

Quality and Productivity: Proven Case Study

Pharmacist-led repeat prescription management: ensuring appropriate prescribing and reducing wastage

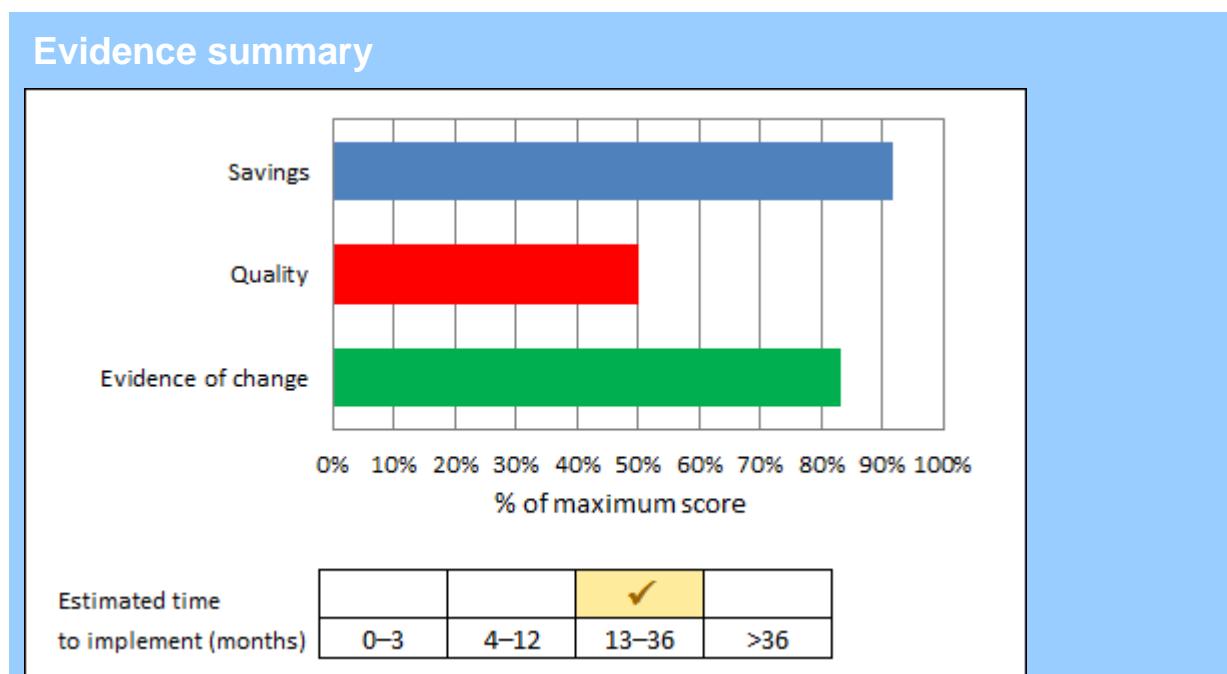
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Sharing good practice: What are 'Proven Quality and Productivity' case studies?

The NICE Quality and Productivity collection provides users with practical case studies that address the quality and productivity challenge in health and social care. All examples submitted are evaluated by NICE. This evaluation is based on the degree to which the initiative meets the Quality and Productivity criteria: savings, quality, evidence and implementability. The first 3 criteria are given a score which are then combined to give an overall score. The overall score is used to identify case studies that are designated as 'recommended' on NICE Evidence. The assessment of the degree to which this particular case study meets the criteria is represented in the summary graphic below.

Proven Quality and Productivity examples are case studies that show evidence of implementation and can demonstrate efficiency savings and improvements in quality.



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Details of initiative

Purpose	To reduce medicines wastage and improve the quality of repeat prescriptions by enabling GP practices to buy-in pharmacist time to manage repeat prescriptions.
Description (including scope)	<p>Walsall Clinical Commissioning Group (CCG) implemented a pharmacist-led repeat prescription management service (RPMS).</p> <p>The service was aimed at reducing medicines wastage, minimising possible harm from medicines and improving the quality of repeat prescribing. Cash was saved by ensuring the least expensive, clinically appropriate medicines were prescribed, for example by switching from branded to generic drugs. Practice-based pharmacists worked as an integral part of primary care general practice teams to manage repeat prescriptions.</p> <p>The previous system, common in many general practices, involved administrative staff generating the repeat prescription for authorisation by the GP(s) on duty. On average, each GP authorised approximately 200 repeat prescriptions per week.</p> <p>Under the new system pharmacists generate the repeat prescriptions, authorising those within their medical competence, with the remainder being authorised by GPs.</p> <p>The role of the pharmacist is to:</p> <ul style="list-style-type: none">• produce and sign (if qualified) any relevant prescriptions. Pharmacists are responsible for determining their competencies according to their training and specialisms and must be insured appropriately.• produce a prescription for signing by a GP• change the prescription to a more appropriate alternative that meets the prescribing indicator objectives. <p>The service allows pharmacists to elicit any relevant information from the patient and the GP system for the purposes of assessing the appropriateness of a request. This information includes medical notes and history, monitoring arrangements and details of other medicines currently prescribed. This helps with:</p> <ul style="list-style-type: none">• waste reduction• improving performance against local and national prescribing indicators• optimising treatment regimen• reducing health inequality• enhancing medicine safety.
	The RPMS is now established in 56 out of 62 practices.
Topic	Medicines use and procurement

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Other information	Approximately 2.1 million repeat prescriptions are issued nationally each day (Health and Social Care Information Centre 2012); estimates suggest that 80% of prescriptions by volume are for repeat prescriptions, accounting for 60–70% of total prescribing costs (Department of Health 2012).
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Savings delivered

Amount of savings delivered	For the financial year 2013/14 the service delivered net savings of £610,270 and demonstrated that for every £1 invested in pharmacist time there was a saving of £3.05.
Net savings in 2013/2014 Calculated as the gross savings from pharmacist interventions minus the cost of the pharmacists' time, as below:	£610,270
Pharmacist intervention category	Savings
Efficiencies (n= 18,032) <ul style="list-style-type: none">medication added/stoppedformulation changesbrand to generic (or generic to brand)simple switchesmedication alignmentremoving duplicates or items that are no longer requiredwastage from over ordering	£816,262
Reduction in harm (n= 2,944) <ul style="list-style-type: none">Highlighting medicines non-adherenceup-to-date drug monitoringup-to-date monitoring	£4,937
Quality (n= 29,443) <ul style="list-style-type: none">national prescribing comparators, for example for antidepressants or low cost lipid modifying drugsdrug choice/formulary adherenceoptimise dosageproblem linkage/indicationcorrespondence updatesmedication reviewreferral to GP/nursesignposting	£86,649
Gross savings from interventions in 2013/2014	£907,848
Cost of pharmacists in 2013/2014 Pharmacists provided between 4-8 hours per week to each practice.	-£297,578

The above savings are likely to be a conservative estimate as they do not include the time saved by GPs, which has not been

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	quantified.
Type of saving	<p>A mixture of cash and productivity savings. Cash is saved by ensuring the least expensive, clinically appropriate medicines are prescribed, for example by switching from branded to generic drugs. Productivity savings are made by reducing wastage due to over-ordering, drug formulation changes and medication alignment.</p> <p>Non-quantifiable savings arise from improvements to care quality reducing future appointments, admissions and disease progression in some cases.</p>
Any costs required to achieve the savings	<p>The set-up costs are negligible compared to the savings. An investment of time is needed to establish demand for the service among local GP practices and to increase pharmacist capacity accordingly. In Walsall's case this was initially done by increasing the hours worked by willing pharmacists in their service level agreements (SLAs). This provided sufficient capacity for 14 practices. As demand increased to 56 practices, it was necessary to recruit more pharmacists.</p> <p>Increasing capacity through SLAs or recruitment is a recurrent cost and has been factored into the calculation of net savings. Both these activities also require some investment of time as a one-off cost, which is negligible compared with the net savings.</p>
Programme budget	Healthy individuals, public health, medicines management
Supporting evidence	<p>Wastage on all prescribed medicines has been estimated at up to £300 million per annum nationally (Department of Health 2012). Before implementation it was estimated that the wastage of medicines within the Walsall health economy was in excess of £1 million a year. Reasons identified for the wastage of prescribed medicines included:</p> <ul style="list-style-type: none">• poor repeat prescribing systems• change in treatment• prescription quantities not synchronised• patients take their medicine intermittently or not at all. <p>The primary care repeat prescribing spend in Walsall totalled £36 million in 2013/14.</p>

Quality outcomes delivered

Impact on quality of care or population health	Quality is likely to be improved for some patients because the extra checks help to ensure they are given the right medicines in the right doses, although the effect on outcomes has not been quantified.
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	<p>Monthly summaries of interventions are submitted by the pharmacists (see details in 'Savings delivered' above for the annual figures).</p> <p>The process has facilitated shared learning for practice staff and clinicians. It has resulted in a time saving for GPs that releases more time for helping patients with complex needs or long-term conditions.</p>
Impact on patients, people who use services and/or population safety	<p>It has been demonstrated that safety is improved for some patients because prescribing errors are identified and corrected, including some with the potential for serious harm.</p> <p>Although not quantified, it is believed that the service has led to improved medicines adherence. NICE guidance estimates that 30–50% of patients with long-term conditions do not take their medicines as recommended (NICE 2009).</p>
Impact on patients, people who use services, carers, public and/or population experience	<p>The initiative does not have any significant impact on the patient or carer experience, other than the potential quality benefits already discussed.</p>
Supporting evidence	<p>Records of actions taken by pharmacists to manage repeat prescriptions and documentation of safety issues and potential harm avoided.</p> <p>Nationally, medication-related hospital admissions account for 6.5–7.5% of total admissions (Garfield et al. 2009), with 69% of these considered to be avoidable. Reasons include sub-optimal prescribing, poor patient compliance and sub-optimal monitoring.</p>

Evidence of effectiveness

Evidence base for case study	'Improving the use of medicines for better outcomes and reduced waste' (Department of Health 2012) emphasises the need to reduce the unnecessary costs associated with repeat prescriptions and medicines wastage. It states that practice-based pharmacists can be part of the solution by identifying opportunities to reduce medicines wastage.
Evidence of deliverables from implementation	The NHS-wide prescribing spend in 2011 was reported as over £8.5 billion (Health and Social Care Information Centre 2012). A 1.56% saving of total repeat prescribing has been achieved using RPMS, which if extrapolated across the entire NHS could lead to a saving of over £106 million.
Where implemented	Walsall CCG, in 56 out of 62 GP practices in the area. Because of

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the success of the project, RPMS has been rolled out to an increasing number of interested practices each year. From uptake in just 2 GP practices in 2010/11, the number of practices with RPMS in place increased to 15, 42 and 56 (90%) in each subsequent year.

Degree to which the actual benefits matched assumptions	The initiative matched expectations within individual practices but saved more money than expected overall because of its high adoption across the locality.
If initiative has been replicated how frequently/widely has it been replicated	It is not known if the initiative has been replicated outside Walsall CCG, but it has achieved very high uptake (90%) among GP practices in that area.
Supporting evidence	Details of savings and pharmacist interventions have been summarised in this case study.

Details of implementation

Implementation details	<p>Initially a pilot project was run in 2 practices to test the idea of practice-based pharmacists managing repeat prescriptions. During this pilot the need for the scheme was confirmed, processes were refined and outcome measures were developed.</p> <p>The scheme involves CCGs creating additional pharmacy capacity, so that GP practices can buy-in pharmacy time to manage repeat prescriptions. This is cheaper and ensures more appropriate prescribing than the previous system of GPs undertaking repeat prescriptions. GP practices buy-in the service out of their prescribing budget. The net cost to the budget of repeat prescriptions is reduced by this initiative.</p> <p>Following the pilot a commissioning business plan was developed to obtain approval for roll-out across 14 practices in the area that had expressed an interest. These practices were initially allocated 4 hours of pharmacist time per 1200 patients. To meet demand, the CCG increased the hours of pharmacist SLAs. The results of the wider roll-out confirmed the benefits to savings and quality resulting from pharmacist interventions.</p> <p>Once a successful evaluation of the project was completed at 18 months, the service was offered to other localities within Walsall, with uptake in 56 (90%) practices. Practices typically used between 4-8 hours of pharmacist time per week, which was less than in the pilot. To meet this demand the medicines management team recruited additional pharmacists to provide capacity.</p> <p>The widespread adoption of the initiative suggests it could be successful in other areas.</p>
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	<p>The work highlights the potential for pharmacists to be included as fully integrated members of a general practice team.</p>
Time taken to implement	<p>This initiative can be implemented in 1–3 years. This includes establishing demand for the service among local GP practices, agreeing how the service will operate and expanding pharmacist capacity by increasing SLA hours or through recruitment of additional pharmacists. Establishing demand and agreeing processes occurs within the first year, alongside some increase in capacity to supply a limited roll out. Wider roll-out with further increases in capacity occurs after the first year as demand dictates.</p>
Ease of implementation	<p>The initiative involves the cooperation of a CCG and GP practices working within a local area.</p>
Level of support and commitment	<p>The widespread uptake of the service within Walsall CCG demonstrates that stakeholders are likely to support the initiative.</p>
Barriers to implementation	<p>Recruitment of additional pharmacists, if required, may be a barrier unless commissioners can be convinced of the net savings.</p>
Risks	<p>Pharmacists work under a SLA requiring them to work within their limits and competence. Under the SLA all pharmacists have a responsibility to report all clinical and non-clinical accidents or incidents promptly. All pharmacists are responsible for ensuring that they have professional indemnity suitable for the range of work they are undertaking and are responsible for ensuring that they have authorisation for making changes to prescribing records within the practice. This may be by written agreement or GP signature for specific audits.</p> <p>Overarching risk management is coordinated by the head of medicines management, prescribing advisors and lead pharmacists who are responsible for supporting the pharmacists, managing the service, monitoring and agreeing the work programme. They are also responsible for reporting and developing the service in conjunction with the CCG Board, CCG localities and the medicines management committees.</p>
Supporting evidence	<p>No extra information provided</p>

Further evidence

Dependencies	<p>Participating GP practices must be able to allocate a room with computer access to the pharmacist when they visit.</p> <p>There must be a way to expand pharmacist capacity to meet demand, by either increasing the hours on SLAs or recruiting</p>
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more pharmacists.

Contacts and resources

Contacts and resources

If you require any further information please email: qualityandproductivity@nice.org.uk and we will forward your enquiry and contact details to the provider of this case study. Please quote reference 14/0001 in your email.

Department of Health (2012) [Improving the use of medicines for better outcomes and reduced waste: an action plan](#)

Health and Social Care Information Centre (2012) [Prescriptions dispensed in the community: England, statistics for 2001 to 2011](#)

Garfield S, Barber N, Walley P et al. (2009) [Quality of medication use in primary care – mapping the problem, working to a solution: a systematic review of the literature](#). BMC Medicine 7: 50

National Institute for Health and Clinical Excellence (2009) [Medicines adherence: involving patients in decisions about prescribed medicines and supporting adherence](#). NICE guideline (CG76)

National Institute for Health and Clinical Excellence (due March 2015) [Medicines optimisation](#).

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