PUBLIC POLICY PROJECTS

INSIGHT • ANALYSIS • INTELLIGENCE

INSIGHTS

How medicines optimisation contributes to population health

CHAIRED BY MINESH PARBAT

Optum

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ABOUT PPP

Public Policy Projects (PPP) is an organisation operating at the heart of health and life sciences policy delivery. We bring together senior leaders and practitioners in the public and private health and life sciences sectors to find realistic solutions to the most pressing issues relating to health and care delivery.

We facilitate effective collaboration between public and private sector organisations. We help businesses to grow their profile within the NHS and wider public sector. In turn, we support public sector leaders and organisations with practical recommendations on implementing policy to improve health and wellbeing outcomes for local populations.

ACKNOWLEDGEMENTS

On the 23rd of May 2024, PPP held a roundtable titled *How can medicines optimisation strategies practically contribute to population health management within local health systems*? The roundtable was chaired by Minesh Parbat, Chief Pharmacist, NHS Shropshire, Telford and Wrekin ICB and attended by:

- ICB chief pharmacists
- Acute trust chief pharmacists
- Pharmacy policy experts
- NPA board members
- Directors of pharmacy integration
- Pharmacy technicians

During the roundtable attendees discussed how the pharmacy sector can be further leveraged to improve population health outcomes through medicines optimisation and public health interventions, supporting systems to meet integrated care priorities. The potential to utilise population health management approaches to deliver pharmaceutical interventions and the critical need to provide the right tools and develop and support the workforce to unlock this opportunity, were also highlighted.

The insights from the discussion have informed this report, which has been supplemented with additional research by PPP. We would like to thank everyone who attended the roundtable and provided their perspectives.

We also thank Optum for providing sponsorship for this roundtable. PPP retained full editorial control over the roundtable agenda and contents of this report, excluding the case study.

Next Steps

PPP's Medicines and Pharmacy programme is an evolving project consisting of a series of roundtables and engagement activities continuing in 2025. This is the third insights report of the 2024 programme and will support PPP to further articulate the value of pharmacy and medicines in contributing to the delivery of integrated care and meeting wider national health and care priorities.

The programme convenes stakeholders from across sectors of pharmacy, including community, general practice and hospital, as well as those from wider primary care, ICB and national leadership, to explore a pharmacy-led transformation of UK health and care.

PPP is also hosting a Medicines and Care Pathways theatre as part of the Integrated Care Delivery Forum, an event series highlighting exactly how ICSs are making place–based, personalised care a reality and the impact this is having on individual citizens and communities. The Medicines and Care Pathways theatre unites the pharmacy profession with wider ICS leadership to discuss and debate the contribution of pharmacy to the integrated care agenda, supporting the elevation of pharmacy as a system-wide strategic asset.

For those interested in getting involved in the programme, please contact Samantha Semmeling (samantha.semmeling@publicpolicyprojects.com) or Lee Davies (lee.davies@publicpolicyprojects.com) for partnership opportunities.

Samantha Semmeling, Policy Analyst, Public Policy Projects

Foreword

MINESH PARBAT
CHIEF PHARMACIST, NHS SHROPSHIRE, TELFORD AND WREKIN ICB

As we advance the vision and delivery of a more integrated and equitable NHS, the role of pharmacy stands at a pivotal juncture. The responsibilities of the profession have evolved significantly in recent years, expanding from traditional dispensing roles to delivering essential clinical services that directly impact the health of local populations. This report sheds light on the unique potential of pharmacy, particularly in the context of population health management (PHM), to further enhance patient care and contribute to addressing some of the NHS' most pressing challenges.

The findings in this report underscore pharmacy's ability to go further to improve health outcomes through medicines optimisation and the potential to deliver pharmaceutical interventions to target health inequalities more broadly. In particular, by leveraging the frequent patient contact seen by community pharmacies, we can go further to support the improvement of medicines adherence, which in turn supports the NHS to gain the maximum value out of the medicines it purchases.

Pharmacy's remarkable contribution to the Covid-19 vaccination campaign and success of the blood pressure monitoring service demonstrate the sector's potential to take a more central role in the delivery of public health interventions. However, as this report highlights, efforts must be formalised, implemented at system level, and adequately supported by digital infrastructure and workforce development.

The use of data and adoption of PHM approaches are central to reducing the stark health inequalities which persist in England. By empowering pharmacies with the right tools and systems, their unique location in areas of the highest deprivation can be leveraged to play a greater part in reducing such disparities. However, everyday challenges, including medicines shortages and underfunding, remain significant, preventing pharmacy from stepping up to this role. Addressing these will be critical if we are to fully mobilise the sector to support the government's ambition of bringing care closer to home and moving the NHS from treatment to prevention.

Ultimately, optimising the use of medicines is a shared responsibility. If we leverage the full potential of pharmacies by integrating them into broader healthcare and data systems, we can ensure patients receive timely and effective care, benefiting both individuals and the wider NHS.

In the wake of the Darzi investigation, this report is a timely call to action for system leaders, policymakers, and healthcare providers to harness the potential of pharmacy in driving better health outcomes for all citizens. Pharmacy is not just a service provider; it is a strategic partner in the health and care ecosystem capable of delivering lasting improvements for the populations that need it most.

Key Insights

- Medicines cut across all aspects of health and care, therefore medicines optimisation extends beyond medicines and pharmacy. Medicines optimisation has the potential to impact upon patient outcomes and population health, but also to unlock wider system benefits. All health and care professionals should have a vested interest in its delivery.

- Medicines are the most common therapeutic intervention deployed by the NHS, yet medicines non-adherence remains a critical issue, with an estimated 30 to 50 per cent of medicines for long-term conditions not taken as prescribed. There is an untapped opportunity to leverage community pharmacy, which is often patients' most frequent point of contact with the NHS, to improve medicines adherence.

- Everyday challenges, such as medicine shortages, limit the ability of pharmacists to deliver interventions which improve population health. More can be done to alleviate workforce pressures, such as by better utilising the skill mix across the wider pharmacy team and further embedding the 'make every contact count' principle within pharmacy.

- Community pharmacy should be harnessed to support a broader range of public health interventions. The potential for this was demonstrated during the delivery of the Covid-19 vaccination campaign and in the success of the blood pressure service check.

- Community pharmacy is an optimal setting for delivery of services to address health inequality. Community pharmacy has a strong footprint among underserved communities, creating an opportunity for systems to directly target and engage with those living in deprived areas. Pharmacies also have more flexible opening times compared to other primary care services and are located within a 20-minute walk for most of the population, providing convenient access.

- The ability of community pharmacy to deliver additional clinical services is reliant upon interoperable IT systems and real-time data sharing. Community pharmacy needs the digital capability to share clinical interventions made with general practice to maintain patient safety and encourage greater cohesion between providers. The infrastructure exists but bureaucratic challenges prevent community pharmacy from using existing systems effectively.

- Population health management approaches can support integrated care systems to prioritise, deliver and monitor pharmaceutical interventions for those populations who most require health and care access, supporting the most effective use of system resources. However, there is variation in digital infrastructure and data maturity across local systems, which if not addressed, will risk exacerbating inequity of access to services.

Recommendations

1. As part of future workforce reform, NHS England and the Department of Health and Social Care should consider how to better utilise the skill mix across the whole pharmacy team to improve medicines adherence, for example, by enabling pharmacy technicians and assistants to talk to patients about their medications. This would more effectively distribute workload, freeing up time for pharmacists to take a more strategic role in population health management.

2. NICE should investigate the feasibility of including guidance for the prioritisation of patient populations depending on clinical need for newly approved medicines. This will support medicines teams to deploy medicines within their budget and capacity, taking pressure off services and allowing them to prioritise patients most in need.

3. To address declining rates of vaccine uptake, NHS England and the Department of Health and Social Care should consider the growing calls to further leverage community pharmacy in the delivery of all adult vaccinations. Community pharmacies are located within a 20-minute walk for the majority of the population and have more flexible opening hours than other primary care services, providing convenient access for vaccination. Further, the sector has demonstrated its ability to engage with patients and act as information counsellors, helping to overcome vaccine hesitancy.

4. As integrated care boards move toward full delegated commissioning status, it is essential that decision-makers consider commissioning services in community pharmacy. This would harness community pharmacy's strong footprint among underserved communities, supporting systems to utilise existing infrastructure to reduce health inequality.

5. NHS England should consider creating a defined role for community pharmacy as part of Enhanced Access service delivery. A re-examination of the Enhanced Access component within the Network Contract Direct Enhanced Service alongside the Community Pharmacy Contractual Framework is needed to determine how stakeholders can collaborate and receive sufficient remuneration to provide Enhanced Access services, preventing siloed contracts and providing holistic patient-centred care.

6. Integrated care boards should ensure pharmacy takes a population health management approach to the delivery and monitoring of Structured Medicines Reviews as well as other pharmaceutical services, provided they have the requisite digital capability. This would facilitate intrinsic working toward improving population health and reducing health inequality through everyday workflows.

7. During contract negotiations, Community Pharmacy England, NHS England and the Department of Health and Social Care should consider how the Community Pharmacy Contractual Framework could be expanded to enable community pharmacy to deliver medicines reviews. By capitalising on community pharmacy's frequent interactions and strong relationships with local communities, enabling the sector to conduct medicines reviews would reduce pressure across systems and allow patients more flexible and convenient access to care.

8. The current workforce model funded by the Community Pharmacy Contractual Framework does not go far enough to support the community pharmacy sector to deliver contracted services and is not sufficient to enable additional service delivery. As part of future workforce planning, NHS England and the Department of Health and Social Care should mandate a minimum of two pharmacists working at any one time in community pharmacies, one to support medicines supply and the other to support the delivery of clinical services.

Introduction

A population health management (PHM) approach utilises both historical and current data about people's health to identify populations most at risk of, or already suffering, the worst health outcomes. This information helps to inform the commissioning decisions of national and local health systems, which in turn support targeting inequalities and unlocking preventative models of care. Medicines optimisation, and by extension the pharmacy sector, can improve outcomes at the individual patient level. When these interventions are scaled and widely deployed, they support improvements to population health.

As Lord Darzi's investigation highlighted, access to community pharmacy has been one of the enduring strengths of the NHS and recent reforms have given the sector a more central role in contributing to population health by enabling it to deliver additional clinical services.[1] The Pharmacy First service, which saw more than 420,000 consultations in its first three months, harnesses community pharmacy as a service embedded within local communities, and places pharmacy as a key enabler of the government's mission to deliver health and care closer to home.[2] Supporting this mission and taking it a step further, the government has also pledged to create a community pharmacy prescribing service.

Although this ambition is a positive step towards unlocking pharmacy's ability to deliver better value for patients, critical challenges face the workforce, and there remain untapped opportunities to improve the use of medicines. Medicines are the most common therapeutic intervention made by the NHS, yet it is estimated that between 30-50 per cent of medicines prescribed for long-term conditions are not taken as intended, which has significant associated environmental and financial costs.[3] Considering the growing number of individuals with long-term conditions, better strategies to address medicines adherence are becoming increasingly necessary.

This report is the culmination of insights from a conversation between a group of pharmacy experts who explored how pharmacy can be further leveraged to contribute to PHM. The report describes how pharmacy can be supported to improve medicines adherence and deliver public health interventions, as well as how pharmaceutical interventions might be delivered and monitored using a PHM approach, supporting integrated care systems (ICSs) to meet their strategic priorities.

IMPROVING MEDICINES ADHERENCE

Non-adherence to medicines is a pressing issue, not only due to the implications for patient outcomes, but also from a financial standpoint. Medicines are the second highest area of NHS spend after staffing, which when combined with significant non-adherence, results in an unnecessarily high loss of NHS finances.[4, 5] This creates a huge incentive to address medicines non-adherence, as it would improve patient outcomes and support the NHS in gaining the maximum value from the medicines it purchases.

LEVERAGING COMMUNITY PHARMACY

Roundtable attendees argued that system leaders are missing an opportunity to further leverage community pharmacy to better support patients in their understanding and use of medicines. Since community pharmacy is often a patient's most frequent point of contact with the NHS, this presents the opportunity to intervene with patients on a more regular basis to ensure they are taking medicines as prescribed.

In some circumstances, community pharmacies are already intervening with patients to support their understanding of medicines. A superintendent pharmacist described how patients collecting prescriptions in their pharmacy are taken to a semi-private area where the pharmacist can answer questions and check the patient understands how to take their medicines appropriately. This type of intervention is supported by studies demonstrating that patients often show poor adherence to new medicines due to a lack of information or unresolved queries.[6]

> *Ensuring patients understand their medicines is essential. Patients may get a list of prescriptions but if it hasn't been conveyed to them in a way that they understand and they don't know why they need to take it, it piles up and you get non-adherence.*

Benefits of commissioning services from community pharmacy

1. Targets inequalities within the community
2. Convenience of access
3. Utilises expertise from trusted professionals
4. Alleviates pressure on wider services

SCALING PILOTS

Additionally, an ICS Director of Pharmacy described a pilot scheme in which Primary Care Networks (PCNs) located within areas of high deprivation and identified as 'low performance' were selected to enable pharmacists and counter staff to ask a series of questions to patients collecting statins. The aim of the pilot was to understand why patients weren't taking statins, to carry out necessary action if this was found to be the case, and to feed information back to prescribers to improve the prescribing process, helping patients to take them correctly from day one.

These interventions likely impact upon improving medicines adherence at a local level, however they currently operate in isolation. To maximise their impact and deliver tangible improvements to medicines adherence on a larger scale, interventions such as these should be formalised and implemented at system level, not simply delivered through pilot studies or the goodwill of pharmacists. Doing so would also ensure that pharmacy is sufficiently remunerated for its efforts.

Attendees questioned whether community pharmacy could further support medicines adherence by delivering medicines reviews.

DELIVERING MEDICINES REVIEWS IN COMMUNITY PHARMACY

Medicines reviews are a core component of medicines optimisation and already occur in other health and care settings. For example, Structured Medicines Reviews (SMRs) are a type of medicines review already commissioned in PCNs, which aim to support with complex or problematic polypharmacy.[7] They have been shown to improve clinical and personal outcomes for those with long-term conditions and support reduced hospital admissions from medicines related harm in primary care.[8] However, there are no reviews of this type currently contracted in community pharmacy.

> *It's not difficult to address patient non-adherence, but systems think it is. Patients will often have good reasons as to why they don't take medicines and as clinicians, we should be engaging with patients and translating technical information to them in a way that they understand. Once patients have and understand the information, they can make an informed decision. We need to respect patients' reasons for not taking medicines; our job is to deal with this reality and support them.*

The National Pharmacy Association (NPA) has called for community pharmacy to be contracted to undertake medicines optimisation reviews – a type of medicines review. They argue that this would help to capitalise on community pharmacy's high frequency of interaction and strong relationships with local communities, while reducing pressure on other parts of the health and care system and offering patients more flexible and convenient access to care. Further, providing more patients with access to medicines reviews could support the reduction of adverse drug reactions (ADEs), which can carry significant associated patient harm and cost the NHS £100m every year.

If community pharmacists are to deliver medicines reviews in future, local systems must work to ensure that the sector possesses the requisite digital capability. Pharmacists must be able to share any changes made to medication, as well as interventions delivered, with patients' GPs, to ensure patient safety and to prevent friction between providers. GP Connect is an IT system set up by the NHS and is an example of a service which could be used to enable community pharmacists to deliver medicines reviews, as it can provide pharmacy teams with the ability to update patients' GP records. However, roundtable attendees explained that the infrastructure exists, but bureaucratic challenges remain which must be overcome for community pharmacy to utilise these systems to carry out additional services.

As the role and clinical responsibility of the pharmacy profession continues to grow with more incoming independent prescribers and expansions to services, further harnessing community pharmacy and its strong relationships with local communities by enabling it to undertake medicines reviews is a logical next step. Further, NHS England should be incentivised to facilitate this as it would support the ambition to embed the principles of Making Every Contact Count (MECC) within health and care.[9]

PHARMACY, PUBLIC HEALTH AND THE POSITIVE PHARMACY CARE LAW

VACCINE UPTAKE

The success of the Covid-19 vaccination programme is attributed to both timely vaccine development and effective delivery. As of September 2021, the UK Health Security Agency (UKHSA) estimated the UK's vaccination campaign had prevented more than 24 million infections and resulted in 105,000 fewer deaths.[10] Although vaccinations were initially planned to be primarily delivered in hospitals and mass vaccination sites, community pharmacy took a central role in the programme. Analysis by the Company Chemists' Association of NHS England data demonstrates that community pharmacy delivered more than 40 million – a quarter of all – vaccinations by the end of 2023.[11]

Through its role in delivering vaccinations, community pharmacy demonstrated a unique ability to engage with patients, helping to overcome vaccine hesitancy, and crucially, to do so in areas of high deprivation – where health and care access, as well as outcomes, are typically lower. Retrospective research examining the role community pharmacy played during the pandemic demonstrates the sector could in future be leveraged further to promote health equity by closing health gaps, increasing access to health care and rapidly responding to public health threats.[12] Despite this, attendees argued that the lessons from the pandemic have not been carried forward into broader service provision, and in turn, that community pharmacy remains an under-utilised asset in the delivery of vaccinations and wider public health interventions.

> *During the pandemic, the strategy most ICBs adopted was [to establish] huge mass vaccination centres. I sat on two local authority Covid outbreak boards and there was a lot of analysis of the people that weren't coming to get vaccinated. ICBs stopped commissioning the mass vaccination sites and commissioned community pharmacies. All those hard-to-reach people got vaccinated; the data showed people were coming out.*

Despite the vaccination strategy implemented by NHS England at the end of 2023, research demonstrates little overall improvement in England's vaccination coverage. A report from Future Health shows the country has significant regional variation in vaccination rates for major adult vaccination programmes, with flu vaccination rates falling in every region of England from 2022-2023 to 2023-2024.[13] UKHSA data also indicates decreased uptake for vaccinations which prevent childhood diseases, such as whooping cough and measles.[14]

In the case of whooping cough, although the disease is cyclical and an outbreak overdue, rates of vaccination uptake for pregnant women to protect their newborn infants have decreased from peak coverage in March 2017 at 72.6 per cent to 58.9 per cent in March 2024.[15] This has contributed to the more than 10,000 recorded cases between January and June 2024, putting Britain on course for its worst outbreak in 40 years.[16, 17] These variations and decreases in vaccination rates highlight the government's need for strategies to bolster coverage and prevent future outbreaks of vaccine-preventable disease.

Attendees argued that the UK does not currently utilise all assets at its disposal to improve vaccine uptake. As a report by the think tank Reform points out, community pharmacies are not currently commissioned to provide most adult vaccinations.[18] Both Reform and Policy Exchange (in its report, *A Fresh Shot*) recommend that community pharmacy should be enabled to deliver all adult vaccinations.[19] The organisations respectively propose defining all adult vaccinations as 'advanced services', as part of the next Community Pharmacy Contractual Framework (CPCF), or to commission their delivery through National Enhanced Services.

However, there are barriers which continue to limit the impact of community pharmacy to engage with underserved communities and

provide additional services, such as expanded vaccine outreach. These include already mentioned issues relating to interoperable IT infrastructure and a lack of capability for real-time data sharing. Community pharmacy services are also already undergoing significant expansion, such as with the Pharmacy First service, and as such are stretched for resources. While the sector has much to offer, the commissioning of expanded services must come with sufficient support for its workforce to help ensure that pharmacy can continue to deliver its core functions.

BROADER PUBLIC HEALTH INTERVENTIONS

Community pharmacy has already shown demonstrable success in the delivery of other key public health services. For example, the blood pressure check service is a nationally commissioned service which is contributing to preventing heart attacks and strokes.[20] As integrated care boards (ICBs) move toward full delegated commissioning status, systems will have a greater ability to commission locally responsive public health services to meet the health and care needs of their populations.

Community pharmacy could play a central role realising ICB ambitions to reduce health inequality. The inverse care law, where access to health and care services is typically lower for the populations who most require it, has been found to apply in England for over 50 years.[21] The community pharmacy sector provides greater access in areas of higher deprivation (a trend referred to as the positive pharmacy care law).[22] Commissioning services out of community pharmacies therefore enables systems to utilise existing infrastructure to directly target those living in the most deprived areas.

> *'Hard-to-reach populations' isn't the right term; they aren't hard to reach, the onus is on us to ensure we have the right services in place to cater to their needs.*

UNLOCKING THE POTENTIAL OF THE SECTOR

Unlocking community pharmacy's full potential will require a re-examination of the CPCF, as well as looking to other community-based services for opportunities to improve collaboration across primary care. For example, the Enhanced Access service, contracted as part of PCNs' Network Contract Direct Enhanced Service (DES), makes access to appointments outside of standard hours (during evenings and weekends) a key priority for PCNs.[23] An attendee explained that community pharmacy is often drafted into these services to support with medication supply, yet there is not a defined role for community pharmacy, nor does it receive remuneration. Clearer roles for community pharmacy within Enhanced Access service delivery should be considered in parallel with those for PCNs to enable primary care providers to collaborate more effectively to deliver holistic patient-centred care.

ENABLING PHARMACY-LED POPULATION HEALTH MANAGEMENT

Amid ICB financial constraints, prioritising interventions for those who most require access to health and care is necessary to make the most effective use of limited resources. By utilising both historical and current data about people's health, PHM approaches can enable ICSs to achieve this.

> *As a system level pharmacist, population health management is so important to me as we are trying to distribute medicines and utilise our budgets in the most effective way.*

Taking a PHM approach enables systems to identify populations where health outcomes are falling behind, which supports decision-making for commissioning services. PHM can also help to proactively identify those most at risk of disease and tailor services to intervene, supporting systems to deliver preventative models of care.

EXAMINING POPULATIONS THROUGH DIFFERENT LENSES

ICSs must interrogate population health data to determine the populations most in need of health and care access, as these populations will likely vary across systems. For example, an attendee described an examination of 'did not attends' (DNAs) for hospital appointments, which found that the largest group of DNAs was women aged between 20 and 30. It was found that this group had a high number of DNAs because they were often in low-paid jobs and couldn't take time off work, yet the services offered to them were typically between 9-5, on Mondays to Fridays. Such data can guide systems to make informed decisions on how, when, and where, to deliver services for maximum impact.

Applying PHM to pharmaceutical interventions can support the delivery of effective medicines optimisation. A roundtable attendee outlined how their system utilises an NHS patient database (Eclipse) and a data analytics platform (Athena) to stratify patients who require SMRs. This enables the prioritisation of patient groups who can be more challenging to engage with to complete SMRs. SMRs can then be monitored using this approach; instead of monitoring how many are delivered, it is possible to identify how many are completed in priority patient groups, such as frailty and learning disability groups. Examining a population through different lenses in this way helps systems to improve population health intrinsically through everyday workflows. ICBs should be incentivised to deliver and monitor medicines optimisation interventions in this manner, as this will support them to meet integrated care priorities.

> *It is our view that ICBs should be looking at demographic data and identifying those areas where care is falling behind, and commission relevant services via suitably located community pharmacies.*

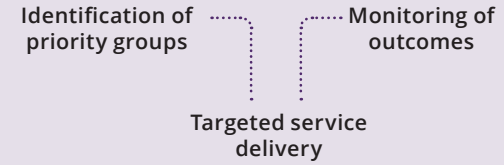
DATA MATURITY

While PHM is a core enabler of ICSs improving health outcomes, the infrastructure and capacity to deliver PHM varies significantly across systems. A report which investigated the state of data sharing and use within ICSs found that they are *"still in the early stages of the transition toward data-led approaches to the management of their populations' health and system-wide coordination of services".*[24] The report explains that only some ICSs have large analytical datasets and the ability to develop data-led approaches to PHM, whereas others have yet to implement the required data infrastructure or remain burdened by data reporting requirements. If variation in the ability to deliver PHM persists, there will also be variation in the availability of tailored services available to local populations across England, risking the exacerbation of access inequalities. The same report recommends that to overcome this, policymakers should work with ICSs to develop a national plan for data improvement aimed at

supporting less-developed ICSs and reducing variation in data maturity.

In addition to variations in data maturity, there is friction between the PHM approach and existing governance structures for the deployment of medicines. Using weight management drugs as an example, an attendee explained how often it is not the most clinically in-need who come forward first. Yet, systems have limited budget and capacity for deployment, so they must leverage PHM to prioritise these patients. The attendee elaborated, *"NICE pushes the implementation and usage of drugs without overlaying which populations should get prioritised".* This can exacerbate inequalities if patients who are most in need don't receive access to the associated treatment. Further, this may lead systems to deploy their own service restriction policies to allow them to afford to implement new medicines while ensuring they prioritise the patients with the greatest clinical need. NICE should investigate the feasibility of including guidance around the prioritisation of patient populations depending on clinical need for newly approved medicines. This would support ICS medicines teams to deploy medicines and services in alignment with PHM.

Population health management



1. Improves population health
2. Targets the reduction of inequality
3. Makes effective use of limited resource

> *If we are really going to take a PHM approach, we are going to come into conflict with those who are driving the numbers and who want us to tick the boxes that we have implemented these new drugs.*

CASE STUDY – HARNESSING INNOVATION TO DELIVER MEDICINE OPTIMISATION AT SCALE

Author: Meera Parkash, Clinical Facilitator, Population Health Management, Optum UK

At a time when the health system is urgently seeking new ways to cut costs, improve outcomes and reduce health inequalities, there are three areas where medicines optimisation can make an important contribution.

The first is non-adherence to medicines. It is estimated that half of all patients are non-adherent to their prescribed medication, costing the NHS £500m every year.[1] The second concerns over-ordering and over-prescribing. About £300m worth of medicines go unused each year, and around half of this cost is believed to be recoverable. The third and final relates to adverse drug events (ADEs) in primary care, leading to hospital admissions. An estimated 72 per cent of ADEs are avoidable, costing the NHS £100m every year.[2]

Traditionally, clinicians have had to manually search for patients who may need changes to their medication approach. This is extremely time-consuming and may not always be accurate if the data being used is out of date.

Population360® changes this. By integrating fully with clinical systems, it automatically finds and presents opportunities to improve medication safety, non-adherence and cost-effectiveness all in one place – transforming the speed, accuracy and scale of these processes.
Other prescribing decision support tools focus mainly on acute prescriptions and can only process them one patient at a time, whereas Population360 can proactively manage an entire patient population for an ICS at once. It does this by providing safety and adherence alerts for high-risk cases while surfacing lists of patients who may benefit from medication changes.

In light of resourcing pressures on pharmacy teams – which limit the number of structured medication reviews, programme switches, or high-risk drugs monitoring they can undertake using traditional methods – Population360 frees up capacity and helps them cover more ground. This demonstrates that it can be an important enabler for delivering medicines optimisation strategies at scale.

Evidence of success

Working with a GP practice covering 10,000 patients, Population360 flagged opportunities to save £82,376 through simple medication switches and recommended 1,171 patients for an adherence or safety intervention over a three-month period.

Based on these, a single pharmacy technician successfully reviewed 16 patients in less than 30 minutes, actively booking tests for 14 patients and initiating a patient consultation and de-prescribe for another.

Another pharmacist reviewed all female patients prescribed sodium valproate based on a targeted clinical rule. The pharmacist contacted patients, reminding them to follow up with their consultant to ensure Annual Risk Acknowledgement Forms were up to date (most of which were not) and contraception was in place.

Both examples demonstrate clinicians working proactively, supporting structured medication reviews, and closing important gaps in care.

The lead pharmacist at the GP surgery said: *"It (Population360) gives us these patients very, very quickly and we can review them and take appropriate action – some of these patients are hard to reach people which is also an advantage."*

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Population360 - Clinical Decision Support
is a Class I Medical Device (EU MDD 93/42/EEC)
(UK MDR 2002)

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DEVELOPING AND SUPPORTING THE PHARMACY WORKFORCE

Numerous challenges face the pharmacy sector, including medicines shortages, insufficient reimbursement and remuneration mechanisms and pharmacy closures. The Health and Social Care Select Committee's recent pharmacy inquiry detailed many of these to the government, which is yet to publish a response.[25] Persistent challenges such as these limit the ability of pharmacy to carry out medicines optimisation and deliver services aimed at improving population health. An attendee explained, *"if pharmacists spend all day addressing drug shortages and are expected to deliver additional services with limited extra resource, one cannot do medicines optimisation and PHM – they get deprioritised."*

The competencies of the wider pharmacy team could be harnessed to alleviate workforce pressures. The government and NHS England have taken steps toward this by expanding the role of pharmacy technicians to supply and administer medicines under Patient Group Directions (PGDs) earlier this year.[26] One attendee said, *"some PCNs are using pharmacy technicians to make a difference to patients by talking to them about their medicines. Also, training HCAs [health care assistants] in [GP] practices to have these conversations with patients means only those that need to be escalated are".*

Future workforce reform should include expanding the roles of pharmacy technicians and assistants to play a greater role in medicines optimisation. This would free up time for pharmacists to support patients with more complex issues. Further, it would support pharmacy teams to practice to the top of their licences, make careers more rewarding, and further embed MECC into the NHS.

> *Pharmacy staff are part of our population, and we need to support them. GP pharmacists' working conditions for example – they may not even have a desk to do patient consultations. Hospitals have a target-orientated culture, and there is nothing about wellbeing/mental health for the pharmacist. There is no time for medicines optimisation, guidelines or for referrals to wider services, which are things that matter to population health.*

Although the wider pharmacy team should be further utilised to deliver medicines optimisation, it should not solely be the responsibility of the pharmacy sector. Since medicines cut across all aspects of health and care, it follows that optimising their use can deliver a wide range of system benefits. To foster a vested interest in medicines optimisation across all health and care professionals, it should be further embedded as a practice across health and care through information sharing, education and training.

> *The pharmacy workforce must evolve; we cannot be working in isolation and must be part of a network. Pharmacists in GPs must be connected with those in the community. [We should be asking] which are the essential tasks to be carried out by pharmacists, and which can be devolved to other professions, to allow pharmacists to step up to the mark and deliver population health management?*

Legislative reforms which support the upskilling of pharmaceutical roles, such as those which enabled the expansion of the pharmacy technician role, are essential to more effectively distribute work and ease workforce pressures. However, there are deeply-rooted workforce challenges and funding pressures facing pharmacy. Although the Long Term Workforce Plan sets out the ambition to expand training places for pharmacists by nearly 50 per cent to around 5,000 places by 2031/32, the Health and Social Care Select Committee pointed out that: *"greater planning and forward thinking continues to be needed around the full pharmacy workforce, accounting for changing roles in the community, increasing demand in hospitals and supporting ICBs to build 'one pharmacy workforce'."* [27, 28]

Attendees argued that the current workforce model funded by the CPCF does not go far enough to support the community pharmacy sector to deliver the services required of it, let alone additional services. As part of future workforce planning, attendees recommended that a minimum of two pharmacists should be working at any one time in community pharmacies, one to support medicines supply and the other to support the delivery of clinical services. Implementing staffing requirements such as these, accompanied by sufficient funding, will be essential if the benefits of pharmacy in contributing to population health are to be realised.

Conclusion

PHM enables the proactive identification of populations who suffer at the lowest end of health outcomes and most require access to health and care services. Not only is PHM essential to achieving the most effective use of resource amid financial constraints, but by contributing to integrated care delivery, it will help to foster a more equitable health system and healthier population.

Once priority populations are identified, ICSs must determine the appropriate services to meet their needs, as well as where and how to deliver them. Community pharmacy, as a service embedded within local communities with an established presence among those typically underserved, provides a means through which these services can be delivered while directly targeting health inequalities.

Despite this, community pharmacy remains an under utilised sector. Through regular interactions with local people, the sector is an ideal setting to further leverage to support ICBs to deliver upon their local medicines optimisation priorities, and in particular to improve medicines adherence. Further, there is untapped potential across all sectors of pharmacy, where the competencies and capacity of the broader pharmacy team could be maximised. In addition to medicines optimisation, the success of the blood pressure monitoring service as well as its pivotal role in the Covid-19 vaccination roll-out, demonstrate community pharmacy's capability to take a more central role in the delivery of public health interventions. However, efforts must be formalised, supported by contractual arrangements, and integrated into the broader health and care system to maximise their impact.

While pharmacy can contribute to improving population health through the interventions described, systems must support the sector to deliver and monitor these using a PHM approach. However, ultimately systems must have sufficient digital capabilities and meet national data priorities to deliver seamless PHM. Additionally, persistent challenges facing the pharmacy sector must be addressed if they are to step up and take a more central role in PHM - a role which it has demonstrated both the ambition and capability to deliver.

Attendees

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