practice for Pharmacy Workforce Resilience-Meet GRiT](#) June 2021, *Pharmacy: A Journal of Pharmacy Education and Practice*

Workforce resilience in pharmacy is required to ensure the practice, education, and administrative systems remain viable and sustainable over time and when facing challenges. Whether it is addressing burnout of pharmacists or students, or the structure and policies/procedures of employment and professional organizations, working to increase resilience

across all individuals and sectors is essential to relieve pressure and promote better well-being, especially during the recent pandemic. The purpose of this article is to describe the development of a community of practice global group focused on development of resilience within the pharmacy workforce that is inclusive of students, pharmacy interns/preregistration and registered pharmacists. The steering group meets monthly and has representation of 24 members across eight countries. Members meet to discuss pertinent issues they are facing in practice, as well as to share and progress ideas on education, research, and practice initiatives. To date, members have collectively implemented resilience training in pharmacy education, researched burnout and resilience in both students and pharmacists, and facilitated international collaborations both within and outside core group members. Future activities will focus on strengthening the community of practice in order to harness the power of the collective.

[How healthy is our primary health care workforce? A cross-sectional study](#) October 2020, Journal of Family Medicine & Primary Care

Context: Progress of any nation depends on the health status of the population. A nation's health directly and indirectly depends on the quality of health-care facilities and how healthy the health care workforce is in that country. To achieve the health for all goal and to provide for most of the health services like maternal health services, child health services, nutrition, vaccination, and family planning services, the Indian health system have multipurpose health workers (female and male) and Accredited Social Health Activist to provide these services at the grass-root level. There is a paucity of literature revealing the health problems or the health status of grassroot level primary health care worker in India or abroad. Methods and Material: All the grass-root level health workers, i.e., MPHWF and ASHAs in the BMC area were included in this cross-

sectional study. Data was collected using a semi-structured interview schedule, followed by general examination and anthropometry using standard procedures. Results: Half of the study participants 111 (50.2%) were having some or other kind of health issues during the data collection time; among them, 107 (48.4%) had a chronic disease condition. 10% of them had diabetes mellitus. More than half of the study participants 141 (63.8%) were found to be obese and hypertension was found in 27 (12.2%) study participants. 21 (9.5%) study participants were under high depression. One-fourth of the health workers among those who could conceive had not gone for antenatal check-ups and more than one-third (33.5%) never consumed iron and folic acid (IFA) tablets during their first pregnancy. 19.1% have children with incomplete immunization as per age. One-fifth of the participants know about the balanced diet and half of them could not ensure that their family eat a balanced diet and in the majority, the diet was calorie deficient as per the daily requirement. Conclusions: There is an urgent need to formulate a policy to improve the health of the primary care grass-root level health-care workers and regular on-the-job training on nutrition needs to be given to them. Copyright: © 2020 Journal of Family Medicine and Primary Care.

[Burnout and Health Care Workforce Turnover](#) January 2019, Annals of Family Medicine

PURPOSE: Levels of burnout among primary care clinicians and staff are alarmingly high, and there is widespread belief that burnout and lack of employee engagement contribute to high turnover of the workforce. Scant research evidence exists to support this assertion, however. CONCLUSION(S): High rates of burnout and turnover in primary care are compelling problems. Our findings provide evidence that burnout contributes to turnover among primary care clinicians, but not among staff. Although reducing clinician burnout may help to decrease rates of turnover, health care organizations and

policymakers concerned about employee turnover in primary care need to understand the multifactorial causes of turnover to develop effective retention strategies for clinicians and staff.

[Resilience of primary healthcare professionals: a systematic review](#) June 2016, The British Journal of General Practice
AIM To examine definitions and measures of resilience, identify characteristics and components, and synthesise current evidence about resilience in primary healthcare professionals.
CONCLUSION Health professional resilience is multifaceted, combining discrete personal traits alongside personal, social, and workplace features. A measure for health professional resilience should be developed and validated that may be used in future quantitative research to measure the effect of an intervention to promote it.

[Predictors and Outcomes of Burnout in Primary Care Physicians](#) January 2016, Journal of Primary Care and Community Health
OBJECTIVE To assess relationships between primary care work conditions, physician burnout, quality of care, and medical errors.
CONCLUSIONS Burnout is highly associated with adverse work conditions and a greater intention to leave the practice, but not with adverse patient outcomes. Care quality thus appears to be preserved at great personal cost to primary care physicians. Efforts focused on workplace redesign and physician self-care are warranted to sustain the primary care workforce.

Workforce

[Inequalities in the distribution of the general practice workforce in England: A practice-level longitudinal analysis](#) 2021, BJGP

Open

Background: In England, demand for primary care services is increasing and GP shortages are widespread. Recently introduced primary care networks (PCNs) aim to expand the use of additional practice-based roles such as physician associates (PAs), pharmacists, paramedics, and others through financial incentives for recruitment of these roles. Inequalities in general practice, including additional roles, have not been examined in recent years, which is a meaningful gap in the literature. Previous research has found that workforce inequalities are associated with health outcome inequalities.
Aim(s): To examine recent trends in general practice workforce inequalities. Design & setting: A longitudinal study using quarterly General Practice Workforce datasets from 2015-2020 in England. Method(s): The slope indices of inequality (SII) for GPs, nurses, total direct patient care (DPC) staff, PAs, pharmacists, and paramedics per 10 000 patients were calculated quarterly, and plotted over time, with and without adjustment for patient need. Result(s): Fewer GPs, total DPC staff, and paramedics per 10 000 patients were employed in more deprived areas. Conversely, more PAs and pharmacists per 10 000 patients were employed in more deprived areas. With the exception of total DPC staff, these observed inequalities widened over time. The unadjusted analysis showed more nurses per 10 000 patients employed in more deprived areas. These values were not significant after adjustment but approached a more equal or pro-poor distribution over time. Conclusion(s): Significant workforce inequalities exist and are even increasing for several key general practice roles, with workforce shortages disproportionately affecting more deprived areas. Policy

solutions are urgently needed to ensure an equitably distributed workforce and reduce health inequities. Copyright © 2021, The Authors

[Primary Care Physician Workforce 2020 to 2025 - a cross-sectional study for the Canton of Bern](#) 2021, Swiss Medical Weekly

AIM OF THIS STUDY: The Swiss primary care sector faces a lack in its workforce and the Canton of Bern - the second largest canton (i.e. federal state) - is believed to be more affected than others. To be able to predict a shortage in the overall workforce, reliable numbers for the workforce of all general practitioners (GPs) and paediatricians (primary care physicians, PCPs) actively working in the Canton of Bern are needed. Switzerland has no registry of active PCPs; therefore, our goal was to (1) define the number and characteristics of all PCPs in the Canton of Bern, (2) to establish the workforce density for the whole canton and its administrative districts, and (3) to forecast the next five years with respect to the PCP workforce development. **METHODS:** In this cross-sectional study, we contacted all potential PCPs of the Canton of Bern. We included all board-certified physicians in general internal medicine, paediatrics and physicians with the title "Praktischer Arzt (practical doctor)" with a professional license from the available registers (MedReg and the FMH register). All potential PCPs received a questionnaire to assess their involvement in the primary care setting, their personal characteristics including workload (current and in 5 years to allow us to estimate the projected workforce per projected population size in 2025), type of practice, administrative district, and additional questions on their acceptance of new patients and their perception of a shortage in their region. The data from non-responders were collected via follow-up letters, emails and phone calls. The density was calculated as full-time equivalent PCPs per 1000 inhabitants in total and per district. **RESULTS:** From all potential

PCPs (n = 2217), we identified 972 working in the Canton of Bern, 851 as GPs (88%) and 121 as paediatricians (12%). From these physicians, we had a response rate of 95%. The mean age was 53 years for GPs and 50 years for paediatricians. Thirteen percent of all PCPs were aged 65 or older. The average workload was 7.6 half-days (GPs) and 6.9 half-days (paediatricians). We found a density of 0.75 (95% confidence interval [CI] 0.69-0.81) full-time equivalents per 1000 inhabitants for the total of the Canton of Bern, and a regional variability with densities between 0.59 to 0.93. Without new PCPs, the workforce density of PCPs will drop to 0.56 (95% CI 0.49-0.62) within the next 5 years. **CONCLUSION:** This is the first study in which 95% of active PCPs participated and it demonstrated that within the next 5 years there will be a shortage in the workforce of PCPs that can only be improved by higher numbers of new domestic PCPs - even after accounting for the current inflow of foreign PCPs.

[The Growing Primary Care Nurse Practitioner Workforce: A Solution for the Aging Population Living With Dementia](#) 2021, American Journal of Geriatric Psychiatry Abstract only*

Redesigning the healthcare workforce to meet the needs of the growing population of persons living with dementia (PLWD), most of whom reside in the community and receive care from primary care providers, is a national priority. Yet, the shortage of adequately trained providers is raising concerns that the primary care system is not equipped to care for PLWD. The growing nurse practitioner (NP) workforce could bridge this gap. In this review, the authors synthesized the existing evidence from fourteen studies on the utilization of NPs to care for PLWD in primary care. Although the authors found that most NPs were engaged in co-management roles, emerging evidence suggests that NPs also serve as primary care providers for PLWD. Findings describe the impact of NP care on the health system, PLWD, and caregiver outcomes. The authors conclude that the

optimal utilization of NPs can increase the capacity of delivering dementia-capable primary care. Copyright © 2021 American Association for Geriatric Psychiatry. Published by Elsevier Inc. All rights reserved.

[Dietetic Workforce Capacity Assessment for Public Health Nutrition and Community Nutrition](#) 2021, Journal of the Academy of Nutrition & Dietetics

Worldwide, there is a continued rise in malnutrition and noncommunicable disease, along with rapidly changing dietary patterns, demographics, and climate and persistent economic inequality and instability. These trends have led to a national and global focus on nutrition-specific and nutrition-sensitive interventions to improve population health. A well-trained public health and community nutrition workforce is critical to manage and contribute to these efforts. The study describes the current public health and community nutrition workforce and factors influencing registered dietitian nutritionists (RDNs) to work in these settings and characterizes RDN preparedness, training, and competency in public health and community nutrition. The study was comprised of a cross-sectional, online survey of mostly US RDNs working in public health/community nutrition and semistructured telephone interviews with US-based and global public health and community nutrition experts. RStudio version 1.1.442 was used to manage and descriptively analyze survey data. Thematic analysis was conducted to evaluate expert interviews. Survey participants (n = 316) were primarily women (98%) and White (84%) with the RDN credential (91%) and advanced degrees (65%). Most reported that non-RDNs are performing nutrition-related duties at their organizations. Respondents generally rated themselves as better prepared to perform community nutrition vs public health functions. Interviews were conducted with 7 US-based experts and 5 international experts. Experts reported that non-RDNs often fill nutrition-related positions in public health, and RDNs should

more actively pursue emerging public health opportunities. Experts suggested that RDNs are more desirable job candidates if they have advanced public health degrees or prior experience in public health or community nutrition and that dietetic training programs need to more rigorously incorporate public health training and experience. Significant opportunity exists to improve the preparedness and training of the current dietetic workforce to increase capacity and meet emerging needs in public health and community nutrition. Copyright © 2021 Academy of Nutrition and Dietetics. Published by Elsevier Inc. All rights reserved.

[Workforce issues in home- and community-based long-term care in Germany](#) 2021, Health and Social Care in the Community

The study addresses staffing and workforce issues for home- and community-based long-term care in Germany. It is based on a study aimed at developing staffing recommendations for home-care provider organisations. The study was commissioned within the regulation of the German long-term care act. Following an exploratory literature search on staffing issues in home- and community-based care qualitative interviews with 30 experts in home care were conducted. In addition, time needed for different interventions in homes of people in need of care (n = 129) was measured. Ethical approval for the study was obtained. The literature on the topic is limited. In Germany, no fixed staff-to-client ratio exists, but staffing is determined primarily by reimbursement policies, not by care recipients' needs. The results of the interviews indicated that staffing ratios are not the main concern of home-care providers. Experts stressed that general availability of staff with different qualification levels and the problems of existing regulation on services and their reimbursement are of higher concern. The measurement of time needed for selected interventions reveals the huge heterogeneity of home-care

service delivery and the difficulty of using a task-based approach to determine staffing levels. Overall, the study shows that currently demand for home-care exceeds supply. Staff shortage puts a risk to home care in Germany. Existing approaches of reimbursement-driven determination of staffing levels have not been sufficient. A new balance between staffing, needs and reimbursement policies needs to be developed. Copyright © 2021 The Authors. Health and Social Care in the Community published by John Wiley & Sons Ltd

[Understanding the general practice nursing workforce in New Zealand: an overview of characteristics 2015-19.](#) February 2021, Australian Journal of Primary Health Abstract only* Limited knowledge about the nursing workforce in New Zealand general practice inhibits the optimal use of nurses in this increasingly complex setting. Using workforce survey data published biennially by the Nursing Council of New Zealand, this study describes the characteristics of nurses in general practice and contrasts them with the greater nursing workforce, including consideration of changes in the profiles between 2015 and 2019. The findings suggest the general practice nursing workforce is older, less diverse, more predominately New Zealand trained and very much more likely to work part-time than other nurses. There is evidence that nurses in general practice are increasingly primary health care focused, as they take on expanded roles and responsibilities. However, ambiguity about terminology and the inability to track individuals in the data are limitations of this study. Therefore, it was not possible to identify and describe cohorts of nurses in general practice by important characteristics, such as prescribing authority, regionality and rurality. A greater national focus on defining and tracking this pivotal workforce is called for to overcome role confusion and better facilitate the use of nursing scopes of practice.

[A cross-sectional survey of the pharmacy workforce in general practice in Scotland 2020,](#) Family Practice Abstract only* Background: In Scotland, there has been significant investment in pharmacy teams in general medical practices over recent years, aligned to current government policy. Objectives: To characterize the national pharmacy workforce including activities undertaken, perceived competence and confidence, as well as perception of integration of the intervention. Methods: A cross-sectional survey of all pharmacists and pharmacy technicians in general practices. Survey items were demographics, activities undertaken and experiences. The NoMAD tool (Improving the Normalization of Complex Interventions) was included as a measure of perspectives of implementation. Post-piloting, a questionnaire link was sent to all pharmacists (n = 471) and pharmacy technicians (n = 112). A total NoMAD score was obtained by assigning 1 (strongly disagree) to 5 (strongly agree) to each item. Results: Responses were received from 393 (83.4%) pharmacists and 101 (91.8%) pharmacy technicians. Three quarters of pharmacists (74.6%) and pharmacy technicians (73.3%) had been qualified for over 10 years. Two-thirds of pharmacists (68.4%) were independent prescribers, with three quarters (72.3%) currently prescribing. Respondents worked in a median of two practices and were providing a range of activities including medication/polypharmacy reviews, medicines reconciliation, prescribing efficiencies and training. Respondents reported high levels of competence and confidence (median 8, scale 0-10 highest). Median NoMAD total score (scale 20-100 highest, Cronbach's alpha 0.89) was 80 for pharmacists and 75 for pharmacy technicians, $P \leq 0.001$. Conclusions: The general practice pharmacy workforce in Scotland is experienced, well-qualified and integrated within general practices, delivering a range of activities. These findings have implications for workforce planning and future education and training.

Evidence Brief: Primary Care Workforce

[The community and public dental services: a mixed-method exploration of the workforce](#) 2020, British Dental Journal

Abstract only*

Aims This exploratory study is the first in a series of two examining the working conditions of the community and public dental services in the UK to provide insight, context and understanding on their current status. **Methods** Secondary analysis of census data was supplemented by qualitative analysis of interview data from community and public dental service dentists. Demographic and working conditions data were examined and interview participants discussed their role, service and patients, potential service improvements and how they saw the services developing. **Results** Overall, dentists were satisfied with their role but did not feel secure in their job and worked more hours than they were contracted to. Interviews identified three key themes: 1) personal - aspects affecting the interviewee on a personal level; 2) patients - aspects affecting patients; and 3) service - aspects relating to the service. Services had changed and were seen, in part, to have become more efficient, but some clinicians thought the focus had moved away from patients. **Conclusions** Overall, clinicians enjoyed their role, but while services were seen to provide good patient care, dentists felt under pressure. Changes to general dental practice, management practices and increased funding were believed likely to improve the services.

[General practice nurse workforce review: Findings from York](#)

June 2018, Practice Nursing Abstract only*

Polly Smith and Lyeanda Berry discuss the findings of a workplace review designed to investigate the diversity of the practice nurse workforce in a cohort of GP surgeries in York, including roles, responsibilities, skills, education and competencies of staff As part of a collaborative initiative between an NHS foundation Trust and a GP federation, a project was developed to review and understand the diversity of

the practice nurse workforce in a cohort of GP surgeries in York, including roles, responsibilities, skills, education and competencies of staff. The workforce review highlighted that GP practices have a rich wealth of knowledge and experience in their nursing workforce. In order to develop and future-proof the service, it is important for practices to work on role development, maximising the non-registered workforce and the recruitment and retention of staff.

[The potential impact of Brexit and immigration policies on the GP workforce in England: a cross-sectional observational study of GP qualification region and the characteristics of the areas and population they served in September 2016](#) November 2017, BMC Medicine

BACKGROUND The UK is dependent on international doctors, with a greater proportion of non-UK qualified doctors working in its universal health care system than in any other European country, except Ireland and Norway. The terms of the UK exit from the European Union can reduce the ability of European Economic Area (EEA) qualified doctors to work in the UK, while new visa requirements will significantly restrict the influx of non-EEA doctors. We aimed to explore the implications of policy restrictions on immigration, by regionally and spatially describing the characteristics of general practitioners (GPs) by region of medical qualification and the characteristics of the populations they serve. **CONCLUSIONS** A large percentage of the UK general practice workforce consists of non-UK qualified GPs who work longer hours, are older and serve a larger number of patients in more deprived areas. Following Brexit, difficulties in replacing this valuable workforce will primarily threaten the care delivery in deprived areas.

[Surviving or thriving in the primary health care research workforce: the Australian experience](#) May 2017, Australian Journal of Primary Health Abstract only*

Primary healthcare research strives for high-quality, priority-driven research to inform policy and practice. This relies on a robust and sustainable workforce to tackle complex problems faced in primary health care locally and globally. The current study investigated characteristics, experiences and career paths of the Australian primary healthcare research workforce. Thirty-seven former Research Higher Degree students from University Departments of General Practice and Rural Health completed a survey. Number of provisions for researchers and career path clarity were associated with job satisfaction. Motivators to stay in research included job satisfaction, research in role descriptions, and identification of problems requiring change. Barriers related to funding, time, and other work roles taking priority were identified. Comparisons were made between participants self-identifying as working in primary healthcare research ('stayers'; n=22) and those no longer part of this workforce ('leavers'; n=15). Leavers were more likely to be in permanent full-time work whereas stayers had experienced more career progression and mentoring. This study raises challenges faced by primary healthcare researchers and will inform strategies for supporting the sustainability of this workforce.

Training, education, upskilling and competencies

[Extending the Population Health Workforce Through Service Learning Internships During COVID: A Community Case Study](#) 2021, *Frontiers in Public Health*

This report arises from the intersection of service learning and population health at an academic medical center. At the University of California, San Francisco (UCSF), the Office of Population Health and Accountable Care (OPHAC) employs health care navigators to help patients access and benefit from high-value care. In early 2020, facing COVID-19, UCSF leaders

asked OPHAC to help patients and employees navigate testing, treatment, tracing, and returning to work protocols. OPHAC established a COVID hotline to route callers to the appropriate resources, but needed to increase the capacity of the navigator workforce. To address this need, OPHAC turned to UCSF's service learning program for undergraduates, the Patient Support Corps (PSC). In this program, UC Berkeley undergraduates earn academic credit in exchange for serving as unpaid patient navigators. In July 2020, OPHAC provided administrative funding for the PSC to recruit and deploy students as COVID hotline navigators. In September 2020, the PSC deployed 20 students collectively representing 2.0 full-time equivalent navigators. After training and observation, and with supervision and escalation pathways, students were able to fill half-day shifts and perform near the level of staff navigators. Key facilitators relevant to success reflected both PSC and OPHAC strengths. The PSC onboards student interns as institutional affiliates, giving them access to key information technology systems, and trains them in privacy and other regulatory requirements so they can work directly with patients. OPHAC strengths included a learning health systems culture that fosters peer mentoring and collaboration. A key challenge was that, even after training, students required around 10 h of supervised practice before being able to take calls independently. As a result, students rolled on to the hotline in waves rather than all at once. Post-COVID, OPHAC is planning to use student navigators for outreach. Meanwhile, the PSC is collaborating with pipeline programs in hopes of offering this internship experience to more students from backgrounds that are under-represented in healthcare. Other campuses in the University of California system are interested in replicating this program. Adopters see the opportunity to increase capacity and diversity while developing the next generation of health and allied health professionals. Copyright © 2021 Belkora,

Weinberg, Murphy, Karthikeyan, Tran, Toliver, Lopez, Tominaga, Helle, Intinarelli and Adler.

[A Community Psychiatry Nurse Practitioner Fellowship: Preparing Nurse Practitioners for Mental Health Workforce Expansion](#) 2021, Psychiatric Services

The increasing need for psychiatry services in medically underserved communities has proven to be challenging for health care systems. Caring for this population is complex and can be overwhelming for the inexperienced provider. Proper utilization of psychiatric and mental health nurse practitioners in this setting can expedite meeting the mental health needs of the community. A postgraduate fellowship program that provides supervision and additional training specific to community psychiatry facilitates the transition from novice provider to experienced clinician while aiming to improve retention rates. In this Open Forum, the authors outline the structure of a federally qualified health center's Community Psychiatry Nurse Practitioner Fellowship.

[Effect of an Immersive Primary Care Training Program on Educational and Clinical Outcomes in an Internal Medicine Residency Training Program: Meeting the Training Needs of a Modern-Day Physician Workforce](#) 2021, Journal of General Internal Medicine Abstract only*

BACKGROUND: Residents planning careers in primary care have unique training needs that are not addressed in traditional internal medicine training programs, where there is a focus on inpatient training. There are no evidence-based approaches for primary care training. **OBJECTIVES:** Design and test the effect of a novel immersive primary care training program on educational and clinical outcomes. **DESIGN:** Nested intervention study. **SETTING, PARTICIPANTS:** Twelve primary care residents, 86 of their categorical peers, and an 11-year historical cohort of 69 primary care trainees in a large urban

internal medicine residency training program.

INTERVENTIONS: Two 6-month blocks of primary care immersion alternating with two 6-month blocks of standard residency training during the second and third post-graduate years. **MAIN MEASURES:** Total amount of ambulatory and inpatient training time, subjective and objective educational outcomes, clinical performance on cancer screening, and chronic disease management outcomes. **KEY RESULTS:** Participants in the intervention increased ambulatory training in both general medicine and specialty medicine and still met all ACGME training requirements. Residents reported improved subjective educational outcomes on a variety of chronic disease management topics and ambulatory care skills. They reported higher satisfaction with the amount of ambulatory training (4.3/5 vs. 3.6/5, $p=0.008$), attended more ambulatory clinics (242 vs. 154, p Copyright © 2021. Society of General Internal Medicine.

[Perspectives on Workforce Development Needs for Community Health Workers \(CHWs\): Results from a Statewide Survey of CHW Employers](#) 2021, Journal of Community Health

We conducted a survey of community health worker (CHW) employers in Texas to understand the employment context and workforce development needs of Texas CHWs. An electronic, mixed-methods survey was emailed to 841 CHW employers across Texas in Spring 2020. The survey consisted of 51 questions. The response rate was 22% ($n = 182$). Responses were analyzed using SPSS, Microsoft Excel, and N.Vivo. We found that most CHW employers directly employ their CHWs, and CHWs are typically part of a multidisciplinary healthcare team. Most respondents required their CHWs be certified by the state's health department and have at least a high school diploma or GED. The most common services that CHWs provide are health education/promotion and information referral. The main health issues that CHWs address are diabetes, hypertension, and mental/behavioral health. Current CHW

workforce development needs include continued training on topics including chronic disease self-management and health promotion. CHW employers differ in their capacity to implement workforce development activities. There is significant variety in the employment context and workforce development needs of CHWs across Texas. Results reinforce previous findings on the need for specialized, continuing training for CHWs and the development of pathways, resources, and opportunities that could advance the CHW profession even more. These results can inform those interested in employing CHWs in their CHW program development. Findings from this study can be used to guide development of tailored curriculum for continuing education units, specialized certifications, or other professional development resources for CHWs. Copyright © 2021. The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature.

[A training workshop for community pharmacist workforce: Caring for older adults](#) 2020, Currents in Pharmacy Teaching & Learning Abstract only*

BACKGROUND AND PURPOSE: The increasing number of older adults worldwide challenges healthcare providers and policy makers to provide high quality care. To our knowledge, there has been little research on educational programs for community pharmacists on the provision of pharmaceutical care-based educational programs for elderly people, especially in Asian regions. The purpose of this study was to develop and describe the implementation of a structured educational program on geriatric care for community pharmacists.

EDUCATIONAL ACTIVITY AND SETTING: Community pharmacists attended a one-day workshop, supplemented with comprehensive training materials which enabled participants to conduct similar sessions with their peers at their own time. The workshop, consisting of case study discussion and role plays, was designed to be an engaging and interactive program that

combined traditional didactic sessions and experiential, discussion-based learning. A pre- and post-workshop questionnaire were administered immediately before and after the event to all attending participants. **FINDINGS:** Core concepts covered in the workshop included: (1) overview of an ageing population, (2) issues with ageing population, (3) medication review, and (4) dietary requirements and dosage forms in older adults. Participants' (n=39) noted significant improvements in knowledge (mean score change 0.7, p Copyright © 2019 Elsevier Inc. All rights reserved.

[Models of paediatric learning for UK primary care clinicians: An unmet need](#) April 2019, Health Education Journal Abstract only*
Objectives: Despite a long-standing declaration of educational need in the area of paediatrics in primary care, there is little in the way of strategy for delivering high-quality learning relevant to the specific needs of the primary care team. This article seeks to explore various models for delivering primary care centred paediatric education to inform discussion about how to meet this need. **Conclusion(s):** The lack of adequate paediatric education for those working in primary care poses a risk which should not be ignored. In the absence of a coherent strategy in the United Kingdom to identify and meet the learning needs of practicing primary care clinicians, one possible solution is for health regions to develop bespoke initiatives based on an understanding of the local workforce, their learning needs and the local resources available. We explore the various modalities through which this can be achieved and share the lessons learned from the development of a multifaceted programme of paediatric learning for primary care clinicians.

[Developing a course for primary care healthcare assistants in recognising and responding to deteriorating patients](#) March 2019, RCNI Primary Health Care Abstract only*

The acuity of patients being seen and treated in primary care is changing. This article substantiates the gap in current practice and shows the effect on primary care healthcare assistants' (HCAs) confidence of providing a course that covers the knowledge and skills needed to recognise and respond to a deteriorating patient. It discusses the changing acuity of patients being seen and treated in primary care and shows how a course initially developed for hospital HCAs has been adapted for primary care. The primary care staff bedside emergency assessment course for healthcare (BEACH) helps HCAs to recognise and take specific action to ensure that safe and competent care is maintained through early recognition, supported decision-making and prompt escalation of deteriorating patients.

[Exploring the training and scope of practice of GPs in England, Germany and Spain](#) March 2019, Gaceta Sanitaria

OBJECTIVE: To explore general practitioner (GP) training, continuing professional development, scope of practice, ethical issues and challenges in the working environment in three European countries. **CONCLUSION(S):** Primary health care variations have strong historical roots, derived from the different national experiences and the range of clinical services delivered by GPs. There is a need for an accessible source of information for GPs themselves and those responsible for safety and quality standards of the healthcare workforce. This paper maps out the current situation before Brexit is being implemented in the UK which could see many of the current EU arrangements and legislation to assure professional mobility between the UK and the rest of Europe dismantled.

[Skill mix in Swiss primary care group practices - a nationwide online survey](#) March 2019, BMC Family Practice

BACKGROUND: Increasing chronic conditions and multimorbidity is placing growing service pressures on health

care, especially primary care services. This comes at a time when GP workforce shortages are starting to be felt across Switzerland, placing a threat on the sustainability of good access to primary care. By establishing multiprofessional teams in primary care, service capacity is increased and the pressures on the GP workforce can be alleviated. The roles of non-medical health professions in primary care are not established so far in Switzerland and the personnel composition of primary care group practices is not known. Therefore this study aims to provide insights into the current composition, educational background and autonomy of these new professional roles in primary care. **CONCLUSION(S):** The results from this study demonstrate that while nearly 50% of group practices have established non-physician professionals, only 25% of practices integrate these professionals with advanced roles. Compared with other countries, there would appear to be significant scope to extend and broaden the uptake of non-physician professionals in primary care in Switzerland. Clear policy direction along with supporting regulation and financing arrangements are required.

[Learning from the transfer of a fellowship programme to support primary care workforce needs in the UK: A qualitative study](#)

January 2019, BMJ Open, Objectives Service redesign, including workforce development, is being championed by UK health service policy. It is allowing new opportunities to enhance the roles of staff and encourage multiprofessional portfolio working. New models of working are emerging, but there has been little research into how innovative programmes are transferred to and taken up by different areas. This study investigates the transferability of a 1-year post-Certification of Completion of Training fellowship in urgent and acute care from a pilot in the West Midlands region of England to London and the South East. The evaluation demonstrates a model of training that is adaptable and transferable between

Evidence Brief: Primary Care Workforce

National Health Service regions, taking account of changing national and regional circumstances, and has the potential to be rolled out widely.

[Filling the gap - the implementation of a graduate development programme in the primary care musculoskeletal setting](#) January 2019, Physiotherapy Abstract only*

Purpose: There is a well-documented shortage of Physiotherapists in the UK, creating difficulties in recruitment at a time of growing demand in Primary Care. Newly qualified Physiotherapists often report finding this setting and the musculoskeletal field daunting due to a perception of specialism and lack of support. These challenges presented an opportunity to create a development programme to both aid recruitment and support graduates within the field of Primary Care MSK.

Conclusion(s): This project has shown that following investment in the development of a programme specific to the workforce and service needs, graduates have been successfully introduced to the Primary Care MSK setting. Those completing the programme felt supported, valued and developed key clinical and reasoning skills. The process is ongoing with regular supervision and staff all progressing onto a further internal development programme to continue to upskill their MSK reasoning and practice. Implications: This project has highlighted a need to be innovative in methods of recruitment. Consequentially, engagement throughout the team was driven with staff supporting others, supervising clinical performance and demonstrating strong values. With planning and consideration to the specifics of services, this model could be replicated. Moving forwards, we are planning our second intake of recruits and have taken feedback on board to optimise the content.

[Primary care workforce development in Europe: An overview of health system responses and stakeholder views](#) October 2018, Health Policy

Better primary care has become a key strategy for reforming health systems to respond effectively to increases in non-communicable diseases and changing population needs, yet the primary care workforce has received very little attention. This article aligns primary care policy and workforce development in European countries. The aim is to provide a comparative overview of the governance of workforce innovation and the views of the main stakeholders. Cross-country comparisons and an explorative case study design are applied. We combine material from different European projects to analyse health system responses to changing primary care workforce needs, transformations in the general practitioner workforce and patient views on workforce changes. The results reveal a lack of alignment between primary care reform policies and workforce policies and high variation in the governance of primary care workforce innovation. Transformations in the general practitioner workforce only partly follow changing population needs; countries vary considerably in supporting and achieving the goals of integration and community orientation. Yet patients who have experienced task shifting in their care express overall positive views on new models. In conclusion, synthesising available evidence from different projects contributes new knowledge on policy levers and reveals an urgent need for health system leadership in developing an integrated people-centred primary care workforce.

[Factors associated with junior doctors' decisions to apply for general practice training programmes in the UK: secondary analysis of data from the UKMED project](#) December 2017, BMC Medicine

BACKGROUND The UK, like many high-income countries, is experiencing a worsening shortfall of general practitioners

Evidence Brief: Primary Care Workforce

(GPs) alongside an increasing demand for their services. At the same time, factors influencing junior doctors' decisions to apply for GP training are only partially understood and research in this area has been hampered by the difficulties in connecting the datasets that map the journey from student to qualified GP. The UK Medical Education Database (UKMED) has been established to ameliorate this problem by linking institutional data across the spectrum of medical education from school to specialty training. Our study aimed to use UKMED to investigate which demographic and educational factors are associated with junior doctors' decisions to apply for GP training. **CONCLUSIONS** Our findings suggest that the supply and demand imbalance in UK primary care might be improved by (1) efforts to attract greater numbers of female, non-white and UK secondary-educated students into medical schools, and (2) targeting resources at medical and foundation schools that deliver doctors likely to fill significant gaps in the workforce. Further research is required to better understand inter-school differences and to develop strategies to improve recruitment of GP trainees.

[The development of professional practice standards for Australian general practice nurses](#) August 2017, Journal of Advanced Nursing Abstract only*

AIMS: The aim of this study was to explore the current role of general practice nurses and the scope of nursing practice to inform the development of national professional practice standards for Australian general practice nurses. **CONCLUSION:** The development of national professional practice standards for nurses working in Australian general practice will support ongoing workforce development. These Standards are also an important means of articulating the role and scope of the nurses' practice for both consumers and other health professionals, as well as being a guide for curriculum development and measurement of performance.

[Location, Location, Location: Where We Teach Primary Care Makes All the Difference](#) April 2017, Journal of General Internal Medicine

Creating a new model to train a high-quality primary care workforce is of great interest to American health care stakeholders. There is consensus that effective educational approaches need to be combined with a rewarding work environment, emphasize a good work/life balance, and a focus on achieving meaningful outcomes that center on patients and the public. Still, significant barriers limit the numbers of clinicians interested in pursuing careers in primary care, including low earning potential, heavy medical school debt, lack of respect from physician colleagues, and enormous burdens of record keeping. To enlarge and energize the pool of primary care trainees, we look especially at changes that focus on institutions and the practice environment. Students and residents need training environments where primary care clinicians and interdisciplinary teams play a crucially important role in patient care. For a variety of reasons, many academic medical centers cannot easily meet these standards. The authors propose that a major part of primary care education and training be re-located to settings in high-performing health systems built on comprehensive integrated care models where primary care clinicians play a principle role in leadership and care delivery.

[Impact of the primary care curriculum and its teaching formats on medical students' perception of primary care: a cross-sectional study](#) September 2016, BMC Family Practice

BACKGROUND Switzerland is facing an impending primary care workforce crisis since almost half of all primary care physicians are expected to retire in the next decade. Only a minority of medical students choose a primary care specialty, further deepening the workforce shortage. It is therefore essential to identify ways to promote the choice of a primary

care career. The aim of the present study was to explore students' views about the undergraduate primary care teaching curriculum and different teaching formats, and to evaluate the possible impact of these views on students' perceptions of primary care. **CONCLUSIONS** The primary care curriculum at Lausanne and Geneva Universities positively influences students' perceptions of this discipline. However, there are shortcomings in both the structure and the content of both the primary care and hidden curriculum that may contribute to perpetuating a negative image of this specialization.

[Core competencies in sexual and reproductive health for the interprofessional primary care team](#) May 2016, Contraception Abstract only*

OBJECTIVE A primary care workforce that is well prepared to provide high-quality sexual and reproductive health (SRH) care has the potential to enhance access to care and reduce health disparities. This project aimed to identify core competencies to guide SRH training across the primary care professions. **CONCLUSION** The 33 core competencies encompass professional ethics and reproductive justice, collaboration, SRH services and conditions affecting SRH. These core competencies will be disseminated and adapted to each profession's scope of practice to inform required curricula.

[Nursing competency standards in primary health care: an integrative review](#) March 2016, Journal of Clinical Nursing Abstract only*

AIMS AND OBJECTIVES This paper reports an integrative review of the literature on nursing competency standards for nurses working in primary health care and, in particular, general practice. **CONCLUSION** Given the potential value of competency standards, further work is required to develop and test robust standards that can communicate the skills and knowledge required of nurses working in primary health care

settings to policy makers, employers, other health professionals and consumers.

Technology

[Artificial Intelligence and the Future of Primary Care: Exploratory Qualitative Study of UK General Practitioners' Views](#) March 2019, Journal of Medical Internet Research

OBJECTIVE(S): This study aimed to explore general practitioners' (GPs') opinions about the potential impact of future technology on key tasks in primary care.

CONCLUSION(S): This study presents timely information on physicians' views about the scope of artificial intelligence (AI) in primary care. Overwhelmingly, GPs considered the potential of AI to be limited. These views differ from the predictions of biomedical informaticians. More extensive, stand-alone qualitative work would provide a more in-depth understanding of GPs' views.

Competency Frameworks

[A competency framework for all prescribers](#) September 2021, Royal Pharmaceutical Society

To support the effective and timely implementation of this framework, organisations, healthcare professional regulators, higher education institutes and individuals will have until September 2022 as a transition period to fully implement the framework in practice. However, higher education institutes and other organisations are encouraged to implement and embed the framework as soon as possible.

[A Gambling Competency Framework for Primary Care: Improving the awareness and responsiveness of primary care to gambling harms](#) June 2021, Royal College of General Practitioners; Royal Society of Public Health; Gamble Aware; National Gambling Treatment Service; GamCare

The aims of the framework are as follows:

- To provide a set of professional competencies to assess, treat and manage problem gamblers. These have been developed in partnership with relevant stakeholders.
- This framework will support primary care, which includes GPs and other members of the primary care team, to build up the appropriate knowledge, skills and attitudes to be competent in identification and management of gambling disorders.
- To provide competencies that are tiered to ensure the role adequacy of the individual involved with gambling disorders.
- To develop, following on from the competency framework, a curriculum of educational requirements and a training programme to equip the primary care team with the appropriate skills and knowledge.

[National Competency Framework for Primary Care Pharmacy Technicians](#) September 2020, APTUK

The framework provides a set of standard core competencies that underpin the knowledge, skills, behaviours and attitudes

required for pharmacy technicians working in and across primary care roles. It is designed to support the safe practice and professionalism required to meet a portfolio of roles across primary care, not limiting to one particular area of practice. It also informs the education and training requirements and provides a basis to further the professional development of pharmacy technicians working in these roles.

[Advanced Clinical Practice \(Nurses\) working in General Practice/ Primary Care in England \(2020\)](#)

2020, Health Education England; NHS England and Skills for Health

Primary care and general practice are ever evolving to meet the increasing and more complex needs of local communities / populations. This will require new ways of working and the development of multi-professional general practice and primary care teams.

This framework provides a standard and greater clarity on the capabilities for nurses working at the advanced clinical practice level within general practice.

[Care Navigation: a competency framework](#) Health Education England

The purpose of this document is to describe a core, common set of competencies for care navigation. These core competencies are brought together in a tiered competency framework, recognising three successive levels; essential, enhanced and expert. This will help provide a coherent benchmark or set of standards for care navigation, to help ensure relevant staff receive the necessary education, training and support to work effectively. This framework may be used by employers, education providers and individuals to inform education and training needs. It will also help lay the foundations for a career pathway framework for non-clinical staff, within primary and secondary care sectors. This is

important to secure a sustainable current and future workforce, offering opportunities for development.

[Competencies: Travel health nursing – career and competence development](#) May 2018, Royal College of Nursing

Travel health is an expanding specialist field of practice which is becoming more challenging. In the UK, travel health services are mainly delivered by nurses, mostly in a primary care setting. Pharmacists are increasingly providing advice for travellers. There is no “one size fits all”, travellers include people of all ages and ethnic background going abroad for a variety of reasons. Their needs are increasingly complex.

[An integrated career and competency framework for pharmacists in diabetes](#) May 2018, UKCPA (Clinical Pharmacy Association) and endorsed by Diabetes UK

To deliver care successfully, pharmacists need to be clear about what competencies are required to deliver high-quality diabetes care in patient-facing role and demonstrate those competencies. Furthermore, experienced pharmacist should be able to assess need and be innovative, and to evaluate and demonstrate they achieve desired health outcomes. This framework supports the commissioning of appropriate levels of pharmacists to deliver diabetes services and provides a clear definition of the pharmacist role – and their expected competencies – within diabetes care.

[General Practice nursing standards: voluntary standards for education and practice](#) 2017, Queen’s Nursing Institute and Queen’s Nursing Institute Scotland

These standards are focuses on senior general practice nurses and have been designed to reflect the requirements of this role, working in new models of care and reflect the rapid changes in the primary care environment.

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