

## Chapter 24

# Pharmacy Technology to Better Public Health: An Exploration of New Models of Supply and Use of Technology – A Regional United Kingdom Quantitative Study

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### ABSTRACT

*Healthcare access and delivery faces significant global and local challenges. This article aimed to explore the public's use of pharmacy services and aimed to obtain 200 completed surveys across eight districts of Bristol, UK, from non-registered pharmacy premises. Respondents reported as follows: 1) ability to order a repeat prescription (79.47%), 2) ability to collect a repeat prescription (72.63%), 3) ability to collect an acute prescription (66.84%), ability to purchase over the counter (OTC) medicines (59.79%), 4) followed by asking for specific advice on prescription medicines (48.42%), and 5) minor ailments (44.15%). Respondents had used the pharmacy at least once for collecting a repeat prescription for a routine medication (59.47%) or acute prescription (55.79%) and for buying OTC medicines (47.89%). Majority of respondents never approached a community pharmacist to specifically ask advice on medicines (51.32%). Participants had not ever approached a community pharmacist for minor ailment/health advice (71.58%).*

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## **INTRODUCTION**

Access to healthcare and its delivery faces significant challenges brought about by funding restraints and increasing public demand. These challenges have led to exploration of new and efficient models of healthcare access, delivery and significant investments in innovations such as Telehealth (Chen et al. 2012; Akshar et al. 2014; Ibrahim et al. 2013; Khdour and Hallak 2012; Adelmoneim et al. 2017). Simultaneously the public's use of technology for all aspects of everyday living has become all-encompassing and has led to changes in behaviour and new models of service delivery. It is against this background that there have been calls for the use of technology in healthcare to improve access to services, to enable better integration of services and swifter delivery of care (Department of Health 2016a, Department of Health 2016b).

In the UK, primary care service providers such as Community Pharmacists and General Practitioners are being encouraged to use technology in a number of ways including moving away from paper to digital records and offering services via apps and web portals. The new digital offerings range from administrative tasks of patient registration (Agrawal 2009), booking of appointments and repeat ordering of prescriptions to provision of clinical services such as video consultations and medication reviews. Similarly, patients are being exposed to and are engaging with a range of technologies including web portals, social media, and apps to assess and manage their health risks (Tinelli et al. 2007; Hayward et al. 2005).

Despite the technological advances and a handful of advanced digital service providers, generally the uptake of technology in primary care has been slow and there have been repeated calls to support innovation (Franklin 2015).

## **COMMUNITY PHARMACY IN THE UK**

In the UK, National Health Service (NHS)<sup>1</sup> patients initially consult a practitioner with independent prescribing rights<sup>2</sup>. The practitioner invariably issues a prescription for medicines. These prescriptions could be for an acute condition, "acute prescription", or a long term condition, "repeat prescription". The repeat prescriptions relate to a number of days supply after which the patient can request further prescriptions from the surgery, this is known as "ordering repeat prescriptions". All prescriptions are presented to a pharmacist in a registered pharmacy premises which has a contract with the NHS for the supply of medicines against a prescription written by a medical practitioner. The act of the supply of medicines by the pharmacist is known as dispensing. The pharmacy gets reimbursed for the cost of the medicines and the service of supply. Legally a pharmacist must supervise and ensure a safe and accurate dispensing process from a registered pharmacy premises.

The increase in demand for health care has led to year on year increases in numbers of prescriptions issued which must be dispensed by pharmacists. In addition to the dispensing of NHS prescriptions, pharmacies are also used by the general public to purchase medicines where a prescription is not needed. These are known as over-the-counter medicines (OTC). Within the OTC category, there is a legal class of medicines which can only be sold in pharmacies under the supervision of a pharmacist. In the UK there has been a trend to reclassify medicines from prescription only to pharmacy only in an effort to make the public less dependent on prescription medicines and thus shift the cost of healthcare from the NHS. Members of public often seek the advice of a pharmacist for a recommendation of a OTC medicine

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