Independent Review of the Costs, Systems and Usage of EPS in Community Pharmacies

Part Two

July 2016

Health and Social Care Information Centre

pwc

Contents

1. Executive summary

Background:

Electronic Transmission of Prescriptions ("ETP") is an ongoing programme to transform the processes around the movement of patient prescriptions through the health economy. The eventual goal of ETP is that a patient's prescription will be sent electronically from their GP to a pharmacy and then on to NHS Prescription Services for payment.

The key element of ETP is the Electronic Prescription Service ("EPS") which is the mechanism through which ETP is being implemented. EPS is being rolled out via phased software releases. The current stage, Release 2, supports the use of electronic signatures, electronic repeat dispensing, patient nomination of their preferred pharmacy, the cancellation of electronic prescriptions, and the submission of prescriptions electronically to NHS Prescription Services.

The 2014 ETP Extension Business Case for the continued rollout of EPS identified 33 benefits and one dis-benefit to EPS Release 2. In December 2015 NHS England, NHS Employers, the Health and Social Care Information Centre ("HSCIC") and the Pharmaceutical Services Negotiating Committee ("PSNC") collectively known as the 'working group' sought an independent assessment of eight of the benefits, and the one dis-benefit, as well as an assessment of the impact on community pharmacies' time and costs as a result of EPS Release 2. The purpose of the independent review was:

1. To assess the costs and time taken for community pharmacies to manage the receipt, preparation, dispensing and claiming of prescriptions using EPS (compared to paper).
2. To provide independent evidence that confirms (or otherwise) the position in relation to EPS benefits and dis-benefits for community pharmacies. This evidence was agreed in advance with PSNC so that it is transparent and is accepted as valid.
3. To provide recommendations for improvements to the dispensing of EPS prescriptions which may result in efficiency savings for community pharmacies.

We, PwC, were commissioned to perform this independent review, which was conducted throughout January and February 2016. As the set out in the agreed scope of work our findings are divided into two reports; 'Part 1' and 'Part 2'. This report forms our response to 'Part 2' of the work.

Scope and limitations of scope:

Scope

The scope of this Part 2 report is limited to addressing the following areas:

1. Analysis of any recurring themes to emerge from discussions – commonly occurring issues or concerns and also any commonly expressed reasons/thoughts where EPS is seen as particularly beneficial. This should explore themes common to working at a pharmacy/branch level and also any that apply to multiples specifically as a result of having centralised functions and administration.
2. Identify areas where business process and technology changes have led to improvements for pharmacies, or where 'forced' business change (to implement EPS) has caused problems that can be addressed. This should demonstrate any linkages to pharmacy types (e.g. size, system, location etc.).
3. Identification of any Best Practice processes that may be working well for different pharmacy types.

This scope complements the findings of our Part 1 report. This was published separately in March 2016 and released to the HSCIC for wider distribution to the members of the working group. The Part 1 report addressed the following areas:

1. Evidence to support or disprove each of the in-scope dispenser benefits/dis-benefit listed within the Extension Business Case plus assessment of how significant each benefit is on improving/impairing pharmacy efficiency.
2. Identification of any emergent benefits or dis-benefits that have not been detailed within the ETP Business Case, backed up by detailed qualification and quantification.
3. An independent assessment of the costs (of consumables, connectivity, peripherals etc.) and time (to complete each process step necessary) for pharmacies to use EPS, from receipt of prescription to reimbursement, compared to the alternative paper-based prescribing process.
4. Analysis of the impact of GP practice systems and processes on pharmacy use of EPS and the need for regular liaison with practices over and above previous contact when using paper-based prescribing.
5. An assessment of any system-specific barriers to the efficient and effective use of EPS, or commonly occurring system issues/concerns. Equally, an assessment of any system strengths that enhance the EPS dispensing experience that might be more commonly used in other pharmacy systems.

To address the scope of Part 2, we have performed the following work:

National survey

A survey was developed which was designed to directly address the scope of the independent review. The content of the survey was shared with and approved by the working group, and also reviewed by operational pharmacists before it was finalised and issued. For the purposes of Part 2, the national survey considered:

- Commonly recurring benefits of EPS Release 2, or otherwise;
- The training that pharmacy staff have received as part of the implementation of EPS Release 2;
- Further training needs identified by pharmacy staff; and
- The impact on business continuity planning and whether business continuity issues have been faced as a result of EPS Release 2.

The survey was shared, either directly through email, or via the HSCIC and PSNC's media portals, with the community pharmacy population (which totalled 11,674 pharmacies as at 31 March 2015). 2,008 (17%) completed surveys were received and we received partial responses from a further 1,271 (11%) pharmacists or pharmacy staff. Where partial responses have been received in respect of specific questions the response has been taken into account within our conclusions.

Fieldwork

200 randomly selected community pharmacies have been visited during January and February 2016. The sampling methodology was agreed with the working group. During the community pharmacy visits the fieldwork team performed the following activities:

- An on-site interview with the pharmacist or the pharmacy staff (through this report considered as a single population) in each location. This questionnaire followed the themes of the national survey and was designed to build on the broad survey findings and provide further evidence to support our conclusions. Specific to Part 2 we gained evidence over the extent of business process changes as well as technology changes in relation to EPS Release 2.
- Where best practices were observed that enhanced the implementation or ongoing administration of EPS Release 2, they were recorded. These observations, although not evidenced based, have been aggregated and compared for the purpose of being recorded in this report.

Our discussions and observations have been supported by the major time and motion study that we performed to support our findings of the Part 1 report. This study was not specifically designed to address the scope of this report, however where relevant the results have been referenced.

The relevant parts of the national survey and on-site interviews, with reference to the time and motion study, have been the basis for our assessment and conclusions throughout this report.

Limitations

The following limitation of scope, relevant to this report, were agreed with the working group prior to our work commencing:

- A number of pharmacies (50 in total) have been excluded from the population of locations to visit. This was due to them having recently participated in a similar study performed by the HSCIC EPS management team.

Summary of findings and recommendations

Recurring themes emanating from discussions

Pharmacists and their staff are generally positive towards EPS Release 2. Where pharmacy staff were positive about the impact of EPS Release 2, this was focused on:

- **A perceived time saving versus processing paper prescriptions** – although our time and motion study did not support this view (on average there is no statistical time difference between EPS Release 2 and paper) there is a view amongst a large cohort of pharmacists that time savings are being made;
- **Reduced risk** – Pharmacists have told us that they like that drugs information is automatically populated on the PMR system when using EPS Release 2, which reduces the risk of input error and patient harm;
- **Increased flexibility** – Although the 'nomination' process frustrates some of pharmacists we spoke to, the majority appreciate the fact that in exceptional cases they can use EPS Release 2 to facilitate receiving prescriptions for patients in urgent situations; and
- **Improved patient service** – Pharmacists have noticed that patients don't need to wait in the pharmacy for as long, saving time and increasing the patient experience.

However, alongside these commonly recurring positive themes , the efficient administration of EPS Release 2 can be hampered by both internal and external factors. The most commonly discussed were :

- GP surgeries not allowing pharmacies enough time to dispense before suggesting to patients' their medication will be ready for collection.
- Alongside this, pharmacists identified various system based issues that slow down the dispensing process, relating to both the PMR systems in use and restrictions of speed that are believed to relate to national infrastructure.
- Other commonly occurring issues revolve around inadequate or out of date training in-house and the need for further training from external sources, and
- Split prescriptions forcing pharmacies to operate dual dispensing models.

The common themes we have identified are prevalent across all pharmacies and not confined to specific pharmacy types.

Business processes and technology changes

EPS Release 2 represents a business change which requires both updated operating procedures and a greater use of technology. However, from our discussions with pharmacy staff and from our observations, the extent to which processes have actually changed appears to be limited.

These findings are reflected in our identification of business process and technological improvements EPS Release 2 have generated. The major improvement we have identified relates to workload management; where pharmacists can anticipate when the majority of scripts will be available for processing they have changed their resource model to respond to these times of increased activity. Other areas of improvement include increasing the number of terminals in pharmacies to reduce staff downtime and increase productivity, and moving to a daily claiming process which reduces the resource requirement for the month end claim.

We also identified a number of issues that pharmacies have faced. These include staff who are not comfortable with a process that relies heavily on an IT solution, system issues which result in lost time, and management deficiencies that mean change is not embraced.

In the majority of cases, the improvements and issues are not limited to a pharmacy type or size, although improvements that are related to increase terminals are dependent on the space available within a pharmacy.

Best practices

When considering process improvements we have observed that most processes within a pharmacy are mirrored across the population. The processes efficiencies we have observed are:

- Reducing the number of visits to GP practices;
- Where allowable, using the functionality of systems to improve the sorting process;
- Stopping processing EPS tokens through the endorsing printer; and
- Optimising the claiming process so that only required tokens are sorted and sent to NHS BSA.

The underlying theme that dictates the level of success is the strength of the human 'owner' of the process, and we observed similar processes being performed to varying degrees of success. The attributes that we have observed as best practice are:

- **Positive attitudes** – EPS Release 2 represents a business change. Common to all business changes, a positive attitude and strong leadership through the change is required to increase the likelihood of a successful outcome. Where EPS Release 2 works particularly well the whole staff within a pharmacy have embraced the change, with the lead pharmacist being crucial to instilling this attitude.
- **Relevant skills** – Alongside training on PMR systems, those pharmacies that demonstrate best practices have either enhanced the computer literacy of the staff or employed their human capital in the most effective roles.
- **Strong working relationships with GPs** – Pharmacies who work closely with their GPs are aware of when they will receive scripts so that they can improve their workload management. They have also agreed principles that benefit patients, such as agreeing minimum times for GPs to tell the patients when their prescriptions will be ready in their pharmacy.
- **Knowledge of patients** – Where scripts are best sorted and prioritised, the pharmacy staff employ their cumulative knowledge and experience to identify the likelihood of patients arriving in the near future and therefore will dispense their items first. This knowledge can also be used to help prevent issues relating to split scripts.

We have observed that to maximise the efficiency of human capital, a pharmacy needs to be well manged and organised. This involves established daily routines, clear staff roles and responsibilities, a sufficient number of terminals, and sufficient space to allow for appropriate number of terminals and staff.

The best practices we have observed are applicable to both EPS Release 2 and paper based systems, although some are specific to EPS Release 2, as they recognise that its implementation is a business change that is based on technology.

2. Detailed findings

2.1 Recurring themes

Objective

"Analysis of any recurring themes to emerge from discussions – commonly occurring issues or concerns and also any commonly expressed reasons/thoughts where EPS is seen as particularly beneficial. This should explore themes common to working at a pharmacy/branch level and also any that apply to multiples specifically as a result of having centralised functions and administration."

Approach

Our observations in this area have been drawn based on the following:

- We have analysed the responses received to the national survey. The survey included a number of broad questions which were designed to identify common views on EPS release 2. It also included specific questions around business continuity and staff training, which we identified as part of our scoping of the study were areas of interest to the community pharmacy population; and
- As part of our fieldwork we asked pharmacy staff to tell us about their experiences, both positive and negative. These have been compared to the national survey responses and factored into our observations.

Common benefits

There is an overall positivity towards EPS Release 2: 65% of survey respondents agreed or strongly agreed that EPS Release 2 had a positive impact versus paper prescribing, and 62% preferred EPS Release 2 over paper. The key reasons for the positivity, as has been borne out by the national survey results and our fieldwork, are:

- A perceived time saving (although this has not been substantiated by our time and motion study);
- Less data entry into the pharmacy system, which saves time and reduces the risk of error;
- Increased patient satisfaction, due to reduced waiting times in pharmacies; and
- Increased flexibility to react to urgent patient needs.

Significant additional common themes have been identified through analysis of evidence obtained, although it should be noted that our work within Section 1 of our Part 1 report evaluated eight identified benefits and either fully or partially validated seven of them. These benefits framed the fieldwork discussions and additional pharmacist considerations we collected are aligned to these areas.

Key issues are:

The impact of GP surgeries

Although pharmacists appreciate the agility that EPS Release 2 allows in terms of downloading prescriptions from the Spine throughout the day, they commonly find that GP surgeries send patients to the pharmacy with expectations that their prescription will be immediately available. This causes both interruptions to the work

flow of the pharmacy as they have to resolve the issue, and a perception amongst pharmacists that customer service is adversely impacted.

System issues

A number of common system issues were discussed by pharmacists, and in part verified through observation by the PwC fieldwork team. These can be categorised into the following five broad areas:

- Lost tokens/tokens 'stuck' in the Spine and not downloadable ("stuck tokens")Issues with downloading prescriptions
- Issues with the claiming process
- Connection issues / system crashing
- Slow system performance

The majority of issues cause inconvenience and lead to a less efficient dispensing process. It was noted that the general consensus is that system downtime is not a common occurrence. Depending on the system in use, between 18% and 28% of pharmacists had experienced system downtime. The cause of these issues was generally unknown although the prevailing understanding amongst pharmacists was that they related to the PMR systems themselves rather than national infrastructure issues.

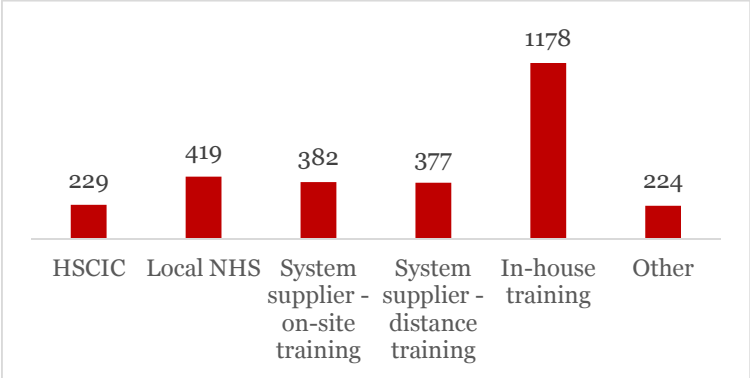
Training

Initial training

The impact of staff training, or otherwise, was regularly discussed amongst pharmacists during the course of this study. The subject was included in our national survey and was further discussed as part of the fieldwork interviews. To understand the level, and source, of training provided when EPS Release 2 was first implemented within each pharmacy, we asked the following question in our national survey:

"Did you receive any training or support with the implementation of EPS Release 2?"

2,012 individuals responded to this question. The total number of responses received for each source of training is detailed below:



The most common source of training was delivered in-house, with 59% of respondents receiving such training.

As part of our fieldwork pharmacists and pharmacy staff discussed their view on the training they had received. The most commonly recurring comments received indicated it was either insufficient or not helpful.

Typical comments:

- "Increased need for training which is time consuming and different staff cope better with it than others."

- "Training only gave very basis understand and an ideal world scenario."

- "Adequate training has not been given."

From the discussions that were held a generally negative view of initial training was noted. Key issues were:

- From a pharmacy management point of view, releasing staff to receive training created resource pressures and increased staff costs;
- A time lag between training being provided and EPS Release 2 going live meant that the key messages from the training had been eroded; and
- Different staff responded to the receiving the same training in different ways, both in attitude and ability.

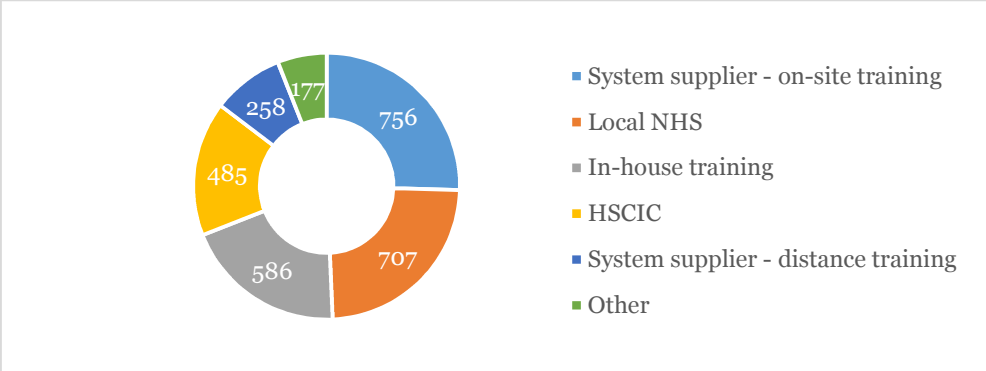
These issues were noted across the pharmacies types and sizes, and were not contained by system or EPS usage levels.

Further training requirements

To understand if further training on EPS was required, we asked the question:

"To make EPS work more effectively, do you think any further training or support is required from the following sources?"

2,012 individuals also responded to this question. The areas from which they believed further training would be a benefit are noted below.



These responses suggest that there is a disconnect between the main source of training provided to date (in-house) and the perceived areas of greatest training value. Of the 2,012 respondents:

- 40% believe either local NHS bodies or the HSCIC should provide training;
- 34% believe system suppliers should provide training; and
- 20% believe further in-house training is required.

A relative lack of desire for further in-house training may be a reflection of the training already received, however pharmacy owners and managers should consider which training is available from external sources and how that may improve EPS implementation and efficiency. Other stakeholders, such as the HSCIC and the PSNC, should also consider what additional training they can provide that will enhance the implementation of EPS Release 2.

Other commonly discussed issues

Dual systems

Alongside training requirements, the other most commonly discussed issue with the EPS project is the requirement to maintain two different systems i.e. EPS and paper.

One of the key reasons for this is the treatment of Controlled Drugs (referred onwards as "Controlled Drugs" and "CDs"). Since July 2015 Schedule 2 and 3 CDs have been allowed to be prescribed and dispensed through EPS. However, discussions held with pharmacists suggests there is not a clear understanding of this change in regulation, or a desire to dispense them via EPS.

Examples of differing views:

- "Controlled drugs should be sent by EPS"

- "They should not put CD (controlled drugs) on EPS. This should be maintained the way it is. It allows the script to be dispensed more locally and faster."

- "All controlled drugs going on EPS will be good."- "Controlled drugs should be sent by EPS"

We understand that although CDs are allowable in EPS Release 2, systems have currently not been updated to facilitate this functionality. For some pharmacists this is causing frustration and prolonging an existing inefficiency.

Controlled drugs cause two main issues for pharmacists:

1. Where EPS is considered to generate time savings, these cannot be achieved for CDs; and
2. CDs lead to 'split scripts', where a patient's prescription is split between EPS and paper.

Split scripts

Where items for one patient are sent from a GP to a pharmacy both electronically and in paper format, pharmacists and pharmacy staff are not assured that all the patient's items have been dispensed at the point they collect them. This can lead to patients not having access to the medication they believed they had received, and to a reduced level of customer service.

In practice, the risk of split scripts is mitigated by the knowledge and experience of the pharmacy staff dispensing items, as they can be aware of a patient's regular medication needs and often know to check that all prescriptions have been received. However, the risk remains live even where such knowledge exists and is heightened when staff are not aware of a patient's history, for example locum pharmacists or new starters.

Themes specific to pharmacy groups ('multiples')

As part of our fieldwork we visited 94 pharmacies classified as 'multiples' (groups with 6 or more branches), out of the total sample of 200. From evidence gathered from these visits, we have not identified themes that are specific to multiples. The issues and benefits observed were common across all pharmacy types and sizes, irrespective of system or EPS usage.

We are aware that a number of multiple pharmacies operate a "hub and spoke" model where prescriptions, in particular repeat prescriptions, are directed to a central "hub" to be dispensed before being collected from a local branch, or "spoke".

Our time and motion study did not include the impact of the hub and spoke model, although the online pharmacy model operates in a similar manner.

From responses received in the national survey, and discussions held as part of our fieldwork, the full impact of the hub and spoke model is not clear. Through observations, this may be as a result of a staff who work in multiples having limited exposure to other business models. This assumption cannot be proven based on the information collected as part of our study, however based on discussions with pharmacy staff we understand that many have either remained with the same employer for an extended period of time or have moved between similar types of pharmacies.

Conclusion

Through review of national survey responses and feedback received as part of our onsite visits, there is a recurring feeling of positivity towards EPS amongst the pharmacist community. This relates to a perception of time saving, reduced risk, increased flexibility and enhanced patient satisfaction.

This positivity is tempered by a number of issues that frustrate pharmacists and impact the ability to dispense efficiently. In particular pharmacists and their staff have indicated that GP surgeries do not always allow pharmacies enough time to dispense before suggesting to patients' their medication will be ready for collection, as well as various system based issues that slow down the dispensing process.

Other commonly occurring issues revolve around inadequate or out of date in-house training and the need for further training from external providers. Pharmacists have also told us they are frustrated by split prescriptions which force pharmacies to operate dual dispensing models.

The common themes we have identified are prevalent across all pharmacies and not confined to specific pharmacy types.

2.2 Business process and technology changes

Objective

"Identify areas where business process and technology changes have led to improvements for pharmacies, or where 'forced' business change (to implement EPS) has caused problems that can be addressed. This should demonstrate any linkages to pharmacy types (e.g. size, system, location etc.).

Approach

We have reviewed the responses received to the national survey and our on-site interviews. When on site we specifically asked what changes pharmacies have made to facilitate EPS Release 2. We have considered these responses and presented key themes.

Our findings in this area are also drawn from our observations while performing our fieldwork. Our team have seen evidence of business changes that have both improved efficiency and created issues.

Extent of business process and technology changes

When pharmacists and their staff were asked whether or not they had changed their business processes to facilitate EPS Release 2 a mixed response was received. The range of responses is highlighted below:

A range of views

"It has resulting in a significant change. It has meant that prescriptions can be dealt with in more regular batches and hence has evened out workflow at the pharmacy. It has also altered the way claiming is made in that it can now be done via the system"

"The pharmacy has significantly changed its operating processes as a result of EPS implementation because basically the pharmacist does not need to go surgeries much to pick up prescriptions therefore the process is more efficient."

"Overall the same processes are in place there have been minor changes to support EPS which supplementing what was already happening. The most noticeable change is ensuring claiming is done during the lunch hour as it is done in batches - once it is happening the terminal is out of action so it is important that this happens during none busy periods"

"The process hasn't changed, it's just quicker under EPS"

"No noticeable difference between pre and post EPS operating processes"

As discussed in section 3 of this report, the extent of change is often driven by the lead pharmacist within a pharmacy, and the extent of change has a significant impact on the efficiency of EPS Release 2. This section of the report reflects on where change has been made, the resultant improvements that have been noted by pharmacists and the barriers to successful change.

It should be noted that in general the business processes and technology changes we have observed have not been significant overall; pharmacists have told us that PMR systems have not been considerably updated due to EPS Release 2, and the extent of any infrastructure changes within a pharmacy has been minimal. The

majority of changes relate to operating procedures within a pharmacy and rely on strong leadership, management and an understanding of change.

Improvement areas

A commonly noted area of improvement is that EPS has enhanced the ability for a pharmacy to manage its workload more effectively. Where a pharmacy can accurately predict when scripts will be received it can more effectively utilise its resources to respond to the increase in activity. This business change is only effective where a pharmacy can anticipate when scripts are sent by GPs and requires an effective working relationship with the GPs who supply the scripts. We have observed that such a relationship is easier to create when the GP is located near the pharmacy. In one case we observed that a GP who was located next door to the pharmacy had installed an internal phone line so that there was direct contact between the two entities, allowing for improved communication and an increased ability for the pharmacy to understand when scripts would be sent.

Other improvements have tended to be less significant in nature, though together may have an impact on a non-efficient pharmacy:

- Increase in the number of terminals in a pharmacy. This reduces the 'down time' of staff members who may be waiting to use a terminal; and
- Where pharmacies have changed their claiming processes so that they have become a daily task they have found that the process has become less laborious. Our time and motion study has indicated that overall the time spent claiming has increased per item, however the time is not concentrated at one part of the month and instead is spread across each day so that its impact is considered less significant.

Issues

To implement EPS release 2, each pharmacy has had to change a number of parts of their operating procedures. Some pharmacies have experienced issues in doing so, however can learn from others how to overcome them:

Increased reliance on technology

EPS Release 2 requires that more processes within a pharmacy are channelled through the PMR system than under paper prescribing. This has led some pharmacy staff who are less technologically strong to struggle to embrace the change. The technological deficiencies are not limited to the PMR as a wider knowledge of computer operating system is required, for example to access the prescription tracker.

Targeted training of staff who require support will increase their effectiveness in dispensing via EPS. In the case of multiples and supermarkets there may be scope to redeploy staff who are unable to embrace the change so that they are employed in a more suitable role, while more appropriate resource (i.e. staff with sufficient computer literacy) is brought into the pharmacy setting. This redeployment of resources will have to be balanced with any associated cost implications.

Sorting and prioritise

Some pharmacists have told us the time it takes to sort and prioritise scripts that have been printed once received from a GP takes significantly longer than sorting paper prescriptions. The major reason stated is that scripts are printed in the order they have been received, so can be from any GP and not in alphabetical order.

Other pharmacists, however, use systems that either automatically print alphabetically, which improves the efficiency of the sorting process, or include this functionality but isn't the default setting and needs manual intervention to turn it on.

Pharmacies should explore whether their system allows for alphabetical printing which will have a positive impact on dispensing efficiency.

Claiming

As part of claiming for payment under EPS pharmacies are required to send certain scripts to the NHS BSA to evidence exemptions or additional costs incurred by a pharmacy. We have seen various interpretations of what

information needs to be sent to the NHS BSA, ranging from all scripts to be sent, and grouped by GP and in alphabetical order, to only non-age exempt scripts to be sent without prior sorting.

Pharmacies will benefit from being reminded of the requirements for scripts that are sent to NHS BSA so that they ensure they are claiming in the most efficient manner.

Change management

A number of pharmacists have told us that they have not changed business processes as a result of EPS Release 2. In these cases they are operating EPS Release 2 as if it is a paper based system. However, there are some fundamental differences between the two systems, and although they encompass similar processes, to achieve optimal efficiency the methodologies within each process should be different.

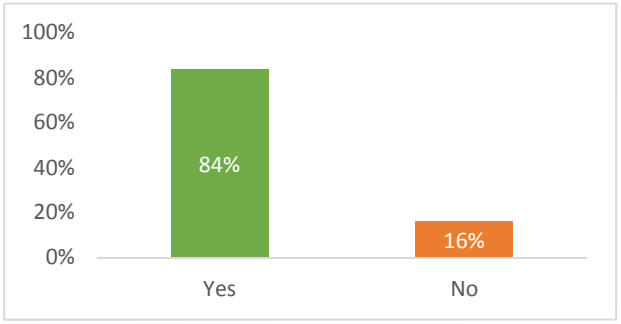
Where pharmacies have not changed processes they should consider re-mapping their processes to understand how they differ between EPS Release 2 and paper, and take appropriate action to maximise the efficiency of both systems. Examples of such changes may be:

- Ceasing processing EPS scripts through the endorser;
- Reducing the extent to which scripts are sorted before being sent to the NHS Business Services Authority (NHS BSA) as part of the claim process; or
- Reducing the number of visits to GPs to collect scripts if there has been a major decrease in paper prescriptions.

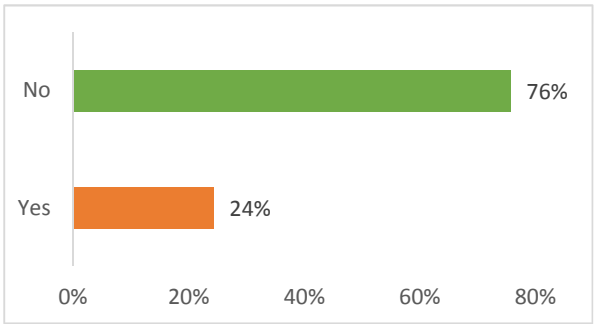
Business continuity

Through the national survey we have explored whether pharmacies have considered EPS Release 2 within their business continuity plans. Where a system is so reliant on technology, mainly controlled by third parties, contingency plans should be in place to mitigate any technological failures. We asked pharmacy staff whether their pharmacy had business continuity plans which included EPS, and whether they had experienced business continuity issues, and whether the issues related to specific items types (e.g. items as part of acute prescriptions, care homes, etc.):

"Does your organisation have a business continuity plan that includes EPS?"



"Have you experienced problems relating to business continuity with certain types of prescriptions for particular groups of patients, e.g. Care home patients?"



The responses received indicate:

- A significant amount of pharmacies have factored EPS into their business continuity plans; and
- The majority of pharmacies have not suffered business continuity issues as a result of EPS.

From the information gathered, the impact of EPS on business continuity does not appear to be a major issue for pharmacies, and in the event that EPS fails, over 80% of pharmacies have plans in place to mitigate the risk

of business continuity failure. Pharmacies that have not addressed business continuity risks should consider whether these risks are acceptable or whether contingency plans should be made.

Conclusion

For most pharmacies the improvements that EPS Release 2 have generated are nuanced. This reflects that the processes for dispensing medication are similar to under the paper system. However, we have identified improvements relating to managing workload, increase in computer hardware, and diluting the time certain tasks take.

We have also identified a number of issues that pharmacies have faced, and suggested a means to resolve them. These include staff who are not comfortable with a process so reliant on IT, system issues which result in lost time, and management deficiencies that mean change is not embraced.

In the majority of cases, the improvements and issues are not limited to a pharmacy type or size, although improvements that are related to increase terminals are dependent on the space available within a pharmacy.

2.3 Best practices

Objective

"Identification of any Best Practice processes that may be working well for different pharmacy types."

Approach

As part of our fieldwork, PwC have recorded best practices it has observed. These observations have been aggregated and analysed.

The focus of this study has been changes to business processes and the use of PMR systems. We have noted, however, that recurring themes of best practice relate to the input of the pharmacists and their staff into the processes, and the relationships they have with other stakeholders, namely GPs and patients. This section of this report considers the nature of these inputs and how they improve EPS Release 2 and dispensing as a whole.

Process improvements

As part of our time and motion study we identified 10 'touchpoints', or processes, that an item goes through from the point of receipt into the pharmacy to its associated income being claimed for. These are outlined in Appendix 1.

We have considered where the application of each touchpoint could be standardised across the community pharmacy population so that best practices seen in some pharmacies could benefit all. The following process-based best practices were identified:

Receiving a prescription into a pharmacy

Where EPS has become the dominant system for receiving a prescription into a pharmacy, the number of paper scripts has significantly decreased. Pharmacies have generated efficiencies by reducing the number of times their staff visit GP surgeries to pick up paper scripts. This has the potential to reduce staff costs or deploy staff to more productive processes.

It is not currently possible to eliminate this process altogether, due to Controlled Drugs and other prescriptions that are still paper based, however significant reductions have been made by some pharmacies.

Sort, reconcile and prioritise

A common issue noted when visiting pharmacies has been that PMRs print tokens in the order they are received, which is not helpful to organising workload. However, other pharmacies have generated efficiencies by employing systems that print in alphabetical order, which allows for a more structured sorting process.

We have noted that not all systems have this functionality, and that some systems do not have it set as a default option. Pharmacies should confirm with their system supplier whether this functionality can be enabled.

Endorsing

In the majority of cases, endorsing through EPS is an automatic function or requires confirming endorsement on the PMR system. Some pharmacies, however, still use the endorsing printer for EPS tokens, which is not required. Eliminating this process will increase efficiency.

Claiming

We have seen various interpretations of which tokens need to be sent to the NHS BSA, and the amount of sorting of those tokens before they are sent. Some pharmacies still sort and send all tokens, which is not required. NHSBSA require non-age exemptions to be sent to them only. The tokens do not have to be sorted in advance.

It should be noted that not all touchpoints are discussed above. For the majority of touchpoints we have observed consistencies in approach between pharmacies. These consistencies are apparent across pharmacy types and sizes, as well as between different system users.

A number of key differences between pharmacies are not related to processes. Instead, they relate to the extent to which EPS Release 2 has been embraced and its roll out has been managed by pharmacies. The remainder of this section discusses the areas we have observed that have allowed pharmacies to best realise the benefits of EPS Release 2 and changes that can be made across the pharmacy population.

Pharmacy size, organisation and management

The pharmacies that appear to operate EPS Release 2 most efficiently share a number of characteristics. These include:

- Well organised daily routines;
- Clear staff roles and responsibilities;
- Sufficient number of terminals so multiple staff can access the PMR at any one time; and
- Sufficient space to allow for appropriate number of terminals.

The last two factors are limited by the assets that a pharmacy has at its disposable, both physical and financial. Larger pharmacies are advantaged in this regard, as they have increased space for more terminals whilst allowing their staff to move around the pharmacy in an efficient manner. For smaller pharmacies, effective management can compensate for some of the disadvantages that their size and lack of space create.

Where effective management was seen, the staff within the pharmacy knew their roles and the operation they were expected to perform. On top of this, the pharmacies' days were organised to best incorporate EPS Release 2. For example, where a pharmacy was aware that most EPS scripts would be available to them when the store first opened, staff numbers would be greater at the start of the day before reducing to reflect the reduced demand. This requires a good understanding of when scripts will be sent by a GP which is discussed later in this section.

We have seen pharmacies that have dedicated managers, and pharmacies where the lead pharmacist takes on the role of manager. These are often smaller independent operations where the pharmacist is the owner and therefore de-facto manager. Variations of management strength were observed in both these groups, and we did not categorically identify one type of manager being more effective than another.

Effective management was seen irrespective of pharmacies being high intensity users of EPS Release 2 (i.e. it was equally relevant for paper scripts), however EPS Release 2 does present the need for specific management skills to ensure an efficient operation:

- **Demand**– understanding when 'demand' is highest i.e. when scripts will be received; and
- **Change** - change management requires specific skills so that the physical environment, the staff, and external arrangements are optimised to maximise efficiency of a new process.

We have observed best practices across pharmacy types and sizes, and equally seen poor practices across the pharmacy spectrum. Understanding that EPS Release 2 is a business change is imperative and that a

'business as usual' approach, incorporating EPS Release 2 into exist paper-based systems, is an obstruction to a successful implementation.

Staff attitudes

We noted that where EPS Release 2 appeared to work most efficiently the staff within a pharmacy collectively embraced the process. It was a common occurrence that the staff within a pharmacy were either all in favour of EPS Release 2 or preferred paper as a group. Although this cannot be evidenced, this attitude tended to stem from the lead pharmacist. This may be a reflection of their ability or willingness to manage the change i.e. those that embraced the change allowed it to positively impact their staff, and vice versa.

Example of staff engagement:

In one medium sized supermarket that we visited the lead pharmacist was particularly positive towards EPS Release 2. This was reflected in the attitudes of the staff who believed it was more efficient. When questioned about what processes had changed to facilitate EPS, the lead pharmacist indicated how the shelves in the pharmacy had been rearranged to allow for better organisation of medications as they were being prepared in bulk at the start of the day when the majority of scripts were pulled from the Spine. This business change was implemented after one of the dispensing staff suggested it as a potential efficiency. The lead pharmacy believed it led to improved organisation and quicker service for patients.

The changes made were simple: shelves were arranged so that there was a section for each GP. Within the section items which had been labelled were stored by patient name, in alphabetical order. This allowed for the staff to prepare large amounts of items in advance, as soon as they were available on the PMR, and locate them quickly when a patient arrived to collect them.

Staff abilities

EPS Release 2 requires a different set of skills than processing medication via paper prescriptions. There is an increased need for computer literacy, as more functions within the pharmacy 'touchpoints' are managed through the PMR system. Although, as discussed in Section 1 of this report, additional training from system suppliers has been identified by pharmacists as a requirement, we have seen non-PMR-specific abilities that are considered best practice:

- Strong typing skills and efficient use of a keyboard;
- General computer literacy, such as navigating to the prescription Tracker; and
- Ability to multi task, so that manual tasks are performed at the same time as system based tasks.

These skills are not exclusive to EPS Release 2 and we have seen them benefit paper based prescription processes also. However, given that EPS Release 2 is a technology based solution, the advantages are greater for these processes.

Where computer users were confident and capable we saw they appeared to be more efficient at dispensing and embraced EPS Release 2 more openly.

Relationships with GPs

An area of best practice observed as part of this work was where pharmacists had agreed with GPs:

- The time of day that the majority of scripts will be sent to the pharmacy; and
- A protocol whereby GPs would advise patients of a minimum time period before they should visit the pharmacy to collect their prescription.

It was observed that relations with GPs were influenced by proximity: the closer a pharmacist was to its main GP partner, the better the relationship and more efficient the use of EPS Release 2.

The arrangements above could be used as a basis for wider service level agreements between pharmacists and GPs, either formal or informal, so that other members of the health economy could benefit from similar efficiencies.

Patient knowledge

We have seen that EPS Release 2 operates particularly effectively when prescriptions can be sorted and prioritised in an efficient manner. Our time and motion study identified that overall this process takes more time for EPS than paper, although observations indicate there are best practices amongst pharmacists that increase efficiency in this area.

The first area of best practice is system driven and relates to the ability to print scripts out in alphabetical order. For some systems this is done automatically, and for others there is functionality available to facilitate this. Pharmacies should explore whether this functionality is available on their system so that they can benefit from a more organised printing approach which allows for easier sorting and prioritisation.

The second area of best practice is the experience within a pharmacy to understand their patients' medical histories which allows them to recognise whether the medication they are receiving is repeat or acute in nature. By investing time in increasing patient knowledge, and by retaining staff so that they have the time to build up their knowledge base, a pharmacy can increase EPS Release 2 efficiency at the sorting and prioritising stage.

Conclusion

When considering process improvements we have observed that most processes within a pharmacy are mirrored across the population. The processes efficiencies we have observed are:

- Reducing the number of visits to GP practices;
- Where allowable, using the functionality of systems to improve the sorting process;
- Stopping processing EPS tokens through the endorsing printer; and
- Optimising the claiming process so that only required tokens are sorted and sent to NHS BSA.

Best practices are driven by human input into pharmacy processes, both in terms of management of staff and the staff themselves. We have observed that these human resources are maximised when a pharmacy is well organised and clearly defined roles and responsibilities exist.

The best practices we have observed are applicable to both EPS Release 2 and paper based systems, although some are specific to EPS Release 2 as they recognise that its implementation is a business change that is based on technology.

Appendix

Appendix 1: Touchpoints

The below table summarises the 'touchpoints', or processes, that were used as the basis of our time and motion study. These touchpoints were designed by PwC's subject matter specialists (i.e. qualified and experienced pharmacists) and agreed by the working group prior to the commencement of our fieldwork:

	Touch Point	Paper	EPS
1	Receive a prescription to dispense	Walk- in or collected from surgery	Electronic transfer - Nomination or dispensing tokens printed by GP
2	Sort; reconcile & prioritise	No printing	Printing step - dispensing token to dispense from (Some may dispense from screen)
3	Exemption check	Patient/ carer signs back of prescription if exempt at 'hand in' (Walk in) - or at pick up (if collected from surgery)	Patient not normally there - so signing has to be done at 'hand out'
4	a) Queries - clinical	Out of scope	
	b) Queries - admin	Addressing queries that prevent the flow of the process	Addressing queries that prevent the flow of the process
	c) Queries - EPS related		
	d) Queries - stock		
5	Label generation	Type into PMR	Electronic - Automatic - no typing - but may need to check dose & adjust manually
6	Dispensing	Out of scope	
7	Endorsing	Hand written	Electronic - majority are automatic. Some not automatic e.g. special and parallel imports
8	Patient receives medicines	Out of scope	
9	Dispensing notification	NA - once collected or delivered - Prescription filed for claiming.	Logon onto the system - open up token - check - authorise dispense notification - highlight. Can do a part - but cannot claim until all DNs are complete.
10	Claiming	Send paper prescriptions to NHS BSA	Notification for claim sent on system.

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