**Hospital Pharmacy and Medicines Optimisation Project**

**Blackpool Teaching Hospital Hospital Pharmacy Transformation (HPTP) Plan**

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<th>Section</th>
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<td>1. Executive Summary</td>
<td>Lord Carter issued his report <em>Operational Productivity and Performance in English NHS Acute Hospitals: Unwarranted Variations</em> in February 2016. A number of key recommendations (Appendix 1) relating to Hospital Pharmacy and Medicines Optimisation were captured in the report, with a drive towards maximising the impact of patient facing clinical pharmacy service and rationalising the variable infrastructure services in pharmacy through collaboration and partnership working with other NHS and non NHS organisations. A national programme of Hospital Pharmacy has been initiated in response to the Carter Report along with the development of a number of metrics within the Model Hospital dashboard. The Pharmacy Department at Blackpool Teaching Hospitals has over recent years embraced and implemented the majority of the Carter recommendations and made excellent progress against many of the Model Hospital benchmark metrics.</td>
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<td>2. Carter Metrics and Model Hospital benchmarks</td>
<td>A key recommendation of the Carter Report is to increase the proportion of staff involved in clinical services and reduce the proportion of staff involved in variable infrastructure services as described in the diagram below:</td>
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Blackpool Teaching Hospital Pharmacy Department has embraced many of the Carter recommendations as part of its strategic direction over recent years.

2.1 Clinical Pharmacy and Medicines Optimisation Services (MO)

A review of operational delivery and introduction of technology and the concept of ‘lean’ working has led to improved efficiencies and productivity across many areas of the department. The introduction of an automated dispensing and stock supply system led to a redesign of work flow processes in order to maximise benefits and eliminate any waste from the system. This resulted in a reduction in discharge dispensing turnaround times from approximately 140 minutes to a consistent 60 minutes achievement. The opportunity was taken to undertake a review of dispensary and ward based staff roles leading to the introduction of dispensing assistants and ward based clinical pharmacy teams. An extension of this model has been the introduction of ward satellite dispensing stations to further improve patient flow and better integration of pharmacy within ward teams. A more recent development has been the introduction of a pharmacist led discharge prescribing scheme with further improvements in patient flow. Current audit data shows that when a pharmacist prescribes the discharge medication approximately 30% of discharges are prescribed 24 hours in advance with an error rate of less than 1%. 
A major benefit has been the time taken from decision taken to discharge a patient through to the discharge prescription being written and to the discharge medication being dispensed and back on the ward this has reduced by around 2 ½ hours. The success of this scheme has led to it being rolled out to all of the wards within the Unscheduled Care Division.

Currently approximately 66% of pharmacist time is deployed on core clinical activities and 52% of pharmacy technician time and 49% of pharmacy assistant time is deployed on ward based activities. The aim is to achieve a target 85% of pharmacist time by 2020 and 60% of technician and assistant time.

The department has been actively growing the number of prescribing pharmacists over recent years and presently 35% of all pharmacists have attained NMP status.

There is a continual process of skill mix review within the department with the aim of ensuring all tasks are completed by the most appropriate grade of staff at all times. This has led to being able to deliver services with only one pharmacist present in the dispensary and procurement and distribution services being delivered by assistant technical staff with minimal involvement of the registered workforce.

The aseptic unit similarly has also introduced assistant technical staff to assist with the preparation of injectable medicines.

A pilot is due to commence on 3 acute medical wards starting June 2017 to evaluate the benefits of using pharmacy technicians for medicines administration. If successful the aim would be to roll this out across all medical wards.

To support patient admissions over a weekend and patient discharges the department introduced a limited 7 day service in May 2013. This involved changing staff terms and conditions to work their 5 day week over 7 days. Along with a traditional weekend dispensing service there is now a limited clinical ward service with the aim of undertaking a medication review on all overnight admissions.

The Trust is one of the Multispecialty Community Provider (MCP) Vanguard sites and recognising the critical role pharmacy has in delivering medicine optimisation 3 Pharmacy Technicians and 2 Pharmacists have been funded as part of the MDT.

The department also provides a pharmacy service to all 21 GP Practices within Fylde & Wyre CCG. The success of this service is reflected that this is the sixth year this agreement has been in place.
2.2 Electronic Prescribing and Medicines Administration (EPMA)

BTH has had electronic prescribing in place for all chemotherapy and inpatient discharges for a number of years. The Trust has signed a contract with CSC to deploy their EPMA (Medchart) software throughout the entire Trust. The Pharmacy department is taking a lead role in the roll out of the project, the Director of Pharmacy is the Executive Sponsor and Chair of the Project Board.

2.3 Medicines Stock Holding and Supply Chain

The department embarked on a project about 4 years ago to better understand and manage medicine stock held within pharmacy. At the time 21 days of stock were routinely held resulting in stock being turned over 13 times a year. A stock review group which consisted of Pharmacists/Technicians and Assistants was established with the aim of reducing stock holding to 12 days without increasing stock outs or increasing administration time supporting this. Currently the department holds 6.5 days of stock resulting in a stock turnover of 55 times a year. The group continue to meet monthly to oversee, review and to continually look for further improvement. All this has been achieved without any negative impact on service delivery whilst driving forward improvements in productivity and efficiency in stock management.

Currently the trust is piloting the use of automated medicine dispensing cabinets with the Emergency Department. The aim is to interface these cabinets with the Pharmacy IT stock control system along with Patient Administration System (PAS) and EPMA to drive efficiencies, improve safe and secure handling of medicines and improve patient safety.

2.4 Variable Infrastructure Services

The department supports a significant number of patients who are on a homecare service and was the first trust in the North West to activate the North of England Homecare contract for Infliximab. This involved a considerable amount of work ensuring appropriate governance arrangements were in place along with gaining clinician engagement and buy in. Currently around 95% of patients have transferred onto the homecare service.

A formal outpatient dispensing tender exercise was undertaken in 2013 resulting in a contact awarded to Lloyds Pharmacy which commenced in June 2014. No staff where lost as a result of this exercise as they were all reallocated to ward clinical duties.

The department has a strong IT infrastructure as along with the automated dispensing and stock system has introduced and developed a number of IT systems to support operational, quality and financial management.
2.5 Coding of High Cost Drugs

The Pharmacy department has a strong relationship with finance and contracting colleagues in which pharmacy playing a key role in supporting internal budget setting, financial planning and involvement within the contracting process. Regular meetings are held between Pharmacy, Corporate Finance and Contracting teams to review and monitor coding of high cost medicines.

The department has a very active CIP working group which meets monthly to both support the development of CIP schemes and performance manage current schemes being implemented to ensure projected savings are achieved. A CIP tracker has been developed which at a glance allows all schemes to be monitored. The Director of Pharmacy attends a trust wide procurement steering group chaired by the Director of Pharmacy this group meets monthly and all drugs savings schemes are tracked through his group.

The department has met it’s CIP target in each of the past 4 years.

An agreement was reached this financial year 2016/17 to have a gain share agreement with both local CCG. Part of this agreement was for all new patients to start on a biosimilar product with patients switching from the reference product where clinically appropriate. To date 95% of Gastroenterology Infliximab patients have switched to a biosimilar and 50% of Rheumatology Etanercept patients have switched.

3. HPTP Plan

Summary

To summarise the department has made considerable progress against many of the Carter Metrics and Model Hospital benchmarks.

Further progress needs to be made to extend the 7 day service although this will need to be targeted to maximise benefits within current resources. It is not currently planned to replicate the current 5 day service over 7 days unless front line clinical services require this support e.g. at present the trust does not require a weekend chemotherapy service. However it is planned to extend the weekend clinical service to ensure all newly admitted patients have their medicines reconciled in a timely manner.

The department will continue to undertake a skill mix review on an ongoing basis to ensure the registered workforce especially pharmacists are focused on patient facing clinical duties along with identifying and progressing areas where pharmacy staff may be able to take on non-traditional roles to assist with workforce shortages in other professions. Opportunities for further collaboration with current and future commercial partners will be explored to assist with service redesign.
Early discussions have taken place with neighbouring pharmacy departments within Lancashire to seek opportunities for shared learning and collaboration over service delivery.

Examples of initial areas to explore are:

- Shared approach to delivering education and training for pharmacy and trust staff.
- Review current multiple store stock location with a view to the possibility of a single Lancashire store.
- Review current IT provision for shared opportunities for system management and support.
- Review current Medicine Information configuration and delivery.
- Review single trust recruitment strategy for certain posts such as Band 7 Pharmacists and scope possibility for a Lancashire wide recruitment and rotational training programme.
- Excellent progress has been made in the early adoption of biosimilars this experience will be crucial in ensuring that momentum is maintained across other specialties when the newer agents emerge.

The implementation of EPMA trust wide will be key to achieve much of the transformation plan.

4. Risks and mitigations

The main risk to the transformation plan will be the ability to deliver within current or possible reduced resources. This ultimately will lead to a prioritisation process being adopted with those items with greatest impact on patient safety and quality along with identifying those with greatest risk being adopted first.

The financial challenge facing the trust is likely to impact on the ability to embrace new technology particularly the roll out of EPMA. The default position will be to continue with current paper based systems whilst aiming to reduce variation and standardise prescribing protocols and policies. This will require robust governance framework supported by education and training of all staff.

Availability of an appropriately trained and competent workforce will be a challenge particularly across the geographical footprint of Lancashire. This will be mitigated by continuing our close working relationships with local schools. Colleges and the School of Pharmacy at UCLAN. Exploring joint appointments with neighbouring trusts will be explored.
Appendix 1 Carter Recommendations

Trusts should through the Hospital Pharmacy Transformation Programme (HPTP) develop plans by April 2017 to ensure hospital pharmacies achieve their benchmark such as increasing pharmacist prescribers, e.g. prescribing and administration, accurate cost coding of medicines and consolidating stock – holding, in agreement with NHS Improvement and NHS England by April 2020: so that their pharmacists and clinical pharmacy technicians spend more time on patient facing medicines optimisation activities.

This should be delivered by:

a) Developing HPTP plans at a local level with each trust board nominating a Director to work with their Chief Pharmacist to implement the changes identified, overseen by NHS Improvement and in collaboration with professional colleagues locally, regionally and nationally; with the Chief Pharmaceutical Officer for England signing off each region’s HPTP plans (brigaded at a regional level) as submitted by NHS Improvement;

b) Ensuring that more than 80% of trusts’ pharmacist resource is utilised for direct medicines optimisation activities, medicines governance and safety remits while at the same time reviewing the provision of all local infrastructure services, which could be delivered collaboratively with another trust or through a third party provider;

c) Each trust’s Chief Clinical Information Officer moving prescribing and administration from traditional paper charts to Electronic Prescribing and Medicines Administration systems (EPMA);

d) Each trust’s Finance Director, working with their Chief Pharmacist, ensuring that coding of medicines, particularly high cost drugs, are accurately recorded within NHS Reference Costs;

e) NHS Improvement publishing a list of the top 10 medicines with savings opportunities monthly for trusts to pursue;

f) The Commercial Medicines Unit (CMU) in the Department of Health undertaking regular benchmarking with the rest of the UK and on a wider international scale to ensure NHS prices continue to be competitive, and updating its processes in line with the Department of Health’s NHS Procurement Transformation Programme as well as giving consideration as to whether the capacity and capability of the CMU is best located in the Department of Health or in the NHS, working alongside NHS England’s Specialist Pharmacy Services and Specialised Commissioning functions;

g) Consolidating medicines stock-holding and modernising the supply chain to aggregate and rationalise deliveries to reduce stock-holding days from 20 to 15, deliveries to less than 5 per day and ensuring 90% of orders and invoices are sent and processed electronically.