

Hypertension affects the majority of people >60 years of age, making blood pressure measurement one of the most common reasons for patients to consult in primary care.¹ Opportunistic blood pressure measurement also has merit, due to the well-established evidence linking uncontrolled hypertension to adverse cardiovascular outcomes.

The majority of patient-facing hypertension care is delivered by doctors and nurses in general practice settings. Recent initiatives have seen pharmacists developing both their pharmacy and their practice-based workplace roles in new models of primary care. Therefore, considering pharmacists' potential to extend their involvement in hypertension-related patient care is timely.

PHARMACISTS' SKILLS CAN CONTRIBUTE TO HYPERTENSION CARE

Pharmacists undergo 4 years of undergraduate training and 1 year as a pre-registration pharmacist. They develop expertise in medications with a focus on safe prescribing and dispensing. Development of their diagnostic skills and clinical reasoning has, appropriately, been secondary to this. Hypertension is, for most people, an ostensibly asymptomatic condition. Therefore, hypothetic-deductive reasoning and pattern recognition (required for clinical care in undifferentiated illness) are not required to the same extent in hypertension care, as in other aspects of clinical care. Likewise, the management of hypertension is driven by algorithms in national guidelines, which give much clarity and certainty in this area of clinical care. Thus, training pharmacists to extend their roles in hypertension care may be more straightforward, in comparison to other clinical areas that demand complex diagnostic skills and management of uncertainty.²

The mainstay of hypertension management is medication intervention. Pharmacists are likely to have the necessary knowledge to identify potential medication risks, such as side effects, drug interactions, and polypharmacy. In addition, for autonomous practice, pharmacists will need to be certified independent prescribers, along with having patient-centred skills for encouraging healthy lifestyles and shared decision-making.

A key element of quality hypertension care provision is timing and service capacity. Ideally, patient reviews should

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take place over the 4 weeks following initial prescription. Furthermore, ongoing review of treatment for uncontrolled hypertension should take place at least monthly. This level of service is associated with greater reduction of systolic blood pressure during interventions,³ and over the longer term is associated with improved cardiovascular outcomes.⁴ With current service pressures this may be difficult to achieve,⁵ therefore, shared care with community pharmacies could offer one practical means of delivering the intensity of care needed to effectively manage hypertension.

WHAT'S NEW IN PHARMACIST-LED HYPERTENSION CARE?

In this context new data presented by Albasri *et al*⁶ in a recent issue of the *BJGP* are to be welcomed. Their analysis of routine data on 131 419 patients seen within the New Medicines Service in England between 2011 and 2012 provides in-practice reassurance that initiation or intensification of antihypertensive treatment can be effectively supported by community pharmacists. Only 4% of those reviewed were referred back to their GP, largely due to side effects. Such patients would be likely to either self-refer or stop taking their medication without such review anyway, so this is unlikely to represent a significant extra burden for the GP. At the same time, a larger absolute number of people expressed a need for further information on their medication, and provision of this halved their likelihood of

being referred back to their GP. So, though this is not explicitly stated in the paper, the intervention of community pharmacists in hypertension care through this service has the potential to offer overall net savings on the workload for GPs.

A 2010 Cochrane review suggested that pharmacist-led care in hypertension may be a promising way forward, but required further evaluation.⁷ In updating that review, we have identified 47 randomised controlled trials of pharmacist-led care; meta-analysis shows a pooled mean reduction of systolic blood pressure 7.3 mmHg (95% confidence interval [CI] = 5.9 to 8.7) greater than that achieved by usual (doctor-led) care (in press). This might suggest ample evidence to support integration of pharmacists into hypertension care. The current NHS England Clinical Pharmacists in General Practice Scheme was introduced with a key performance indicator to improve the number of patients with diagnosed hypertension having a blood pressure of <150/90 mmHg, and practices are increasingly augmenting their multidisciplinary teams through the addition of a practice-based pharmacist.⁸ However our review only found one multi-centre trial, of limited quality, set in UK community pharmacies,⁹ and two other small UK single practice trials incorporating practice pharmacists.^{10,11} The evidence from these was weak; the study of 282 patients with hypertension attending 20 community pharmacies over 4 months found a non-significantly greater achievement of study

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BP target (odds ratio [OR] 2.7, 95% CI = 0.8 to 8.7) and adherence to medication (OR 0.9, 95% CI = 0.5 to 1.7).⁹ Within UK primary care, one randomised open crossover trial of pharmacist-led medication reviews over 6 months reported greater reductions in blood pressure of -13.6 mmHg [-20.9 to -6.3 mmHg] and/or -10.8 [-15.8 to -5.8 mmHg] compared to doctor-led care for just 33 subjects with hypertension.⁹ In the other single practice study, the pharmacist allocated patients sequentially to his clinic ($n=92$) or usual care ($n=68$), suggesting a high risk of selection bias; the study target of 140/90 mmHg was met more frequently (OR 6.2, 95% CI = 3.1 to 12.7) with the intervention than with usual care.¹¹ Thus, while the global body of evidence in support of pharmacist-led care for hypertension is substantial, the UK contribution is minimal, and given variations between healthcare systems its applicability to the NHS cannot be assumed.

EVIDENCE FOR PHARMACIST-LED HYPERTENSION CARE

For this reason the real world data presented by Albasri *et al*⁶ are encouraging, however uncertainties remain. For example, the cost effectiveness of pharmacist-led interventions in hypertension is poorly researched. Any new service will require funding, which could be justified if a positive impact of reducing doctor workload was shown. In turn, community pharmacists taking on extra responsibilities may not go unnoticed. Their current workplace challenges include an increasing volume and complexity of prescriptions, dealing with walk-in patients, sole pharmacist working, and the supervisory nature of their job. Reasonably, community pharmacists would expect funding to be linked to any additional responsibilities.

Some argue for pharmacist-led hypertension care in the absence of comorbidity, leaving complex care to GPs,² yet hypertension is commonly associated with multimorbidity,¹² so 'cherry picking' uncomplicated hypertension may not alleviate primary care workload pressures and denies the application of pharmacists' expertise with medicines to those most likely to gain from multidisciplinary care. Moreover, we also need an understanding of patients' views about changing patterns of care.

There will also be challenges to overcome; currently community pharmacy services have access to medication information on Summary Care Records, however, as a rule, community pharmacists are neither able to see primary care consultation details nor able

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to add to those patient records. For a safe primary care shared care approach, shared access to records will be needed. About 10% of the country will be excluded from the New Medicines Programme as they are registered with dispensing practices. There is, however, increasing integration of pharmacists into primary care settings (with or without dispensaries) and further evidence on their management of hypertension is also needed.⁸

WHAT SHOULD WE DO NOW?

With an ageing demographic and a rise in hypertension, the workload of hypertensive care is likely to remain high. As the skill-mix within primary care expands, and health and social care integrate, the multidisciplinary approach will likely further evolve. While there is evidence to support nurse-led care in hypertension,¹³ relatively few studies have looked at a team approach to hypertension. This is surprising considering the current shared-care 'practice nurse-GP' approach (driven primarily by the introduction of the Quality Outcome Framework). Making best use of the skill-mix within wider multidisciplinary teams should be optimised so that an affordable and manageable approach to improved hypertension management in primary care can continue to be delivered.

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