

# Registered pharmacy inspection report

**Pharmacy Name:** Rowlands Pharmacy, Whitehouse Industrial Estate,  
Rivington Road, Runcorn, Cheshire, WA7 3DJ

**Pharmacy reference:** 9011089

**Type of pharmacy:** Dispensing hub

**Date of inspection:** 15/09/2021

## Pharmacy context

This is a large dispensing hub used by pharmacy branches within the same company. It is situated above a major pharmacy wholesaler in Runcorn and is not accessible by members of the public. It uses automated technology to dispense the prescriptions. The dispensed medicines are delivered to the pharmacy branches, which then supply them to the patients.

## Overall inspection outcome

✓ **Standards met**

**Required Action:** None

Follow this link to [find out what the inspections possible outcomes mean](#)

## Summary of notable practice for each principle

Principle	Principle finding	Exception standard reference	Notable practice	Why
<b>1. Governance</b>	Excellent practice	1.1	Excellent practice	The pharmacy can demonstrate that its service has reduced the overall number of dispensing errors within the company.
		1.2	Excellent practice	There are live systems in place to monitor the error rate at each stage of the dispensing process. The pharmacy reacts to any spikes in the error rate to identify the cause and then takes action to resolve the issue.
		1.7	Good practice	Members of the pharmacy receive regular training about data protection so that they know how to manage private information.
<b>2. Staff</b>	Good practice	2.1	Good practice	The pharmacy continuously monitors the incoming workload and alters the number of staff present accordingly. This helps to make sure there are enough staff to complete the work and avoids putting extra pressure on the team.
		2.2	Good practice	Members of the pharmacy team complete regular training to help keep their skills and knowledge up to date.
<b>3. Premises</b>	Standards met	N/A	N/A	N/A
<b>4. Services, including medicines management</b>	Good practice	4.2	Good practice	The pharmacy uses advanced automation with a number of automated safeguards in place to ensure the service is safe and effective.
<b>5. Equipment and facilities</b>	Good practice	5.2	Good practice	The pharmacy employs a highly skilled technical team who are available all of the time to ensure the equipment continues to run smoothly. The team have completed additional training to help them to apply their technical knowledge to the context of patients receiving pharmacy services.

## Principle 1 - Governance ✓ Excellent practice

### Summary findings

The pharmacy has robust systems in place to monitor the data from its operations and learn from when things go wrong. It has a live dashboard to show anything that goes wrong at each stage of the dispensing process so that the team can improve the service. The technology utilised by the pharmacy has a positive impact on overall risk, by reducing the number of dispensing errors produced by the pharmacy itself, and by other pharmacy branches within the company.

### Inspector's evidence

There was a set of standard operating procedures (SOPs) which covered the operation of the pharmacy. Members of the pharmacy team had signed to say they had read and accepted the SOPs. In the event of a major systems failure, there was a business continuity plan built into the automation system. This involved a text alert which was sent to key stakeholders within the company who oversee major functions. They would contact the pharmacy's head of operations to determine how they could assist in minimising any wider impact or knock-on effect due to the system failure.

The pharmacy dispensed a large number of medicines for approximately 450 pharmacy branches within the company. The dispensing process was fully automated, using advanced automation which consisted of five 'line' machines. The automated process included sensors to identify any irregularities with the dispensed medicines. If the sensors detected any possible irregularities a 'system flag' was generated and the medicine was diverted to a manual accuracy checking station. The system flags were monitored during the day on a live dashboard by senior management and on-site technicians. The different types of system flags were shown in a line graph format for each of the automated systems' five lines. If there was a 'spike' in the number of flags created for a particular line, the on-site technician team would be alerted to investigate. An example of this involved one of the lines in which a camera was detecting a higher number of inaccurate pictures. The investigation found that the camera had been knocked out of alignment during its routine cleaning. The camera was re-aligned by a technician and this reduced the number of similar system flags.

One percent of all the dispensed medicines were also sent to the accuracy checking station as a random sample. This was to monitor the automated systems' accuracy and to provide an assurance that there wasn't an unknown catastrophic event.

Members of the team working on the accuracy checking station kept a near miss record on which they recorded any items that were found to be incorrect but had not been flagged by the system. The record was checked each time it was completed to look for any similar trends over the past few days. Records were also analysed each month. Any trends they identified were referred to senior management or the technician team to investigate. An example of this was a contraceptive pill which was found to have an expiry date that was shorter than its intended use. The team amended the database for the machine to refer all packs to the accuracy checking station for a manual date check.

Any dispensing errors reported to the branches would be recorded and sent to the SI's office. If the item had been dispensed by the dispensing hub, senior management at the pharmacy would be informed about the error and an investigation would be conducted. An electronic log was kept showing the date and time at which each medicine was labelled and bagged. The team would pull up the corresponding CCTV footage which covered the conveyer belts and key functions of the automated

system. This allowed any faults to be identified within the system to help prevent a similar mistake. An example of this was when one of the bagging machines was accidentally crushing the tablets whilst sealing the bag. This resulted in a patient receiving damaged stock. The investigation identified the fault, and the sensors were altered so that any medicines which may have been damaged during bagging were flagged by the system and sent to the accuracy check station.

To help drive improvement, key stakeholders within the company, including the superintendent (SI) and the regulatory manager, held a monthly quality development meeting. This was used to discuss any concerns relating to dispensing errors, near miss incidents, or system flags. And identify any actions required from a strategic level.

The dispensing system relied on a barcode database to identify the individual medicines. The accuracy of the barcode database was continuously updated by the pharmacy team when discrepancies were identified. Their own database was used elsewhere within the company to provide an accuracy checking function in community pharmacy. It also updated external barcode databases such as Dm+d and PIP codes, which are databases used within the pharmacy sector.

The SI produced data which showed there had been a reduction in the number of dispensing errors across its pharmacy branches. She believed the reason for the reduction was partly because using the hub had reduced workload within the branches, and also due to the efficiency of the automated system itself. Figures provided by the company showed a dispensing error rate which was significantly lower than the dispensing error rate before the company began to use the automated system.

Roles and responsibilities of the pharmacy team were defined within the SOPs. There were various support roles within the team to help ensure the right person was present to oversee the operation. This included clinical governance being overseen by the responsible pharmacist (RP), an operations manager who helped to manage and deliver the workload, and technicians who were responsible for the continued running and maintenance of the automated system. The RP had their notice displayed and they were appropriately signed into the RP register.

The company had a complaints procedure, which was available on their website. Feedback was received from pharmacy branch teams who used the dispensing hub. The hub staff could also provide their own feedback internally. Feedback was then discussed as part of the monthly quality development meeting. An example of recent feedback was about delivery delays during Bank Holiday periods. These were investigated and found to be due to a delay in delivery on the company's long-distance trunk network. The pharmacy provided their investigation to the delivery team for them to follow up on.

An information governance (IG) policy was available. The pharmacy team had completed annual IG training and had confidentiality agreements in their contracts. Confidential waste was segregated and removed by an authorised waste carrier. The company's privacy notice, explaining how data was handled, was available on the website. Industry standard technology was utilised in the transmission of data between branches and the dispensing hub. This allowed data to be transmitted securely across the company's network. Safeguarding procedures were included in the SOPs, and members of the team had completed safeguarding e-learning. On-site pharmacists had completed level 2 safeguarding training. A current certificate of professional indemnity insurance has been provided by the company.

## Principle 2 - Staffing ✓ Good practice

### Summary findings

Staffing levels are continuously reviewed to ensure there are enough staff to manage the pharmacy's workload. And there are processes in place to monitor the incoming workload and adjust the number of staff needed. Members of the pharmacy team are appropriately trained for the jobs they do. They complete regular training to help them keep their knowledge up to date.

### Inspector's evidence

There were 25 trained members of staff within the pharmacy team. Their roles included dispensers, pharmacy technicians who are trained to accuracy check (ACT), and pharmacists. All members of the team had completed the necessary training for their work. There was a staggered holiday system in place. And the pharmacy utilised three locum dispensers who had completed the necessary training and were booked in for planned absences. There were also other staff within the building who did not routinely work within the pharmacy but had completed the necessary training and would support the pharmacy team when needed.

There was capacity within the pharmacy team to 'flex' as the workload dictated. As the work was sent to the dispensing hub on the day before, the operations manager could see whether the workload was higher or lower than expected. If needed he could call in extra staff to work an extra shift.

To ensure members of the pharmacy team understood their role and training, they were required to complete competency assessments, which were recorded. There were different types of assessment, including distance observations, 'show me how to do it' observations, and 'explain what you are doing' observations. If there was an error involving a member of staff, or if they had been away from work for a few weeks, the competency assessments were re-completed to ensure they understood their role. The pharmacy also provided the team with a structured e-learning training programme. Training records were kept showing that ongoing training was up to date.

The RP said he routinely worked with the operations manager and SI. He felt able to exercise his professional judgement in the running of the pharmacy and he felt that his decisions were respected. Members of the pharmacy team were seen working well together. People asked for help where a task required a 2nd input or check. They held a weekly team meeting to discuss their current work. And there was a monthly meeting to discuss business agenda items. Staff were provided with annual appraisals and were given feedback about their work. A whistleblowing policy was in place. There were no performance targets related to professional services.

## Principle 3 - Premises ✓ Standards met

### Summary findings

The pharmacy is clean and tidy. The premises are suitable for the services provided and steps have been taken to make them COVID secure.

### Inspector's evidence

This was a closed pharmacy which members of the public could not enter. People would use this pharmacy's services indirectly when using a Rowlands pharmacy branch which had implemented use of the dispensing hub into their workflow. The pharmacy is situated on a purpose-built mezzanine area above a major pharmacy wholesaler. There was sufficient space for the services provided. The temperature was controlled by the use of a central air system, lighting was sufficient. Staff had access to their own kitchenette and WC facilities within the footprint of the registered premises.

Workplace measures to help prevent the spread of coronavirus were in place. This included face masks, hand sanitiser, and twice-a-week lateral flow tests to check for asymptomatic COVID infections.

## Principle 4 - Services ✓ Good practice

### Summary findings

The pharmacy uses advanced automation with a number of safeguards in place to ensure the service is safe and effective. There is a full audit trail covering the dispensing process and delivery of the medicines to the branches. The pharmacy gets its medicines from recognised sources and only orders what it needs so that no obsolete medicines are ever present.

### Inspector's evidence

The prescriptions sent to the dispensing hub from the pharmacy branches were for non-urgent repeat medicines. The dispensed medicines would be returned to the branch on the second day after processing the prescription. Only whole original packs of medicines could be dispensed by the dispensing hub, and this did not include controlled drugs (CDs), fridge items, unusual quantities, or large items, such as creams. The pharmacist in the pharmacy branch would be responsible for the clinical check of the prescription, and to check the accuracy of the data entered on to the patient medical record (PMR) system.

Stock medicines were mostly obtained from the wholesale warehouse below the pharmacy. The warehouse had an automated conveyor belt system which would group stock belonging to specific patients from the same pharmacy branch. The stock was placed into a tote which had a barcode on the side which identified the stock inside the tote. Each tote would automatically be sent from the warehouse to the pharmacy via a conveyor belt. The pharmacy's automated system sorted the totes into order according to the priority of dispensing. Pharmacy branches which required long-distance delivery via the company's pallet trunk lines were dispensed first to allow for the travel time, whilst local branches would be dispensed later.

The automated system consisted of five 'line' machines each of which performed the same task. Each line was monitored by a dispenser and required human intervention at the initial stage where a tote was presented to the machine. The barcode on the tote identified the expected stock. The dispenser was required to move the stock from the tote and place it on a conveyor belt, straight and face up, to ensure the machine could process it. The machine would perform a number of functions, such as checking the stock was the medication expected within the tote and affixing a dispensing label. It would take a photo before and after the dispensing label was attached and compare the photos to check it was attached to the correct box of medication. The dispensing label had a unique barcode printed on it to identify that specific box of medication.

Each labelled box of medication would then be passed to a 'pusher' which placed the medicines into rows for each specific patient. Any medications which were not expected within the tote, or not identified by the barcode, were 'ejected' by the automated system onto a separate conveyor belt and sent to the accuracy checking station. The other associated medicines for the same person would also be electronically flagged and sent to the accuracy checking station once completed. When all of the medicines from a tote had been sorted into each specific patient, the group of medicines would be transferred to the bagging machine. This would check the number of boxes present were correct and scan the barcode on the dispensing label to ensure they were all for the same patient. The medicines would drop one by one into a bag, which was heat sealed once filled. Each filled bag was for one patient and an address label was attached to the external side of the bag. The address label contained another

barcode which was used by the pharmacy branch to 'book in' the received bag. The bag would be placed into a tote alongside other bags of dispensed medicines destined for the same pharmacy branch.

The automated system generated a 'flag' and associated it with the barcode on the dispensing label for a variety of system events. For example, when the cameras did not detect a high accuracy likeness of the box or size of the box, any mistiming of the gap between medicines, or when a box of medication was ejected from the machine. Any bags of medicines containing a flag would be diverted to the accuracy checking station.

The accuracy checking station was staffed by pharmacists and ACTs. The machine would present totes to the accuracy checking station for a manual accuracy check to take place. The flagged bag was opened, and each box of medication checked manually. If the flagged bag was due to a medication which was ejected by the machine, the member of staff would retrieve the ejected medicine to check whether it was correct. If it was the correct medication, the member of staff would manually apply a dispensing label and check it. Once the member of the team was satisfied that all the medicines were correct, the bag would be resealed and placed back in the tote ready for delivery. The barcode on the front of the bag contained any additional information needed by the pharmacy branch. For example, if there was an item out of stock or was not dispensed. The pharmacy branch would be expected to dispense any medicines not included in the bag.

Completed totes would be sealed with a lid and a tamper-proof strap wrapped around. Then they would be stored until their allotted delivery time. The company used their wholesaler network to deliver totes to pharmacy branches. Once the timeframe for delivery had begun, the tote would be sent to the wholesaler's goods out delivery bay. Each tote would be labelled with the destination pharmacy branch. There was an electronic audit trail for each individual tote, which would be scanned at key points during the transportation phase. This allowed the pharmacy to track where the tote was at any point in time.

The pharmacy operated a just in time stock handling system. This meant all stock would be sent by the wholesaler in the morning. It then used all the stock within the dispensing process. Any unwanted stock was taken to another site to be redistributed within the company. Therefore, no stock was kept on the premises which needed to be managed. Drug alerts were received by email from the MHRA. Alerts would usually be actioned by the wholesaler prior to the pharmacy receiving stock for the day. To ensure this was the case, any affected medicines would be diverted to the accuracy checking station to check their expiry dates and batch numbers. A record of any action taken was kept in a folder.



## Principle 5 - Equipment and facilities ✓ Good practice

### Summary findings

The pharmacy utilises modern technology to deliver pharmacy services. It employs highly skilled staff who are available on-site all of the time. Technical staff maintain a log of routine tasks and maintenance to show the work they have completed. And they complete pharmacy support staff training so they can apply their technical knowledge whilst understanding the needs of patients who receive pharmacy services.

### Inspector's evidence

The dispensing hub used a conveyor-belt fed automated system which had 5 lines in operation. At least one on-site technician team was generally available all of the time to ensure the machine was kept operational. This included routine cleaning and maintenance of the machine, plus any unexpected alterations or fixes which were identified from an investigation. A log was kept for cleaning and maintaining the machine. There were processes and procedures in place to slow down the machine or increase the number of manual accuracy checks completed if a fix was required. During the daily staff break in the afternoon, the line was stopped and cleaned to help ensure it continued to function correctly. A large whiteboard was on display to show the pharmacy team any planned or unplanned work which was scheduled to take place, and on which line it affected.

Each technician had completed their dispenser training to help them to understand how a pharmacy operated and apply their expertise in the field of pharmacy and dispensing medicines. If there was a fault which could not be fixed by the on-site technicians, there was a procedure to escalate problems to the manufacturer who could remotely access the machine if needed. There were safeguards in place which made it impossible for the manufacturer to see any patient information as this was stored on a separate database.

### What do the summary findings for each principle mean?

Finding	Meaning
✓ Excellent practice	The pharmacy demonstrates innovation in the way it delivers pharmacy services which benefit the health needs of the local community, as well as performing well against the standards.
✓ Good practice	The pharmacy performs well against most of the standards and can demonstrate positive outcomes for patients from the way it delivers pharmacy services.
✓ Standards met	The pharmacy meets all the standards.
Standards not all met	The pharmacy has not met one or more standards.