NHS
Health Education England

Evidence Brief: Pharmacy workforce

Contents

There may have been an update to this Evidence Brief - to check you are reading the most current version please see the links below:
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Key publications – the big picture

[The future of pharmacy manifesto report](#)
Source: All-Party Pharmacy Group
Publication date: January 2023
Why did we conduct this inquiry? Pharmacies are at the heart of every community. Pharmacy teams demonstrated their value, resilience, and adaptability by supporting patients during the worst of the pandemic at a time when the NHS changed beyond all recognition. This prompted the All-Party Parliamentary Pharmacy Group to launch this inquiry into the future of the pharmacy sector. The COVID pandemic has generated a significant backlog of demand at all levels within the NHS. It is essential that the entire healthcare system, including pharmacy, is efficiently utilised to address this.

[A summary of discussion in National Voices' roundtable on the future of community pharmacy on behalf of the National Pharmacy Association](#)
Source: National Voices
Publication date: January 2023
On Wednesday 12 October 2022, National Voices convened a group of its members and lived experience partners on behalf of the National Pharmacy Association to discuss the future role of community pharmacy within primary care and more widely. The National Pharmacy Association is the representative voice of independent community pharmacies across the UK and a leading provider of services to the entire sector.

[Integrating additional roles into primary care networks](#)
Author(s): Baird et al.
Source: The King's Fund
Publication date: March 2022
This report examines the extent to which Additional Roles Reimbursement Scheme (ARRS) roles have the potential to make a significant contribution to the quality of patient care in general practice and represent a significant investment in the future sustainability of general practice. The Additional Roles Reimbursement Scheme (ARRS) was introduced in England in 2019 as a key part of the government's manifesto commitment to improve access to general practice. The aim of the scheme is to support the recruitment of 26,000 additional staff into general practice. This represents a huge scale of ambition and requires the implementation of significant and complex change across general practice. While primary care networks (PCNs) have swiftly recruited to these roles, they are not being implemented and integrated into primary care teams effectively. This study focuses on four roles - social prescribing link workers; first contact physiotherapists; paramedics and pharmacists - to examine the issues related to the implementation of these roles, looking at the experiences of working in these roles and of the people managing them. We found a lack of shared understanding about the purpose or potential contribution of the roles, combined with an overall ambiguity about what multidisciplinary working would mean for GPs. Successful implementation of the scheme requires extensive cultural, organisational and leadership development skills that are not easily accessible to PCNs. We found examples of good practice and positive stories of implementation, but to ensure successful implementation of the roles we make recommendations including: a clearer, shared vision for a multidisciplinary model of care; a comprehensive package of support for implementation of the scheme including improved support for clinical and managerial supervision; streamlining and communicating current guidance and roadmaps in different ways that make them more accessible and practical for PCNs, practices and professionals to understand and implement; a focus on future sustainability, including funding, estates strategy and career progression; leadership and management skills development embedded in GP specialist training.

A vision for pharmacy professional practice in England
Source: The King's Fund and Royal Pharmaceutical Society
Publication date: 2022
This document outlines key ambitions for the future of pharmacy in England over the next decade. It sets out how pharmacy teams can support better patient care and address key challenges facing the nation's health. It calls for the complete integration of pharmacy professionals across health and care systems to enable a transformation in patient care, supported by a comprehensive pharmacy workforce strategy, improved use of data and research to drive better patient outcomes, and strong skilful leadership and collaboration to inform professional practice.

PSNC Briefing 013/22: Summary of the results of PSNC's 2022 Pharmacy Pressures Survey
Source: PSNC
Publication date: April 2022
England's community pharmacies have played a vital role in the Government's COVID-19 pandemic response, including staying open throughout to provide critical face-to-face healthcare services and advice to patients and the public. This has brought with it significant additional pressure, which is being worsened by rising operating costs, and by a workforce crisis enveloping the sector.

Community Pharmacy Workforce Survey 2021
Source: Health Education England
Publication date: January 2022
Health Education England commissioned the Centre for Pharmacy Workforce Studies1 at the University of Manchester to enable the delivery of the Community Pharmacy Workforce Survey 2021 (CPWS2021) to provide information about the current numbers and skill mix in the community pharmacy

workforce and to inform future planning and investment. The report was written by Dr Liz Seston.

RPS recommendations and case studies for Integrated care Systems
Source: Royal Pharmaceutical Society
Publication Date: 2022
Abstract: This document focuses on the role pharmacists and their teams can play within integrated care systems (ICSs) and how they can positively impact on patient care through strong strategic leadership across an ICS. With the establishment of ICSs, there are huge opportunities for integrated care across different organisations and settings. This includes more joined up working between hospital, primary care and community-based services, physical and mental health, and health and social care. Medicines are the most common intervention in primary and secondary healthcare and form a key component of all care pathways. The delivery of medicines priorities within an ICS requires close system working to benefit patients and communities. Multi-professional clinical and care leadership will enable excellent patient outcomes from medicines use and the pharmacy workforce. The document makes a number of recommendations aimed at those working at senior level within an ICS board, focusing on: professional and clinical leadership and engagement with the pharmacy profession; workforce; medicines optimisation; commissioning; digital. As ICSs develop, there is a need to adopt innovative practice, take learnings from the pandemic and share them across systems to deliver better care and outcomes for patients and the public.

Trend analysis report amid the Covid-19 pandemic 2021-2022
Source: FIP (International Pharmaceutical Federation)
Publication date: 2022

See sections 1.2.1 (Transformation of pharmaceutical education) and 1.2.2 (Expanding pharmaceutical workforce scope of practice)

Every year, FIP sections are invited to submit a trend analysis report to the Board of Pharmaceutical Practice. The term "trend analysis" means collecting information and identifying patterns based on this information. FIP BPP sections are asked to recognise and describe those trends which they consider are the drivers for the changes occurring in pharmacy at a global level. Sections are also invited to consider the most probable impact on section activities driven by these trends.

Our vision for the future of pharmacy professional leadership
Source: Royal Pharmaceutical Society
The Chief Pharmaceutical Officers of England, Scotland, Wales and Northern Ireland have set up an Independent Commission on Pharmacy Professional Leadership1 . As part of the RPS's support of the work of the Independent Commission, we have created a comprehensive response to the call for evidence. In doing so, we have found that the survey format used by the Commission lends itself more easily to an individual's response, rather than an organisational response. Therefore, we have created this statement. There are many aspects of our organisational vision we consider to be an important part of the evidence submission and we believe this statement gives a more complete picture of our organisational position.

Working collaboratively in an ICS: freeing up opportunities in community pharmacy
Source: NHS Confederation
Publication date: September 2021
Exploring the opportunities for greater collaborative working between community pharmacy, primary care networks and federations within ICSs.

Community pharmacy: no longer the silent 'P' in PCNs
Source: NHS Confederation
Publication date: 27th September 2021
Practical steps to ensure community pharmacy resource is effectively engaged to best support improved outcomes for primary care networks' populations.

Pharmacy technician and pharmacy support staff workforce development strategy
Source: HEE
Publication date: March 2021
This workforce development strategy follows on from Advancing pharmacy education and training: a
review published by Health Education England in January 2019. The strategy focuses on pharmacy
technicians and pharmacy support staff, in particular:
• Setting out the current pharmacy technician and pharmacy support staff workforce landscape,
including key policy and strategic drivers influencing change in the workforce
• Describes the education and training required to meet these changes
• HEE priorities for the next 5 years to support the delivery of the NHS Long Term Plan and People
Plan.
The strategy will underpin development of workstreams to define how these priorities will be delivered
and implemented at a national and regional level and will be reviewed on an annual basis.

Position statement: Workforce – improving capacity and culture
Source: Royal Pharmaceutical Society
Publication date: December 2021

The pharmacy workforce is under significant pressure in every sector across Great Britain. The reasons for this are multifactorial, and consequently there is no simple solution. This position statement aims to be a catalyst for immediate change that will ensure long term benefit to the workforce and patient care.

Impacts of current funding, policy and economic environment on independent pharmacy in England
Source: EY
Publication date: September 2020
Nearly three-quarters of family-owned pharmacies in England could be forced to shut their doors over the next four years according to a damning new report from Ernst and Young. The study found that pharmacies are under-funded to the tune of £497m – with 72 percent forecast to be loss-making within four years if the current contractual arrangements carry on unchanged. The report estimates that the average pharmacy will be making an annual loss of £43k by 2024.

The future of pharmacy in a sustainable NHS: key principles for transformation and growth
Source: Royal Pharmaceutical Society
Publication date: July 2020
Coronavirus has shaken the very foundations of our health care system. The pandemic has brought unparalleled challenges that have stretched personal and professional resilience to the limit. The result has been innovation and transformation like never before. Clearly, the future delivery of NHS services will never be the same again. The decisions and actions we take now will be critical in crafting the future we want for pharmacy and our patients. The commitment of the pharmacy profession to patient care, and the hard work and determination to sustain medicines supply and key pharmaceutical care services throughout the pandemic, has been a source of immense pride.

The commitment to patient care has been awe-inspiring and is widely acknowledged across the NHS and by the general public.

We are the NHS: People Plan for 2020/21 – action for us all
Source: NHS
Publication date: July 2020
The People Plan 2020/21: action for us all, published at the end of July 2020 along with Our People Promise, built on the interim People Plan to set out a range of actions to deliver this. These are organised around four pillars:
- looking after our people – with quality health and wellbeing support for everyone
- belonging in the NHS – with a particular focus on tackling the discrimination that some staff face
- new ways of working and delivering care – making effective use of the full range of our people's skills and experience
- growing for the future – how we recruit and keep our people, and welcome back colleagues who want to return.

Improving inclusion and diversity across our profession: our strategy for pharmacy 2020-2025
Source: Royal Pharmaceutical Society
Publication date: June 2020
This report is borne out of a series of conversations that took place over the last year, in which we strengthened and formalised our commitment to improving I&D within the profession. We formed an internal steering group and appointed an independent chair, Asif Sadiq MBE, to oversee our I&D activities and we undertook a comprehensive survey that pinpointed our strengths and weaknesses as a profession. Asif facilitated workshops with members and other representatives in England, Scotland and Wales, in which we explored areas

that are ripe for change, as well as the organisational areas that RPS needs to address to embody the change for which we so strongly advocate

On primary care: General Practice, Pharmacy, Workforce
Source: University of Manchester
Publication date: 2020
Our publication On Primary Care: General Practice, Pharmacy, Workforce asks leading experts in three areas of the UK primary care sector to identify the challenges and opportunities facing policymakers today.

All-Party Pharmacy Group Flash Inquiry: The impact of the Covid-19 pandemic on pharmacy and pharmacy teams
Source: All-Party Pharmacy Group
Publication date: 2020
Pharmacists have lifted heaven and earth to quickly adapt to the challenges of the pandemic to ensure a safe supply of medicines for the communities they serve. The All-Party Pharmacy Group launched this 'flash' inquiry to examine the response of pharmacies in England and found many pre-existing challenges had been amplified by COVID-19. There is a clear and urgent need for reform and a review of funding mechanisms if the sector is to remain sustainable in the future.

Long Term Plan
Source: NHS
Publication date: January 2019
As medicine advances, health needs change and society develops, the NHS has to continually move forward so that in 10 years time we have a service fit for the future. The NHS Long Term Plan is drawn up by frontline staff, patients groups, and national experts to be ambitious but realistic.

See also "The future pharmacy workforce: the vision for the pharmacy workforce in the context of the NHS Long Term Plan" (HEE)

Pharmacy workforce intelligence: global trends
Source: FIP (International Pharmaceutical Federation)
Publication date: 2018
This report describes the global capacity trends observed in the pharmaceutical workforce from 2006 to 2016, building on the FIP 2015 Global Pharmacy Workforce Intelligence Trends Report; this report features additional analysis to track global and national trends, including gender distribution and capacity growth mapped to regional variation and country-level economic indicators.

Case Studies

Widening local participation through partnering with the Prince's Trust
Source: NHS Employers
Publication date: January 2023
Read about how a Manchester trust is supporting more young people into employment through its new partnership with The Prince's Trust.

Pharmacy Advanced Practitioner Case Study with Patient Experience
Source: Health Education England
Publication date: 2022
This video provides an insight into working as a Pharmacist Advanced Practitioner within Pre-Assessment.

Primary Care Network clinical pharmacist role offers room to grow for new recruit

Source: NHS England
Publication date: July 2020
Receiving the news that I had finally qualified, after a year as a hospital pre-registration pharmacist, brought a sense of elation like no other. All those years of study, the gruelling revision periods every summer and the pre-registration exam all suddenly seemed worth the stress to become a pharmacist.

[Case studies for pharmacists and GP surgeries](#)
Source: Royal Pharmaceutical Society

[Pharmacy technicians](#)
Source: Health Education England
Pharmacy technicians are professional members of the pharmacy team who prepare and manage the supply of medicines and give advice to patients and customers. The role pharmacy technician is regulated by the General Pharmaceutical Council and has developed significantly in recent years. Pharmacy Technicians carry out some of the same tasks as a pharmacist, engaging with patients, managing the supply of medicines and liaising with other members of the healthcare team. Pharmacy Technicians work in a variety of settings including hospitals, community pharmacies, primary care (including GP surgeries), care homes, universities and colleges, health and justice services, the armed forces and industry. These case studies show different roles undertaken by Pharmacy Technicians improving clinical care and efficiency in a variety of settings to help you understand the possibilities a career as a pharmacy technician can lead to.

[Clinical pharmacists in general practice: the Old School Surgery, Bristol](#)
Source: NHS Long Term Plan
Publication date: March 2019

This video case study explains the role of clinical pharmacists in general practice, clarifying when and why patients might see a clinical pharmacist.

HEE Star

More resources and tools are available in the by searching for **"pharmacy"** in the [HEE Star](#)

Statistics

You can find relevant statistics on the [Health and Care Statistics Landscape](#) under **"Health and Care"** and use the **"Prescribing" and "Workforce"** filters

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

Advanced practice

Evaluation of a novel advanced pharmacy technician role: discharge Medication Education Technician Abstract only*
Item Type: Generic
Author: Anderson, B. J., Taylor, S. E., Mitchell, S. M., Carroll, M. E., Verde, A., Sepe, D., EL-Katateny, E., Droney, J., Than, J. and Hilley, P.
Publication Date: 2021
Publication Details: Journal of Pharmacy Practice and Research, 51, (5) pp.396-405. , Australia: John Wiley and Sons Inc.
Abstract: Background: Despite evidence to support pharmacists practicing in advanced scope roles, embedding such roles into practice is challenging. Upskilling hospital pharmacy technicians (HPTs) to undertake selected clinical support roles under indirect supervision could relieve pharmacists from non-complex tasks. Aim(s): To compare patient satisfaction with routine postoperative discharge medication education provided by a HPT or pharmacists in a short-stay surgery setting. Method(s): An HPT completed a comprehensive training program to become a credentialed medication education technician (MEdTech). Consecutive overnight-staying patients were assigned to receive education by the MEdTech or pharmacists according to staff availability. Patient satisfaction with their education experience was measured via telephone calls the day following discharge. The hospital's Research Office approved this study as quality improvement. Result(s): Overall, 341 patients were screened and 217 met all inclusion criteria. Two hundred patients provided feedback (100 educated by the MEdTech and 100 by pharmacists). All patients reported high levels of overall satisfaction with their education experience, irrespective of which pharmacy staff member provided the education; a finding supported by the qualitative feedback. Significantly more MEdTech-educated patients were very satisfied with the amount of information provided (92% vs 79%) and ease of following the education (97% vs 86%) than pharmacist-educated patients, respectively. Conclusion(s): This study supports advanced practice HPTs assisting with the provision of medication information to patients. This novel workforce model could facilitate pharmacists working in advanced-scope roles by having advanced HPTs undertake uncomplicated aspects of clinical pharmacy within a defined scope of practice and with specific pharmacist referral criteria. Copyright © 2021 The Society of Hospital Pharmacists of Australia

Trends in advanced practice and specialisation in the global pharmacy workforce: a synthesis of country case studies
Item Type: Generic
Author: Bader, L. R., Bates, I. and Galbraith, K.
Publication Date: 2020
Publication Details: International Journal of Pharmacy Practice, 28, (2) pp.182-190. , United Kingdom: Wiley-Blackwell Publishing Ltd (E-mail: info@royensoc.co.uk).
Abstract: Objectives: This study aims to gain a better understanding of the drivers and barriers to the development of advanced practice and specialised systems around the world. Through the synthesis of in-depth country case studies, this paper aims to identify current models of advanced practice and specialisation in pharmacy and illustrate trends, drivers and barriers in policy development. This is the first analysis of its kind to examine pharmacy specialisation and advanced practice in this depth from a global perspective. Method(s): A synthesis of country case studies was carried out. The country case study template was reviewed and approved by an expert working group drawn from a cross section of International

Pharmaceutical Federations (FIP) experts and special-interest groups. FIP member organisations and country-level contacts from regulatory, professional and government agencies and universities were approached to contribute to the case study database. The data were collected between January and May 2015. Descriptive comparative analysis and qualitative thematic analysis were both used to analyse the data. Key Findings: Case study submissions were received from 17 countries. The findings demonstrate that the pace and depth of change in advanced practice and specialisation are occurring at different rates across countries and regions, although many countries appear to be moving towards recognising advanced and specialised practice of pharmacists and developing frameworks and/or formalised recognition systems. Conclusion(s): Country-specific examples are useful in identifying factors that may contribute to the rate at which developments in advanced practice and specialisation in pharmacy are taking place and enable progress in around the world.Copyright © 2020 Royal Pharmaceutical Society

Burnout and stress

The stress, satisfaction and fulfilment of early career pharmacists - a qualitative analysis of a survey on their professional and personal lives Abstract only*
Item Type: Generic
Author: Chee, Pui Ying, Tan, Li Vern, Lee, Caryn Chuen Wei, Choo, Britney Bao Ni and Cheong, Mark Wing Loong
Publication Date: 2023
Publication Details: The International journal of pharmacy practice, , England:

Abstract: OBJECTIVES: This study aims to examine and develop a better understanding of (1) the factors that affect the stress of both their professional and personal lives, (2) the aspects of professional and personal life that affect their satisfaction and fulfilment and (3) what they need to achieve satisfaction and fulfilment in their professional and personal lives., METHODS: A cross-sectional study using a questionnaire was developed. The questionnaire contained 8 questions designed to collect qualitative data on the factors affecting the stress, satisfaction and fulfilment in the professional and personal lives of early career pharmacists (ECPs). Questionnaire responses were analysed using a qualitative content analysis approach and themes describing influential factors were developed., KEY FINDINGS: Some of the factors that contribute to the stress, satisfaction and fulfilment of ECPs were identified. The stressors identified include the workplace environment and relationships with colleagues, the demands of a pharmacist career, the lack of career advancement pathways, job insecurity, relationships and their weaknesses. Factors contributing to satisfaction and fulfilment included supportive work environments and relationships, being appreciated and making a difference, growth, supportive relationships and self-care., CONCLUSIONS: Supporting the well-being of ECPs is important for a resilient, engaged and effective pharmacy workforce. Key interventions include eliminating job insecurity, establishing clear career pathways, improving work environments and relationships and investing in the development of clinical, technical, communication and managerial skills.

Exploring the relationship between stress and student leadership among student pharmacists Abstract only*
Item Type: Generic
Author: McKeirnan, Kimberly, Supnet, Adriel and Capdeville,

Connor
Publication Date: 2022
Publication Details: Currents in pharmacy teaching & learning, 14, (1) pp.46-55. , United States:

Abstract: INTRODUCTION: Previous studies show student pharmacists have a lower health-related quality of life than undergraduate students and are among the most stressed of the health profession students. The long-term effects of chronic stress on healthcare providers can lead to reduced productivity, increased turnover, and medical errors. The goal of this research was to gather information from students who participate in organizational leadership positions regarding their opinions of the benefits of the leadership positions and feelings about stress, burnout, and quality of life., METHODS: Student pharmacists holding leadership positions were asked to complete an electronic survey. Survey questions were based on behavioral assessment instruments. Descriptive statistics were used to analyze demographic data and yes/no question responses. The Spearman Rho test was used to look for associations when comparing variables., RESULTS: Sixty-four students completed the survey. There was a significant association between both self-reported lower quality of sleep and reduced time dedicated to leisure activities with holding concurrent positions (p = 0.021, p = 0.028, respectively). No significant relationship was found between the number of leadership positions held concurrently, satisfaction gained from those positions, professional year in pharmacy school, employment during didactic years, or self-perceived test taking performance. Student pharmacists reported taking on leadership positions in student organizations for a variety of reasons, including desire to improve skills, make connections, improve the profession, and gain experience., CONCLUSIONS: Pharmacy faculty mentors may be able to utilize the results of this study to encourage student leaders and better understand the challenges that come with organization leadership positions.

[National survey of pharmacists, intern pharmacists and pharmacy students in Australia: the nature and extent of stress and well-being](#)
Item Type: Generic
Author: Chapman, C. B., Wilson, S. G., Wilson, D. I. and Dunkley, M. K.
Publication Date: 2020
Publication Details: International Journal of Pharmacy Practice, 28, (4) pp.355-361. , United Kingdom: John Wiley and Sons Inc.

Abstract: Objectives: A national survey of the Australian pharmacy workforce was conducted to determine the extent to stress experienced, the extent to which it is work-related, how stress is managed, the barriers to getting help and how well prepared the workforce is for stressful situations. There were three objectives: provision of guidance on possible interventions; provision of a baseline for further studies; and provision of information to the Australian Health Practitioner Regulation Authority (AHPRA). Method(s): An online survey incorporating the 10-item Perceived Stress Scale was developed, piloted and launched in October 2016. Pharmacy-related organisations alerted their members to the voluntary survey. Popular pharmacy social media was used. Responses were analysed using SPSS and Excel. The a priori for significance was P < 0.05. Key Findings: In relation to the nature and extent of stress in the workforce and work-life balance, information provided by 1246 respondents out of a workforce of 29 819 revealed high levels of stress (PSS-10 score 20.1 +/- 7.3), with those under 30 years of age and/or with 10 years or less in the pharmacy workforce reporting the highest levels. Just under half the respondents reported dissatisfaction with their work-life balances. Conclusion(s): Workplace stress is high, particularly among younger members of the workforce. Professional pharmacy associations, schools

of pharmacy at Australian universities and AHPRA have been alerted to this issue. The survey should be repeated reasonably soon to determine if any of the key characteristics have changed, particularly if interventions are made to reduce the occurrence of workplace-related stress. Copyright © 2020 Royal Pharmaceutical Society

Work-related stress: the hidden pandemic in pharmacy
Author(s): Dawn Connelly
Source: The Pharmaceutical Journal
Publication date: 18th November 2021
Data from our salary and job satisfaction survey paint a disturbing picture of a profession drowning in rising demand, staff shortages and shifting expectations.

The relationship between organizational climate, job stress, workplace burnout, and retention of pharmacists
Item Type: Generic
Author: Lan, Y. -L, Huang, W. -T, Kao, C. -L and Wang, H. -J
Publication Date: 2020
Publication Details: Journal of occupational health, 62, (1) pp.e12079. , Australia: NLM (Medline).
Abstract: OBJECTIVES: This study explored the relationship between organizational climate, job stress, workplace burnout, and retention of pharmacists. This study adopted a cross-sectional design and conducted a questionnaire survey of pharmacists working at three teaching hospitals (a district teaching hospital, a regional teaching hospital, and a medical center). METHOD(S): The sampling criteria were a license to practice pharmacy and a willingness to sign a written consent form to participate in this study. RESULT(S): One hundred ten questionnaires were distributed, of which 101 contained valid responses, yielding a valid return rate of 91.82%. A significant correlation was evident between organizational climate, job stress, workplace burnout, and retention. Hierarchical

regression analysis revealed that demographic variables, organizational climate, job stress, and workplace burnout had a predictive power of 55.6% for retention (F = 9.712***, P < .001). Organizational climate had a significant positive correlated with retention (beta = 0.401*, P < .001). CONCLUSION(S): The results of this study can help hospitals to create a friendly and healthy workplace, instruct hospital managers how to improve their organizational climates, and reduce pharmacists' job stress and workplace burnout, thereby enhancing the quality of pharmacy service and medication safety and eventually improving pharmacists' intention to stay.Copyright © 2019 The Authors and Cathay General Hospital. Journal of Occupational Health published by John Wiley & Sons Australia, Ltd on behalf of The Japan Society for Occupational Health.

Career pathways and advancement

Exploring career advancement of pharmacy support staff within two Queensland hospitals: a qualitative study Abstract only*
Item Type: Generic
Author: Cheong, A. K. W., McMillan, S. S., Anoopkumar-Dukie, S. and Kelly, F. S.
Publication Date: 2022
Publication Details: Journal of Pharmacy Practice and Research, 52, (3) pp.228-235. , Australia: John Wiley and Sons Inc.
Abstract: Background: Internationally, pharmacy assistants and technicians have expanded their roles to allow pharmacists to concentrate on more clinical duties. The Australian model of care is currently exploring avenues for strategic role expansion for these support staff. Aim(s): To qualitatively explore pharmacist and support staff views on the training needs of Australian pharmacy support staff. Method(s): Ethics approval was obtained from both Metro South Human Research Ethics Committee and UnitingCare HREC prior to the commencement

of the study. Semi-structured interviews were conducted with personnel from the private and public settings to explore key issues identified in the literature. Interviews were conducted either face-to-face or via telephone between October 2017 and August 2018, with a mean duration of 39.85 min. NVivo 11 qualitative software was used to consolidate the data. The general inductive approach was used for thematic data analysis, which allowed for the emergence of new themes and sub-themes within the research topic. Result(s): A total of 25 participants consisting of 10 pharmacists and 15 pharmacy support staff were recruited from a private (n = 13) and a public (n = 12) hospital in South-East Queensland. Participants across both pharmacist and pharmacy support staff expressed inadequacy in current certification level, resulting in a need for further on-the-job training. The main reported facilitators to pursue further training were organisational support, career progression and remuneration. The main reported barriers were training cost and lack of time. Conclusion(s): This exploratory study provides critical insights into the evolving needs of support staff that can inform innovative strategic role expansion for efficient and sustainable training.Copyright © 2022 The Society of Hospital Pharmacists of Australia.

Competencies

[Evaluating digital competencies for pharmacists](#)
Item Type: Generic
Author: Lee, Geraldine, Caton, Emma and Ding, Amally
Publication Date: 2023
Publication Details: Research in social & administrative pharmacy : RSAP, 19, (5) pp.753-757. , United States:
Abstract: BACKGROUND: Digital technologies are widely used in healthcare. In the UK, Health Education England developed a framework on digital capabilities so that healthcare professionals could determine their health literacy, evaluate

their competencies and identify their learning needs. For pharmacists, specific digital capabilities were developed - Digital Capabilities for the Pharmacy Workforce., AIM: The aim of this study was to explore the views of pharmacists on digital competency in the workplace and evaluate the suitability of the Digital Capabilities Framework for the Pharmacy Workforce for use within clinical practice., METHODOLOGY: A focus group of experienced pharmacists working within the NHS in the UK was conducted and thematic analysis of the content was undertaken., RESULTS: Seven pharmacy staff took part in an online focus group. They held senior positions across various London NHS hospitals and in community settings. From the content of the focus group, four themes were identified: Theme 1 - Use of digital technology, Theme 2 - Digital competency and training of the pharmacy workforce, Theme 3 - Assessment of digital competency and Theme 4 - Evaluation of the Digital Capabilities Framework for the Pharmacy Workforce. The pharmacists in this study suggested that the Digital Capabilities Framework could be used as a helpful assessment tool to ensure that all staff should have the appropriate digital skills and capabilities to fulfil their pharmacy role., CONCLUSION: With widespread use of digital technologies in practice, there is a need for formal digital technology training for pharmacists. The Digital Capabilities Framework has the potential to be utilised as an assessment tool to ensure pharmacy staff have the appropriate levels of digital skills to fulfil their clinical duties and make their service more efficient. Copyright © 2023. Published by Elsevier Inc.

Continuing Professional Development (CPD)

[The future of CPD for general practitioners, registered pharmacy staff and general practice nurses in Scotland - qualitative responses from a national survey](#) Abstract only*
Item Type: Generic

Author: Cunningham, D. E., Luty, S., Alexander, A., Waqa, V. and Zlotos, L.
Publication Date: 2020
Publication Details: Education for primary care : an official publication of the Association of Course Organisers, National Association of GP Tutors, World Organisation of Family Doctors, 31, (1) pp.7-14. , United Kingdom: NLM (Medline).
Abstract: In the United Kingdom, undertaking continuing professional development (CPD) is required for revalidation with regulatory authorities for general practitioners, general practice nurses and registered pharmacy staff - pharmacists and pharmacy technicians. A survey of CPD preferences and activities of these four professions has been published and this paper focuses on one qualitative question in the survey: 'Please describe any changes that you anticipate in the way in which you will undertake CPD over the next 12 months.' Responses were analysed using content analysis, then codes and themes were developed into a coding framework. 1,159 respondents provided comments to the question and five themes were identified: options for learning, time, appraisal and revalidation, people in transition and use of technology. There was a desire for face-to-face courses, for interactive learning and for variety of learning methods. Respondents valued learning with others and Practice-Based Small Group Learning was considered to be flexible and promoted inter-professional learning and socialisation. Lack of time for learning was seen as a barrier for respondents. Respondents considered that CPD was needed to support them as their roles developed in primary healthcare.

Covid-19

Experiences and learnings of pharmacists, students, and clinical assistants working collaboratively in a COVID-19 vaccination clinic: a qualitative study
Item Type: Generic

Author: Paradissis, Chariclia, De Guzman, Keshia,R., Barras, Michael, La Caze, Adam, Winckel, Karl, Taufatofua, Natasha and Falconer, Nazanin
Publication Date: 2023
Publication Details: Exploratory research in clinical and social pharmacy, 9, pp.100241. , United States:
Abstract: Background: The involvement of pharmacists and pharmacy clinical assistants (CAs) in hospital clinics has demonstrated benefits for improving medication safety and care delivery. Internationally, pharmacy staff played a crucial role in the safe storage, provision and administration of vaccines, as well as reinforcement of pharmacovigilance efforts during the COVID-19 pandemic. In Australia, healthcare providers collaborated to rapidly facilitate a phased COVID-19 vaccination program. The perspectives of the pharmacy team, including pharmacy students, involved in implementing novel health services are underexplored in the literature., Objective: To describe the key learnings in how a team of pharmacists, CAs and pharmacy students contributed to the COVID-19 vaccine service, and to explore their preparedness and experiences working at a vaccination clinic within a quaternary hospital., Method: This study involved semi-structured interviews with pharmacy students, CAs and pharmacists. All pharmacy staff who worked in the clinic were invited to participate in the study and a snowball strategy was used to maximise recruitment. The interviews were audio-recorded, transcribed, and analysed using inductive thematic techniques to identify major themes., Results: A total of 11 participants were interviewed including: four pharmacists, four CAs and three undergraduate students. Using thematic analysis, five main themes were identified: (1) Potential for student value and experiential learning; (2) Adaptive procedures and work practices in a rapidly changing environment; (3) Clear leadership, with role clarity, role expansion and interchangeability; (4) Supportive learning environment and (5) Stakeholder drivers for service delivery

and to optimise societal benefit. These five themes often interacted with each other, highlighting the complexities of implementing and operating the service., Conclusions: The vaccine clinic service provided a novel and valuable opportunity for students, CAs, and pharmacists to work collaboratively, extending their scope of practice to contribute to better national health outcomes. Participants expressed their support for future initiatives involving pharmacy students and healthcare staff collaborating in hospital settings. Copyright © 2023 The Authors.

Emotional Burden among Pharmacists and Pharmacy Technicians during the COVID-19 Lockdown: A Cross Sectional Study
Item Type: Generic
Author: Baldonedo-Mosteiro, Carmen, Mosteiro-Diaz, Maria, Franco-Correia, Sara and Tardon, Adonina
Publication Date: 2022
Publication Details: International journal of environmental research and public health, 19, (17) , Switzerland:
Abstract: This study aims to investigate the prevalence of depression and anxiety symptoms among Spanish community pharmacists and pharmacy technicians during the coronavirus disease 2019 (COVID-19) lockdown. A descriptive cross-sectional quantitative study was designed. An online survey was administered to participants from 4 to 21 April 2020 using a questionnaire assessing sociodemographic information and the Spanish version of the Hospital Anxiety and Depression Scale (HADS). Informed consent to participate was requested. Participants comprised 1162 pharmacy staff from Spain with an average age of 39.15 +/- 9.718, from 20 to 65 years old, of whom 83% were women, and 50.6% were married. More than half of the participants expressed symptoms of depression (62.7%) and anxiety (70.9%). An important prevalence of anxiety and depression symptoms has been detected among

Spanish pharmacists and pharmacy technicians during the COVID-19 lockdown. Being a woman, smoking, feeling fear, feeling stress and believing that pharmacists/pharmacy technicians are very exposed to COVID-19 seem to be associated with higher HADS scores.

The impact of the COVID-19 pandemic on pharmacy personnel in primary care
Item Type: Generic
Author: Weir, Natalie, Newham, Rosemary, Dunlop, Emma, Ferguson, Aimee and Bennie, Marion
Publication Date: 2022
Publication Details: Primary health care research & development, 23, pp.e56. , England:
Abstract: INTRODUCTION: The coronavirus (COVID-19) pandemic has impacted healthcare worldwide. It has altered service delivery and posed challenges to practitioners in relation to workload, well-being and support. Within primary care, changes in physicians' activities have been identified and innovative work solutions implemented. However, evidence is lacking regarding the impact of the pandemic on pharmacy personnel who work in primary care., AIM: To explore the impact of the pandemic on the working practice (including the type of services provided) and job satisfaction of pharmacists and pharmacy technicians within Scottish general practice. Due to the stressful nature of the pandemic, we hypothesise that job satisfaction will have been negatively affected., METHODS: An online questionnaire was distributed in May-July 2021, approximately 15 months since initial lockdown measures in the UK. The questionnaire was informed by previous literature and underwent expert review and piloting. Analysis involved descriptive statistics, non-parametric statistical tests and thematic analysis., RESULTS: 180 participants responded (approximated 16.1% response rate): 134 pharmacists (74.4%) and 46 technicians (25.6%). Responses indicated greater

involvement with administrative tasks and a reduction in the provision of clinical services, which was negatively perceived by pharmacists. There was an increase in remote working, although most participants continued to have a physical presence within general practices. Face-to-face interactions with patients reduced, which was negatively perceived by participants, and telephone consults were considered efficient yet less effective. Professional development activities were challenged by increased workloads and reduced support available. Although workplace stress was apparent, there was no indication of widespread job dissatisfaction., CONCLUSION: The pandemic has impacted pharmacists and technicians, but it is unknown if changes will be permanent, and there is a need to understand which changes should continue. Future research should explore the impact of altered service delivery, including remote working, on patient care.

The effects of the COVID-19 pandemic on pharmacy education, staff and students in an Australian setting
Item Type: Generic
Author: Chuang, S., Trevaskis, N. and Mak, V.
Publication Date: 2020
Publication Details: Pharmacy Education, 20, (2) pp.87-90. , Netherlands: International Pharmaceutical Federation.
Abstract: Worldwide, COVID-19 has changed the way Pharmacy Education is being delivered. In Australia there was a rapid shift to online delivery, implementation of new technologies and new models for remote online teaching. The effects of the pandemic on pharmacy education, students and staff are discussed as well as strategies of how to maintain workforce development goals to ensure quality education.Copyright © 2020 FIP.

Overview of the pharmacy education and workforce development challenges and responses to the global pandemic

of COVID-19 in Switzerland
Item Type: Generic
Author: Czock, A.
Publication Date: 2020
Publication Details: Pharmacy Education, 20, (2) pp.106-109. , Netherlands: International Pharmaceutical Federation.
Abstract: The COVID-19 pandemic changed pharmacy education permanently as it promoted and facilitated online learning for the pharmacy workforce. In regards to examinations, it did not affect the examination mode as exams could be performed under special precautions and respecting predefined safety concepts.Copyright © 2020 FIP.

Digital literacy

Assessing the digital literacy levels of the community pharmacy workforce using a survey tool Abstract only*
Item Type: Generic
Author: Crilly, P., Fletcher, J., Chandegra, N., Khalefa, A., Rouf, S. M., Zein, M. and Kayyali, R.
Publication Date: 2022
Publication Details: The International journal of pharmacy practice, , United Kingdom: NLM (Medline).
Abstract: OBJECTIVES: To investigate the digital literacy of staff in London, UK, community pharmacies and to explore their perceptions about the use of eHealth tools. METHOD(S): The study population was community pharmacy staff (N = 21,346) in Greater London. A survey tool was divided into six sections: Use of the internet; Use of social media; Use of mobile health applications (MHAs); Perception of and practical use of digital health tools; Scenario-based questions and demographics. Responses were analysed in SPSS. Following data collection, Health Education England's (HEE's) Digital Capabilities Framework (DCF) was published. The authors mapped the survey tool retrospectively to the framework. KEY FINDINGS:

Almost all respondents (98.0%, n = 551/562) used eHealth tools at work, mainly to access medicine information (89.8%, n = 495/551). Almost one-third (31.7%, N = 178/562) used social media regularly, while many (79.4%, N = 446/562) were aware of MHAs. Self-perceived digital literacy indicated that 63.3% (n = 356/562) deemed themselves to be above average. Under 35s rated their digital literacy more highly than over 35s (P < 0.001). HEE's DCF indicated that actual digital literacy was lower than that of self-perceived. Despite the high use of eHealth tools, respondents were reluctant to recommend these to the public for health advice. CONCLUSION(S): Community pharmacy staff self-report their digital literacy to be high yet do not use these skills for public health purposes. Furthermore, these self-reported skills appear to be over-estimated. Despite high levels of use of digital tools at work, staff do not use them for public health, therefore, further training to build confidence to better utilise them is recommended.

Diversity, Inclusion and Participation

A vision to advance gender equality within pharmacy leadership: Next steps to take the profession forward Abstract only*
Item Type: Generic
Author: Mill, Deanna, Burton, Lauren, Lim, Renly, Barwick, Anna, Felkai, Chelsea, Sim, Tin Fei and Dineen-Griffin, Sarah
Publication Date: 2023
Publication Details: Research in social & administrative pharmacy : RSAP, , United States:
Abstract: The United Nations Sustainable Development Goal 5 to 'achieve gender equality and empower all women and girls' aims to eliminate all forms of discrimination against women and girls and ensure their full and effective participation in all spheres of life. In alignment with this, several key international initiatives are making progress towards gender equality in the pharmacy profession. The pharmacy profession must support women and accelerate the progress of women in leadership positions in pharmacy. International and national pharmacy professional bodies can play a critical role in fostering the change required to improve gender equality in all regions and countries. The ongoing development, evaluation and implementation of policies and initiatives are critical to a profession that is increasingly becoming feminised. Furthermore, there is an imperative to deeply understand the gender-based barriers and develop evidence-based strategies and solutions to support women in pharmacy leadership. There is extensive literature and research on gender inequality and its impact on leadership outside pharmacy which could be used strategically for the profession to develop its own evidence based strategic position. Robust initiatives are needed to ensure that women at all levels including women in pharmacy leadership are empowered and encouraged to participate in their profession. This commentary seeks to generate and contribute to the debate to ensure the profession is proactive and deliberate in tackling the challenges that have traditionally impeded women reaching leadership positions and several critical actions as next steps are proposed. Action is needed to improve gender equality in pharmacy leadership and a profession-wide discussion on ways to progress the above proposed actions is critically needed. Copyright © 2023 Elsevier Inc. All rights reserved.

Gender balance in pharmacy leadership: Are we making progress? Abstract only*
Item Type: Generic
Author: Martin, Alicia, Naunton, Mark and Peterson, Gregory M.
Publication Date: 2021

Abstract: BACKGROUND: In recent years there has been an increasing focus on gender balance and equity in leadership positions. In most fields of work, including female dominated professions such as pharmacy, there is an underrepresentation of women in leadership positions. This is despite significant benefits being observed in organisations when diversity in leadership is increased. To date, there has been no research investigating gender balance in pharmacy leadership and decision-making positions in Australia., OBJECTIVE: To explore gender balance in pharmacy leadership in Australia and how it has changed over the last 20 years., SETTING: This study was conducted in Australia., METHOD: Eight key Australian pharmacy organisations were identified. Data were extracted from their websites or through direct contact with the organisation for the gender breakdown of their boards/committees/councils from the years 1998-2018., RESULTS: In total, data were obtained for 368 separate professional committees, from seven organisations (including 22 state/territory branches), covering the years of 1998-2018. Some organisations provided information for each of the 21 years, while others were only able to provide a few data points. Overall, gender balance in pharmacy organisations has increased over the 21-year period however, there remains a lack of women in leadership positions, particularly in the most senior positions where women held only 24% of president/chair positions over the time period. In 2018 women held 34% of these positions, despite representing 62% of pharmacists in Australia., CONCLUSION: Gender inequity in leadership is prevalent in the Australian pharmacy profession, although it has lessened over time. Based on the trend from 1998 to 2018 it is predicted that women will achieve an average of 50% representation in Australian pharmacy professional committees

Education and Training

[Mental health training programs for community pharmacists, pharmacy staff and students: A systematic review](#)
Item Type: Generic
Author: Crespo-Gonzalez, C., Dineen-Griffin, S., Rae, J. and Hill, R. A.
Publication Date: 2022
Abstract: BACKGROUND: Primary care is often the first point of contact for people living with mental disorders. Community pharmacists, pharmacy staff and students are increasingly being trained to deliver mental health care. However, there is still a gap in the literature exploring the characteristics of all available mental health training programs and their components and their influence on pharmacists, pharmacy staff and students' outcomes. OBJECTIVE(S): To summarize the evidence evaluating mental health training programs completed by community pharmacists, pharmacy staff and students. More specifically, to explore the components of mental health training programs and identify those that facilitate significant improvements in outcomes. METHOD(S): A systematic review was conducted following the Cochrane handbook and reported according to PRISMA guidelines. A search for published literature was conducted in three databases (PubMed, Scopus, and Web of Science) in July 2021. Eligible studies were included if they described and evaluated the impact of mental health training programs delivered to community pharmacists, pharmacy staff and pharmacy students regardless of design or comparator. The methodological quality of included studies was

appraised using both the NIH quality assessment, to evaluate studies with an uncontrolled pre-post design, and the Cochrane EPOC risk of bias assessment, to evaluate studies with a controlled (randomized and non-randomized) study design. RESULT(S): Thirty-three studies were included. Most of the identified mental health training programs contained knowledge-based components and active learning activities. Changes in participants' attitudes, stigma, knowledge, confidence and skills were frequently assessed. An extensive range of self-assessment and observational instruments used to evaluate the impact of the training programs were identified. Positive improvements in participants' attitudes, knowledge and stigma were frequently identified following participation in training programs. CONCLUSION(S): This systematic review highlights the importance of mental health training programs in increasing pharmacists', pharmacy staff and pharmacy students' skills and confidence to deliver mental health care in community pharmacy. Future research should build upon this basis and further focus on finding the most efficient measures to evaluate these training programs and assess their long-term effectiveness, allowing comparison between programs.

Identifying mental health training needs of general practice pharmacy workforce to advance practice: a training needs analysis survey Abstract only*
Item Type: Generic
Author: Johnson, C. F. and Earle-Payne, K.
Publication Date: 2022
Publication Details: International Journal of Clinical Pharmacy, 44, (6) pp.1454-1463. , Switzerland: Springer Science and Business Media Deutschland GmbH.
Abstract: Background: Mental health problems are commonly treated in general practice. Pharmacy roles are evolving in general practice; however it is unknown what mental health training the pharmacy workforce needs. Aim(s): To identify and prioritise general practice clinical pharmacists' (GPCPs) and technicians' mental health and psychotropic prescribing learning needs within general practice. Method(s): All 353 GPCPs and technicians, in one health board, were invited to participate in an online survey, September 2021. The validated Hennessy-Hicks Training Needs Assessment Questionnaire, was embedded in the survey. Participants rated 26 tasks with regard to their confidence in performing the task, and importance to their role. Clinical knowledge was assessed against clinical guidelines and literature. Result(s): Response rate was 26% (92/353); 27% (68/256) GPCPs and 25% (24/97) technicians. Respondents prioritised 'appraising own performance' and 'assessing suicide/deliberate self-harm risk' as high training needs. There were significant variations in prioritisation between GPCPs and technicians; substantial pharmacist agreement (inter-rater correlation 0.713, 95% CI 0.376-0.870, p = 0.001). Depression was a priority training need followed by anxiety, dementia, bipolar, attention deficit (hyperactivity) disorder and schizophrenia. For depression treatment, 2 in 3 respondents were unaware of early antidepressant response, dose-response effects for efficacy, and would wait 8-12 weeks before optimising treatment. The majority were aware of individual lithium and antipsychotic cardiometabolic monitoring parameters; 25% identifying the correct monitoring care-bundle. Conclusion(s): Respondents identified a range of training needs which varied between technicians and pharmacist, and staff banding. Addressing these learning needs may help pharmacy staff to better support practices and patients.

Health and wellbeing

[Neglected workforce: pharmacists and their health-related quality of life](#)
Item Type: Generic
Author: Kurnik-Lucka, M., Pasieka, P., Gorecka-Mazur, A., Rzasa-Duran, E., Pekala, J. and Gil, K.
Publication Date: 2021
Publication Details: Folia medica Cracoviensia, 61, (1) pp.19-35. , Poland: NLM (Medline).
Abstract: BACKGROUND: pharmacists remain on the frontline of public health around the globe and their performance directly impacts patients' safety. So far, to our knowledge, no European study has been dedicated to their heath-related quality of life (HQoL). Therefore, the primarily aim of our study was to evaluate HQoL of Polish pharmacists utilizing the SF-36 health survey with regard to anthropometric and lifestyle-related variables. METHOD(S): A total sample screened consisted of 1412 respondents, yet 765 pharmacists (mean age 40, 86.3% females) finally participated in the study. HQoL was assessed with the Medical Outcomes Study 36-Item Short Form Health Survey (SF-36). RESULT(S): The lowest median scores were noted for general health (GH, 50.0) and vitality (V, 60.0) domains. No gender differences regarding physical and mental summary scores were found. Significant difference of HQoL was found among the assessed age groups in several domains, especially physical functioning (PF) and GH (p <0.001) scores, and especially in the group of 51-60-year-old-respondents. Correlations were found between PF (r = -0.29, p <0.001), GH (r = -0.25, p <0.001) and age as well PF (r = -0.27, p <0.001), GH (r = -0.21, p <0.001) and BMI. Self-assessed dietary habits were correlated with PF (r = 0.22, p <0.001), mental health (r = 0.25, p <0.001), GH (r = 0.27, p <0.001) and V (r = 0.30, p <0.001) scores. CONCLUSION(S): The analysis indicates that pharmacists tend to have similar mental and physical burden according to SF-36, with age, BMI and dietary habits as predominant factors influencing their HQoL. The study presents unique values for future comparative analyses related, for instance, to the influence of the ongoing pandemic on HQoL of health-care providers.

[Disaster preparedness amongst pharmacists and pharmacy students: a systematic literature review](#) Abstract only*
Item Type: Generic
Author: McCourt, Elizabeth, Singleton, Judith, Tippett, Vivienne and Nissen, Lisa
Publication Date: 2021
Publication Details: The International journal of pharmacy practice, 29, (1) pp.12-20. , England:
Abstract: OBJECTIVES: In the aftermath of a disaster, the services provided by pharmacists are essential to ensure the continued health and well-being of the local population. To continue pharmacy services, it is critical that pharmacists are prepared for disasters. A systematic literature review was conducted to explore pharmacists' and pharmacy students' preparedness for disasters and the factors that affect preparedness., METHODS: This review was conducted in April 2020 through electronic databases CINAHL, MEDLINE, Embase, PubMed, Scopus and PsycINFO, and two disaster journals. Search terms such as 'pharmacist*', 'disaster*' and 'prepared*' were used. The search yielded an initial 1781 titles. Articles were included if they measured pharmacists or pharmacy students' disaster preparedness. After screening and quality appraisal by two researchers, four articles were included in final analysis and review. Data were extracted using a data collection tool formulated by the researchers. Meta-analysis was not possible; instead, results were compared across key areas including preparedness ratings and factors that influenced preparedness., KEY FINDINGS: Three articles focused on pharmacy students' preparedness for disasters, and

one on registered pharmacists' preparedness. Preparedness across both groups was poor to moderate with <18% of registered pharmacists found to be prepared to respond to a disaster. Factors that potentially influenced preparedness included disaster competency, disaster interventions and demographic factors., CONCLUSION: For pharmacists, the lack of research around their preparedness speaks volumes about their current involvement and expectations within disaster management. Without a prepared pharmacy workforce and pharmacy involvement in disaster management, critical skill and service gaps in disasters may negatively impact patients. Copyright © 2020 Royal Pharmaceutical Society.

Student pharmacists' role in enhancing ambulatory care pharmacy practice
Item Type: Generic
Author: Pamulapati, Lauren G. and Hess, Danielle
Publication Date: 2020
Publication Details: Pharmacy practice, 18, (3) pp.2150. ,
Spain:
Abstract: With a primary care physician shortage, utilization of pharmacists in the ambulatory care setting has proven to have positive economic and clinical outcomes for the practice and for patients. To extend the reach of the pharmacists, students may assist with patient care activities, such as medication reconciliation, point-of-care testing, and counseling. Evidence has shown that students benefit in building confidence, as well as improved perceptions of interprofessional care, while positive patient outcomes are maintained. There are many methods for schools to integrate these experiences early into their curriculum, as well as for students to explore opportunities on their own. Copyright: © Pharmacy Practice and the Authors.

Use of cross-sector apprenticeships in pharmacy: is it a sustainable quality education model for pharmacy assistants?

Author(s): Jones et al.
Source: International Journal of Pharmacy Practice 27(2) pp. 201-206
Publication date: April 2019
Objectives: To establish whether undertaking cross-sector pharmacy apprenticeship training to become a pharmacy assistant equally split across the two main pharmacy sectors improves training experience and cross-sector understanding. Methods: A mixed method approach was utilised to explore the experiences of 10 pharmacy apprentices, their employers and education provider. Questionnaires were used to explore apprentices' experiences and views following each 6-month placement. Seven pharmacy employers and the education provider were invited to take part in telephone interviews. Questionnaires were analysed using simple frequencies; qualitative data were analysed thematically. Key findings: Ten apprentices were recruited, and nine apprentices returned questionnaires from at least one placement. Three hospital-based employers, four community employers and one education provider were interviewed. All participants had found the pilot positive and the cross-sector training to have been a useful experience. Employers noted that the pilot provided the apprentice with valuable insight into the patient's journey and the opportunity to share learning across sectors. Employers also commented that more information regarding the nature of the training would have been useful to help better structure the placement for the apprentice. Conclusions: This paper explores the benefits and challenges of employing a pharmacy apprentice and utilising a novel cross-sector training model. Findings have potential relevance to the training of other pharmacy staff, including pharmacy technicians and pharmacists. They offer early insights into the potential value of pharmacy apprenticeships for training pharmacy assistants, particularly if these are set up across the two main sectors hospital and community pharmacy.

[Trends in the pharmacist workforce and pharmacy education](#)
Author(s): Lebovitz et al.
Source: American Journal of Pharmaceutical Education 83(1)
Publication date: February 2019
This commentary is an observation of longitudinal trends in national data on the pharmacist workforce and pharmacy education. Data indicate seismic shifts in supply and demand, from critical shortage to imminent oversupply. The change in the profession to employing more patient-care focused jobs has been observed as slow and minimal, although academia has focused on the clinical training and rapidly increased enrollments. Pharmacy is on the brink of transforming the profession, but several important changes are still required to alter the current trajectories of supply and demand. Pharmacy schools, associations, and employers must devote all energies to immediate and significant actions that tip the balance in favor of pharmacists of the future.

[Education and training for community pharmacists in mental health practice: how to equip this workforce for the future](#)
Abstract only*
Author(s): Wheeler et al.
Source: The Journal of Mental Health Training, Education and Practice
Publication date: September 2014
Purpose: The purpose of this paper is to explore the potential approaches to continuing education and training delivery for community pharmacists to equip them to support mental health consumers and carers with illnesses such as depression and anxiety. Design/methodology/approach: Review of national and international literature about community pharmacists' roles, beliefs and attitudes towards mental health, continuing education delivery for the workforce and training recommendations to equip pharmacy workforce. Findings:

Training involving consumer educators was effective in reducing stigma and negative attitudes. Interactive and contextually relevant training appeared to be more effective than didactic strategies. Narratives and role-plays (from the perspective of consumers, carers and health professionals) are effective in promoting more positive attitudes and reduce stigma. Flexible on-line delivery methods with video footage of expert and consumer narratives were preferable for a cost-effective programme accessible to a wide community pharmacy workforce. Originality/value: There is a clear need for mental health education for community pharmacists and support staff in Australia. Training should target reducing stigma and negative attitudes, improving knowledge and building confidence and skills to improve pharmacy staff's perceived value of working with mental health consumers. The delivery mode should maximise uptake.

Job satisfaction

[What drives job satisfaction among community pharmacists?](#)
[An application of relative importance analysis](#)
Item Type: Generic
Author: Fadare, Olajide O., Witry, Matthew J., Gaither, Caroline A., Doucette, William R. and Schommer, Jon C.
Publication Date: 2023
Publication Details: Exploratory research in clinical and social pharmacy, 9, pp.100237. , United States:
Abstract: Background: Pharmacy employers want to improve pharmacists' job satisfaction, but ratings of job satisfaction are highly subjective, as evaluating job satisfaction involves weighing simultaneously the importance of multiple correlated determinants that are often perceived unequally., Objectives: To 1) describe the application of relative importance analysis in estimating the predictive ability of correlated determinants of job satisfaction, and to rank the determinants in order of relative

importance, and 2) explore how the perceived relative importance of job satisfaction predictors may vary across community pharmacists' age, gender, and work setting categories., Methods: Data were obtained from the 2019 National Pharmacy Workforce Survey administered to 96,110 licensed U.S. pharmacists. Multiple regression analysis (MR) and relative weight analysis (RWA) were used to assess the predictive ability of determinants to explain pharmacists' job satisfaction. Subgroup analyses were performed to explore variations in the perceived relative importance of predictors across pharmacists' age, gender and work setting categories., Results: Over the entire sample of community pharmacists, no personal experience of workplace discrimination RW = 0.0613, rank = 1] and less reported engagement in advanced dispensing activities RW = 0.0235, rank = 2] were most associated with greater job satisfaction, as both predictors jointly accounted for 67.5% of the predicted criterion variance (R 2). Pharmacists' compensation was observed to have the lowest perceived relative importance for predicting job satisfaction RW = 0.0005, rank = 6], accounting for 0.5% of R 2. Between-group comparisons showed that, no personal experience of workplace discrimination had the highest perceived relative importance for job satisfaction across pharmacists' age groups, among women, and across most work settings except small chain pharmacies. Within-group comparisons showed that pharmacists' compensation was significantly more important than professional interactions (DELTARW(PC-PPI) 0.2900 0.0637, 0.5360]) for job satisfaction among pharmacists in large chain pharmacies, while patient-care services was significantly more important than compensation for job satisfaction in independent (DELTARW(PPS-PC) 0.1761 0.0017, 0.5980]) and health system retail pharmacists (DELTARW(PPS-PC) 0.4190 0.0444, 0.8303])., Conclusions: Relative importance analysis corroborated multiple regression and provided a more

interpretable presentation of variable influence on community pharmacists job satisfaction as the importance of personal and workplace characteristics in how pharmacists evaluate their job satisfaction varied across age, gender and work setting categories. Copyright © 2023 The Authors.

What drives pharmacists' turnover intention: A systematic review
Item Type: Generic
Author: Thin, Su Myat, Nakpun, Tulakarn, Nitadpakorn, Sujin, Sorofman, Bernard A. and Kittisopee, Tanattha
Publication Date: 2021
Publication Details: Pharmacy practice, 19, (4) pp.2559. , Spain:
Abstract: Background: Pharmacist turnover can negatively impact not only on work efficiency, organizational performance, work productivity and customer satisfaction, but also on the quality of pharmaceutical services and patient safety. Turnover intention is a core antecedent of turnover. Turnover intention of the pharmacists is affected by many factors related to their organization or job., Objective: To elaborate the factors affecting the pharmacists' turnover intention and their associations. Studies related to any factors affecting pharmacists' turnover intention in all pharmacy settings were included. The QualSyst assessment tool was used for assessing the quality of the included studies., Result: For this systematic review, 3,822 studies were identified. Of these studies,20 studies were included. Thirty factors were explored and a model for pharmacists' turnover intention was produced. Organizational commitment, job satisfaction, career commitment, job stress, perceived organizational support, and work climate were frequently found as drivers to pharmacist turnover intention. Some of 24 other factors had both direct and indirect effects on pharmacist turnover intention via organizational commitment, job satisfaction, career

commitment, job stress, and perceived organizational support. Many studies have reported that organizational commitment and job satisfaction had significant influence on pharmacist turnover intention in all settings. Job stress and work climate had direct and indirect effects on turnover intention of hospital pharmacists. Career commitment and perceived organizational support had direct and indirect effects on community pharmacist turnover intention., Conclusion: The factors driving the turnover intention of the pharmacists in different pharmacy practices were different. It indicated that the further interventions should be different to improve the pharmacists' retention in each pharmacy practice setting. Our systematic review is beneficial to guide human resource management in pharmacy and useful for guiding the conceptual framework of future research studies. Copyright: © Pharmacy Practice.

Gender, age and pharmacists' job satisfaction

Author(s): Carvajal and Popovici
Source: Pharmacy Practice 16(4)
Publication date: 2018
A comprehensive literature review was conducted on the concept of job satisfaction in the pharmacist workforce field and the facets it comprises, as well as its measurement, aiming to (i) review the nature, mechanisms, and importance of job satisfaction in the context of the pharmacist workforce, (ii) survey some of the most salient facets that configure job satisfaction, and (iii) discuss validity and measurement issues pertaining to it. Although female pharmacists generally hold less appealing jobs, earn lower wages and salaries, and are promoted less frequently than their male counterparts, they report higher levels of job satisfaction. Age has a U-shape effect on job satisfaction, with middle-age pharmacists less satisfied than both younger and older practitioners. Workload, stress, advancement opportunities, job security, autonomy, fairness in the workplace, supervisors, coworkers, flexibility,

and job atmosphere are facets contributing to pharmacists' job satisfaction. Finally, discrepancy exists among researchers in measuring job satisfaction as a single global indicator or as a composite measure derived from indices of satisfaction with key aspects of a job. Understanding the mechanisms that affect pharmacists' job satisfaction is important to employers in their pursuit to respond to practitioners' needs, decrease turnover, and increase productivity. As pharmacists' response to work-related conditions and experiences depends on gender and age, a unique set of rewards and incentives may not be universally effective. Additional research into the dynamics of the forces shaping pharmacists' perceptions, opinions, and attitudes is needed in order to design and implement policies that allocate human resources more efficiently within the various pharmacy settings.

Leadership

Developing Leadership Skills in Pharmacy Education

Item Type: Generic
Author: Ali, Raja, Alnaimi, Shaikha Jabor, Abdulrahim, Sara and Mraiche, Fatima
Publication Date: 2022
Publication Details: Medical science educator, 32, (2) pp.533-538. , United States:
Abstract: Leadership could refer to holding official leadership positions or advocating for patients and the profession. Different pharmacy organizations recommend the inclusion of leadership development in pharmacy education and as such some pharmacy schools have introduced courses or various initiatives which support the development of leadership skills. In this commentary, we discuss means by which various pharmacy schools incorporate ways to develop leadership skills. This commentary also addresses the competencies used to assess leadership skills in pharmacy education., Supplementary

[Technicians' perception of pharmacist leadership behaviors on their own commitment and turnover intention](#) Abstract only*
Item Type: Generic
Author: Desselle, Shane P., Wasem, Valerie, Hosseini, Sina, Hohmeier, Kenneth C., Woodyard, Ashley and McKeirnan, Kimberly C.
Publication Date: 2022
Publication Details: American Journal of Health-System Pharmacy : AJHP : Official Journal of the American Society of Health-System Pharmacists, 79, (24) pp.2244-2252. , England:

Abstract: PURPOSE: To evaluate technicians' perceptions of how they are supported and supervised by pharmacists through assessment of various components of pharmacists' leadership behaviors in developing the technician workforce. Additional objectives included evaluating levels of pharmacy technician uncertainty about their future, job commitment, and turnover intention in relation to perceived pharmacist leadership behaviors., METHODS: This study employed a cross-sectional design involving administration of an online questionnaire survey. The target population was technicians certified through the National Healthcareer Association. The questionnaire was disseminated to a random, nationwide sample of 3,000 technicians. It solicited responses to an adapted version of the Multifactorial Leadership Questionnaire (MLQ), a 29-item instrument for measuring the frequency of observed pharmacist supervisory behaviors, which are categorized as transactional, transformative, or both. The questionnaire also inquired as to respondents' levels of future uncertainty, profession commitment, organization commitment, and turnover intentions., RESULTS: Responses were acquired from 882 certified pharmacy technicians, who reported their observance of pharmacy supervisory behaviors, as measured by the adapted MLQ, with moderate frequency. Higher technician-reported levels of transformative leadership behavior by pharmacists were associated with lower levels of future uncertainty, greater profession and organization commitment, and diminished turnover intentions., CONCLUSION: Pharmacists' supervisory behaviors, namely transformative leadership behaviors, may be impactful to pharmacy technicians' attitudes and work-related outcomes. The pharmacy profession's leaders and educators might consider these results in educating current and future pharmacists so as to improve the workplace and, potentially, organizational and profession-wide outcomes in the delivery of care.

[Assessing the Impact of a Global Health Fellowship on Pharmacists' Leadership Skills and Consideration of Benefits to the National Health Service (NHS) in the United Kingdom](#)
Item Type: Generic
Author: Brandish, Claire, Garraghan, Frances, Ng, Bee Yean, Russell-Hobbs, Kate, Olaoye, Omotayo and Ashiru-Oredope, Diane
Publication Date: 2021
Publication Details: Healthcare (Basel, Switzerland), 9, (7) , Switzerland:

Abstract: Antimicrobial resistance (AMR) poses a global, public health concern that affects humans, animals and the environment. The UK Fleming Fund's Commonwealth Partnerships for Antimicrobial Stewardship (CwPAMS) scheme aimed to support antimicrobial stewardship initiatives to tackle AMR through a health partnership model that utilises volunteers. There is evidence to indicate that NHS staff participating in international health projects develop leadership

skills. Running in parallel with the CwPAMS scheme was the first Chief Pharmaceutical Officer's Global Health (CPhOGH) Fellowship for pharmacists in the UK. In this manuscript, we evaluate the impact, if any, of participation in the CwPAMS scheme and the CPhOGH Fellowship, particularly in relation to leadership skills, and consider if there are demonstrable benefits for the NHS. The 16 CPhOGH Fellows were invited to complete anonymised baseline and post-Fellowship self-assessment. This considered the impact of the Fellowship on personal, professional and leadership development. Senior colleagues were invited to provide insights into how the Fellows had performed over the course of the Fellowship. All Fellows responded to both the pre- and post-Fellowship questionnaires with a return of 100% (16/16) response rate. There was a significant improvement in Fellows' perception of their confidence, teaching abilities, understanding of behaviour change, management and communication skills. However, there was no change in the Fellows' attitude to work. Feedback was received from 26 senior colleagues for 14 of the CPhOGH Fellows. Overall, senior colleagues considered CPhOGH Fellows to progress from proficient/established competencies to strong/excellent when using the national pharmacy Peer Assessment Tool and NHS Healthcare Leadership Model. The majority (88%) of senior colleagues would recommend the Fellowship to other pharmacists. The analysis of the data provided suggests that this CPhOGH Fellowship led to the upskilling of more confident, motivated pharmacist leaders with a passion for global health. This supports the NHS's long-term plan "to strengthen and support good compassionate and diverse leadership at all levels". Constructive feedback was received for improvements to the Fellowship. Job satisfaction and motivation improved, with seven CPhOGH Fellows reporting a change in job role and five receiving a promotion.

[Community pharmacists' perceptions of leadership](#) Abstract only*
Item Type: Generic
Author: Gregory, Paul Am, Seuthprachack, Winston and Austin, Zubin
Publication Date: 2020
Publication Details: Research in social & administrative pharmacy : RSAP, 16, (12) pp.1737-1745. , United States:

Abstract: BACKGROUND: Concerns have been expressed regarding a "leadership crisis" in pharmacy. Previous research has identified potential barriers to pharmacists assuming leadership roles and signposted opportunities for further exploration of leadership issues in the profession related to psychological comfort with use of power., OBJECTIVES: This study explored community pharmacists' perceptions of the effectiveness and impact of power leveraged by formal and informal pharmacy leaders., METHODS: A theoretical framework based on Raven's 7 Sources of Power model was used to guide this research. Semi-structured interviews with community pharmacists in Ontario, Canada were undertaken, and data were coded and categorized using this framework., FINDINGS: 29 pharmacists participated in this study. Participants in this study highlighted over-reliance on charismatic power, underuse of rewards and punishments, and general lack of effectiveness or impact in use of informational, expertise, positional, and relational powers amongst pharmacy leaders. Opportunities to broaden the power repertoire of pharmacy leaders, including leadership education, were identified as potentially valuable for individual leaders and the profession as a whole., CONCLUSIONS: Effectively leveraging power is important for leaders. This study has highlighted patterns of power use amongst community pharmacy leaders and identified opportunities for further research in this area and for continuing professional development for leaders. Copyright © 2020. Published by Elsevier Inc.

New and emerging roles

[Cultures of support and resilience are associated with certified pharmacy technicians embracing new roles](#) Abstract only*
Item Type: Generic
Author: Desselle, Shane P., Wasem, Valerie, Woodyard, Ashley, Hosseini, Sina, Hohmeier, Kenneth C. and McKeirnan, Kimberly C.
Publication Date: 2023
Publication Details: Research in social & administrative pharmacy : RSAP, 19, (2) pp.316-321. , United States:
Abstract: BACKGROUND: Various technological, economic, and regulatory factors are creating opportunities for pharmacy technicians to take on additional responsibilities. Technicians in the broader sense have indicated a preference for expanded scope of duties; however, it is not known what drives technicians' greater inclinations to accept these new roles., OBJECTIVE: The purpose of this study was to determine the association of various work-related factors, such as co-worker support, pharmacist-leadership style, future uncertainty, their own organizational commitment, and personal characteristics of technicians, including their resilience, on pharmacy technicians' willingness to take on emerging responsibilities in pharmacy., METHODS: A self-administered questionnaire survey was disseminated through email to a national, randomized sample of 3000 technicians certified through the National Healthcareer Association (NHA). The questionnaire solicited data on willingness to participate in either of 13 emerging responsibilities as well as resilience, perceived transformative leadership behaviors of supervising pharmacists, future uncertainty, coworker support, organizational commitment, and various personal and practice-related variables. Following the use of principal component analyses for item purification and summation of various scale responses, inferential analyses were conducted via independent sample t-tests, one way analyses of variance, and Pearson's product moment correlation, as appropriate., RESULTS: From 2906 surveys delivered, 878 were returned, with 745 of them providing completed responses on willingness to participate in emerging responsibilities. Willingness on most items/responsibilities was highly rated, with many means being at least 4 on a 5-point scale, though some were lower and perhaps a reflection of less exposure to these by way of their personal experience orpractice setting. Technicians' resilience, their coworker support, organizational commitment, and perceived transformative behaviors undertaken by their supervising pharmacists were all highly associated with willingness to engage., CONCLUSIONS: Pharmacists, pharmacy technician peers, and organizations can contribute to a culture that is supportive for pharmacy technicians and may serve to encourage commitment, resilience, and willingness to embrace new, or emerging responsibilities. Copyright © 2022 Elsevier Inc. All rights reserved.

[Expanding pharmacy roles and the interprofessional experience in primary healthcare: a qualitative study](#) Full text available with NHS OpenAthens account*
Author(s): Silvaggi et al.
Source: Journal of Interprofessional Care 31(1)
Publication date: January 2017
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.

Examining the emerging roles for pharmacists as part of the urgent, acute and emergency care workforce
Author(s): Aiello et al.
Source: Pharmaceutical Journal
In the future urgent, acute and emergency medicine clinical workforce, new models of care and care delivery need to be developed, in order to maintain and enhance standards of safe and accessible patient care. A departure from traditional (doctor-led) approaches to workforce planning, and an understanding of scope and governance surrounding emerging clinical roles is necessary to develop a sustainable, multi-skilled workforce across primary, community and secondary care.

New roles in pharmacy – learning from the All Wales Common Ailments Scheme
Author(s): Mantzourani et al.
Source: International Journal of Pharmacy Practice 24 pp. 298-102
Publication date: 2016
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. Methods Methods used were semi-structured interviews with stakeholders involved in development and delivery of the CAS. Snowball sampling was employed and invites were extended to eight of 13 pharmacies offering CAS in Cwm Taf LHB, the practice managers at two associated general practitioner surgeries and two local and national level commissioners. Key findings The benefits of encouraging self-care by patients were widely recognised in terms of their impact on patients, health professionals and wider society. Although some challenges of introducing a new service were identified, these did not appear to be insurmountable. Conclusions CAS 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.

Protected UK – Clinical pharmacist interventions in the UK critical care unit: exploration of relationship between intervention, service characteristics and experience level
Author(s): Rudall et al.
Source: The International Journal of Pharmacy Practice
Publication date: August 2017
PURPOSE Clinical pharmacist (CP) interventions from the PROTECTED-UK cohort, a multi-site critical care interventions study, were further analysed to assess effects of: time on critical care, number of interventions, CP expertise and days of week, on impact of intervention and ultimately contribution to patient care. METHODS Intervention data were collected from 21 adult critical care units over 14 days. Interventions could be error, optimisation or consults, and were blind-coded to ensure consistency, prior to bivariate analysis. Pharmacy service demographics were further collated by investigator survey. KEY FINDINGS Of the 20 758 prescriptions reviewed, 3375 interventions were made (intervention rate 16.1%). CPs spent

3.5 h per day (mean, ±SD 1.7) on direct patient care, reviewed 10.3 patients per day (±SD 4.2) and required 22.5 min (±SD 9.5) per review. Intervention rate had a moderate inverse correlation with the time the pharmacist spent on critical care (P = 0.05; r = 0.4). Optimisation rate had a strong inverse association with total number of prescriptions reviewed per day (P = 0.001; r = 0.7). A consultant CP had a moderate inverse correlation with number of errors identified (P = 0.008; r = 0.6). No correlation existed between the presence of electronic prescribing in critical care and any intervention rate. Few centres provided weekend services, although the intervention rate was significantly higher on weekends than weekdays. CONCLUSIONS A CP is essential for safe and optimised patient medication therapy; an extended and developed pharmacy service is expected to reduce errors. CP services should be adequately staffed to enable adequate time for prescription review and maximal therapy optimisation.

New ways of working

[Releasing GP capacity with pharmacy prescribing support and new ways of working: a prospective observational cohort study](#)
Author(s): Maskrey et al.
Source: British Journal of General Practice 68(675)
Publication date: 2018
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. Design and setting Prospective observational cohort study in 16 urban general practices that comprise Inverclyde Health and Social Care Partnership in Scotland. Method GPs recorded the time they spent dealing with special requests, immediate discharges,

outpatient requests, and other prescribing issues for 2 weeks prior to the study and for two equivalent periods during the study. Specialist clinical pharmacists performed these key prescribing activities to release GP time and Read coded their activities. GP and practice staff were surveyed to assess their expectations at baseline and their experiences during the final data-collection period. Prescribing support staff were also surveyed during the study period. Results GP time spent on key prescribing activities significantly reduced by 51% (79 hours, P<0.001) per week, equating to 4.9 hours (95% confidence interval = 3.4 to 6.4) per week per practice. The additional clinical pharmacist resource was well received and appreciated by GPs and practices. As well as freeing up GP capacity, practices and practitioners also identified improvements in patient safety, positive effects on staff morale, and reductions in stress. Prescribing support staff also indicated that the initiative had a positive impact on job satisfaction and was considered sustainable, although practice expectations and time constraints created new challenges. 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.

Primary care

[Community pharmacy teams' experiences of general practice-based pharmacists: an exploratory qualitative study](#)
Author(s): Karampatakis et al.
Source: BMC Health Services Research 20(431)
Publication date: 2020
Background: In England, since 2015, there has been a formal drive to integrate pharmacists into general practice as a new healthcare service. Research efforts have offered insights into

how general practice-based professionals and patients view the service, however, they took no account of community pharmacy teams' opinions. There have been anecdotal statements about opposition from community pharmacies to the service, due to fears of losing business. The aim of the current study was to identify the experiences and perceptions of community pharmacy teams regarding pharmacists' presence in general practice. Methods: The National Health Service Choices website was used to identify community pharmacies within a radius of two miles from eight West London general practices. The search resulted in 104 community pharmacies which were all contacted via telephone. Pharmacy staff who verbally expressed their interest to participate were then provided with the study's documents. Qualitative, face-to-face, semi-structured interviews were conducted inside the pharmacy from which each participant was recruited. Interviews lasted 30 to 45 min and were audio-recorded. Audio-recordings were transcribed verbatim and transcripts analysed thematically. Results: Forty-eight community pharmacy staff participated. Four themes were discerned: awareness ("I knew that [pharmacists] have already been implemented [in general practice] but I haven't really followed it … where does the pharmacist role come?"); interactions ("I'm just so pleased that there's a pharmacist professional in the general practice … because we speak the same language!"); patient care ("if I was a patient knowing that there is a general practitioner and a pharmacist [in general practice], I would … think 'nothing can go wrong at the moment'"); and funding challenges ("if general practices take on the extra responsibility of stop smoking or flu vaccination campaigns … financially, this would affect this pharmacy"). Conclusions: The current study revealed the perceived impact of general practice-based pharmacists on community pharmacies would be improved communication between pharmacies and practices. Findings will inform policy so that any future framing of pharmacists' presence in general practice considers the needs of community pharmacies.

[Pharmacist joint-working with general practices: evaluating the Sheffield Primary Care Pharmacy Programme: a mixed-methods study](#)
Author(s): Marques et al.
Source: BJGP Open 2(4)
Publication date: 2018
Background The NHS in the UK supports pharmacists' deployment into general practices. This article reports on the implementation and impact of the Primary Care Pharmacy Programme (PCPP). The programme is a care delivery model that was undertaken at scale across a city in which community pharmacists (CPs) were matched with general practices and performed clinical duties for one half-day per week. Aim To investigate (a) challenges of integration of CPs in general practices, and (b) the perceived impact on care delivery and community pharmacy practice. Design & setting This mixed-methods study was conducted with CPs, community pharmacy employers (CPEs), scheme commissioners (SCs), and patients in Sheffield. Method Semi-structured interviews (n = 22) took place with CPs (n = 12), CPEs (n = 2), SCs (n = 3), and patients (n = 5). A cross-sectional survey of PCPP pharmacists (n = 47, 66%) was also used. A descriptive analysis of patient feedback forms was undertaken and a database of pharmacist activities was created. Results Eighty-six of 88 practices deployed a pharmacist. Although community pharmacy contracting and backfill arrangements were sometimes complicated, timely deployment was achieved. Development of closer relationships appeared to facilitate extension of initially agreed roles, including transition from 'backroom' to patient-facing clinical work. CPs gained understanding of GP processes and patients' primary care pathway, allowing them to follow up work at the community pharmacy in a more timely

way, positively impacting on patients' and healthcare professionals' perceived delivery of care. Conclusion The PCPP scheme was the first of its kind to achieve almost universal uptake by GPs throughout a large city. The study findings reveal the potential for CP–GP joint-working in increasing perceived positive care delivery and reducing fragmented care, and can inform future implementation at scale and at practice level.

Perspectives of pharmacists in general practice from qualitative focus groups with patients during a pilot study
Item Type: Generic
Author: Mann, Claire, Anderson, Claire, Boyd, Matthew, Karsan, Yasmin and Emerson, Tristan
Publication Date: 2022
Publication Details: BJGP open, 6, (2) , England:
Abstract: BACKGROUND: Utilising skill mix in general practice is proposed as a solution to the demand-supply issue. Pharmacists can play an important role in this context, leading to an increase in training and funding for independent prescriber roles. A role for pharmacists in general practice was funded, piloted, and evaluated by NHS England (NHSE) from 2015., AIM: To answer the following question: what is the patient perspective of pharmacists in patient-facing roles in general practice in the UK?, DESIGN & SETTING: Focus group interviews exploring patient perspectives on the pharmacist role in the UK., METHOD: Thirty-four patients were interviewed in five focus group (January-December 2016). Data were iteratively analysed using the one sheet of paper technique., RESULTS: While the public were aware of the primary care crisis, they were less well informed about potential solutions. Data showed patients primarily sought access to a clinician over expressing a preference for any type of clinician. Low awareness was shown about the pharmacist role and there was initial confusion about it. Acceptability levels were high. It was

found that pharmacists added value and provided an expert medication-focused service, which had a positive impact on medicines use. Patients reported benefit from longer appointments, feeling they were not rushed, and that all their conditions were being considered holistically. They trusted pharmacists as experts in medication and trust was consolidated over time. Regular coaching from a pharmacist could lead to improved patient self-monitoring and self-care., CONCLUSION: Pharmacists can add value to the general practice team and this is recognised by patients. Copyright © 2022, The Authors.

Integration of a clinical pharmacist workforce into newly forming primary care networks: a qualitatively driven, complex systems analysis
Item Type: Generic
Author: Mills, Thomas, Madden, Mary, Stewart, Duncan, Gough, Brendan and McCambridge, Jim
Publication Date: 2022
Publication Details: BMJ open, 12, (11) pp.e066025. , England:
Abstract: OBJECTIVE: The introduction of a new clinical pharmacist workforce via Primary Care Networks (PCNs) is a recent national policy development in the National Health Service in England. This study elicits the perspectives of people with responsibility for local implementation of this national policy package. Attention to local delivery is necessary to understand the contextual factors shaping the integration of the new clinical pharmacy workforce, and thus can be expected to influence future role development., DESIGN: A qualitative, interview study SETTING AND PARTICIPANTS: PCN Clinical Directors and senior pharmacists across 17 PCNs in England (n=28) ANALYSIS: Interviews were transcribed, coded and organised using the framework method. Thematic analysis and complex systems modelling were then undertaken iteratively to develop the themes., RESULTS: Findings were organised into two

overarching themes: (1) local organisational innovations of a national policy under conditions of uncertainty; and (2) local multiprofessional decision-making on clinical pharmacy workforce integration and initial task assignment. Although a phased implementation of the PCN package was planned, the findings suggest that processes of PCN formation and clinical pharmacist workforce integration were closely intertwined, with underpinning decisions taking place under conditions of considerable uncertainty and workforce pressures., CONCLUSIONS: National policy decisions that required General Practitioners to form PCNs at the same time as they integrated a new workforce risked undermining the potential of both PCNs and the new workforce. PCNs require time and support to fully form and integrate clinical pharmacists if successful role development is to occur. Efforts to incentivise delivery of PCN pharmacy services in future must be responsive to local capacity. Copyright © Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY. Published by BMJ.

Inequalities in the distribution of the general practice workforce in England: a practice-level longitudinal analysis
Item Type: Generic
Author: Nussbaum, Claire, Massou, Efthalia, Fisher, Rebecca, Morciano, Marcello, Harmer, Rachel and Ford, John
Publication Date: 2021
Publication Details: BJGP open, 5, (5) , England:
Abstract: 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: 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: The slope indices of inequality (SIIs) 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., RESULTS: 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: 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.

Community pharmacy teams' experiences of general practice-based pharmacists: An exploratory qualitative study
Item Type: Generic
Author: Karampatakis, G. D., Patel, N., Stretch, G. and Ryan, K.
Publication Date: 2020
Publication Details: BMC Health Services Research, 20, (1) pp.431. , United Kingdom: BioMed Central Ltd. (E-mail: info@biomedcentral.com).
Abstract: Background: In England, since 2015, there has been

a formal drive to integrate pharmacists into general practice as a new healthcare service. Research efforts have offered insights into how general practice-based professionals and patients view the service, however, they took no account of community pharmacy teams' opinions. There have been anecdotal statements about opposition from community pharmacies to the service, due to fears of losing business. The aim of the current study was to identify the experiences and perceptions of community pharmacy teams regarding pharmacists' presence in general practice. Method(s): The National Health Service Choices website was used to identify community pharmacies within a radius of two miles from eight West London general practices. The search resulted in 104 community pharmacies which were all contacted via telephone. Pharmacy staff who verbally expressed their interest to participate were then provided with the study's documents. Qualitative, face-to-face, semi-structured interviews were conducted inside the pharmacy from which each participant was recruited. Interviews lasted 30 to 45 min and were audio-recorded. Audio-recordings were transcribed verbatim and transcripts analysed thematically. Result(s): Forty-eight community pharmacy staff participated. Four themes were discerned: awareness ("I knew that pharmacists] have already been implemented in general practice] but I haven't really followed it where does the pharmacist role come?"); interactions ("I'm just so pleased that there's a pharmacist professional in the general practice because we speak the same language!"); patient care ("if I was a patient knowing that there is a general practitioner and a pharmacist in general practice], I would think 'nothing can go wrong at the moment'"); and funding challenges ("if general practices take on the extra responsibility of stop smoking or flu vaccination campaigns financially, this would affect this pharmacy"). Conclusion(s): The current study revealed the perceived impact of general practice-based pharmacists on community pharmacies would be improved communication between pharmacies and practices. Findings will inform policy so that any future framing of pharmacists' presence in general practice considers the needs of community pharmacies. Copyright © 2020 The Author(s).

A cross-sectional survey of the pharmacy workforce in general practice in Scotland
Item Type: Generic
Author: Stewart, D., Maclure, K., Newham, R., Gibson-Smith, K., Bruce, R., Cunningham, S., Maclure, A., Fry, S., Mackerrow, J. and Bennie, M.
Publication Date: 2020
Publication Details: Family practice, 37, (2) pp.206-212. , United Kingdom: NLM (Medline).

Abstract: BACKGROUND: In Scotland, there has been significant investment in pharmacy teams in general medical practices over recent years, aligned to current government policy. OBJECTIVE(S): To characterize the national pharmacy workforce including activities undertaken, perceived competence and confidence, as well as perception of integration of the intervention. METHOD(S): 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. RESULT(S): 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 <= 0.001. CONCLUSION(S): 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.Copyright © The Author(s) 2019. Published by Oxford University Press. All rights reserved.For permissions, please e-mail: journals.permissions@oup.com.

Role definition if key – rapid qualitative ethnography findings from a team-based primary care transformation
Author(s): Brown-Johnson et al.
Source: Learning Health Systems 3
Publication date: 2019
Purpose: Implementing team-based care into existing primary care is challenging; understanding facilitators and barriers to implementation is critical. We assessed adoption and acceptability of new roles in the first 6 months of launching a team-based care model focused on preventive care, population health, and psychosocial support. Methods: We conducted qualitative rapid ethnography at a community-based test clinic, including 74 hours of observations and 28 semi-structured interviews. We identified implementation themes related to team-based care and specifically the integration of three roles purposively designed to enhance coordination for better patient outcomes, including preventive screening and mental health: (1) medical assistants as care coordinators; (2) extended care team specialists, including clinical pharmacist and behavioral

health professional; and (3) advanced practice providers (APPs)—ie, nurse practitioners and physician assistants. Results: All stakeholders (ie, patients, providers, and staff) reported positive perceptions of care coordinators and extended care specialists; these roles were well defined and quickly implemented. Care coordinators effectively managed care between visits and established strong patient relationships. Specialist colocation facilitated patient access and well-supported diabetes services and mental health care. We also observed unanticipated value: Care coordinators relayed encounter-relevant chart information to providers while scribing; extended care specialists supported informal continuing medical education. In contrast, we observed uncertain definition and expectations of the APP role across stakeholders; accordingly, adoption and acceptability of the role varied. Conclusions: Practice redesign can redistribute responsibility and patient connection throughout a team but should emphasize well-defined roles. Ethnography, conducted early in implementation with multistakeholder perspectives, can provide rapid and actionable insights about where roles may need refinement or redefinition to support ultimate physical and mental health outcomes for patients.

What can pharmacists do in general practice? A pilot
Author(s): Deeks et al.
Source: Australian Journal of General Practice 47(8)
Publication date: August 2018
Background and objectives: Non-dispensing pharmacists are being suggested as a useful addition to the workforce in general practice. The aim of this study was to describe the activities of three general practice pharmacists over six months in a pilot trial. Method: Three general practices integrated a part-time (15.2-16 hours per week) non-dispensing pharmacist to be employed according to their individual skillset and local workplace needs. Each general practice pharmacist maintained

a daily activity diary, which was subsequently analysed. Results: The general practice pharmacists' activities were categorised as quality of practice (37%), administration (34%), medication review (19%) and patient education (11%). Within the quality of practice category, most time was spent conducting clinical audits (47%). Over the course of the six months, time spent on administration decreased, while time communicating with general practitioners (GPs) on clinical issues increased. Discussion: The general practice pharmacists conducted a range of predominantly clinically related activities involving their expertise in the quality use of medications. Involvement in clinical activities to support GPs increased with time working in the practice. Randomised controlled trials are required to collect clinical outcomes and determine which activities conducted by pharmacists are most beneficial to Australian patients and GPs.

[Evolution of the general practice pharmacist's role in England: a longitudinal study](#)
Author(s): Bradley et al.
Source: British Journal of General Practice
Background: To address the growing GP workforce crisis, NHS England (NHSE) launched the Clinical Pharmacists in General Practice scheme in 2015. The NHSE scheme promotes a newer, patient-facing role for pharmacists and, currently, there is little insight into the role and activities undertaken. All scheme pharmacists are enrolled on the general practice pharmacist training pathway (GPPTP).Aim: To investigate the role evolution and integration of clinical pharmacists in general practice in England.Design and Setting: Longitudinal survey of all phase 1 GPPTP registrants working in general practice at start of (T1) and 6 months into (T2) training.Method: An online longitudinal survey was administered to all phase 1 GPPTP registrants (n = 457) at T1 and T2, measuring their perceived knowledge, skill, and confidence, activities performed, and perceptions of

practice integration, environment, and support. Descriptive statistics and non-parametric tests were conducted.Results: Response rates were 46% (T1) and 52% (T2); 158 participants completed both questionnaires. Perceived knowledge, skill, and confidence levels increased significantly from T1 to T2 for all areas, except for managing acute or common illness. Scope of practice increased significantly, particularly in patient-facing activities. Sharing office space with administrative staff was common and 13% of participants reported having no designated work area. Perceived integration at T2 was fairly high (median = 5 on a scale of 1-7) but GP clinical support was 'too little' according to one-third of participants.Conclusion: Findings show not only patient-facing role expansion, but also practice environment and support issues. Pharmacists may appreciate more GP time invested in their development. Practices need to be realistic about this support and not expect an immediate reduction in workload.

["Pharming out" support: a promising approach to integrating clinical pharmacists into established primary care medical home practices](#)
Author(s): Bruinsholz et al.
Source: Journal of International Medical Research
Publication date: August 2017
Objective: Embedding clinical pharmacists into ambulatory care settings needs to be assessed in the context of established medical home models. Methods: A retrospective, observational study examined the effectiveness of the Intermountain Healthcare Collaborative Pharmacist Support Services (CPSS) program from 2012–2015 among adult patients diagnosed with diabetes mellitus (DM) and/or high blood pressure (HBP). Patients who attended this program were considered the intervention (CPSS) cohort. These patients were matched using propensity scores with a reference group (no-CPSS cohort) to determine the effect of achieving disease management goals

and time to achievement. Results: A total of 17,684 patients had an in-person office visit with their provider and 359 received CPSS (the matched no-CPSS cohort included 999 patients). CPSS patients were 93% more likely to achieve a blood pressure goal < 140/90 mmHg, 57% more likely to achieve HbA1c values < 8%, and 87% more likely to achieve both disease management goals compared with the reference group. Time to goal achievement demonstrated increasing separation between the study cohorts across the entire study period (P < .001), and specifically, at 180 days post-intervention (HBP: 48% vs 27% P < .001 and DM: 39% vs 30%, P < .05). Conclusions: CPSS participation is associated with significant improvement in achievement of disease management goals, time to achievement, and increased ambulatory encounters compared with the matched no-CPSS cohort.

Recruitment and retention

The Pharmacy Community Apgar Questionnaire: a modified Delphi technique to develop a rural pharmacist recruitment and retention tool
Item Type: Generic
Author: Terry, D. R., Peck, B., Hills, D., Bishop, J., Kirschbaum, M., Obamiro, K. O., Phan, H., Baker, E. and Schmitz, D.
Publication Date: 2022
Publication Details: Rural and remote health, 22, (4) pp.7347. , Australia: NLM (Medline).
Abstract: INTRODUCTION: An adequate healthcare workforce remains essential for the health of rural communities. Strategies to address rural health workforce challenges have often centred on the medical and nursing workforce; however, addressing the rural pharmacist workforce also remains critical as they are often the first point of contact for health advice. Initiatives have increased pharmacist supply; however, key issues such as poor attraction, recruitment, and retention to rural areas remain. The aim of this study was to support the recruitment and retention of pharmacists in rural areas of Australia through the development of the Pharmacy Community Apgar Questionnaire (PharmCAQ). METHOD(S): A modified Delphi technique was employed to develop the PharmCAQ. A panel of experts were purposively selected. Eight representatives were from organisations with rural experience relevant to the study including the Society of Hospital Pharmacists of Australia, the Pharmaceutical Society of Australia, the Pharmacy Guild of Australia, the Pharmacy Board of Australia, and a representative of a government health agency, who also leads a hospital pharmacy. Three additional participants included local and international academics with health policy and rural health workforce expertise. All participants participated in three separate focus groups of 45-60 minutes duration, where the review and refinement of factors that drive recruitment and retention of pharmacist were discussed. Face and content validity was achieved through the representatives, while internal consistency was achieved when the tool was piloted among 10 rural pharmacists in rural Victoria. RESULT(S): Fifty key factors that impact the recruitment and retention of pharmacists were identified, developed and succinctly described. All factors were grouped into five classifications: (1) geographic, (2) economic and resources, (3) practice and scope of practice, (4) practice environment and (5) community practice support. After final consensus, the factors and their definitions formed the final questionnaire. Lastly, the reliability of PharmCAQ was determined, with a Cronbach's alpha coefficient of 0.852. CONCLUSION(S): While the development and use of the Apgar questionnaire for the recruitment and retention of health professionals is not a novel idea, seeking to specifically focus on pharmacists is unique. However, 10 factors were similar to factors associated with rural recruitment and retention of both physicians and nurses; they encompassed geographic, community support, and economic and resource factors.

Regardless of similarities or differences between health professions in terms of recruitment and retention, as a mechanism for addressing the worsening health professional shortage currently experienced in rural areas, the PharmCAQ was developed to support the recruitment and retention of the pharmacist workforce in rural areas.

[Sustaining rural pharmacy workforce understanding key attributes for enhanced retention and recruitment](#) Abstract only*
Item Type: Generic
Author: Terry, Daniel, Peck, Blake, Hills, Danny, Bishop, Jaclyn, Kirschbaum, Mark, Obamiro, Kehinde, Phan, Hoang, Baker, Ed and Schmitz, David
Publication Date: 2022
Publication Details: The Australian Journal of Rural Health, , Australia:
Abstract: OBJECTIVE: To pilot the Pharmacist Community Apgar Questionnaire (PharmCAQ) and evaluate its usability and capacity to develop a greater understanding of the unique factors that impact the rural recruitment and retention of pharmacists., DESIGN: Cross-sectional design involving face-to-face, telephone or video conferencing interviews., SETTING: Twelve rural communities across Tasmania and Western Victoria, Australia., PARTICIPANTS: Participants (n = 24) included pharmacists, a Director of Clinical Services, pharmacy practice managers and senior pharmacy assistants., MAIN OUTCOME MEASURES: Interviews enabled the completion of the PharmCAQ, which assigns quantitative values to 50 key factors to ascertain a community's strengths and challenges associated with recruitment and retention and their relative importance to the pharmacist workforce., RESULTS: The cumulative PharmCAQ scores indicated the tool was sensitive enough to differentiate high- and low-performing communities. Overall, the highest-rated factors considered most vital to pharmacist recruitment and retention were the reputation of the

pharmacy, the ability of the pharmacist to be independent and autonomous, the loyalty of the community to the pharmacy, the level and stability of monetary compensation and the breadth of tasks available to a pharmacist., CONCLUSIONS: This study identified the strengths and challenges of participating communities and provided an insight into the shared factors to consider in recruiting and retaining pharmacists. Further, each community has unique strengths that can further be promoted in recruitment, flagging where limited resources are best used to address site specific challenges. This is more likely to ensure the matching of the right candidate with the right community. Copyright © 2022 The Authors. Australian Journal of Rural Health published by John Wiley & Sons Australia, Ltd on behalf of National Rural Health Alliance Ltd.

[Factors contributing to the recruitment and retention of rural pharmacist workforce: a systematic review](#)
Item Type: Generic
Author: Terry, D., Phan, H., Peck, B., Hills, D., Kirschbaum, M., Bishop, J., Obamiro, K., Hoang, H., Nguyen, H., Baker, E. and Schmitz, D.
Publication Date: 2021
Publication Details: BMC health services research, 21, (1) pp.1052. , United Kingdom: NLM (Medline).
Abstract: BACKGROUND: Recruiting and retaining medical, nursing, and allied health professionals in rural and remote areas is a worldwide challenge, compromising continuity of care and population health outcomes in these locations. Specifically, pharmacists play an essential and accessible frontline healthcare role, and are often the first point of contact for health concerns. Despite several incentives, there remains a maldistribution and undersupply of pharmacists in rural and remote areas across many parts of the world. Although current systematic reviews have focussed on factors affecting pharmacists' retention generally, literature specifically focused

on rural pharmacist workforce in a global context remains limited. The aim of this systematic review is to identify factors associated with recruitment and retention of the pharmacist workforce in rural and remote settings. Better understanding of these contributors will inform more effective interventional strategies to resolve pharmacist workforce shortages. METHOD(S): A systematic search of primary studies was conducted in online databases, including Medline, Embase, CINAHL, Scopus, Web of Science and PsycINFO, and by hand-searching of reference lists. Eligible studies were identified based on predefined inclusion/exclusion criteria and methodological quality criteria, utilising the Critical Appraisal Skills Programme (CASP) and Good Reporting of A Mixed Methods Study (GRAMMS) checklists. RESULT(S): The final review included 13 studies, with quantitative, qualitative, or mixed methods research design. Study-specific factors associated with recruitment and retention of pharmacists in rural practice were identified and grouped into five main themes: geographic and family-related, economic and resources, scope of practice or skills development, the practice environment, and community and practice support factors. CONCLUSION(S): The results provide critical insights into the complexities of rural recruitment and retention of pharmacists and confirms the need for flexible yet multifaceted responses to overcoming rural pharmacist workforce challenges. Overall, the results provide an opportunity for rural communities and health services to better identify key strengths and challenges unique to the rural and remote pharmacist workforce that may be augmented to guide more focussed recruitment and retention endeavours.Copyright © 2021. The Author(s).

[Strategies to increase the pharmacist workforce in rural and remote Australia: a scoping review](#)
Item Type: Generic
Author: Obamiro, K. O., Tesfaye, W. H. and Barnett, T.

Abstract: INTRODUCTION: Despite reports suggesting an oversupply of pharmacists, there is currently an inadequate supply in rural and remote Australia. This can lead to a reduction in pharmaceutical services for an already vulnerable population. The objective of this study was to identify strategies for increasing the pharmacist workforce and factors associated with retention in rural and remote Australia Methods: Database searches of Ovid Medline (Medline and Embase), CINAHL and Scopus were conducted. Full text of relevant studies conducted in Australia, reported in English and published between 2000 and 2019 were retrieved. The record titles were independently screened by two investigators, after which abstracts of disputed articles were collected for further evaluation. Where agreement could not be reached, a third independent investigator screened the residual articles for inclusion or exclusion. RESULT(S): Overall, 13 articles focusing on the pharmacy profession were retrieved. Strategies that have been employed to increase the rural and remote pharmacist workforce include the establishment of pharmacy schools in rural areas, inclusion of rural content in undergraduate pharmacy curriculum, enrolment of students from rural backgrounds, rural placement and employment of sessional pharmacists. Factors associated with retention were personal, workplace or community factors. CONCLUSION(S): There is limited research focusing on the recruitment and retention of pharmacists in rural and remote Australia. Given that pharmacies in rural and remote areas are very accessible and often function as one-stop health hubs, additional personal, workplace and community support should be provided for rural pharmacists and pharmacy students undergoing placements in rural and remote communities.

Skill mix

[Skill-mix change in general practice: a qualitative comparison of three 'new' non-medical roles in English primary care](#)
Author(s): Nelson et al.
Source: British Journal of General Practice
Publication date: July 2019

BACKGROUND General practice is currently facing a significant workforce challenge. Changing the general practice skill mix by introducing new non-medical roles is recommended as one solution; the literature highlights that organisational and/or operational difficulties are associated with skill-mix changes. AIM To compare how three non-medical roles were being established in general practice, understand common implementation barriers, and identify measurable impacts or unintended consequences. DESIGN AND SETTING In-depth qualitative comparison of three role initiatives in general practices in one area of Greater Manchester, England; that is, advanced practitioner and physician associate training schemes, and a locally commissioned practice pharmacist service. METHOD Semi-structured interviews and focus groups with a purposive sample of stakeholders involved in the implementation of each role initiative were conducted. Template analysis enabled the production of pre-determined and researcher-generated codes, categories, and themes. RESULTS The final sample contained 38 stakeholders comprising training/service leads, role holders, and host practice staff. Three key themes captured participants' perspectives: purpose and place of new roles in general practice, involving unclear role definition and tension at professional boundaries; transition of new roles into general practice, involving risk management, closing training-practice gaps and managing expectations; and future of new roles in general practice, involving demonstrating impact and questions about sustainability. CONCLUSION This in-depth, in-context comparative study highlights that introducing new roles to general practice is not a simple process. Recognition of factors affecting the assimilation of roles may help to better align them with the goals of general practice and harness the commitment of individual practices to enable role sustainability.

Staff experiences and perceptions

[Pharmacists' perceptions of their emerging general practice roles in UK primary care: a qualitative interview study](#)
Author(s): Butterworth et al.
Source: British Journal; of General Practice
Publication date: September 2017
Background: UK general practice is experiencing a workload crisis. Pharmacists are the third largest healthcare profession in the UK; however, their skills are a currently underutilised and potentially highly valuable resource for primary health care. This study forms part of the evaluation of an innovative training programme for pharmacists who are interested in extended roles in primary care, advocated by a UK collaborative '10-point GP workforce action plan'.Aim: To explore pharmacists' perceptions of primary care roles including the potential for greater integration of their profession into general practice.Design and Setting: A qualitative interview study in UK primary care carried out between October 2015 and July 2016.Method: Pharmacists were purposively sampled by level of experience, geographical location, and type of workplace. Two confidential semi-structured telephone interviews were conducted - one before and one after the training programme. A constant comparative, inductive approach to thematic analysis was used.Results: Sixteen participants were interviewed. The themes related to: initial expectations of the general practice role, varying by participants' experience of primary care; the influence of the training course with respect to managing uncertainty, critical appraisal skills, and confidence for the role;

and predictions for the future of this role.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.

[Delegation: a solution to the workload problem? Observations and interviews with community pharmacists in England](#) Abstract only*
Author(s): Lea et al.
Source: International Journal of Pharmacy Practice 24(3)
Publication date: May 2016
Objective: This study aims to describe how pharmacists utilise and perceive delegation in the community setting. Method: Non-participant observations and semi-structured interviews with a convenience sample of community pharmacists working in Kent between July and October 2011. Content analysis was undertaken to determine key themes and the point of theme saturation informed sample size. Findings from observations were also compared against those from interviews. Key findings: Observations and interviews were undertaken with 11 pharmacists. Observations showed that delegation occurred in four different forms: assumed, active, partial and reverse. It was also employed to varying extents within the different pharmacies. Interviews revealed mixed views on delegation. Some pharmacists presented positive attitudes towards delegation while others were concerned about maintaining accountability for delegated tasks, particularly in terms of accuracy checking of dispensed medication. Other pharmacists noted the ability to delegate was not a skill they found inherently easy. Comparison of observation and interview data highlighted discrepancies between tasks pharmacists perceived they delegated and what they actually delegated.
Conclusions: Effective delegation can potentially promote better management of workload to provide pharmacists with additional time to spend on cognitive pharmaceutical services. To do this, pharmacists' reluctance to delegate must be addressed. Lack of insight into own practice might be helped by self-reflection and feedback from staff. Also, a greater understanding of legal accountability in the context of delegation needs to be achieved. Finally, delegation is not just dependent on pharmacists, but also on support staff; ensuring staff are empowered and equipped to take on delegated roles is essential.

Support workforce

[Implementing the pharmacy technician role in existing pharmacy settings: Stakeholders views of barriers and facilitators](#)
Item Type: Generic
Author: Koehler, Tamara, Velthuis, Floor, Helmich, Esther, Westerman, Michiel and Jaarsma, Debbie
Publication Date: 2022
Publication Details: Research in social & administrative pharmacy : RSAP, 18, (10) pp.3814-3820. , United States:
Abstract: BACKGROUND: The field of pharmacy will benefit from pharmacy technicians, a higher educated mid-level support workforce. They support pharmacists in providing pharmaceutical patient care through delegated roles and responsibilities. Empirical research on pharmacy technicians within pharmacy practice community and hospital pharmacy practices tends to focus on the practical outcomes of this workforce addition. It mostly addresses the 'WHAT' of service delivered by pharmacy technicians. Literature on the 'HOW' of their role development in practice is scarce. Furthermore, it

seems difficult for most pharmacy technicians to effectively fulfil this professional role., OBJECTIVE: This qualitative study explored factors influencing role development of pharmacy technicians in community and hospital pharmacies., METHODS: On site, individual and small-group interviews were conducted with pharmacy technicians (n = 10), and two colleagues: pharmacists (n = 7) and pharmacy assistants (n = 6). Interviews were based on a semi-structured interview guide. Participants were asked to describe specific incidents and organisational, relational and pharmaceutical care perspectives, illustrative of the process of developing and implementing the pharmacy technician role. Template analysis was used to develop a list of codes representing themes identified in the data., RESULTS: Five interrelated themes influenced development and implementation of the pharmacy technician role. Two of them were at a more contextual level: (a) experiencing a lack of vision on added value of the new role within the field of pharmacy and (b) learning climate. The other three were related to personal interactions between staff members: (c) role expectations and organisational fit, (d) personal traits of pharmacy technicians and (e) support of pharmacy technicians through task delegation and role enhancement., CONCLUSIONS: The data showed that development and implementation of pharmacy technician roles is a complicated process. A detailed plan for addressing and remediating the five identified themes is important to promote role development of pharmacy technicians. Copyright © 2022 The Authors. Published by Elsevier Inc. All rights reserved.

Technology

[Disruptive innovation in community pharmacy – impact of automation on the pharmacist workforce](#) Abstract only*
Author(s): Spinks et al.

Source: Research in Social and Administrative Pharmacy 13(2) pp. 392-397
Publication date: March 2017
Pharmacy workforce planning has been relatively static for many decades. However, like all industries, health care is exposed to potentially disruptive technological changes. Automated dispensing systems have been available to pharmacy for over a decade and have been applied to a range of repetitive technical processes which are at risk of error, including record keeping, item selection, labeling and dose packing. To date, most applications of this technology have been at the local level, such as hospital pharmacies or single-site community pharmacies. However, widespread implementation of a more centralized automated dispensing model, such as the 'hub and spoke' model currently being debated in the United Kingdom, could cause a 'technology shock,' delivering industry-wide efficiencies, improving medication accessibility and lowering costs to consumers and funding agencies. Some of pharmacists' historical roles may be made redundant, and new roles may be created, decoupling pharmacists to a certain extent from the dispensing and supply process. It may also create an additional opportunity for pharmacists to be acknowledged and renumerated for professional services that extend beyond the dispensary. Such a change would have significant implications for the organization and funding of community pharmacy services as well as pharmacy workforce planning. This paper discusses the prospect of centralized automated dispensing systems and how this may impact on the pharmacy workforce. It concludes that more work needs to be done in the realm of pharmacy workforce planning to ensure that the introduction of any new technology delivers optimal outcomes to consumers, insurers and the pharmacy workforce.

Transitions of care

Role of clinical pharmacists and pharmacy support personnel in transitions of care Abstract only*
Item Type: Generic
Author: Stranges, P. M., Jackevicius, C. A., Anderson, S. L., Bondi, D. S., Danelich, I., Emmons, R. P., Englin, E. F., Hansen, M. L., Nys, C., Phan, H., Philbrick, A. M., Rager, M., Schumacher, C. and Smithgall, S.
Publication Date: 2020
Publication Details: JACCP Journal of the American College of Clinical Pharmacy, 3, (2) pp.532-545. , United States: Blackwell Publishing Ltd.

Abstract: Patients moving between health care settings or providers are at increased risk of complications, including unplanned hospital readmissions and medication errors. Several actions must occur in concert with members of the health care team and across settings to ensure coordinated and continuous care for patients undergoing these transitions of care (TOC). Clinical pharmacists support patients during care transitions by providing interventions and services designed to improve medication outcomes. Clinical pharmacists and team members who support clinical pharmacist activities (eg, pharmacy students, technicians, and residents) are located throughout the care continuum, from acute care to care in the community, with each contributing to improved TOC outcomes. This article provides information on evidence of high-impact clinical pharmacist TOC practices to serve as a practical guide for practitioners interested in starting or improving TOC activities. This article also addresses current and emerging best practices and offers suggestions for improving clinical pharmacist involvement in care transition activities.Copyright © 2020 Pharmacotherapy Publications, Inc.

Documenting the evolution of the relationship between the pharmacy support workforce and pharmacists to support patient care
Source: Research in Social and Administrative Pharmacy 13(2) pp. 280-285
Publication date: 2017
Since 2009 there has been a focus on the relationship between pharmacy technicians, pharmacy support workforce cadres and pharmacists in the literature. 2009–2011 saw a framework of role evolution develop, with publications from 2012 to 2015 documenting further maturity in the development of practice models for improved patient care and optimal use of personnel. The dominant narrative in the published academic literature has been made by certain high- income countries (mainly Canada, Denmark, United Kingdom and the United States of America). In these countries there are significant numbers of pharmacists available and there has been an increasing interest to utilize pharmacy support workforce cadres to allow the extension of clinical roles of pharmacists in these contexts. This is not a systematic presentation of all the literature available but rather a commentary overview supported by key papers. Key points from this literature include:

Upskilling

Can upskilling pharmacy technicians support a robust and cost-effective Inflammatory Bowel Disease patient review process? A single-centre prospective study
Item Type: Generic
Author: Rees, F., Packham, A., St Clair Jones, A. and Smith, M.
Publication Date: 2022
Publication Details: Journal of Crohn's and Colitis, 16, pp.i391-i392. , Netherlands: Oxford University Press.
Abstract: Background: Immunomodulators are key to the management of Inflammatory bowel disease (IBD). To ensure

safety and efficacy, UK guidance recommend immunomodulator review. At University Hospitals Sussex (UHS), reviews are completed by a multi-disciplinary team (MDT), with specialised IBD pharmacists and nurses leading on autonomous blood monitoring and symptom review (figure 1). This workload puts considerable strain on the UHS IBD team. Upskilling and task shifting is recognised as legitimate strategy for service enhancement, care access, cost effectiveness and sustainability plus ensures team flexibility, boosted morale and career progression. The UHS IBD team includes a highly motivated pharmacy technician (PT). In the UK, PT are registered non-prescribing healthcare professionals, but training does not include autonomous blood monitoring and symptom review. Method(s): To ensure competency of autonomous blood monitoring and symptom review, a training package was developed and was approved by UHS Medicines Governance Group. Once accredited, PT prospectively recorded blood monitoring and symptom review activity over, 10-weeks (figure 2 and, 3) and referrals completed (figure 4). Result(s): The training package was completed in, 10 weeks. Over, 10 weeks, PT completed, 699 distinct monitoring activities, with, 57 (8%) needing referral to the specialised pharmacist. The highest proportion of workload was observed in the IBD infusion clinic (314, 45%), followed by thiopurine monitoring (250, 36%) and then 'others' (135, 19%). 'Others' were essential IBD activities including faecal calprotectin levels (FCPL), pre-initiation tests (e.g. thiopurine methyltransferase levels (TPMT), viral screening, t-spots) and medication levels to optimise therapy. All referrals to the specialised pharmacist were appropriate as needed action by a prescribing professional. In addition, PT contributed substantially to data collection for virtual biologic clinic (VBIC) reviews;, 32 patients. Feedback has been overwhelmingly positive from all effected stakeholders (PT, IBD pharmacy and nursing team and gastroenterologists). Conclusion(s): Identifying appropriate tasks and upskilling the

IBD PT has enabled a more cost-effective and efficient use of IBD workflow, care standardisation, team robustness and staff morale. Approved training and support are required to enable upskilling and continued service safety and we recommend that skills are recognised locally and nationally. (Table Presented).

Workforce

"Trying to develop a better workforce": Stakeholders' perspectives of a practice-integrated Australian hospital pharmacist foundation residency program
Item Type: Generic
Author: Sim, Yu Ting, Murray, Carolyn, Marotti, Sally and Kumar, Saravana
Publication Date: 2022
Publication Details: PloS one, 17, (6) pp.e0270051. , United States:

Abstract: BACKGROUND: Practice-integrated education and professional development programs (also known as residencies), have been available to pharmacists in America and the United Kingdom for many years. In 2016, the Society of Hospital Pharmacists of Australia launched Australia's novel Foundation Residency Program to support the development of early-career pharmacists, and has been implemented across many hospitals nationally. This model was adopted by the South Australian (SA) public hospital pharmacy statewide service and was granted full accreditation. The study aimed to explore key stakeholders' expectations and early perceptions of the structure, role and impact of the SA program and in that process, to identify key influencing factors and strategies informing future program planning and design., METHODS: Purpose ful sampling was adopted to recruit participants who oversee preceptors and residents, across all employment levels and pharmacy service sites. Stakeholders participated in

individual semi-structured interviews. Each interview was audio-recorded and transcribed verbatim. The transcribed dataset was managed using NVivo softwareTM (version 10) and analysed using reflexive thematic analysis through the lens of the PRECEDE-PROCEED logic model framework., RESULTS: Thirty-three staff consented to participate. Participants were de-identified with a randomly assigned code number. Three key themes were identified using reflexive thematic analysis; alignment of program goals and visions, culture shift to prioritising workforce development as core business, program structure supports focused workforce development., CONCLUSIONS: Participants view the residency as beneficial for development of the residents, preceptors, and the hospital pharmacy workforce. The multisite structure was a strength of the program. Whilst it was acknowledged that the rotations, cross-site rotations, and research project presented challenges, they were deemed worth the investment. Overall, it was felt that incremental increases in program capacity will occur over time, as culture changes, and as investing in workforce development becomes core business. The findings have led to several key recommendations to guide program expansion.

[Analysis of the demographics and characteristics of the Australian pharmacist workforce 2013-2018: Decreasing supply points to the need for a workforce strategy](#) Abstract only*
Item Type: Generic
Author: Jackson, J. K., Liang, J. and Page, A. T.
Publication Date: 2021
Publication Details: International Journal of Pharmacy Practice, 29, (2) pp.178-185. , United Kingdom: Oxford University Press.
Abstract: Objectives: An adequate workforce is necessary for health care delivery. The last official analysis of the Australian pharmacist workforce was in 2014 and the results of recent studies are contradictory. The objective of this work was to determine current demographic details and recent trends of the pharmacy workforce and assess the impact of changes in student numbers and migration policy. Method(s): Longitudinal and descriptive analysis was undertaken of National Health Workforce Datasets and registrant data available from the Australian Health Practitioner Regulation Agency and the Pharmacy Board of Australia from 2013 to 2018. Key Findings: There was an increase in females and a trend towards hospital practice but no change in the geographic distribution of pharmacists over the period. However, the pharmacist workforce grew more slowly than comparable health professions and while the youngest pharmacist cohort (20-34 years) remains the largest, the next oldest cohort increased at a greater rate. The youngest cohort reported a decrease in intention to remain working in pharmacy. Conclusion(s): A fall in student numbers and changes to immigration policy have contributed to a low growth rate and ageing of the pharmacist workforce compared with other professions. Whether these factors along with the intentions of young pharmacists will result in a shortage is dependent on developments in demand for pharmacists and a workforce strategy is required to monitor these developments.Copyright © 2021 The Author(s) 2021. Published by Oxford University Press on behalf of the Royal Pharmaceutical Society. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com.

[A review of the pharmacy workforce in Northern Ireland](#)
Abstract all available - Scroll to page 68
Item Type: Generic
Author: Cardwell, K., Adair, C. and MacIntyre, J.
Publication Date: 2020
Publication Details: International Journal of Pharmacy Practice, 28, pp.68. , Netherlands: Wiley-Blackwell Publishing Ltd.
Abstract: Introduction: The current cost of medicines within Health and Social Care (HSC) in Northern Ireland (NI) is 600 million. Pharmacists and pharmacy technicians are pivotal in

ensuring the safe and effective use of medicines. As HSC in NI continues to evolve, new services and models of working are needed to enable HSC to deliver on the transformation agenda and meet population needs. To achieve this, workforce planning across all health professions is required1. Aim(s): To inform planning, the Department of Health (DoH) commissioned the Northern Ireland Centre for Learning and Development (NICPLD) to undertake a review of the pharmacy workforce development needs across the three main employed sectors (community, hospital and general practice), covering the period 2019-2029. Method(s): The review was authorised by the DoH through the Medicines Optimisation Steering Group and reported in accordance with the Regional HSC Workforce Planning Framework. A Project Board, consisting of key stakeholders, was formed to oversee the review and ensure input from their respective organisations. Data were collected using focus groups undertaken with key stakeholder organisations. Focus group topic guides were informed by the Project Board to identify constraints to the delivery of pharmacy services in the future. Focus groups were audio-recorded, transcribed verbatim and analysed using thematic analysis; this involved coding of data, collating codes into themes, gathering data relevant to each theme and generation of a thematic map2. Data were also collected using an anonymous questionnaire, circulated to all pharmacists and pharmacy technicians registered with the NICPLD (n = 3137). Result(s): Eight focus groups were conducted with key stakeholder organisations. The overall response rate to the questionnaire was 22%. Key constraints to the provision of future pharmacy services across all sectors were: recruitment challenges, capacity, professional isolation, skill-mix and career development. All sectors reported an inability to their control workload and balance new roles with existing responsibilities. However, community pharmacists and pharmacy technicians were more likely to report being overwhelmed by patients'

expectations (78%), stressed they would make a mistake (77%), professionally isolated (59%) and unable to utilise their skills to the fullest extent (71%). Whilst community pharmacy employers saw increased funding as central to resolving the constraints identified, employees cited other fundamental issues (e.g. professional isolation, limited utilisation of skills, flexible working and adequate breaks), which may be more difficult to overcome. Generally, general practice pharmacists were most positive about their role, followed by hospital pharmacists at Band 8a and above. Data from the GPhC showed undergraduate recruitment is outstripped by current demand. In response, 17 recommendations advocating for necessary changes to policy, legislation and funding arrangements were compiled to address the constraints identified. Conclusion(s): The report demonstrated the need to increase workforce capacity and ensure workforce development is supported. Effective workforce planning and full implementation (to include a formal midterm evaluation of actions taken) of the recommendations will ensure we have the right people, in the right place at the right time to deliver the wider HSC transformation agenda over the next ten years.

[Critical care pharmacy workforce: UK deployment and characteristics in 2015](#) Abstract only*
Author(s0): Borthwick et al.
Source: International Journal of Pharmacy Practice 26(4)
Publication date: August 2018
Objective: Clinical pharmacists reduce medication errors and optimize the use of medication in critically ill patients, although actual staffing level and deployment of UK pharmacists is unknown. The primary aim was to investigate the UK deployment of the clinical pharmacy workforce in critical care and compare this with published standards. Methods: An electronic data entry tool was created and distributed for UK critical care pharmacy services to record their critical care

workforce deployment data. Key findings: Data were received for 279 critical care units in 171 organizations. Clinical pharmacist input was identified for 98.6% of critical care units. The median weekday pharmacist input to critical care was 0.045 whole time equivalents per Level 3 (ICU) bed with significant interregional variation. Weekend services were sparse. Pharmacists spent 24.5% of time on the multidisciplinary team ward round, 58.5% of time on independent patient review and 17% of time on other critical care professional support activities. There is significant variation in staffing levels when services are stratified by highest level of competence of critical care pharmacist within an organization (P = 0.03), with significant differences in time spent on the multi-disciplinary ward round (P = 0.010) and on other critical care activities (P = 0.009), but not on independent patient review. Conclusions: Investment in pharmacy services is required to improve access to clinical pharmacy expertise at weekends, on MDT ward rounds and for other critical care activities.

Competency Frameworks

[Standards for the education and training of pharmacist independent prescribers](#)
Source: General Pharmaceutical Council
Publication date: Updated October 2022
Pharmacists, as experts in medicines, play a vital role in delivering care and helping people to maintain and improve their health, safety and wellbeing. Patients and the public have a right to expect safe and effective care from pharmacists. We believe it is pharmacists' attitudes and behaviours in their day-to-day work which make the most significant contributions to the quality of care, of which safety is a vital part. These standards set out the knowledge, skills and attributes that a pharmacist independent prescriber in training must demonstrate. We

expect them to become proficient prescribers whose skills can be used to work with and support the wider, complex healthcare systems across Great Britain and Northern Ireland. The standards also set out our requirements for organisations providing their education and training.

[Core Advanced Pharmacist Curriculum](#)
Source: Royal Pharmaceutical Society
Publication date: ?August 2022
The drivers for taking this opportunity to rearticulate what we expect of entry-level advanced pharmacists have never been stronger. As the UK, and its healthcare systems, begin to emerge from one of the most challenging healthcare events in recent history, the path to recovery for patients, the profession, the wider pharmacy team and beyond may appear stormy and daunting. We hope that the RPS Core Advanced curriculum, in combination with our other postregistration curricula, provide the professional development infrastructure to help pharmacists rise to this challenge, as part of the wider healthcare team, and realise and demonstrate their full value and potential

[A competency framework for all prescribers](#)
Source: Royal Pharmaceutical Society
Publication date: September 2021 (Effective date September 2022)
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.

[Consultant Pharmacist Curriculum](#)
Source: Royal Pharmaceutical Society

Publication date: ?2021

First introduced to the NHS in 2005, consultant pharmacists are leaders in the profession as well as senior clinical experts delivering care and driving change across the healthcare system; they undertake activities that use their extensive expert knowledge and skills to contribute to improving the health of individuals and the wider population. Traditionally, the pathway to becoming a consultant pharmacist was based on an individual's personal motivation and serendipity. To respond to this, the Royal Pharmaceutical Society (RPS) developed the RPS Advanced Pharmacy Framework, a competency-based framework designed to support the development of an advancing pharmacy workforce capable of delivering high-level care.

A competency framework for Designated Prescribing Practitioners

Source: Royal Pharmaceutical Society

Publication date: December 2019

Since the introduction of non-medical prescribing, trainees have undertaken a period of learning in practice (PLP) to consolidate and contextualise the academic learning delivered by the programme provider. The PLP enables the trainee to put theory into practice; to develop and demonstrate competence as a prescriber under the supervision of an experienced prescribing practitioner. Traditionally, medically qualified doctors have carried out this role, as a designated medical practitioner (DMP).

Foundation Pharmacist Framework

Source: Royal Pharmaceutical Society

Publication date: 2019

Download the new RPS Foundation Framework for guidance on how to reflect on your knowledge, skills and behaviours, and to help you identify development needs.

A more detailed curriculum, encompassing these capabilities, is being developed throughout 2020 to support national Foundation training programmes.

Leadership Development Framework

Source: Royal Pharmaceutical Society

Publication date: January 2015

As a professional body, one of the roles of the RPS is to develop professional standards and Frameworks that are supportive, enabling and challenging. n A renewed focus on the development of excellent leadership is being seen consistently across all countries within GB. In England, concerns raised by the Francis Review of the failures of Mid-Staffordshire Foundation Trust1 and the response to that review, the report of the National Advisory Group on the Safety of Patients in England (commonly known as the Berwick Report2), and the criminalisation amends to the Health and Social Care Act3 , allied to changes in the NHS structure in England, has prompted a push to develop excellent leadership in healthcare. In Scotland, the Healthcare Quality Strategy for the NHS puts leadership at all levels among both clinical and non-clinical staff as one of the key foundations for change4 . n This Framework is designed to support every pre-registration trainee, pharmacist and pharmaceutical scientist in every pharmacy sector to develop leadership attributes and become a leader.

Advanced Pharmacy Framework (APF)

Source: Royal Pharmaceutical Society

Publication date: 2013

Over the past decade, many frameworks and tools have evolved to support professional development across the profession. The RPS Advanced Pharmacy Framework (APF) is a framework for identifying and recognising the stage of practice. It is applicable to all sectors and nations, building on

what have previously been shown to work. This can form the basis of the professional portfolio.

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