



Quality evaluation of community pharmacy Blood Pressure (BP) screening services: an English cross-sectional survey with geospatial analysis.

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Background

01

Hypertension-related appointments make up almost one in 10 of all GP consultations each year.

02

With the workload of GPs thought to be nearing saturation point, alternative models of hypertension management such as pharmacist-led care have the potential to alleviate this increasing burden on primary healthcare systems.

03

Evidence from systematic reviews shows that such interventions can significantly reduce blood pressure compared with usual GP care.



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Objectives, Design, Setting, Participants.

Objectives: The primary objective was to assess the accuracy (calibration and validation status) of digital blood pressure (BP) monitors used within community pharmacy in England and the secondary objectives were to assess the overall quality of the BP service by assessing service prevalence, service utilisation and other in-service considerations.

Design: A cross-sectional survey.

Setting: primary-care retail-pharmacies.

Participants: 500 pharmacies that contribute to government dispensing-data were invited by post to complete the survey. Private contractors were excluded.



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Interventions & Results

Interventions: We conducted a questionnaire survey with a follow-up (September to December 2018).

Results: 109 responses were received. 61% (n=66) of responding pharmacies provided a free BP check to their patients. 40 (61%) pharmacies used recommended validated clinical meters, 6 (9%) had failed validation, and 20 (30%) provided too little information to enable us to determine their monitor's status.



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Deprivation

- Postcodes of pharmacies were linked with freely available data on index of multiple deprivation (IMD) scores, which provides an estimate of the socioeconomic deprivation of the practice population.
- The interactive application helps to visualize the data easily:
<https://portuni.maps.arcgis.com/apps/webappviewer/index.html?id=a4ef6e48721649ada4eec362507245f6> or <https://arcg.is/1jrevP>.



Black star are responders.

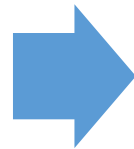
Blue dot are 66 service providers.

Orange dot represents pharmacies that **screened 100+ members of the public** in the last year.

Purple dot represent pharmacies that screened members of the **public newly detected with hypertension** in the last month.

Conclusions

Responding pharmacies were able to provide useful BP monitoring services to their patients, though quality enhancements need to be implemented. Majority of pharmacies use validated BP monitors, however, there was a lack of range of cuff sizes, variation in replacement and calibration of monitors, and apparent absence of such practice in a minority of pharmacies alongside variation in training standards. We noted higher frequency of BP screening in the most deprived postcodes.



We recommend in-service redesign and delivery improvements, and suggest professional bodies and researchers work together to create clearer frameworks for front-line practitioners, creating appropriate incentives to facilitate this service redesign.



Funders and policy setters should consider the value added to the National Health Service and other healthcare agencies of such screening by pharmacy providers both nationally and internationally. It has the potential to reduce complications of undiagnosed hypertension and the medicines burden that it creates. Future work should examine the impact of pharmacist-led BP screening on patients.



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Strengths and limitations

01

► We invited pharmacists from 500 pharmacies across England to complete a survey.

02

► We mailed our survey with a single follow-up of non-responders (Sept to Dec 2018).

03

► Postcodes of pharmacies were linked with freely available data on Index of Multiple Deprivation (IMD) scores, which provides an estimate of the socioeconomic deprivation of the practice population.

04

► The interactive application helps to visualise the data easily: <https://arcg.is/1jrevP>



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RECOMMENDATIONS (pharmacies providing this service:)



“Someone calling themselves a customer says they want something called service.”

