Evidence Brief: Pharmacy

Contents

Produced by the HEE Knowledge Management team Evidence Briefs offer a quick overview of the published reports, research and evidence on a workforce-related topic. A starter for 10 on the evidence if you will.

HEE Knowledge Management Team, August 2019

Key publications – the big picture

Interim NHS People Plan NHS, June 2019

Our Interim NHS People Plan, developed collaboratively with national leaders and partners, sets a vision for how people working in the NHS will be supported to deliver that care and identifies the actions we will take to help them. See "The future pharmacy workforce"

See also "Interim NHS People Plan: the future pharmacy workforce"

NHS Long Term Plan NHS NHS, 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, patient groups, and national experts to be ambitious but realistic. See Chapter 4 "NHS staff will get the backing they need"

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

Facing the Facts, Shaping the Future: a draft health and care workforce strategy for England to 2027 NHS, December 2017

The NHS needs radical action to improve working conditions, boost training and retention and become a 'model employer' for staff, a report on the future of the health and care workforce has concluded.

See Chapter 8 "Developing the NHS Workforce" which includes a section on Pharmacy.

Community Pharmacy Forward View Pharmaceutical Services Negotiating Committee (PSNC), July 2016

Response to the NHS Five Year Forward View (5YFV), published in October 2014. Topics covered include: Empowering patients and supporting people to manage their own health - Community pharmacy as the facilitator of personalised care for people with long-term conditions; Community pharmacy integration and new care models; Improving access, choice and integration - Community pharmacy as the trusted, convenient first port of call for episodic healthcare advice and treatment; Engaging communities, helping people stay well and independent and improving health and wellbeing for the whole population - Community pharmacy as the neighbourhood health and wellbeing hub; A day in the life of the future community pharmacy team; Conclusion and next steps.

Primary care home: community pharmacy integration and innovation National Association of Primary Care (NAPC), May 2018

Welcome to this guide on progressing integration of community pharmacy services within the new care model – the primary care home. Community pharmacy and general practice have traditionally worked closely together. Through the primary care home (PCH) model, the National Association of Primary Care (NAPC) aims to take joint working much further and extend the integration of services and the work of multidisciplinary teams so that community pharmacies are integral to supporting the health and care needs of their local population. The guide is designed to strengthen relationships between community pharmacy and general practice,

and to demonstrate some of the opportunities that exist for greater integration and improved health outcomes.

Supporting the development of community pharmacy practice within primary care New NHS Alliance, June 2016

There are nearly 11,700 community pharmacies in England. Each pharmacy serves a catchment population of approximately 5,000 people. It is widely quoted that 1.6m people walk into a pharmacy every day meaning that there a pharmacy may have 136 people that walk in every day. Many of these pharmacies are open extended hours and many over 85 hours a week. All community pharmacists have significant clinical training within their degree course and pre-registration training. This is further developed in practice and through continual professional development. All community pharmacies have an area reserved for confidential conversations with people away from the main counter area.

Pharmacists and general practice: a practical and timely part of solving the primary care workload and workforce crisis New NHS Alliance, December 2014

This report looks at pharmacists and the role they could play in general practice. The report contains excerpts from a round table held with GPs, practice pharmacists and members of the public, and explores the current role of pharmacists working within general practice, why this isn't more widespread, what the barriers might be, and how they might be overcome.

PSNC Briefing 013/19: An introduction to Primary Care Networks PSNC, March 2019

This briefing aims to provide an explanation for community pharmacy teams of what Primary Care Networks (PCNs) are and their role in the NHS. It can be used by Local Pharmaceutical Committees as an introductory briefing on PCNs for contractors, as part of local work to engage contractors and their team in the work of networks.

The Community Pharmacy Workforce in England 2017 – survey report HEE

Health Education England commissioned the Community Pharmacy Workforce Survey (2017) across England to better understand the current numbers and skills mix in the community pharmacy workforce, and inform planning and future investment in education. The survey was based on the format and process first piloted in Kent, Surrey and Sussex in 2014, and the further surveys carried out in both Thames Valley and London regions in 2015. The survey had high levels of participation from community pharmacies, with a combined participation rate of 86%. The ability of the data to provide a clear insight on the shape of the community pharmacy workforce is based upon this high participation. The data which informs this report is also available through the Health Education England and data.gov.uk websites.

Pharmacy Workforce Intelligence: Global Trends Report FIP (International Pharmaceutical Federation), 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

Clinical pharmacists in general practice: the Old School Surgery, Bristol NHS Long Term Plan, 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.

Pharmacy technicians NHS Improvement, February 2019
A case study describing action by Southern Health NHS Foundation Trust to develop the role of pharmacy technicians to support the workforce.

Helping people lead healthier lives: Greater Manchester's Pharmacy Health Champions GM Health and Social Care Partnership, September 2018
More than 90% of Greater Manchester pharmacies are now accredited as Healthy Living Pharmacies (HLP), committed to actively promoting wellbeing and helping people to lead healthier lives.

Clinical pharmacists in Norwich NHS England
Clinical pharmacists working across GP practices to help patients stay well and out of hospital as well as support GPs and practice nurses with demand.

HEE Star

More resources and tools are available in the **Primary Care** section of the HEE Star, you can also type in Pharmacy in the search bar:
https://www.hee.nhs.uk/our-work/hee-star

Statistics

You can find relevant statistics on the Health and Care Statistics Landscape under **Secondary & Hospital Care** and **Prescribing**
https://gss.civilservice.gov.uk/hc-statistics-landscape/

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

New ways of working

Documenting the evolution of the relationship between the pharmacy support workforce and pharmacists to support patient care Research in Social and Administrative Pharmacy, March 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.

Releasing GP capacity with pharmacy prescribing support and New Ways of Working: a prospective observational cohort study The British Journal of General Practice, October 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.

Nontraditional career opportunities for pharmacists Hospital Pharmacy, December 2016

The changing landscape of health care mirrors that of health-system pharmacy, with pharmacists' scope of practice and provider

status being the most significant changes. This creates new roles and opportunities; many of these roles are considered to be nontraditional in today's practice. This article reviews some new roles for pharmacy leaders that provide different career options and pathways. Nontraditional career opportunities discussed include expanded consulting roles in pricing analytics and drug pricing programs (contracting, 340B programs), pharmacogenomics patient consult services and clinics, specialty drug pharmacies, and compounding pharmacy services. To continue to develop high-performing pharmacy departments, pharmacy directors should recognize these roles and ensure they are clearly defined and managed. With the advent of these nontraditional opportunities, pharmacy departments can further expand their ability to provide advanced patient-centered pharmacy services.

Role definition is key – rapid qualitative ethnography findings from a team-based primary care transformation
Learning Health Systems, July 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.

A multidisciplinary approach to prevention European Journal of Preventative Cardiology, June 2017
Cardiovascular disease accounts for 17,500 deaths globally, representing nearly half of all non-communicable disease deaths. The World Health Organization has set nine lifestyle, risk factor and medicines targets to achieve by 2025 with the aim of reducing premature mortality from non-communicable diseases by 25%. In order to succeed in this, we need to equip our global health professional workforce with the skills to support patients and their families with making lifestyle changes and being in concordance with cardioprotective medication regimes at every opportunity. Success depends on collegiate working through effective interdisciplinary team-based care characterised by shared goals, clear roles, mutual trust, effective communication and measurable processes and outcomes, with the patient and family at the centre

of care. Nurses are the largest sector of the health professional workforce and their role in prevention should be optimised. Nurse coordinated care is proven to be effective, especially where they work in an interdisciplinary way with other health professionals such as doctors, pharmacists and psychologists, who provide equally important expertise for supporting holistic care. Successful care models are those that comprehensively target all adverse lifestyles and risk factors that are responsible for the development of cardiovascular disease. These characteristics should be reflected in the standards and core components of prevention and rehabilitation programmes.

What can pharmacists do in general practice? A pilot trial
Australian Journal of General Practice, August 2018
Athens log in required
BACKGROUND AND OBJECTIVESNon-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.METHODThree 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.RESULTSThe 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.DISCUSSIONThe 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.

New and extended roles

New roles in pharmacy – learning from the All Wales Common Ailments Scheme The International Journal of Pharmacy Practice, August 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. CONCLUSIONSC AS 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.

Expanding pharmacy roles and the interprofessionals experience in primary healthcare: a qualitative study
Journal of Interprofessional Care, January 2017
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.

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Pharmaceutical role expansion and developments in pharmacist-physician communication Health communication, 2016

Expanded clinical pharmacist professional roles in the team-based patient-centered medical home (PCMH) primary care environment require cooperative and collaborative relationships among pharmacists and primary care physicians (PCPs), but many PCPs have not previously worked in such a direct fashion with pharmacists. Additional roles, including formulary control, add further elements of complexity to the clinical pharmacist-PCP relationship that are not well described. Our objective was to characterize the nature of clinical pharmacist-PCP interprofessional collaboration across seven federally funded hospitals and associated primary care clinics, following pharmacist placement in primary care clinics and incorporation of expanded pharmacist roles. In-depth and semistructured interviews were conducted with 25 practicing clinical pharmacists and 17 PCPs. Qualitative thematic analysis revealed three major themes: (1) the complexities of electronic communication (particularly electronic nonformulary requests) as contributing to interprofessional tensions or misunderstandings for both groups, (2) the navigation of new roles and traditional hierarchy, with pharmacists using indirect communication to prevent PCP defensiveness to recommendations, and (3) a preference for onsite colocation for enhanced communication and professional relationships. Clinical pharmacists' indirect communication practices may hold important implications for patient safety in the context of medication use, and it is important to foster effective communication skills and an environment where all team members across hierarchies can feel comfortable speaking up to reduce error when problems are suspected. Also, the lack of institutional communication about managing drug formulary issues and related electronic nonformulary request processes was apparent in this study and merits further attention for both researchers and practitioners.

Skill-mix change in general practice: a qualitative comparison of three 'new' non-medical roles in English primary care The British Journal of General Practice, 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.

Evolution of the general practice pharmacist's role in England: a longitudinal study British Journal of General Practice, October 2018

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.

Examining the emerging roles for pharmacists as part of the urgent, acute and emergency care workforce Clinical Pharmacists, February 2017

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. Today's healthcare workforce includes an ever-increasing number of non-doctor professionals, undertaking clinical work in the medical domain. The traditional,

medicines-focussed role of the pharmacist is being challenged by Health Education England (HEE), the organisation responsible for NHS workforce training and development in England, and its national stakeholders. It is argued that the clinical pharmacist of the future should be capable of confidently and competently managing patients at an advanced clinical level - with health assessment, diagnostics and clinical examination skills comparable with that of an advanced clinical practitioner. A recent three-year programme run by HEE, evaluated the potential for pharmacists to manage patients in the emergency department and across urgent and acute care. Evidence from the 'Pharmacists in Emergency Departments' (PIED) suite of studies suggests that pharmacists with advanced training may clinically manage up to 36% of patients attending emergency departments. This article examines these data and proposes enhanced clinical development pathways for pharmacists, and calls for a change in thinking around the future integrated clinical workforce across urgent, acute and emergency care.

Clinical Pharmacists

Controversy and consensus on a clinical pharmacist in primary care in the Netherlands International Journal of Clinical Pharmacy, October 2016

Background Controversy about the introduction of a non-dispensing pharmacist in primary care practice hampers implementation. Objective The aim of this study is to systematically map the debate on this new role for pharmacists amongst all stakeholders to uncover and understand the controversy and consensus.Setting: Primary health care in the Netherlands. Method Q methodology. 163 participants rank-ordered statements on issues concerning the integration of a non-dispensing pharmacist in primary care practice.Main Outcome Measure: Stakeholder perspectives on the role of the non-dispensing pharmacist and pharmaceutical care in primary care. Results This study identified the consensus on various features of the non-dispensing pharmacist role as well as the financial, organisational and collaborative aspects of integrating a non-dispensing pharmacist in primary care practice. Q factor analysis revealed four perspectives: "the independent community pharmacist", "the independent clinical pharmacist", "the dependent clinical pharmacist" and "the medication therapy management specialist". These four perspectives show controversies to do with the level of professional independency of the non-dispensing pharmacist and the level of innovation of task performance. Conclusion Despite the fact that introducing new professional roles in healthcare can lead to controversy, the results of this Q study show the potential of a non-dispensing pharmacist as a pharmaceutical care provider and the willingness for interprofessional collaboration. The results from the POINT intervention study in the Netherlands will be an important next step in resolving current controversies.

"Pharming out" support: a promising approach to integrating clinical pharmacists into established primary care medical home practices The Journal of International Medical Research, January 2018

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.

Clinical pharmacist interventions in the UK critical care unit: exploration of relationship between intervention, service characteristics and experience level The international Journal of Pharmacy Practice, 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 roles for clinical pharmacists in general practice Prescriber, April 2017

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

Experiences and perceptions

Delegation: a solution to the workload problem? Observations and interviews with community pharmacists in England The International Journal of Pharmacy Practice, 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.CONCLUSIONSEffective 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.

Pharmacists' perceptions of their emerging general practice roles in UK primary care: a qualitative interview study British Journal of General Practice, 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.

Demographics

Critical care pharmacy workforce: UK deployment and characteristics in 2015 The International Journal of Pharmacy Practice, 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.

Gender, age and pharmacists' job satisfaction Pharmacy Practice, 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.

Technology

Disruptive innovation in community pharmacy – impact of automation on the pharmacist workforce Research in Social and Administrative Pharmacy, April 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.

Primary Care Team and Pharmacist staffing ratios: is there a magic number? Annals of Pharmacotherapy, March 2018

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

Education and Training

Pharmacy technician self-efficacies: insight to aid future education, staff development and workforce planning Research in Social and Administrative Pharmacy, June 2019

BACKGROUND: The roles of pharmacy technicians are increasingly prominent given pharmacy's transition to patient-centered activities and evolving scopes of practice in many U.S. states and throughout the world. OBJECTIVES: The aims of this study were to assess U.S. pharmacy technicians' self-efficacies for and attitudes toward performing current and emerging roles in hospital and in community pharmacy and to identify factors related to pharmacy technician self-efficacies in these roles. METHODS: A total of 5000 pharmacy technicians from 8 U.S. states were sent an electronic survey eliciting data on current involvement, self-efficacies, and attitudes for practicing in an expansive list of practice activities. The 8 states from which the sample was drawn were selected from a stratified randomized procedure using U.S. Census Bureau geographically defined regions. Pre-notification and response reminders were employed. Data were analyzed descriptively and with univariate, inferential tests, as appropriate, to determine associations with commitment, practice environment, experience level, and other variables. RESULTS: Of the 612 participants who responded, 494 were currently working as a technician and not enrolled in a PharmD program of study. Participants reported various activities in which they were highly engaged. Overall, attitudes toward performing most of the activities and self-efficacies were quite favorable, even for those activities in which technicians were currently less involved. There were some notable differences between technicians practicing in community versus hospital settings. Years of experience, profession commitment, and advanced employee ranking were associated with

higher levels of self-efficacy, overall. CONCLUSIONS: This initial examination of pharmacy technician self-efficacies identified areas that along with other factors could help employers with further expanding technician practice activities and vocational institutions with considerations for education and development of these key members of the workforce. The results would suggest technicians to be ready for continued evolution in their practice.

Ensuring fitness to practice in the pharmacy workforce: understanding the challenges of revalidation Research in Social and Administrative Pharmacy, March 2013

Background: Revalidation is about assuring that health practitioners remain up to date and fit to practice, and demonstrating that they continue to meet the requirements of their professional regulator. Objectives: To critically discuss issues that need to be considered when designing a system of revalidation for pharmacy professionals. Although providing international context, the article focuses in particular on Great Britain (GB), where both pharmacists (Phs) and pharmacy technicians (PTs) are regulated. Methods: Following a brief historical overview, the article draws on emerging evidence in context. Results: Revalidation may involve discrete periodic assessment or a continuous process of assessment against clearly identified standards. The evolving scope of pharmacy practice involves increasingly clinical roles and also practitioners in nonpatient-facing roles. The potential risk to patients and the public may require consideration. Although revalidation, or systems for recertification/relicensure, exist in numerous jurisdictions, most center on the collection of continuing education credits; continuous professional development and reflective practice are increasingly found. Revalidation may involve assessment of other sources, such as appraisals or monitoring visits. Existing revalidation systems are coordinated centrally, but particularly in larger jurisdictions, like GB, where approximately 67,000 pharmacy professionals are regulated, some responsibility may need to be devolved. This would require engagement with employers and contracting organizations to ensure suitability and consistency. Existing systems, such as company appraisals, are unfit for the assessment of fitness to practice owing to a focus on organizational/business targets. Certain groups of pharmacy professionals may pose particular challenges, such as self-employed locums, pharmacy owners, those working in different sectors, or returning after a break. Conclusions: To ensure proportionality, it must be considered whether the same standards and/or sources of evidence should apply to all pharmacy professionals, either dependent on whether they are patient facing, their scope of practice, or whether Phs and PTs should be treated differently.

Education and training for community pharmacists in mental health practice: how to equip this workforce for the future Journal of Mental Health Training Education and Practice

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.

Trends in the pharmacist workforce and pharmacy education American Journal of Pharmacy Education, 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.

Use of cross-sector apprenticeships in pharmacy: is it a sustainable quality education model for pharmacy assistants? International Journal of Pharmacy Practice, 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.

Will new standards for pharmacy technician education change pharmacy practice? American Journal of Health-System Pharmacy, July 2019

The article discusses whether the new standards for pharmacy technician education as of July 2019 are effective in reforming pharmacy practice. Other topics include the partnership between the American Society of Health-System Pharmacists (ASHP) and the Accreditation Council for Pharmacy Education (ACPE) to issue accreditation standards for pharmacy technician education and

training programs, as well as the potential benefits like improved patient safety.

Trends in the Pharmacists Workforce and Pharmacy Education American Journal of Pharmaceutical Education, January 2019

Athens log in required

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.

Competency Frameworks

Standards for the education and training of pharmacist independent prescriber General Pharmaceutical Council, January 2019

Pharmacists play a vital role in delivering care and helping people to maintain and improve their health, safety and wellbeing. An increasingly central role for pharmacists is prescribing in settings where prescribing has not necessarily happened before. By doing this, pharmacists can play an important part in and helping people to take their medicines safely and effectively.

Being an independent prescriber means that you can prescribe a medicine without needing to consult another prescriber first.

Professional standards for hospital pharmacy Royal Pharmaceutical Society, 2017

For providers of pharmacy services in or to acute hospital, mental health, private, community service, prison, hospice and ambulance settings. We have updated these standards in 2017 using the RPS process for the development of standards and guidance. The professional standards have been in use since 2012, they were previously updated in 2014. The development and updating of the professional standards has been led by the pharmacy profession with multidisciplinary and lay input. The professional standards describe quality pharmacy services (or 'what good looks like').

A competency framework for all prescribers Royal Pharmaceutical Society, June 2016

Competencies help individuals and their organisations look at how they do their jobs. A competency framework is a collection of competencies thought to be central to effective performance. Development of competencies should therefore help individuals to continually improve their performance and to work more effectively.

Advanced Pharmacy Practice Framework (APF) Royal Pharmaceutical Society, 2013

This framework builds on the widely used Advanced to Consultant Level Framework (the ACLF), to ensure it is applicable to all sectors and specialisms across pharmacy in Great Britain (GB). Evidence supports its use across the profession, and more widely, for the development of both advanced and specialist practice, applicable to all who work in pharmacy. The APF is intended for use once early or foundation years have been completed. It forms a useful

supportive framework to gather evidence of advancement across the core competencies. It is also used as an enabling framework to 'host' a range of professional curricula which identify the key knowledge, skills, experience and behaviours, needed in different scopes of practice.

Foundation Pharmacy Framework (FPF) Royal Pharmaceutical Society, January 2014
The Foundation Pharmacy Framework (FPF) will support you to achieve the core skills, knowledge and behaviours that are essential for all pharmacy practitioners. A blend of these key components provides a baseline for safe and effective pharmacy practice which underpins all roles within pharmacy practice and ensures a foundation of essential skills which can be built on depending on your focus and expectations for career development. The FPF can be used by all pharmacists at any career stage as a way of capturing experiences in practice and identifying learning gaps and areas for further development. As well as supporting foundation practice for individuals, the FPF can be used by education and training providers, employers and mentors to guide and set expectations for development. The FPF forms the backbone of the RPS Foundation Programme and will be a valuable tool for all practitioners helping to identify their own learning gaps and providing them with a structured career progression programme.

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