Care Home Hub Automation:

How to grow a pharmacy care home service and simplify dispensing

Centred Solutions™

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Introduction

Pharmacists are becoming increasingly important in meeting the health needs of care home patients. Pharmacists now play a key role in the Enhanced Health in Care Homes (EHCH) model which was a commitment of the NHS Long Term Plan. The model aims to deliver proactive care, focussed on the needs of individual people, their families and care home staff.[1]

The pharmacist's role in this new model involves much more than simply dispensing medication. Just like in the community, pharmacists providing a care home service have seen a significant shift in their traditional role. As well as dispensing medication they are expected to undertake several other activities including[2]:

- Providing advice and support
- Providing medicines and system training
- Undertaking medication audits
- Delivering structured medication reviews
- Supporting care home staff with medication queries

This all results in additional workload for those pharmacy teams who decide to provide a care home service. Many of these pharmacies will already have been working at capacity for some time. Those looking to survive in this new world need to consider how they can automate the logistic and administrative tasks of their workload. This will increase capacity to deliver the more clinical elements of the role which can't be automated. The medication dispensing process is one area that is crying out for automation.

1 & 2: https://www.cqc.org.uk/guidance-providers/adult-social-care/primary-care-medicines-support-people-living-care-homes

The complexities of care home dispensing

Pharmacies that choose to provide a care home service face additional complexities when it comes to dispensing medication. This is due to the diverse needs of the patients. Care home residents are prescribed an average of seven medicines a day, with many taking 10 or more[3]. The task of organising and dispensing this medication, as well as supporting care homes with administration, cannot be underestimated. It is both challenging and time consuming.

In addition to this, both the care home and the pharmacy must adhere to the strict regulations set out by the Care Quality Commission (CQC) and General Pharmaceutical Council (GPhC). Ensuring compliance with these regulations is demanding and can take up a significant amount of time. Maintaining accurate records for medication, administration, storage and disposal is essential but this too is a lengthy process.

It is essential that care home pharmacies start streamlining these processes so they become more efficient and reduce the risk of human error which is more likely to happen when staff are under pressure. Polypharmacy requires meticulous attention to detail. Co-ordinating and managing repeat prescriptions efficiently to ensure patients don't run out of medication can be logistically challenging, especially when these patients will often also be prescribed acute medication in addition to their repeat medication on a regular basis.

Technology is now available to support the dispensing process. Using this technology frees up more time for the pharmacy team to communicate with care home customers, educate care home staff and carry out medication reviews. For pharmacists doing a mixture of care home and community work it can also free up time to deliver more clinical services, like Pharmacy First, in store.

3: https://www.england.nhs.uk/2019/05/army-of-nhs-experts-to-tackle-over-medication/#:~:text=Care%20home%20residents%20are%20prescribed,to%20a%20'chemical%20cosh'

The shift to original pack medication for care homes

Anyone who has ever worked in pharmacy knows just how time consuming it is dispensing with medication compliance aids (also known as dosettes or blister packs). That's why there has been an increase in the use of pharmacy robots that automate the production of them over the past five years. Once upon a time these compliance aids were the go-to solution for care home residents. But in recent years that has changed.

Both the Royal Pharmaceutical Society (RPS) and National Institute for Clinical Excellence (NICE) have now said that medication compliance aids should not be the first choice intervention for care home residents[4]. This is because there is a lack of evidence when it comes to patient outcomes and in some cases they have even been found to do more harm than good. Instead the RPS recommends original pack medication as their preferred choice for care home residents.

In line with this thinking, a number of Local Pharmaceutical Council's have issued official guidance which states medication compliance aids should only be used for the small number of patients who may find it valuable and only after a detailed review.

With this shift to original pack medication, pharmacies need to start looking at how they automate this element of the dispensing process in the same way they did for medication compliance aids.

4: https://www.cqc.org.uk/guidance-providers/adult-social-care/multi-compartment-compliance-aids-mcas-adult-social-care#:~:text=People%20can%20experience%20a%20range,sometimes%20they%20can%20cause%20harm

How care home original pack dispensing automation works

There is award-winning hub technology that has been adapted to meet the requirements of the care home market. The solution automates the pharmacy dispensing process to produce bagged and labelled patient medication by care home, institution, or facility type. A number of care home hubs are already using the automation as well as hospital homecare and prison hubs so the technology is very much tried and tested.

The bespoke workflows mean a pharmacy hub can be run at maximum efficiency while meeting the unique needs of the care home market. The technology offers specific workflows for split packs, inner labelling, controlled drugs, fridge items, bulky items and acute versus monthly medication.

The software integrates with the pharmacy PMR to process orders in the most efficient way. It separates the orders into workflows to ensure maximum efficiency and reduce the possibility of quarantine events, where a secondary pharmacist check is required.

Close up on Amal Pharmacy

Amal is a care home pharmacy serving care homes in the South East of England. They have been using FLOWRx to streamline their dispensing process for original packs.

Since using FLOWRx they have **increased** their item volumes with no additional resource

x 2

The team are now able to **process twice as many** care homes each day with the same number of staff

Since installing the solution they have been able to take on contracts with **10 new care homes**

The entire dispensing process is now **53% quicker** on average

Pharmacists spend **55% less time** on average carrying out clinical and accuracy checks

There has been a **70% time saving** on average for picking and labelling medication

Automating the workflows for a care home hub

Standard Workflow

For standard medication, the software and technology will use the typical hub dispensing process:

1. The clinical and accuracy check is done up front at the start of the process by the pharmacist.
2. Medication is then batch picked into FLOW Totes. An automatic labelling unit (ALU) will automatically apply labels to packs for which there are matching patient orders.
3. RFID LED smart shelves guide the operator to sort the right medication into patient specific baskets.
4. The bagging of medication is automated and barcode technology is used to sort medication into totes for the relevant care home.

Splits Pack Workflow

While the work involved in processing splits is set to improve in community pharmacy with the new 10% legislation change, it is still unclear how this will impact care homes. As such, it remains a possibility that split packs will continue to be a challenge for pharmacies providing care home services. The automated solution offers two options to process split packs more efficiently. The first is the ***staged splits*** process:

1. A pick sheet will be created for all the split pack medication required to fulfill a care home order. The operator picks all medication required and scans the first box. They are notified of the number of pills required for that patient box.
2. The software prints a pack label for the splits with the new quantity, drug type, strength, batch number and expiry date. The label will also include a barcode so the split pack can be processed through the ALU.
3. With the remaining medication in the original pack, the software prompts the operator to fulfill another patient order. Once all orders requiring that medication have been fulfilled, the software prints a new pack label detailing how many tablets remain so the pack can be placed on shelves and used again at a later stage.
4. The pharmacist or ACT checks the quantity on the prepared splits packs and places them with full pack medication required for the order. Packs are then labelled, sorted and bagged using the ALU.

Automating the workflows for a care home hub

The second option is to use the ***in line splits*** workflow which allows for the processing of splits that can't be done in advance, for example if the stock is not available or it is an acute medication.

1. The pick list instructs the operator to process the full pack through ALU and the software knows not to label this pack.
2. Once the pack has been through ALU, the operator scans the pack barcode label and the software notifies them that it is a split pack and informs them of the quantity required.
3. The operator removes the required amount for the new box and the software provides a pack label with the new quantity, drug type, strength, batch no. and expiry date. It also includes a unique barcode which is then scanned by operator to print the patient label.
4. The operator scans the patient label and sorts the pack to the relevant patient basket which is placed into quarantine for a final pharmacist check.

Bulky Items

The software identifies bulky items when an order is placed and creates a separate picklist so these items can be processed outside the ALU but with all the other benefits of the solution. The workflows have been developed to let the hub label these items in one of two ways:

1. Automatically print all the patient labels required for a large quantity of the same item for one patient but with the requirement to only scan one patient label, saving time.

OR

2. Pre-define the label so the operator can package the item/items the way the hub prefers. This is useful for items like dressings.

Inner Labelling

Items that require inner labelling can still be processed through the ALU.

1. A patient label is added to the outer item in the ALU.
2. When the operator scans that patient label to sort the item the software will flag that an inner label is required for that item and print it.
3. The operator adds the label to the inner item and sorts to the correct patient basket.

Fridge Items/Controlled Drugs

New functionality is in development for fridge items and controlled drugs. This will enable the software to identify any fridge items or controlled drugs in an order. The system will then print a separate pick list so these items can be processed in advance and then quickly returned to either the fridge or CD cabinet, labelled and ready for dispensing.

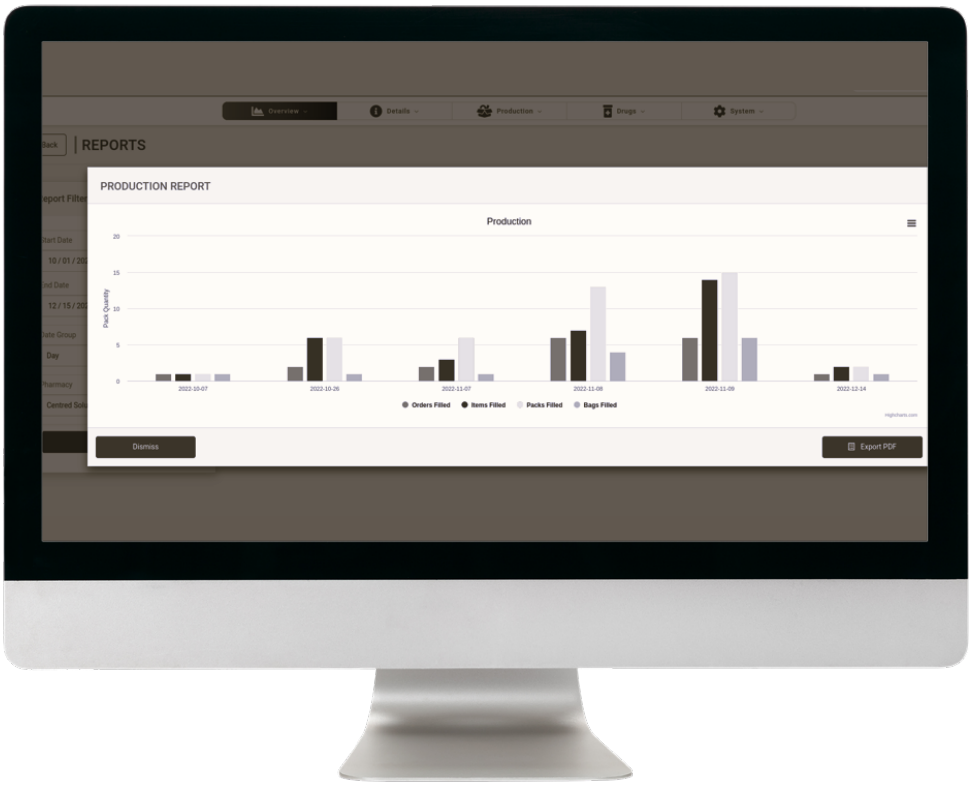
Clear and visible audit trail and robust data

Governance and compliance is a key component of offering a care home service but it is time consuming. The good news is that the software provides a full end to end audit trail right down to patient and pack level from receipt to storage through to dispensing.

With multiple verification checks, it post alerts for expired medications, provides lot number tracking, manages inventory effectively as well as recording critical drug information such as GTIN, EAN and DM&D codes. All this information can be shared back to the NHS to meet all their compliance requirements. Should it be required in the future it also supports compliance with EU FMD regulations requiring the capture of pack serialisation.

Ensuring timely delivery of medications, especially for urgent prescriptions can be challenging. Delays in the supply chain can have a serious impact on residents' health. Managing stock levels to ensure availability while avoiding over stocking and wastage requires careful planning and forecasting.

Easy access to data within the automated system can improve efficiency of inventory management, ensuring the hub always has the items in stock required to fulfil orders. Software ensures the patient's prescription is visible at every step of the process. There is no room in the process for ambiguity and robust SOPs ensure this.



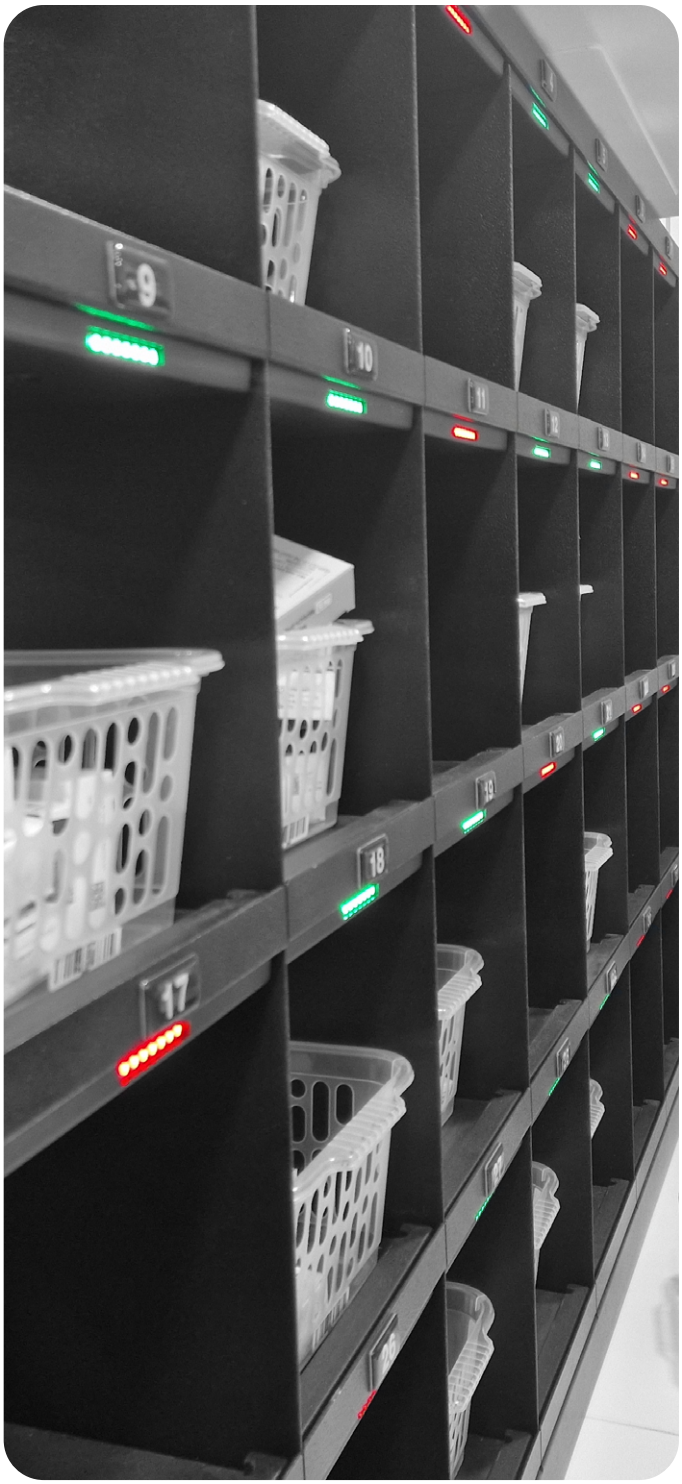
An invaluable safety net

Minimising medication errors, such as incorrect dosages or wrong medications requires robust systems and processes. With the best will in the world, human error will always be a significant risk factor.

Technology acts as an invaluable safety net for all pharmacy settings. The care home hub solution for original packs has checks and balances throughout the entire dispensing process to ensure right quantity, right drug, right patient. The technology reduces the risk of errors, improves accuracy and gives greater visibility.

Manual tasks can introduce potential for errors and inefficiency. Automation narrows those gaps by reducing the need for human interaction resulting in a more continuous, safer and traceable automated workflow. It provides drug data integrity and validation by comparing a multitude of inventory management codes against the drug item code. Barcode and RFID technology not only ensures the right medication is prepared for the right patient, it also provides a warning which halts the dispensing process if the drug type and dose don't match what has been prescribed for a patient. Many care home items are cold chain that require minimum time outside of the refrigerated environment. The speed of the automation ensures they are picked, labelled and sorted quickly to reduce the time medications are exposed to higher temperatures.

Delivering prescriptions to patients on time can often be impacted by stock issues, workforce challenges or a high workload. Technology ensures faster and safer processes so you can process more prescriptions quickly and at speed. Robotic technology can label up to 1500 packs per hour with a single line and 3000 with a double line.



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