Background paper on automation and Hub and Spoke

Earlier this year, Boots announced it was setting up pilot sites for Hub and Spoke dispensing. The Chief Pharmaceutical Officer for England, Keith Ridge, has been promoting centralised / automated dispensing. The vision paper Prescription for Excellence in Scotland talks about the majority of prescriptions being dispensed by automated hubs. Overall there is growing pressure from Government for community pharmacy to make greater use of automation and Hub and Spoke dispensing, with the goal of freeing capacity and reducing costs in the sector.

At the Pharmacy Show the Minister Alistair Burt announced that the Government would consult (believed to be in early 2016) on legislative changes to enable Hub and Spoke dispensing where the hub and spokes are not of the same legal entity. The aim is to introduce the legislative changes in October 2016.

The reasons cited for developing a Hub and Spoke model include:

- Increased efficiency
- Reducing costs
- Providing time in spoke pharmacies for the delivery of more quality patient facing care including the delivery of enhanced services
- Reducing picking / dispensing errors – this is not dependent on solely automation but a reduction in errors will also be achieved in manual hub operations and is due to lack of interruptions during the dispensing process

The NPA is concerned that the advantages of Hub and Spoke have been overstated and that senior leaders in the NHS are focussed on cost savings rather than enabling community to deliver more services. We therefore want to explore the pros and cons of different Hub and Spoke models for independent community pharmacies.

This paper provides an initial scoping of the models available.

Models

Automation

This first option is not Hub and Spoke but is the only model of automation currently available to single pharmacies. A robot may be the solution to increasing capacity in a single pharmacy when extra capacity is needed. Some companies selling pharmacy automation claim their systems are cost effective for pharmacies dispensing 6-6500 prescriptions a month. A well designed pharmacy with workstations appropriately placed will give a sense of calm efficiency as the amount of walking by staff will be reduced and along with it the sense of frenetic activity. The calm generates positive working conditions. Any pharmacist considering installing a robot should consider the size and layout of their pharmacy. Plugging a robot into an existing pharmacy layout may not produce the desired effect as badly placed work stations will not reduce staff foot fall in the pharmacy. Depending on the dispensing work load and the robot it may be possible for 75% of prescriptions to be dispensed by the robot, giving the benefits of automation in reduced picking errors as well as generating headroom for pharmacy staff to deliver more patient facing care.

Hub and Spoke

This is only available to pharmacies operating within the same legal entity. A minimum of two pharmacies is required though in practice, in order to get the efficiencies of scale and recoup expenses at a reasonable rate, the number is upwards of 5 or 6. The pharmacies involved
need to have sufficient script volume to make it viable. In this model the hub is a registered pharmacy but does not have an NHS contract. The prescription and the relationship with the patient remain with the spoke pharmacy. The responsibility for the clinical check lies with the RP in the spoke and the accuracy check with the RP in the hub. Staff in the spokes must be fully engaged with the process, not feel their jobs are under threat, and submit all the scripts which are appropriate to the hub. If the law changed and national wholesalers provided this service to independents, there is some concern that pricing structures would not be transparent and the same level of saving would not be passed to non-integrated as to the integrated pharmacies.

**Hub and Satellite**

This model is only available to pharmacies within the same legal entity. In this model the hub pharmacy has an NHS contract so the spokes act more like a collection point and responsibility for both clinical and accuracy checks lie with RP in hub. The relationship with the patient also lies in the hub, something patients may not like. If this model became acceptable for pharmacies from different legal entities the pharmacy network could be put at risk as the hub pharmacy could develop a relationship with the patient and bypass the spoke.

**Hub and spoke Co-operative**

In this model, pharmacies in a locality from different legal entities form a co-operative and set up a hub dispensary. The hub pharmacy won’t have an NHS contract. As with Hub and Spoke described previously the script volumes of the spoke have to be sufficient to warrant use of a spoke and staff need to be involved. As all the pharmacies have a stake in the hub there is less of a threat to the pharmacy network.

**Hub and spoke – Dutch model**

This model is currently operating in the Netherlands. In this model the wholesaler supplies pharmacies with patient ready packs complete with dispensing label. Responsibility for the clinical and accuracy checks lies with the RP in the spoke pharmacy as the hub is not a registered pharmacy but a supply unit. The hub would be licensed using a manufacturer’s Authorisation with a qualified person.

The pathway could look like this:

- The electronic prescription is delivered via EPS to the spoke pharmacy
- The clinical check is carried out and if appropriate the prescription is transmitted electronically to the hub
- The item is supplied to spoke with dispensing label in clear sealed unit for accuracy check

The wholesalers already have distribution networks set up and typically deliver twice a day.

**Nationalised Centralised dispensing**

In this model dispensing could be carried out in a small number of hubs, most probably automated NHS units. This model is completely untried so cost efficiencies are unknown, large scale distribution networks would need to be set up and stock could/ would be purchased through the NHS and would destabilise existing contractual frameworks.