Electronic Prescribing Service:

Opening the Doors for Pharmacy Transformation in Wales.

Centred Solutions™

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Introduction

For a number of years, Welsh community pharmacy has led the way in terms of moving to a service driven model. Last year alone, more than 400,000 people used the common ailment service and a third of pharmacies in Wales now deliver an independent prescribing service, with this number growing year on year. Three years on from the implementation of the new pharmacy contract in Wales, pharmacies are now integral health hubs releasing pressure from elsewhere in the NHS.

However, despite the success of the service-based model, pharmacies in Wales have not been immune to the problems facing community pharmacy elsewhere in the UK. Welsh pharmacies have faced significant financial challenges for an extended period of time due to factors such as increases in the national minimum wage, increased utility bills and interest charges. Just this month, the Welsh Government awarded a £6m additional funding boost as a 'stability payment' for community pharmacy.

It follows a 6% increase in funding earlier this year, worth £9.9m, to address immediate pressures and realise long-term reform plans for community pharmacy.

Among the reforms taking place across community pharmacy is the roll out of a primary care electronic prescription service (EPS), which is now available at many GP practices and community pharmacies across every Health Board. The roll out of this technology opens the door for further transformation that supports the vision for community pharmacy in Wales while taking into consideration the ongoing funding pressures.

EPS: Opening the Doors for a Digital Revolution

Prescriptions across Wales can now be processed without the need for a "paper form" thanks to the new national EPS. The system was launched at the end of 2023 and it is being rolled out across the country as part of a phased approach. The service is now live for a number of GP practices and community pharmacies in every Health Board across Wales.

EPS has a number of benefits including:

- Saving time for both patients and health care staff

- Releasing time for patient care

- Enhanced safety and security as no longer reliant on paper based systems

- Reduces reliance on paper which has a wider impact on the environment.

The service is part of a wider commitment to introduce digital medicines and e-prescribing in all hospitals and primary care in Wales. But this should only be the start of a digital transformation to completely change the way prescriptions are managed. There is still the need to further streamline a process that has not changed in decades.

Once in place, EPS can open the door to a whole host of other pharmacy automation solutions. These were previously not as easy to access for pharmacies in Wales due to the integration they required with online patient records. These solutions were designed to further automate the dispensing process within community pharmacy with a view to releasing staff from manual and administrative tasks to spend more time on face to face patient care. It also further enhances patient safety by reducing the risk of error often caused by manual processes.

This technology includes:

- Robotic dispensing systems (RDS) designed to automate stock management and picking of original packs.

- Original pack dispensing automation, a newer type of technology which is a semi-automated version of the traditional pack to patient central fill model.

- Intelligent PMR systems which streamline the dispensing process and enable paperless workflows

- MDS automation which automates the filling, and sometimes checking, of multi-medication compliance aids.

For pharmacies looking to create greater capacity for patient services, automating the dispensing process needs to be the next step. And once EPS is in place it is a step that is a whole lot easier to take.

Automation for Original Pack Medication

RDS are widely adopted in hospital pharmacies and there has been a growing trend for these robots in the community pharmacy market. It is a competitive market and there are a number of suppliers but, generally speaking, they automate stock management and picking of original packs.

- **Sort and fill:** Most solutions offer "fill" functionality which means the tote delivery from the medication wholesaler can be tipped onto a hopper/conveyor belt and from there it is automatically sorted/loaded into defined locations in the robot.

- **Picking:** Integration with EPS means orders sent to the RDS are picked by a robot "arm" or picking head and then dispensed from the robot so it can be collected by a dispenser or pharmacist to fulfil an order.

- **Location and size:** RDS can be used in either a stand-alone pharmacy or a central pharmacy hub. There are standard-size solutions as well as configurable solutions which are modular. However, most solutions still require significant space so pharmacists wanting to install an RDS in branch will need to ensure they have the floor space.

FLOWRx Original pack dispensing automation is a newer type of technology growing in popularity across England. Developed by hub and spoke experts, Centred Solutions, this is a semi-automated version of the traditional pack to patient central fill model. Because it is scaled down it means this type of technology is now accessible and affordable for all pharmacy groups, regardless of size. It automates all elements of the original pack dispensing process for repeat prescriptions and takes 50% of total dispensing volumes out of store.

- **Checking:** Integration allows clinical and accuracy checks to be done up front by branch pharmacists. Orders are then sent through to the hub warehouse or central fulfilment branch. FLOWRx software ensures the pharmacy branch has full visibility of the patient prescription and its order status at all times.

- **Picking:** At the hub, the FLOWRx software creates a picking list so operatives can batch pick medication for multiple patients in one go.

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Automation for Original Pack Medication

- **Labelling:** Packs are placed onto the FLOWRx Automated Labelling Unit (ALU). The pack barcode is scanned, matched to the relevant patient in the software and the ALU then labels the pack. The ALU will label up to 25 packs per minute. This is one of the biggest efficiency savings when it comes to automating dispensing.

- **Sorting:** The labelled packs are scanned and the software guides the operator to sort medication into patient specific baskets at the sort station which uses guiding light and RFID technology, offering an added safety net when it comes to minimising errors.

- **Bagging and Toting:** Completed patient baskets can then be bagged at the automated bagging station. The software directs the operator to place the patient bag in the delivery tote for the relevant patient store.

- **Deliver and Dispense:** Bagged and labelled medication is then delivered back to the pharmacy branch. Any exceptions that have not been fulfilled by the hub (eg controlled drugs) can be processed at the store using FLOWRx software which guides the pharmacy team through the dispensing process.

- **Location and Size:** This solution has been designed for groups of pharmacies rather than stand-alone stores. It is fully modular/scalable and can be introduced in stages, but it will still require space at either a central hub or a larger pharmacy branch.

> **(!)** NOTE: Any anomalies in the dispensing process (eg., no barcode to scan) are flagged by the software. The relevant patient basket is placed into a quarantine state and cannot be processed until it has been cleared by a pharmacist.

Intelligent PMR Systems

For standalone pharmacy stores or smaller groups of pharmacies, new intelligent PMR systems provide software that semi-automates a number of elements of the dispensing process.

- **Paperless:** Full digital workflow replacing paper and providing total visibility of prescription throughout the entire process.

- **Checking:** Ability to save clinical checks for up to 12 months and only re-check if there is a change. Barcode accuracy checking reduces requirement for manual accuracy checks.

- **Picking and Sorting:** Ability for stock deliveries which are scanned directly to patient baskets.

- **Integration:** Integration with the full range of automation including original pack systems, pouch and MDS machines.

- **Location and Size:** This solution is software based so space for hardware is not a requirement.

Reasons to Consider a Hub and Spoke Model

It's long been thought that a hub and spoke model of dispensing has the ability to create capacity within pharmacy branches. But there has also been a lot of scepticism about this and what has been missing is the evidence to back that theory up.

For the past few years Centred Solutions has been providing hub and spoke solutions to a range of different pharmacy groups. This put the company in the unique position of being able to evaluate the effectiveness of hub and spoke models in different environments. It used this local data alongside national data to identify the benefits and potential return on a hub and spoke investment pharmacy can expect.

Centred Solutions discovered that return on investment, from setting up a hub and all operational costs excluding transport, can come from either re-directing time saved into delivering services, resource efficiencies or a combination of the two.

Key findings included:

- A return on investment within two years for an average pharmacy.

- Hub and spoke can deliver an 81% reduction in payroll costs per item, from 99p per item in a pharmacy compared to 19p per item in a hub.

- Moving to a hub and spoke model will take a minimum of 50% of total dispensing volumes (70-80% of repeat dispensing) out of branch creating much needed capacity.

- An average stock reduction in year one of 50% per pharmacy branch that moves to a hub and spoke model of dispensing.

- In an average 8,000 item pharmacy open 48 hours per week, hub and spoke can free up 48 hours of dispenser time per week and 24 hours of pharmacist time.

Every pharmacy is different so the findings are based on averages and NHS service fees. However, Centred Solutions has developed a tool that provides more specific data based on a particular pharmacy's demographics. This tool helps bring to life the potential benefits and return on investment for specific pharmacies or pharmacy groups who are considering hub and spoke right from the outset.

Service Potential of Hub and Spoke

Using a conservative model for an average 8,000 item pharmacy, with 50% of the pharmacist's time freed up for services and 27% of freed up technician hours, this could be the service potential when using FLOWRx original pack dispensing automation.

Group of *five pharmacies* dispensing 8,000 items each

Profit per year *after year one*
£214,225

Profit *over five years*
£860,858

Group of *ten pharmacies* dispensing 8,000 items each:

Profit per year *after year one*
£494,650

Profit *over five years*
£2,062,715

Group of *twenty pharmacies* dispensing 8,000 items each:

Profit per year *after year one*
£1,103,800

Profit *over five years*
£4,722,930

* Profit takes into account capital expenditure and operating costs incurred with setting up a hub.
* Potential pharmacy service revenue based on Welsh reimbursement model for Common Ailment Scheme, Inhaler Review Service, Flu Vaccinations, Smoking Cessation Service and Bridging, Emergency and Quick Start Contraception service.
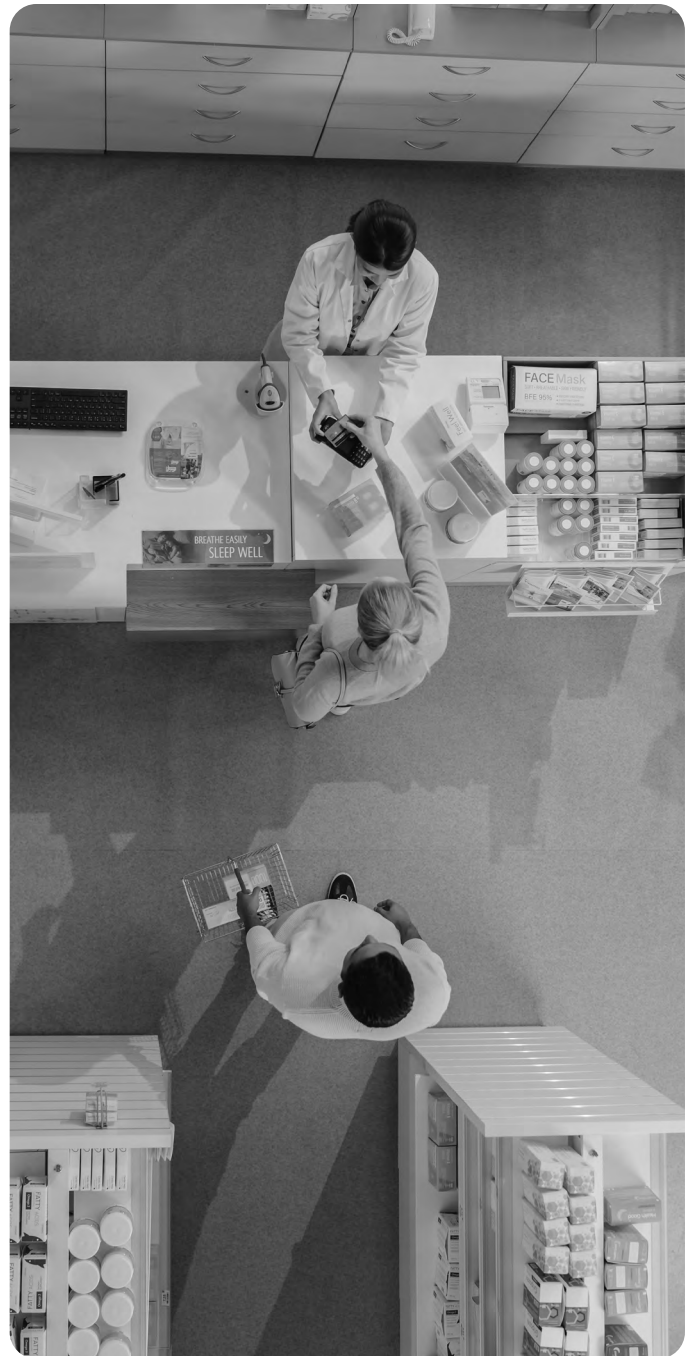
Conclusion

EPS is transforming pharmacy in Wales for both staff and patients. Not only does it enhance efficiency and accuracy in patient care, it also streamlines the prescribing process and reduces the potential for errors.

But this should only be the start of digitisation for community pharmacy in Wales. To cement the vision of community pharmacies becoming health care hubs, pharmacies need to go a step further and automate as much of the medication dispensing process as possible. It is only by doing this that they will have the capacity to deliver all the new patient services expected of them.

The rollout of EPS in Wales creates an ideal foundation for pharmacy automation and central fulfilment. Pharmacies that embrace automation and this new way of working will improve efficiency, patient experience, and clinical service capacity even further and ensure they remain a key part of modern NHS Wales healthcare delivery.

Those pharmacies looking to take these efficiencies to the next level should be considering hub and spoke. This model of dispensing has evolved rapidly over the past few years and there is a range of scalable and affordable automated solutions for pharmacies of all shapes and sizes. These solutions can grow with a business and starting costs are affordable and accessible, giving pharmacies the ability to invest now and then scale up to a more complex solution as their business grows. Centred Solutions customers range from groups of three pharmacies to larger chains.

Pharmacies considering automation as the next step should look at which elements of the dispensing process are taking up the most time in terms of workforce and skill. Then look at the automation available to take on the most time consuming tasks which has the ability to scale to meet future demand.

If you are interested in learning more on this topic you can visit the Centred Solutions team at the **Welsh Pharmacy Show on Sunday, May 18** at The Vale Resort, Cardiff.

You just need _your free ticket_ to attend.

This white paper was produced
by Centred Solutions.

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