Portsmouth Hospitals NHS
NHS Trust

Hospital Pharmacy Transformation Plan 2016-2021

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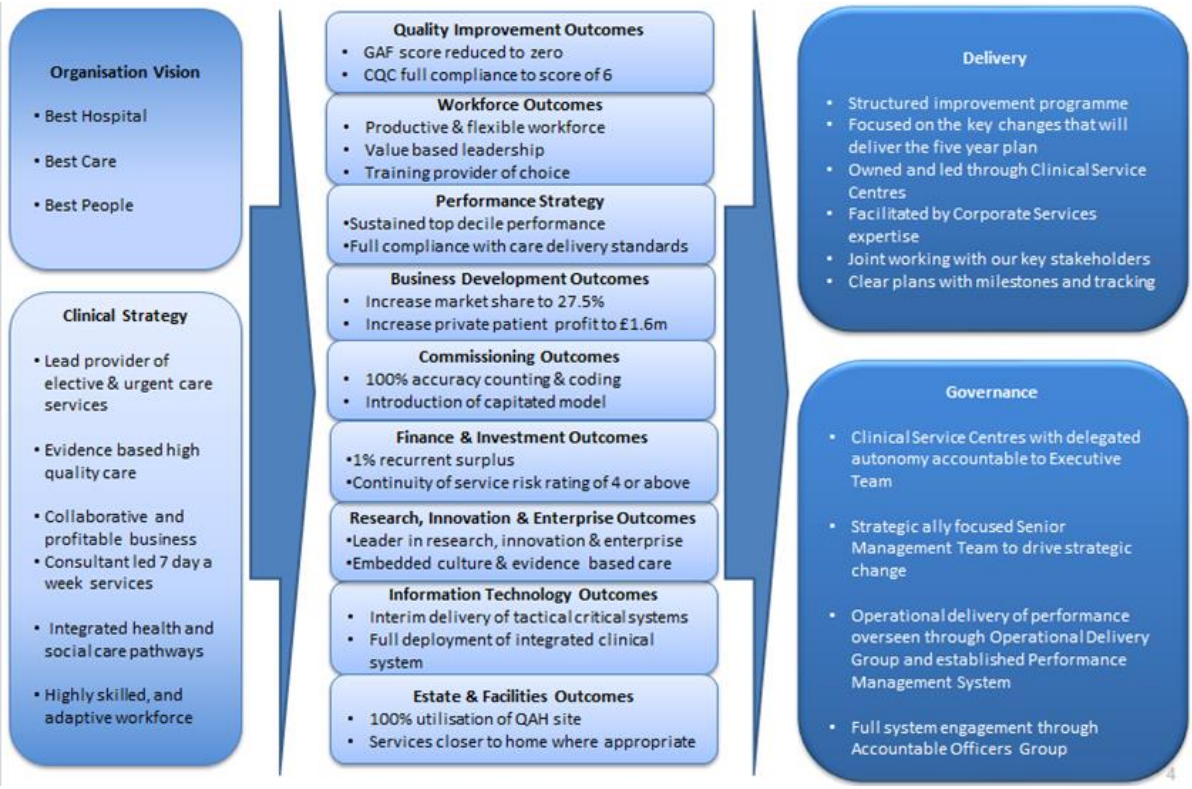
1. Executive Summary

Trust level



Pharmacy level

The pharmacy department at Portsmouth Hospitals provides a very clinically focussed service. The staff do a fantastic job and their contribution, linked with recent transformational change, has manifested in our current good performance against some Model Hospital metrics.
There are opportunities to investigate savings on drug expenditure, where performance is at variance from the average in some instances.
The Trust needs to invest in pharmacist prescribers in order to improve safety and reduce length of stay. In order to release some pharmacist time for more high risk clinical duties, we plan to investigate the introduction of assistant "triage" for inpatients. We envisage that this should enable the stretch of pharmacist and technician resource such that all high risk patients receive a clinical pharmacy review 7 days a week.
Coding of medicines is accurately recorded within reference costs
The Portsmouth Hospitals Trading services model allows an in house method of outsourcing from Acute services. There are STP plans to develop this model throughout the Acute Alliance and much national interest in how this will progress.

2. Carter Metrics and Model Hospital Benchmarks

Clinical Pharmacy

The vision for Medicines Optimisation follows the principles that doctors perform diagnostic and surgical roles, with pharmacists managing the prescribing and monitoring. We have commenced our journey towards this vision, starting with the redesign of Clinical Pharmacy services in 2012. Since this redesign, almost all inpatient and discharge screening is undertaken in near patient areas. One stop dispensing is undertaken during the inpatient stay, enabling discharge prescriptions to be assembled within clinical areas using Patients' Own Drugs (PODs), one stop and addition of last minute items. This method of service delivery has been very successful and enabled delivery of uncomplicated TTO turnaround time on average 35 minutes, which benchmarks to 6th best nationally. More complicated TTOs (including MDS and controlled drugs) are dispensed within the hospital pharmacy. This represents approximately 20% of discharge workload, with average turnaround times of 70 minutes.

Pharmacists spend 82% of their time in clinical pharmacy activities – there are only a few very senior pharmacists within the acute structure who have no regular patient facing commitment. This level is already better than the 80% recommended by Lord Carter and benchmarks well at 17th highest nationally. The service is also above average for the number of hours spent by pharmacists on wards and the number of patients seen. We plan to increase pharmacist clinical pharmacy activities to 90% of their time by 2020. However we know that we are unable to see patients every day due to staffing levels and admission/discharge pressures. Future role expansion & development requires a small amount of investment as there is no spare capacity to be released from reduction in infrastructure activities. Workforce benchmarking shows that we have fewer pharmacists than the average, which when linked to our position of very low paycosts per admission and per £10m drug spend pharmacist time demonstrates how LEAN the service is and supports the need for additional investment. Unmet clinical needs remain and require action to deliver. Patients within escalation capacity and unfunded clinical areas receive suboptimal clinical care – where a resource can be provided it is often at the expense of cover elsewhere. We will plan to address this gap, gaining investment where necessary and implementing a process of prioritisation for pharmacist patient review.

It is known that pharmacist prescribers reduce length of stay and improve patient flow through reduction of errors. The Trust has started the journey towards increasing the number of pharmacist prescribers, approving the appointment of three band 7 pharmacists to work with the MDTs as prescribers, improving accuracy of prescribing and reducing length of stay through early prescribing of TTOs and optimising medicines through deprescribing. However despite rapid training we have only managed to increase from 4% to 14% pharmacists actively prescribing along the Model Hospital timeline, which leaves us well below the current national average of 22%. Some organisations have 100% of their pharmacists actively prescribing, therefore the Trust has a gap to manage in order to provide more prescribers to drive safety, efficiency and cost reduction. A recent trial within Medicine demonstrated that a pharmacist is very able to prescribe and complete simple medical narrative on the discharge summary for those patients that they are familiar with, doing so accurately the day before the predicted date of discharge. There are plans for approval of further investment over the next year in order to cover other clinical areas, once the value has been demonstrated. These posts are likely to be funded through workforce redesign, reduction in non training junior doctor posts, locums and banding supplements. Existing pharmacists will be trained in tandem, enabling us to reach our goal of 100% band 7 and above pharmacists with prescribing as part of their everyday role by 2021.

Following the service redesign, Portsmouth Hospitals currently has approximately 60% technician time allocated to clinical duties, which is well above the benchmarking average of 43% and above average for the number of hours technician are on the wards, but below average for the number of patients seen. This needs to be balanced against our high performance in TTO turnaround and helping to drive the Trust discharge processes. Further investigation is required as there may be opportunities to diversify the service from within existing allocation. The percentage of assistant time allocated to clinical duties is well above average, but this requires further investigation as a proportion of this may be near patient dispensing rather than direct patient contact and governance roles. We plan to increase clinical pharmacy activity for technicians to 80% and for assistants to 70% by 2020. Releasing technician and assistant time from infrastructure services will allow for service redesign following a gap analysis. There are plans to expand the technician role within our short stay ward to include administration of medicines and provision of support to allow patients to self-medicate. We hope that demonstrating success will help to remove the barriers perceived in other areas by working more closely with the MDT to deliver optimal use of medicines and drive better outcomes. With the imminent introduction of Nursing Associate practitioners this role will be increasingly important for the next few years, until their full role is established and regulated.

Pharmacy technicians have started providing a clinical transcribing service within some outpatient clinic areas where high risk or high cost medicines are used. We plan to increase the technician support to outpatient areas, thereby releasing pharmacist time to meet the needs of more complex patients. We would like to propose suitably experienced technicians undertake supplementary prescribing, although this would require a change in legislation, or the development of an electronic transcribing system. We also plan to investigate further opportunities to expand technician resource within the Oncology Day Unit, both to improve patient outcomes from their medicines and to enable better scheduling of batch chemotherapy in order to allow for the necessary changes within production.

Portsmouth Hospitals has an established Discharge MUR referrals service, which benchmarks at just above average for referral numbers. However this service is only provided for approximately a third of our patients due to the way in which it is commissioned, therefore there are opportunities to expand this further to achieve patients' unmet clinical needs. We shall shortly start a Clinical Handover (Refer to Pharmacy) project in conjunction with the AHSN – Portsmouth is an excellent area to implement such a project due to the long established relationships we have with our community pharmacies. However this will require considerable investment in IT solutions to enable seemless transfer of information to the community pharmacy.

Pharmacy services are currently provided 7 days per week, but clinical pharmacy provision is limited at the weekends. The Model Hospital dashboard shows the clinical provision on Sundays at 4 hours, which is bottom quartile, with plenty of scope for extension and improvement. Pharmacists cannot review every patient's medicines 5 days per week, even before we expand the service over 7 days. The Trust reaches Black escalation status most Sunday nights/Monday mornings and the further development of weekend clinical pharmacy services would help relieve the pressure for discharges but must be linked to the availability of clinicians for decision making. Currently we have limited opportunity to identify which patients require review due to lack of EPMA triggers. However we plan to trial a process of prioritising newly admitted patients via PAS and using "assistant triage" in order to prioritise the patients at highest risk for review. It is anticipated that full implementation of such processes will allow the extension of existing pharmacist weekend cover to allow all newly admitted or high risk patients to receive a pharmacist medication review 7 days per week. Changes in workflow within the Monday to Friday week will reduce TTOs for planned discharges, with this work being concentrated earlier in the inpatient stay when senior clinicians and primary care liaison is available.

We would propose to link this with the implementation of a prescribing pharmacist in Pre-op Assessment, delivering optimal use of medicines in surgical patients, reducing the need for supply where patients already have medicines at home and reducing "on day" cancellations due to inappropriate continuation of medication. A business plan to address this proposal has been submitted and will be developed for 17/18.

The Model Hospital dashboard shows the medicines reconciliation (MR) rate to be very good at 77% overall within 24 hours, almost top of the second quartile. This figure is good despite the relative lack of weekend clinical provision, which brings down Monday figures, and benchmarking shows that pharmacy staff achieve 60% more MR overall than the national average. Expansion of the weekend clinical service would raise the MR rate further, making for safer patient care.

There are opportunities to improve antimicrobial consumption, with Model Hospital showing our performance at exactly our peer median and just above the national median. This is a reasonable starting position. However from benchmarking we know that the 0.5wte antimicrobial pharmacist is well below average, and significantly lacking considering the size and complexity of the patient cohort. Based on current performance within the Trust, we will not meet the 17/18 CQUIN and our contractual obligations. However subject to investment in a total 1wte leadership role for an antimicrobial stewardship pharmacist, there are plans to implement regular supported prescribing review with particular emphasis on reducing course length in appropriate use cases. Further opportunities for collaborative working with our local CCGs will be developed over the next two years in order to provide a consistent approach through Consultant Pharmacist leadership.

Infrastructure services

Pharmacy services within the Trust have been run using "modern" principles for over 30 years. The service is divided into Acute and Trading. The Trading side covers Procurement, Ward Box assembly, Aseptic Production and a Quality Control service and runs as a separate business, which provides an income to the Trust for providing services to other organisations. This division of services has enabled the delivery of "Carter-type" metrics within the Acute service for many years, with the number of pharmacists, technicians and pharmacy assistants involved being minimal.

The Acute service provides an outpatient dispensing service, which could be outsourced. The current average outpatient waiting time of 40 minutes benchmarks above the national average of 24 minutes. The limited savings opportunity through this option makes the service relatively unattractive to community pharmacy chains, but a subsidiary company could provide both opportunities for savings and improvement in patient experience, whilst releasing staff from infrastructure roles to provide more clinical roles. Plans are being developed to identify alternative delivery methods for outpatient pharmacy services. The likely proposal will be formation of a wholly owned subsidiary company or collaborating to become a branch of the Southampton subsidiary company, depending on progress within the Solent Acute Alliance.

Medicines Information will be outsourced. The diversion of the MI pharmacist to provide more clinical pharmacy has resulted in a diminishing number of inquiries, to the point where it is no longer viable to run the service locally. A service level agreement has been negotiated with a neighbouring Trust, but is currently not funded. Funding will be secured from 17/18 cycle to enable completion of the proposal to outsource Medicines Information.

Radiopharmacy provision has been outsourced for approximately 5 years under SLA to a licensed unit in a neighbouring Trust.

Portsmouth Hospitals provides infrastructure services under SLA to 3 local organisations (Hospice and 2 community services). There is currently no viable alternative model for service provision for the community services. The provision by us enables these organisations to reduce their infrastructure services, and the income to the Trust far outweighs the minimal % staff time diverted from clinical duties. The service to the Hospice is mixed, combining clinical and infrastructure services.

Pharmacy Workforce & Leadership

The pharmacy team is very LEAN compared to our peers, having undergone extensive skillmix review. Benchmarking demonstrates below average pay costs of all staff per 100 beds, and very below average pay costs per admission. Pharmacist pay costs benchmark to 10th lowest per £10m drug spend. When this is linked to the Model Hospital medicines cost metrics, it shows that investment in pharmacists is required, and would bring about the £5 saving per £1 invested predicted. Technician and Assistant pay costs are also low per £10m drug spend, but this may be more representative of the lack of senior staff. Workforce benchmarking identifies less management and senior leadership roles (less band 6 technicians, significantly less pharmacists at 8b and above). This impacts on the ability to influence clinical staff outside of pharmacy and could limit the delivery of transformation change at the pace required. We plan to review the senior clinical leadership team over the next 18 months in order to enable staff to be supported in delivering best patient outcomes.

We have a relatively successful recent history of over-recruitment at band 6 pharmacist level to recognise the annual outturn from pre-reg placements. However these staff require development in order to take their clinical abilities forward, which has training and supervision costs. We have less band 7 pharmacists than the average, which could limit our ability to develop prescribing roles.

Pharmacy technician recruitment has been very challenging for at least 5 years; however the training team have developed a career pathway from school-leaver apprentice through to qualified technician. Whilst there are opportunities for collaboration, we plan to maintain our highly successful education & training provision in line with Trust objectives in order to succession plan for future clinical developments. We are taking the lead on apprentice training locally (including blended learning across other disciplines) and plan to extend our successful programme to other local Trusts. As a large Acute trust we train on behalf of the locality and STP plans for the expansion of pharmacy staff within primary care and GP surgeries will make training ever more important.

Portsmouth Hospitals has a good in house leadership and talent management programme, which we will utilise in order to develop senior leadership and resilience. When further specifics are available regarding the drugs spend, we will engage in business planning to optimise pharmacy services in areas of need, following the principle that clinical pharmacy delivers a return on investment of £5 for every £1 invested. The organisation stands to make great savings through reducing missed doses, reducing length of stay, reducing admissions, increasing the time to readmission, reducing medicines cost and reducing errors on discharge all of which are as a result of investment in clinical pharmacy.

Performance in staff sickness rates (although still comparable with our peers) and appraisal rates has deteriorated over the last year. Pharmacy staff are well motivated and the departmental heads believe this deterioration is representative in the departmental role within the Unscheduled Care burden, coupled with our higher vacancy rate and relative lack of leadership and management positions. Turnover rates are low nationally and the best within our peer group, which is good position especially when taking into account the number of fixed term trainee posts.

Business support/ Drug savings opportunities

Variations in the Model Hospital dashboard metrics show that there could be opportunities for savings on drugs. Medicines cost per WAU is in the highest quartile and is the highest in our peer group. The use of high cost drugs is well below our peer median and almost exactly national median, but the non-high cost drugs spend is in the highest quartile and is the highest of our peer group. There are also opportunities to investigate the use of safer drugs. We intend to revisit this area during 17/18 to try to reduce our unnecessary usage.

The pharmacy team work closely with the Finance Income team and the Commissioning team to ensure that we are achieving local and national objectives for medicines spend within commissioning intentions. The coding of medicines as included and excluded from PBR is accurate and has undergone revision over the last year. We have now established a good methodology for responsible commissioner for PBRx drugs, which has led to better categorisation and closer monitoring. We plan to maintain our reporting structure to enable transparency and accuracy of reference costs to be maintained.

We plan to invest in business/general management, administration and clerical support. This will enable tight monitoring of performance, whilst keeping clinical staff within clinical areas. The exact nature of the Pharmacy Business Manager role will be reviewed and developed within the next year, and is likely to include responsibilities for tracking and delivering medicines use reporting, therapeutic switches, benchmarking and the Model Hospital recommendations. They will also work closely with the pharmacist responsible for income and commissioning in order to develop appropriate pathways for implementation.

Information Technology

The Model Hospital dashboard gives an incorrect representation of electronic prescribing. The Trust provides an electronic discharge summary and has ePrescribing for most adult chemotherapy, but does not have EPMA for inpatients, nor ePrescribing for outpatients. This is at variance with the picture elsewhere locally and nationally and leaves the Trust at risk of not being able to meet contractual obligations with regard to the Minimum Data Set, dm+d, etc. in addition to being without the obvious time saving and safety benefits. The Trust is planning an eHospital solution, which will deliver EPMA and pharmacy stock control in September 2019. This timeline will limit the necessary transformation and we will investigate an interim solution.

Despite business cases demonstrating the safety and security benefits of “smart” storage cupboards, there has been no recognition of their value through the funding cycles. The lack of such cupboards means that diversion likely occurs and “top-up” cannot be modernised quickly in order to release further assistant time for clinical duties. In order to fully realise savings from Scan4safety, security control and ward distribution transformation, the organisation needs to consider investment in “smart” cupboards. Recent similar investment elsewhere is predicted to be paid for by savings made within 3 years and plans will be drawn up with this in mind.

Procurement and ward box assembly

As part of our Trading service, Portsmouth Hospitals has run a “regional” store (RDPC) for many years. This store holds a WDA (H) licence and acts as the Procurement hub for the acute site, manufacturing unit and many other Trusts. Ward boxes are assembled at this site for other NHS organisations in addition to wards on the acute site. The stockholding at RDPC is acceptable and varies dependent upon the “specialist” nature of the drugs. 90% of medicines are ordered electronically and 100% invoices paid electronically through RDPC.

Portsmouth Hospitals acute site already meets the stock holding metrics for daily deliveries, orders and invoices processed electronically (MH dashboard incorrectly mapped) and we are marginally above the recommended 15 days for stock-holding. We plan to expand our procurement hub model to include other NHS Trusts in line with models suggested by the National Pharmaceutical Procurement Specialists Committee. Expansion will require investment in IT infrastructure in order for Portsmouth Hospitals to trade electronically with our customers. The ultimate extreme of ward distribution could include "smart" cupboards at various NHS organisations raising orders direct to our remotely located wholesaler robot. Whilst releasing minimal staff within Portsmouth Hospitals, this initiative will produce a huge reduction in infrastructure services elsewhere, enabling the release of their purchasing teams and pharmacy assistants for clinical duties. By having a collaborative approach, it will enable rationalisation of the links into the Commercial Medicines Unit such that processes and benchmarking can be implemented across a wide customer base through a single point of contact.

Aseptics

As part of our Trading service, Portsmouth Hospitals has run an aseptic manufacturing unit (PMU) for many years. This unit holds a Manufacturer's Specials licence and acts both as the aseptic unit for our patients and sells products to many other Trusts and organisations. Tight management has ensured that there is minimal wastage of chemotherapy doses. Dose banded chemotherapy is already established within the organisation, but opportunities for optimising batch processes and scheduling will be investigated. This will release capacity to increase batch production and the Trust will work towards becoming the provider for batch produced products across the Acute Alliance, thereby allowing the reduction in infrastructure services elsewhere. We will investigate opportunities to increase the production of CIVAS, thereby supporting administration of medicines at home and allow for nursing workforce redesign.

In addition, we will contribute to and change practice according to that defined by the Specialist Pharmacy Services review and with the development of an NHS Manufactured Medicines product catalogue. We will work with SPS to develop opportunities following the production of an "approved" product list, ensuring that there are sufficient centres available to produce the necessary products.

3. HPTP Plan Summary

Initiatives within Portsmouth Hospitals

Implementation timetable for workforce and process change are detailed elsewhere.

- Workforce investment and transformation, to deliver unmet clinical needs, safety and prioritised 7 day service
- Compliant and governed outsourced pharmacy services for homecare, outpatients, etc..
- Development of digital medicines strategy to include EPMA interim solution, dm+d, Scan4safety, FMD and minimum data set for high cost drugs.
- Optimise drug savings and use of NHS Improvement top 10 list, including work as part of STP to deliver savings on biosimilars
- Develop Clinical Handover and primary care based services, including referral to Community Pharmacy.

STP (Solent Acute Alliance) opportunities

The Chief Pharmacists from Portsmouth, Isle of Wight and Southampton have been planning collaborative work since early summer 2016. We will be taking forward opportunities to work together to reduce infrastructure costs as part of the Acute Alliance (subsection of the STP plans). The three workstream being discussed are as follows:-

- Outpatient Pharmacy services
- Medicines Procurement & Distribution
- Aseptic services

Plans will be further refined and discussed through the Acute Alliance over the next few months, with delivery timetables over approximately 2 years.

4. Risks & Mitigation

Risks	Mitigation
Recognition of IT requirements not reflected in Digital Roadmap	Incorporated as an aspect of eHospital; Chief Pharmacist to continue work with Director of IT and newly appointed CCIO to gain recognition of value
Unable to fund workforce transformation	Limit further expansion and continue pressure for investment from within tariff funding received by clinical service centres
Safety concerns with role transfer	Full engagement, consultation and training of staff
Capacity for NMP training	Stage implementation internally and advise HEE regards future needs including Educational Supervisors
Collaboration between Acute Alliance	Requires Memorandum of Understanding and honest collaboration rather than individual organisations' opportunities
Loss of income (due to collaboration)	Delivery of savings across a greater geography brings future stability. Opportunities to extend business and scope will be investigated

5. Issues & Mitigation

Issue	Mitigation
Lack of EPMA – limits transformational change	Requires interim solution prior to eHospital project
Infrastructure investment – cannot release staff for clinical duties	Requires investment in JAC homecare module, smart storage cupboards and replacement robot. Requires investment to outsource Medicines Information to meet RPS standards.
Workforce investment – insufficient staff for clinical service delivery	Requires investment in prescribing pharmacists
Electronic communication on discharge – no re-keying	Requires investment in secure data transfer (Pharmoutcomes)
Project management for Acute Alliance	Requires allocated support. Resource not allocated and STP unsure of funding route at time of document
RDPC location – aging building	Plan to relocate within next year or so. Location partly depends on status of Acute Alliance plans, therefore prompt decision making required.
eTrading – current lack of system to support	Requires investigation as part of Acute Alliance project, critical to delivery, requires Trust and STP support.