The Queen Elizabeth Hospital NHS
King's Lynn
NHS Foundation Trust

Queen Elizabeth Hospital King's Lynn Hospital Pharmacy Transformation Plan (HPTP) 2016 – 2020

March 2017

Chair: Edward Libbey
Chief Executive: Dorothy Hosein
Patron: Her Majesty The Queen

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1. Executive Summary

The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust (QEH) is an acute Trust with 469 beds. The pharmacy department employs 52.5 WTE staff, comprising 19.2 WTE pharmacists, 19 WTE technicians and 14.5WTE pharmacy assistants; there are currently no pharmacist vacancies. An HPTP steering group has been established within the Trust and the executive director nominated to oversee this work is the Chief Operating Officer (COO).

The HPTP has been developed in collaboration with acute Trusts within the existing Norfolk Provider Partnership (NPP) and with the Chief Pharmacists and Specialist Pharmacy Services (SPS) in the Eastern region. In addition to existing bi-monthly meetings of members of the regional Pharmacy Eastern Network (PhEN) a 'Blue-Sky thinking day' was held in January which enabled Chief Pharmacists, SPS and Eastern Academic Health Science Network (EAHSN) pharmacists to focus on opportunities for collaborative working in the acute sector. The activities and timelines to explore rationalisation of infrastructure services within the NPP and Eastern region have been jointly agreed by the Chief pharmacists.

Next steps in the plan are to further develop opportunities outlined in sections 2 and 3, with the overall aim of implementing systems which increase efficiency by reducing duplication of effort and unwarranted variation in services. The QEH has a clear digital strategy which will be key in streamlining clinical pharmacy activities and enabling safer, more efficient systems of work with improvements in patient flow and patient experience. They will allow this Trust to meet Model Hospital performance metrics and increase pharmacists' patient-facing activities. The Trust is committed to increasing best use of medication through Medicines Optimisation and ensuring that a minimum of 80% of pharmacists' time is spent in patient facing activities.

2. Current Carter Metrics and Model Hospital Benchmarks

a. HPTP planning and Governance

The Trust has set up a Carter Review Programme Board whose purpose is to oversee the successful delivery of work streams recommended by the Carter report. A Trust HoPMOp steering group has been established to deliver agreed actions led by the COO.

b. Clinical and infrastructure services

The QEH current pharmacist resource allows approximately 70% of pharmacist time to be spent on core clinical activities. This includes a daily ward pharmacy service to carry out medicines reconciliation and clinical review on admission, daily monitoring of charts and clinical interventions and preparation for discharge. It does not include a weekend clinical service; a business case has been written to achieve 7 day working during the financial year 2017/18. The limited time pharmacists have to spend on wards results in a large number of inpatient charts and discharge prescriptions being sent to the dispensary for clinical screening. To achieve 80% clinical activity, the

service will need to transform by increased use of technology, such as a dispensing robot, near-patient dispensing and portable devices. The Trust has committed to buying a dispensing robot in the financial year 2017/18 and near-patient dispensing has been introduced onto one ward.

The Trust currently has one pharmacist who is an independent prescriber; the aim is to train all clinical pharmacists of Band 7 and above as independent prescribers and use these skills to improve clinical efficiency on wards, collaborating with medical and nursing staff to improve the medicines reconciliation and discharge processes. 4 pharmacists have started non-medical prescribing courses and a further 8 have been identified to start courses within the next financial year, with 3 of these linked to clinical diplomas. A pilot study on one ward with a pharmacist transcribing TTAs has demonstrated faster processing of discharge prescriptions, with fewer errors and more accurate information to GPs; this will be extended to other wards as pharmacists complete training and become qualified as prescribers. A limiting factor in training non-medical prescribers is the large number of junior pharmacists in the department who have not been on the register long enough to qualify as prescribers. Due to the difficulty in recruiting senior pharmacists, the Trust took the decision 2 years ago to recruit junior pharmacists with the aim of 'growing our own' seniors; we have been successful in recruiting to junior positions and are in the process of mentoring them through an in-house training programme, sponsoring clinical diplomas and non-medical prescribing courses, with the goal of retaining pharmacists and recruiting them into senior roles.

	Current status	**2017/18**	**2018/19**	**2019/20**
% Pharmacist time on wards	70%	80%	90%	90%
% Pharmacist prescribers	5%	25%	60%	60%
% Technician time on wards	5%	10%	25%	30%

The department does not have dedicated Medicines Information staff; rather we maintain UKMI-recommended reference sources which are used by clinical pharmacists to answer queries related to their own patients. A Band 7 pharmacist administers the service and coordinates responses to the patient-information helpline. This takes approximately 1-2 hours per week. The regional Medicines Information service is used to assist in answering other enquiries and for training. The Trust formulary is aligned with that of the Norfolk CCG and we have no dedicated formulary pharmacist resource; governance is managed via the Trust Drugs and Therapeutics committee with senior pharmacy representation.

Only 5% of technicians' time is spent on clinical activities, predominantly as part of the medicines reconciliation process. Implementation of a dispensing robot will release some technician and assistant time which will be redeployed to clinical activities and a review of their scope of work will include activities such as near-patient dispensing and discharge counselling by 2020.

Collaboration with neighbouring Trusts as part of the NPP (Norfolk and Norwich University hospital and James Paget University hospital) is underway to rationalise infrastructure services (see below for details) and further potential collaborative opportunities have been identified by Chief Pharmacists in the Eastern Region.

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c. Electronic Prescribing and medicines administration

The Trust's current status on the implementation of electronic prescribing and medicines administration is as follows:

Implementation Area	Current Status
Chemotherapy	Partially implemented
Outpatients	Not started
Discharge medicines	Fully implemented
Inpatients	Electronic prescribing system used in Critical Care only

Electronic prescribing for discharge is established throughout the Trust; The Trust will be implementing the link between its JAC Pharmacy management system and the Sunquest ICE e-discharge solution to deliver process efficiencies.

The only inpatient area currently using an electronic prescribing and administration system is the Critical Care Unit; this has been in place for a number of years and is well-established. The Trust is currently exploring the potential benefits of joining with the other acute trusts in Norfolk in having a common electronic prescribing and administration system for inpatients and will be looking to deliver a solution in 2017/18.

As a consequence of on-going project delays a senior team within the Trust is reviewing the plan for the successful delivery of the chemotherapy e-prescribing system. This has been caused by the failure of a commercial chemotherapy e-prescribing system to deliver.

A detailed plan for the development of Digital Maturity is given below. The Trust Head of ICT is part of the HoPMOp steering group.

d. Accurate coding of medicines

A system upgrade to the pharmacy management system has been ordered from JAC to enable dm+d reference costing; we are awaiting installation in the first quarter of 2017/18.

e. Top 10 drug saving opportunities

The QEH has developed an effective multi-disciplinary approach for switching to biosimilar biologics. 100% compliance in switching to the first available biosimilar, Infliximab, was achieved within 6 months of its availability and 100% within 1 month for Etanercept. A Policy for introducing biosimilar switches has been ratified with the aim of ensuring rapid switching for future products.

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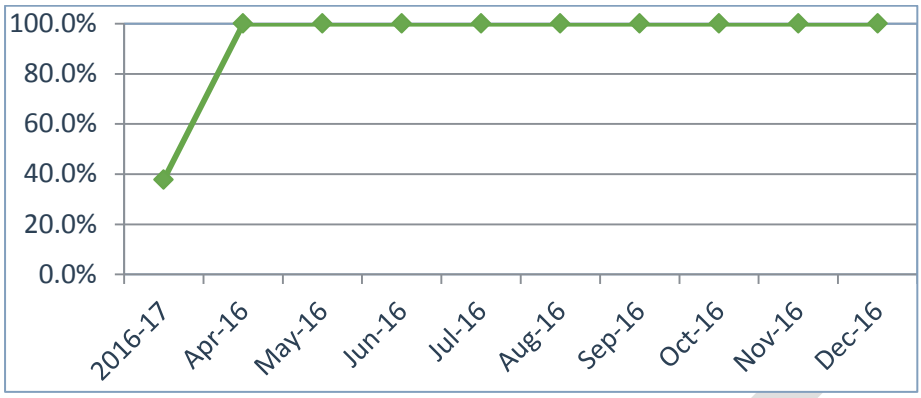
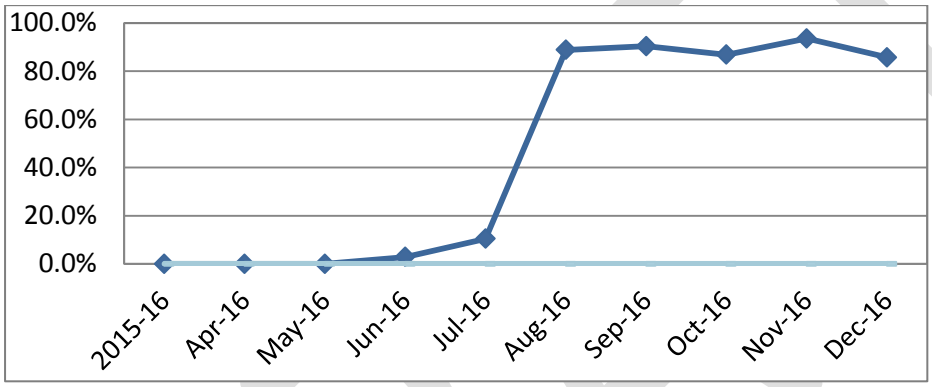
QEH Infliximab Biosimilar switch



QEH Etanercept Biosimilar switch (not all strengths available as biosimilar, therefore not 100%)



The top 10 drug saving opportunities will be reviewed as part of the pharmacy Cost Improvement Plan (CIP) in liaison with operational managers and will be monitored as part of the pharmacy transformation plan.

f. Medicines stock-holding and supply chain

Carter Recommendation	Current Value	Target date
Reduce average stock-holding to 15 days	24 days	2020
Fewer than 5 daily deliveries	18	2020
90% orders sent electronically	77%	tbc
90% invoices processed electronically	0	tbc

The Trust does not currently meet the targets for stock-holding and supply chain. Much of this is not within our capacity to improve and we plan to engage with the work being carried out by the National Pharmaceutical Procurement Specialist Committee (NPPSC) to improve these metrics; this is expanded in Appendix 1.

3. Transformation Plan

Rationalisation of Infrastructure Services

The QEH is collaborating with neighbouring acute Trusts within the existing Norfolk Provider Partnership (NPP): the Norfolk and Norwich University Hospital (NNUH) and James Paget University Hospital (JPUH). Options for rationalising aseptic services were identified early in 2016 and an external options appraisal is on-going. We are also exploring options for collaborative ventures with Chief pharmacists and SPS pharmacists in the Eastern region. A 'Blue-Sky thinking day' was held in January 2017 which enabled Chief Pharmacists, SPS and Eastern Academic Health Science Network (EAHSN) pharmacists to focus on opportunities within the acute sector. The activities and timelines to explore rationalisation of infrastructure services within the NHG/NPP and Eastern region were jointly agreed by the Chief pharmacists; a series of work stream groups have been established within the NHG/NPP, as described below.

In rationalising infrastructure services, it is recognised that the over-arching aim is to enable increased patient-facing activities and medicines optimisation. The clinical leads and chief pharmacists in the NHG have agreed a common approach and standards for the delivery of excellent clinical services in each hospital. We have agreed a structure that can be adapted to suit the varying size and complexity of the different hospitals.

A series of work streams and associated leads have been identified; the following plans summarise the streams and plans of work.

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Programme plan for delivery for eight Carter workstreams within Pharmacy

Project	16-17	2017 - 2018				2018 - 2019				2019 - 2020			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Digital maturity													
Prescription Tracking service													
e-Chemotherapy													
Robot installation													
Procure EPMA system													
Install dm+d software													
Automation of processes													
Overcome legal and software issues for data transfer													
Data flow to e-PR systems													
Data flow from EPMA to SCR													
Data flow to e-referral system													
Compliance with falsified medicines directive													
Education and Training													
Establishment of NNUH/QEHKL/JPUH trining group													
Develop E&T strategy													
Devlop in house MM and Meds Rec training													
Develop rotational pharmacist training programme													
Procurement and Distribution													
Establish task and finish group													
Survey requirements of each individual Trust													
Meet interested parties													
Identify options and report back to Trusts													
Engage in procurement process													
Implement identified solutions													
Homecare													
Process improvements													
Undertake an options appraisal for centralized model													
Implementation of centralised model if viable													
Dispensing													
Undertake options appraisal for outpatient and TTO dispensing													
Implement outsourced out patients if viable													
Increase near patient dispensing													
Preparative Services													
Commission options appraisal (complete)													
Review range of aseptic manufactured products to outsource/rationalise													
Implement rationalization and outsourcing													
Report and review of options appraisal													
Evaluate and implement outcome of options appraisal													
Present to NHG/NPP for outcome agreement													
Develop business case for change in service delivery													
Implement outcome option													
Medicines optimisation and Clinical Services													
Develop model and common standards													
Develop business case for 7 day services													
Implement 7 day services tragetting high risk patients/high risk medicines													
Articulate model within individual Trusts													
Gap analysis by individual Trusts													
Skill mix all posts and new developments to support patient facing service													
Develop action plans to address gap													
Implement action plans and new systems of work													
Monitor benefits													
Options appraisal of near patient pharmacies													
Implement findings of options appraisal													
Medicines Information and Drugs Governance													
Await outcome of national review of SPS													

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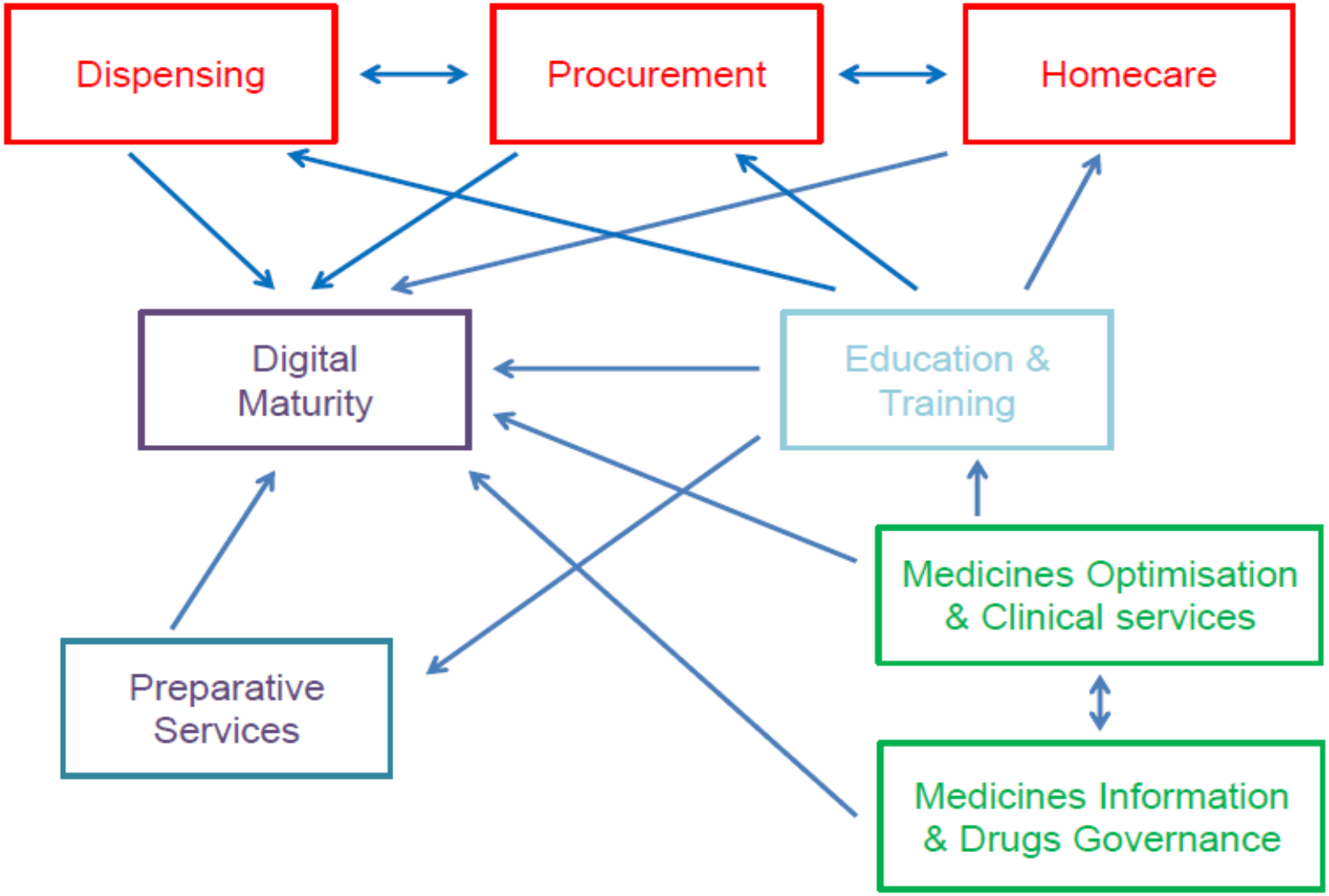
Key Project Theme Interdependencies



Project: Digital Maturity Roadmap | **Stream Lead: Chief Pharmacist**

Narrative

The QEH has an electronic discharge system in place with plans to investigate further increasing the efficiency of this by implementing the link between the existing JAC pharmacy system and Sunquest ICE e-discharge. The Trust's ICT department is exploring the potential benefits of joining with other Trusts within NHG/NPP by having a common e-prescribing solution for inpatients and outpatients, and aim to deliver a solution in 2019/208.

As a consequence of ongoing project delays the Trust is currently reviewing the plan for the successful delivery of a chemotherapy e-prescribing system.

NNUH and JPUH have recently implemented electronic prescribing and medicines administration, and an automated dispensing system. All Trusts are keen to utilise modern technologies in order to standardise practice and reduce input required by trained Pharmacy staff in order to provide an improved patient facing clinical service to patients. All Trusts fully intend to comply with dm+d and falsified medicines directive requirements.

Summary of current digital maturity:

	NNUH	Interface	JPUH	Interface	QEHKL	Interface
Prescription tracker	Yes	N/A	Yes	N/A	In process	N/A
ADS	Yes	Yes	Yes	Yes	No	No
EDL	Yes	Yes	Yes	Yes	Yes	No
EPMA	Yes	Yes	Yes	Yes	No	No
SCR	Yes	No	Yes	No	Yes	No
Robotics	Yes	Yes	Yes	Yes	No	No
Automated cabinet	Yes	Yes	No	No	No	No
EPR	No	No	Yes	No	No	No
e-referral to Community Pharmacy	No	No	No	No	No	No

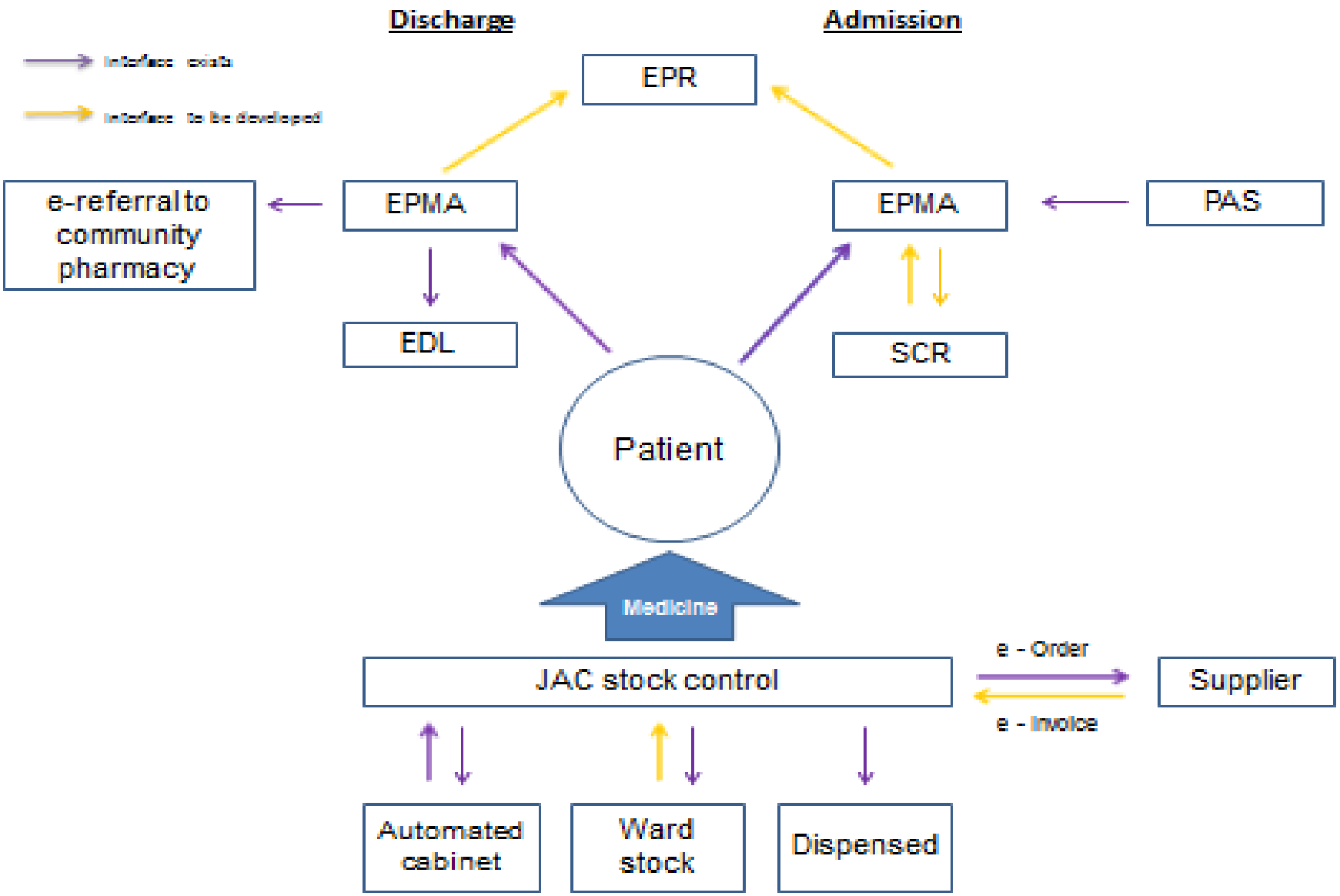
Milestones	Start date	End date
Procure and install new prescription tracker	Q4 2016/17	Q1 2017/18
Procure and install Automated Dispensing System (Robot)	Q1 2017/18	Q3 2017/18
Investigate further integration of electronic discharge and JAC systems	Q2 2017/18	Q4 2017/18
Implement Chemotherapy electronic prescribing system	Q3 2014/15	Q4 2017/18
Install dm+d software	Q4 2016/17	Q1 2017/18
Procure and implement EPMA for inpatients	Q1 2019/20	Q4 2019/20
Automation of processes in order to reduce error and improve patient safety • Automated ward cabinets • Use of bar codes (products and patient) (dispensing and administration) • Electronic link between EPMA and JAC stock control system	)) Q2 2017/18)	)) Q4 2019/20)
Integration with other clinical IT systems to provide accurate medicines information for efficient patient care	Q1 2019/20	Q4 2019/20
Overcome legal and software barriers in order to transfer data between sites and across the STP	Q1 2019/20	Q4 2019/20
Integration from EPMA to primary care IT systems	Q1 2019/20	Q4 1019/20
Compliance with falsified medicines directive	Q2 2017/18	Q3 2018/19
e-referral to community pharmacy	Q1 2019/20	Q4 2019/20
= Business Case required		

Risks:

1. Concerns about the safety of the chemotherapy e-prescribing system have led to significant delays and risk of failure to implement.
2. Lack of funding for planned projects and software licences
3. Legal issues of data transfer to be resolved
4. Business cases being successful

KPIs to be monitored:

- Installation of prescription tracker
- Implementation of Chemotherapy ePrescribing
- Installation of Automated Dispensing System
- Implementation of EPMA
- Installation of dm&d software
    - Transmission of suitable accurate data compliant with MDS to NHS England
- Bar code scanning of prescriptions to collect data
    - Patient name
    - Date of Birth
    - Drug name and form
    - Drug strength
- Bar code scanning of patient at time of administration with medication box
- Use of automated ward cabinets in suitable ward areas
- Software issues for interfaces resolved between suppliers
- Integration from EPMA to primary care systems
- Information Governance and Legal issues resolved to deal with data transfer between Trusts and Suppliers
- Use of community e-referral system
    - No: of referrals
    - Type of referral
    - Referral initiation (Pharmacist/Technician)


Discharge
Admission
EPR
e-referral to community pharmacy
EPMA
EPMA
PAS
EDL
SCR
Patient
Medicine
JAC stock control
e - Order
e - Invoice
Supplier
Automated cabinet
Ward stock
Dispensed

Project: Procurement and Distribution

Stream Lead: Chief Pharmacist

Narrative:

All Trusts are required to procure medicines at the most cost effective price whilst maintaining quality and safety, and to maintain appropriate systems and audit trail to support financial accountability. The pharmacy stock control systems are replicated across the Trusts and lend themselves to centralisation and thus achieving economies of scale. Options to consolidate across local, regional or supra regional areas should be explored.

In addition pharmacies receive multiple deliveries per day with a consequent stock holding in order to operate stock replenishment systems. This is resource intensive involving duplication of tasks. Process review to streamline and reduce duplication through for example, direct ward orders which should be explored and adopted.

To deliver this ambition Trusts will work together exploring commercial opportunities/partnerships to adopt direct the ward order principle whilst minimising deliveries to each Trust each day, and may involve the set-up of a centralized procurement office using a lead provider model.

Objectives:

Reduce average stock-holding days to 15, an average of less than 5 deliveries per day, 90 % of orders are sent electronically and 90% of invoices are processed electronically.

(See diagram for vision)

Milestones	Start date	End date
Establish task and finish group	Q4 2017/18	Q4 2017/18
Survey requirements of each Trust	Q4 2017/18	Q4 2017/18
Meet interested parties commercial and NHS) to identify options and develop action plan/tender schedule	Q1 2018/19	Q2 2018/19
Identify options and report back to Trusts	Q3 2018/19	Q3 2018/19
Engage in planned regional procurement process to support logistics arrangements if necessary OR Prepare business case for in-house option OR both	Q4 2018/19	Q1 2019/20
Implement identified solutions	Q2 2019/20	Q4 2019/20
= Business Case required		

Risks:

- Information Governance issues between different Trust sites
- Commercial sensitivities between Trusts, Pharmaceutical companies and potential third party suppliers if utilised
- Information technology
- Interface issues between sites
- Establishing a lead trust to 'host' the centralised hub

KPIs to be monitored:

- Survey of requirements of each Trust
- Options and action plan identified
- Business case for in-house option
- Engagement with regional procurement process
- Implementation of identified options

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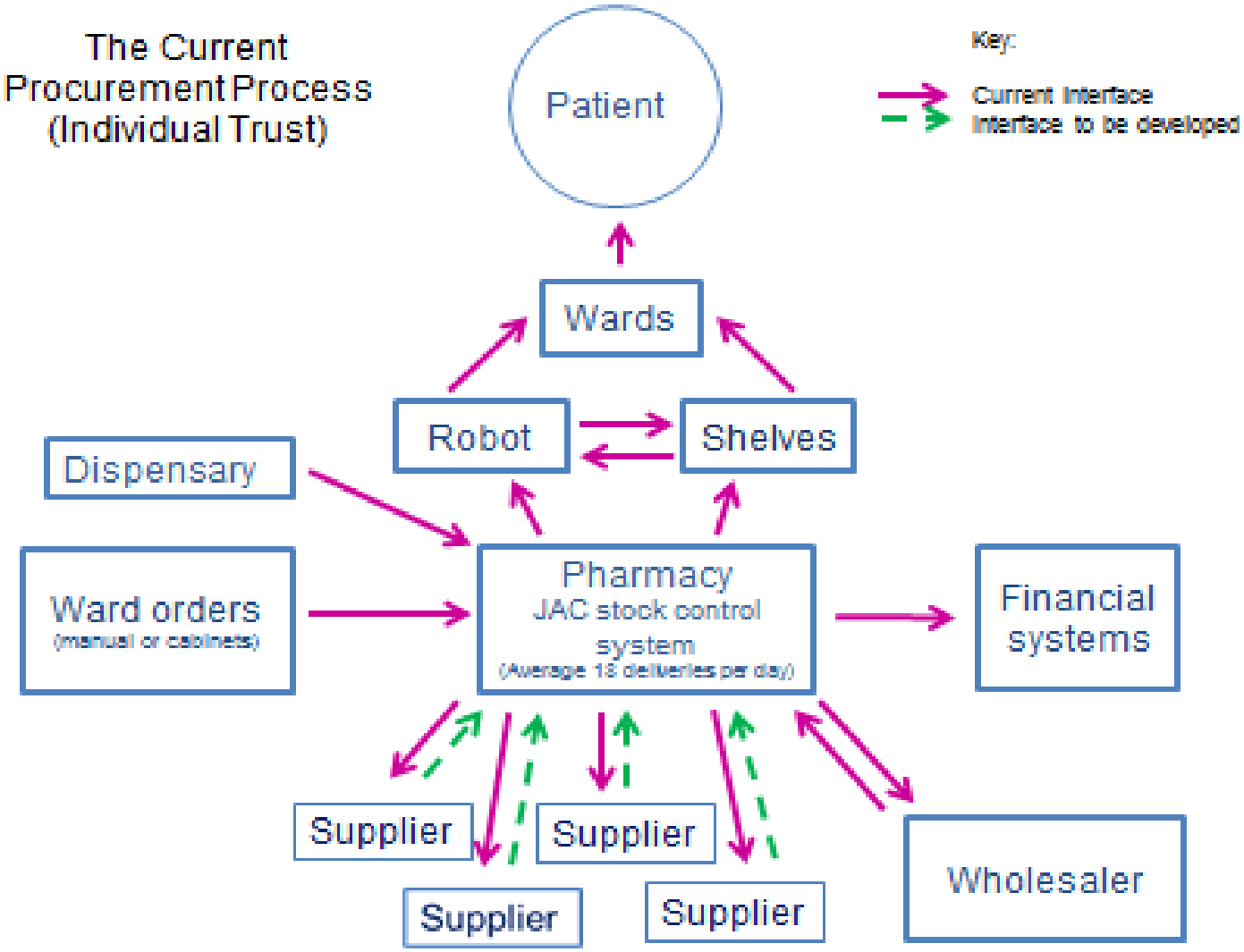
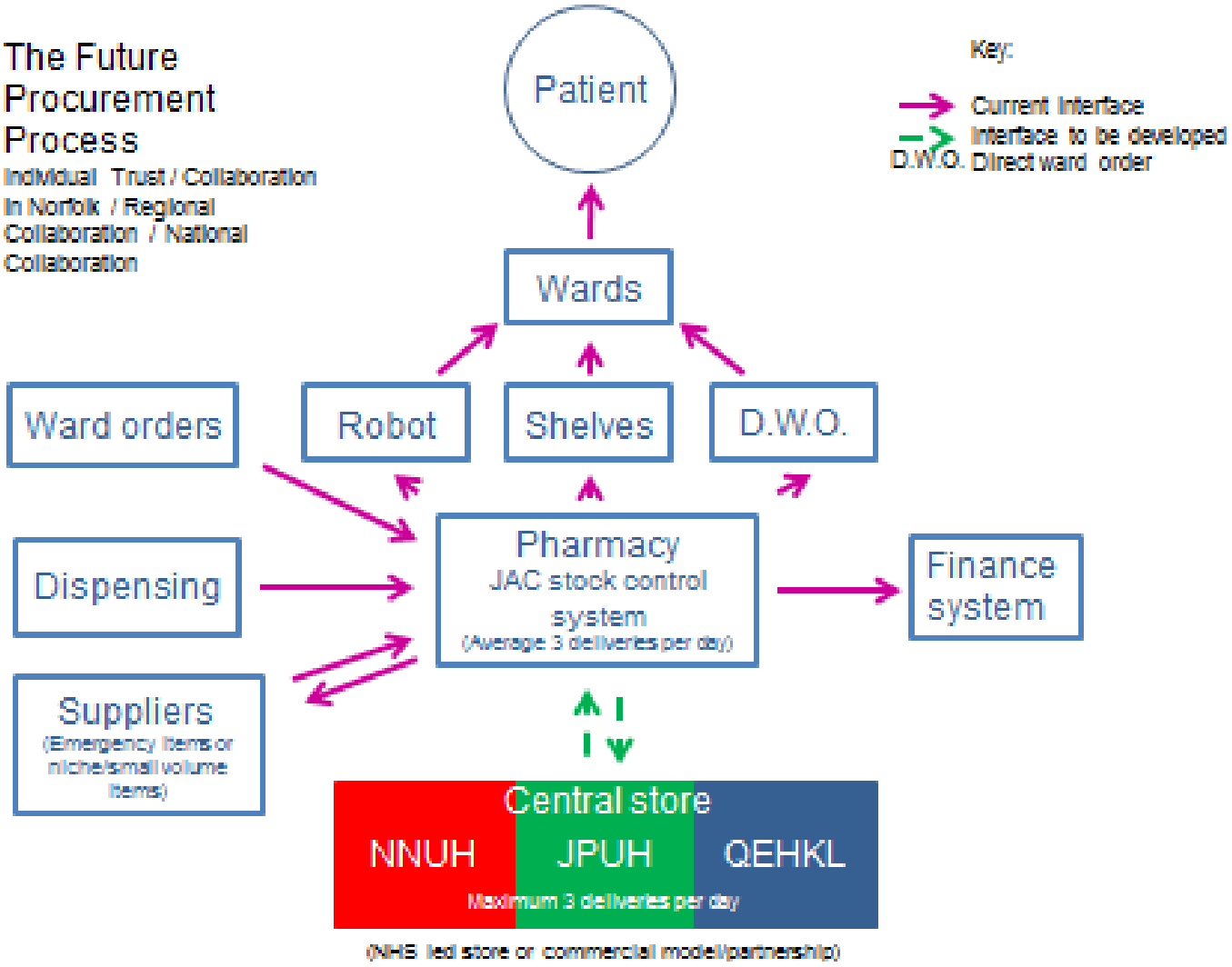

The Current Procurement Process (Individual Trust)
Patient
Key:
Current Interface
Interface to be developed
Wards
Robot
Shelves
Dispensary
Ward orders
(manual or cabinets)
Pharmacy
JAC stock control system
(Average 18 deliveries per day)
Financial systems
Supplier
Supplier
Supplier
Supplier
Wholesaler


The Future Procurement Process
Individual Trust / Collaboration
In Norfolk / Regional Collaboration / National Collaboration
Patient
Key:
Current Interface
Interface to be developed
D.W.O. Direct ward order
Wards
Ward orders
Robot
Shelves
D.W.O.
Dispensing
Pharmacy
JAC stock control system
(Average 3 deliveries per day)
Finance system
Suppliers
(Emergency items or niche/small volume items)
Central store
NNUH
JPUH
QEHKL
Maximum 3 deliveries per day
(NHS led store or commercial model/partnership)

Project: Homecare	**Stream Lead: Chief Pharmacist**

Narrative

All Trusts are commissioned to supply high cost drugs (medicines principally commissioned by HNS E and CCGs) via homecare suppliers in order to optimize the patient's access to medicines, whilst enabling substantial savings. The number of patients and range of medicines supplied through homecare suppliers is growing with similar processes to support supply and securing reclamation of costs via our commissioners being operated in all Trusts. This detracts staff from 'front line' clinical activities. The clinical pathway in the process leads itself to centralization and economies of scale. This could be achieved on a local health economy, regional or supra regional basis. It would necessitate a change in processes by NHS E/CCGs and a lead provider willing to support the functionality, to work with the homecare companies who are considered third party supplier. Opportunities may exist to set up a homecare provider model through the lead provider. The economies need to be explored, but in liaison with an in-house outsourced out-patient dispensing model may make it economically viable and generate income for the Trusts.

Objectives

To develop the homecare process, to ensure that going forward, homecare is only chosen when desired by the patient, and is the most economically advantageous route for medicines supply available to the member Trust/Commissioner.

(See diagram for vision)

Milestones	Start date	End date
Process improvements: • Electronic transmission of purchase order and prescription • Electronic receipt of invoice • Acknowledgement of goods received directly from the patient to the Trust	 Q3 2017/18 Q4 2017/18 Q4 2017/18	 Q2 2018/19 Q4 2019/20 Q4 2019/20
Undertake options appraisal for the centralised model, including: • Logistics • Location • Staffing • IT requirements • Information and IG issues • Financial analysis • NHSE/CCG billing issues	Q2 2018/19	Q4 2019/20
If viable, implementation of the centralised model in line with finding and options appraisal	Q1 2019/20	Q4 2019/20
= Business Case required		

Risks:

- I.T infrastructure
- Clinical Governance responsibilities defined
- Information governance
- IT interfaces
- Establishing a lead trust to 'host' the centralised hub

KPIs to be monitored:

- % of electronic purchase orders and prescripitons
- % of electronic invoices
- % of electronic acknowledgement of goods received by patients
- Options appraisal for a centralised model
- Implementation of preferred option

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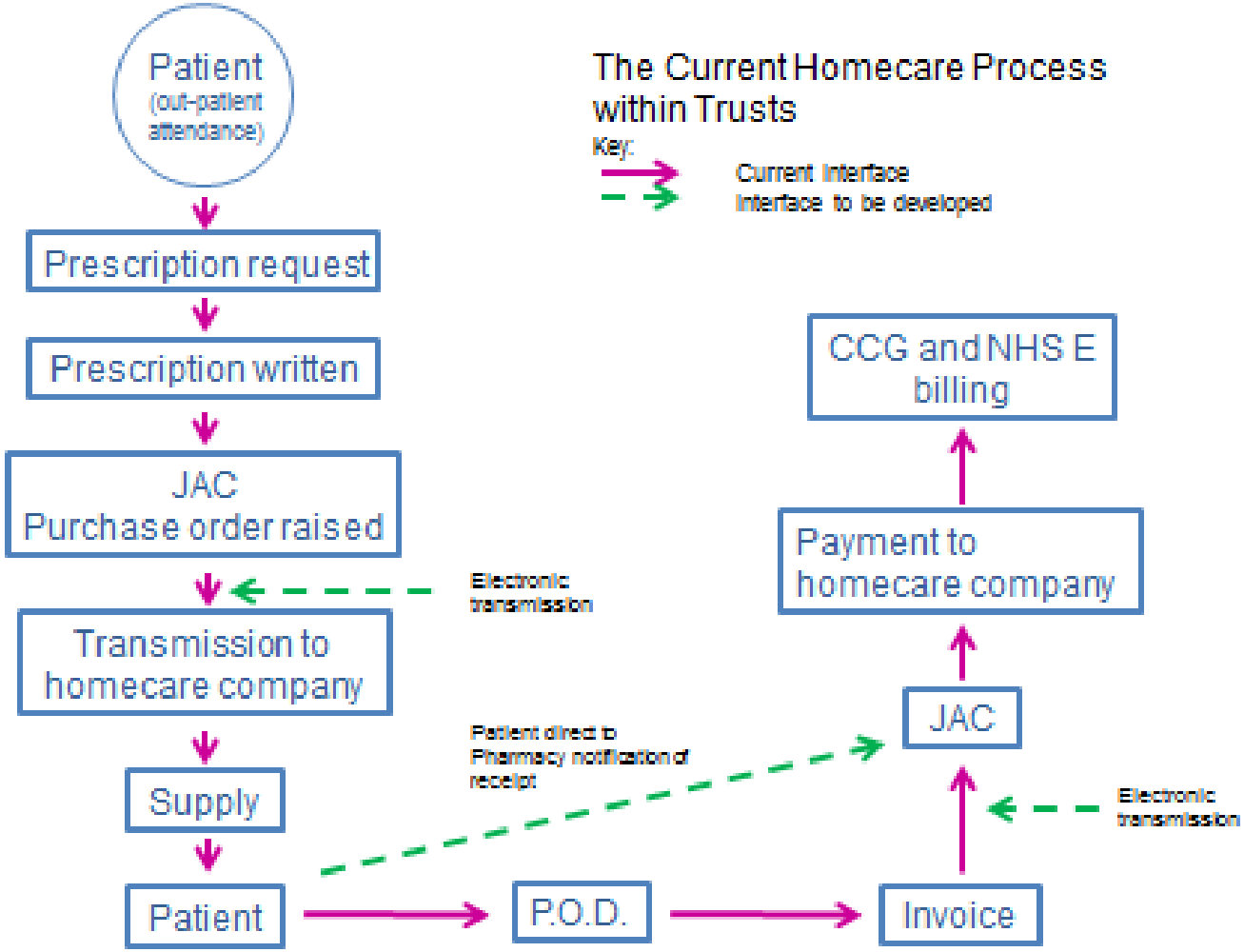
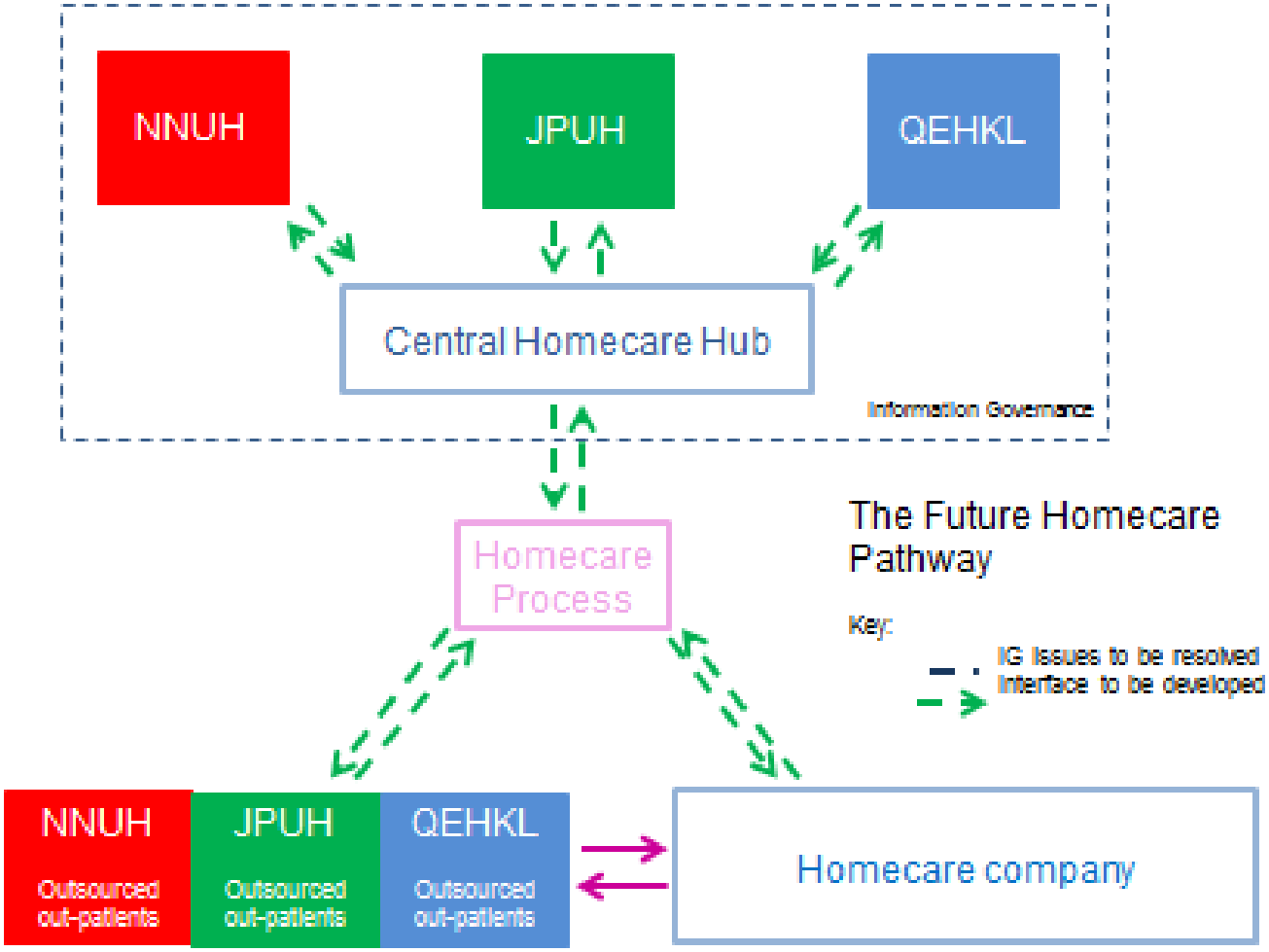

The Current Homecare Process within Trusts
Key:
Current Interface
Interface to be developed
Patient (out-patient attendance)
Prescription request
Prescription written
JAC Purchase order raised
Electronic transmission
Transmission to homecare company
Supply
Patient
P.O.D.
Invoice
Electronic transmission
JAC
Patient direct to Pharmacy notification of receipt
Payment to homecare company
CCG and NHS E billing


NNUH
JPUH
QEHKL
Central Homecare Hub
Information Governance
Homecare Process
The Future Homecare Pathway
Key:
IG Issues to be resolved
Interface to be developed
NNUH
Outsourced out-patients
JPUH
Outsourced out-patients
QEHKL
Outsourced out-patients
Homecare company

Project: Dispensing Services

Stream Lead: Chief Pharmacist

Narrative

All Trusts are required to provide a supply/dispensing function to cover all in-patient , out-patient and discharge medicines. The process is prescriptive in terms of being governed by the Medicines Act, however different models of dispensing covering the route of supply and by whom are possible and can achieve economies of scale and efficiencies for savings/income.

Review of the process can achieve more timely supply through for example near patient pharmacies and reduction in unit cost through skill mix utilising more dispensing assistants liberating pharmacy technician and pharmacists from the supply process.

Out-patient dispensing places an increasing burden on in house dispensing through the competing demand of supply against the provision of in-patient and discharge medication. Many Trusts have minimized this impact through the outsourcing of out-patient dispensing to a third party or by an outsourced in-house model. To date it has been on an individual Trust basis and for a sole function, usually the dispensing of out-patient prescriptions. Opportunities may exist to develop the traditional outsourced model to embrace the dispensing of TTOs and homecare supplies as well, and needs to be evaluated through a comprehensive options appraisal. This may enable more organisations to achieve a financially viable service.

Objectives

To develop the dispensing process to improve the timeliness of supply and access to medicines and reduce unit dispensing costs whilst liberating professional and technical staff into patient facing activities.

(See diagram for vision)

Milestones	Start date	End date
Undertake an options appraisal for the dispensing of outpatient and TTO medication: • As present; • Outsourced to third party; In-house outsourced dispensing through joint venture or equivalent.	Q2 17-18	Q4 17-18
Implement outsourced model in line with findings of options appraisal if viable.	Q1 18-19	Q4 18-19
Increase near-patient dispensing: • Identify location(s) based on need; • Set up dispensing.	Q1 18-19	Q4 18-19
Continue skill-mix towards more dispensing assistants for routine dispensing functions both within pharmacy dispensary and near-patient pharmacies.	Q1 17-18	Q4 19-20
= Business Case required		

Risks:

- Financially viability of the service
- Identification of space within the Trust to locate an out-sourced pharmacy
- Establishment of suitable commercial partnership if applicable
- Capital set-up costs if outsourced solution is an 'in-house' model
- Set up of commercial contract agreements between pharmaceutical supplier and third party provider

KPIs to be monitored:

- Complete options appraisal for outpatient and TTA dispensing
- Implement preferred option
- % of near-patient dispensing for TTAs and inpatients

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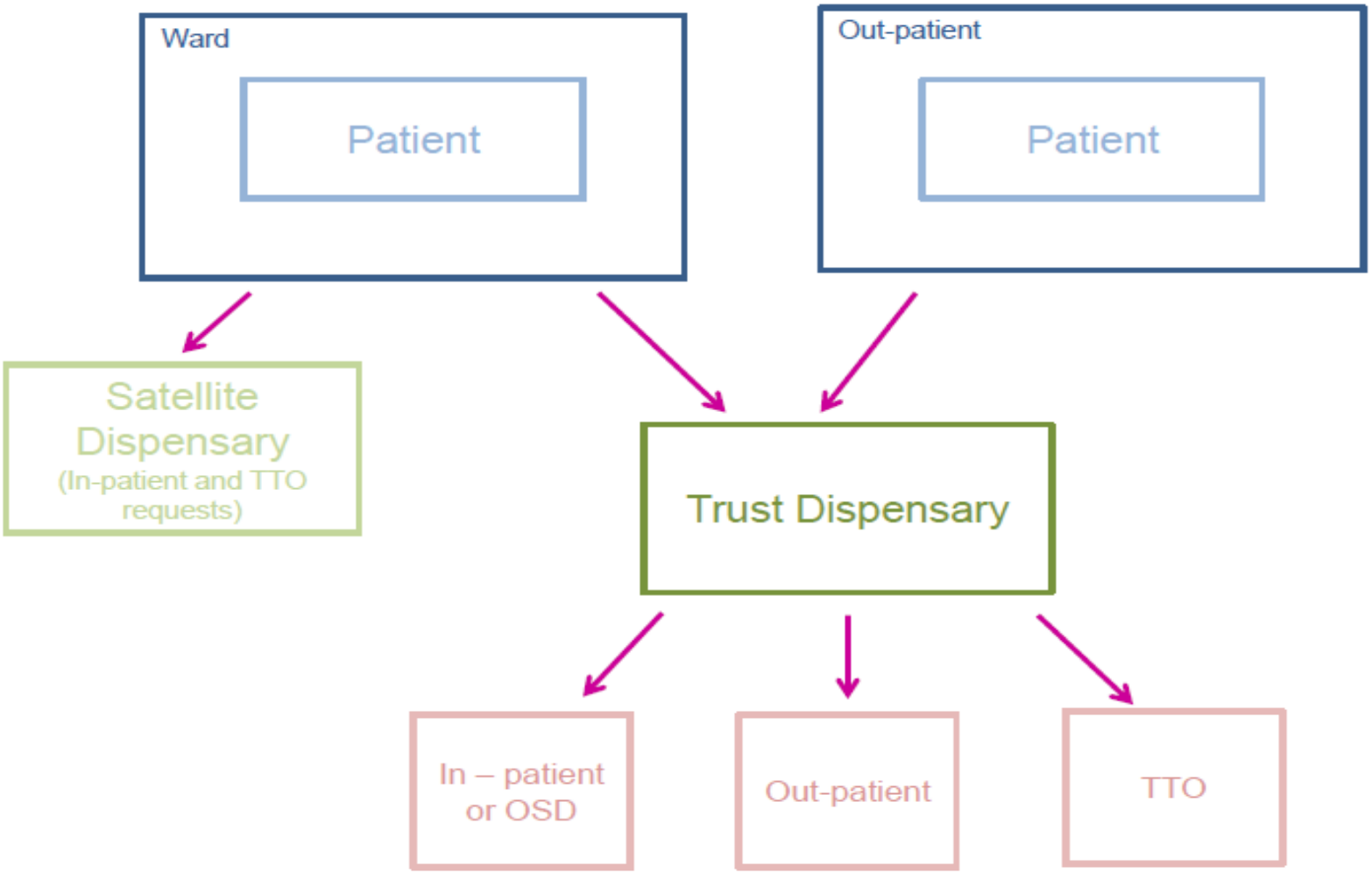
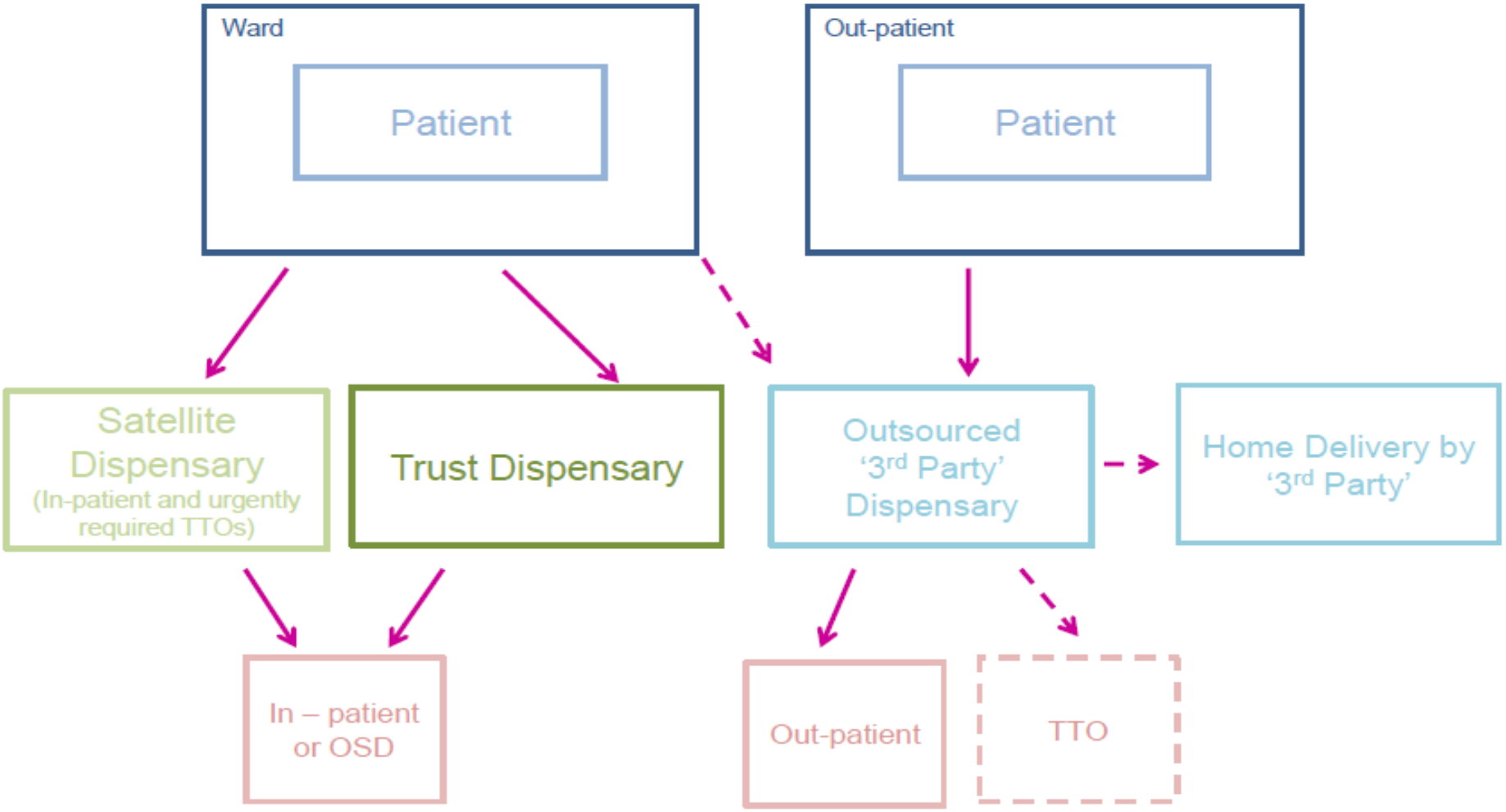
The Current Dispensing Model



The Future Dispensing Model



Project: Preparative Services (Production)	Stream Lead: Chief Pharmacist

Narrative

QEH pharmacy installed an aseptic suite with 6 isolators (2 positive pressure and 4 negative pressure) in 2011 at a cost of circa £2M. This was producing radiopharmaceutical products, Total Parenteral Nutrition (TPN) and chemotherapy when it was first installed. Radio-pharmacy and TPN are now outsourced and recent rationalisation of the chemotherapy provision has left excess capacity in the unit.

NNUH has an out-dated aseptic unit and a licensed non-aseptic production unit which now is used only for repacking and over labelling. JPUH have 2 isolators, no Specials Licence and are mainly manipulating dose-banded chemotherapy and basic TPN bags.

Objectives

To carry out an assessment of the financial viability and capacity across the NHG footprint for using the QEH pharmacy aseptic unit for the supply of products to NNUH and JPUH and to extend the volume of repacking and over labelling work at NNUH to supply the needs of the QEH. The objective being to reduce manufacturing costs through economies of scale including replacement equipment, increase use of ready to use forms and consolidation of services

Milestones	Start date	End date
Commission options appraisal by Windcliff Management Ltd	Dec 2016	Complete
Report and review of options appraisal	Q4 2016/17	Q1 2017/18
Present to NHG/NPP for outcome agreement	Q2 2017/18	Q2 2017/18
Develop business case for change in service delivery	Q3 2017/18	Q4 2017/18
Implement outcome option	Q1 2018/19	Q4 2019/20
= Business Case required		

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Risks:

1. Failure for all Trusts in NGH/NPP to agree on the implementation of the options appraisal findings.
2. Lack of funds to implement recommendations made by findings.
3. Staff recruitment, particularly pharmacists into a discipline which is no longer poplar due to lack of patient contact.

KPIs to be monitored:

- Presentation of options appraisal to NPP
- Review of options appraisal
- Business case developed for new systems of work
- Implement preferred option
- Benefits of new ways of working

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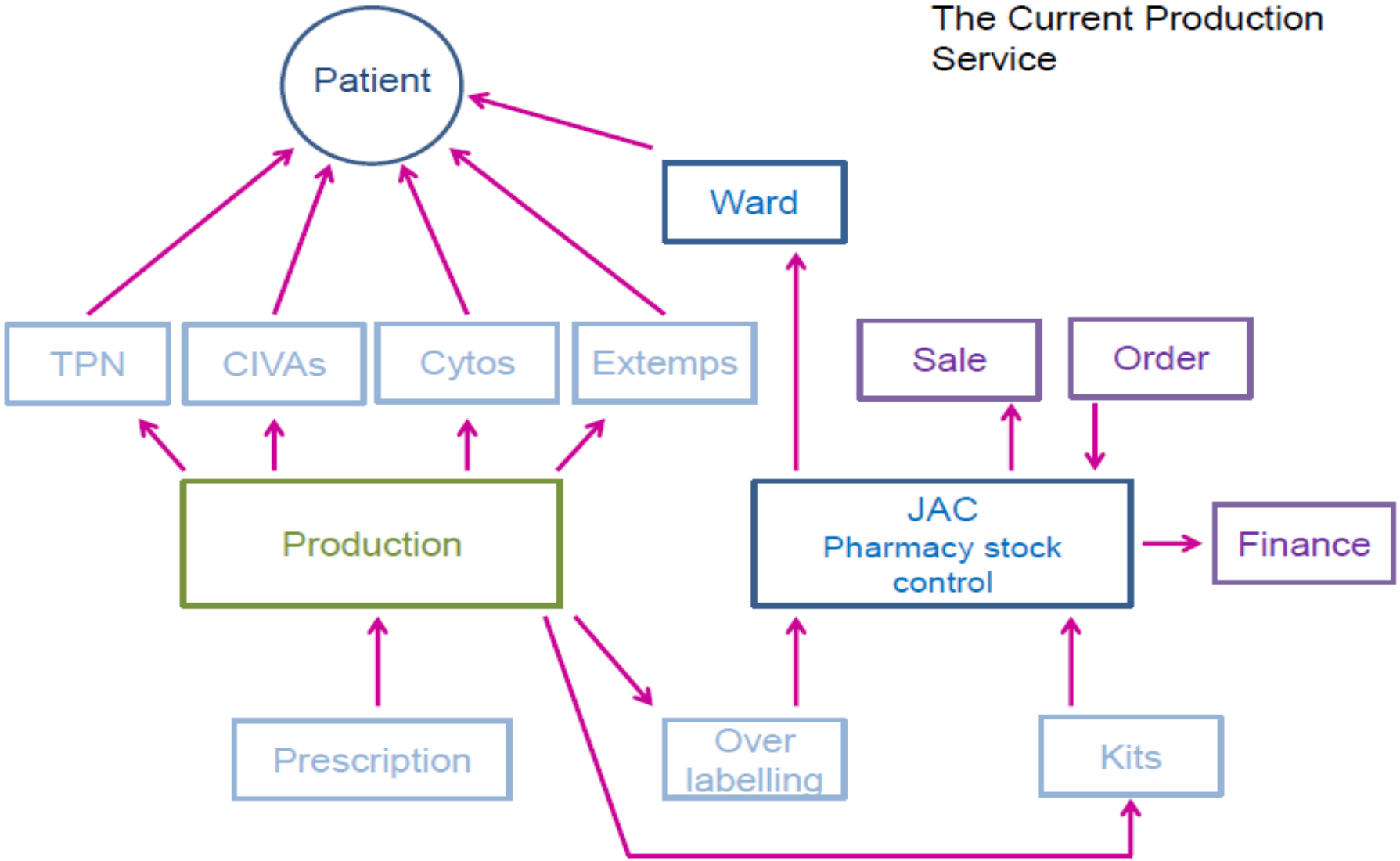
The Current Production Service
Patient
Ward
TPN
CIVAs
Cytos
Extemps
Sale
Order
Production
JAC
Pharmacy stock control
Finance
Prescription
Over labelling
Kits

Project: Workforce Development/Education & Training	**Stream Lead: Chief Pharmacist**

Narrative

Currently there are a number of E&T streams within the departments:

a) Pre-registration training (pharmacists and technicians): Programmes co-ordinated by the UEA school of pharmacy; underpinning knowledge taught on a regional basis and quality assurance of in-house training programme.
b) Post registration training (pharmacists and technicians): Diploma in general pharmacy practice, non-medical prescribing, MSc in pharmacy practice; accredited checking, medicines management, medicines reconciliation, patient counselling for technicians. Registration usually with the UEA.
c) Other training such as NVQ level 2 for pharmacy assistants – the underpinning knowledge and assessment is provided by an external organisation (Buttercups).
d) In-house education programmes for pharmacist and technicians.

JPUH, QEHKL and NNUH have collaborated on the future models for clinical pharmacy services in order to ensure equitable access and delivery for patients whilst offering leading edge services to aid staff job satisfaction and recruitment and retention. These objectives will be underpinned through a common training and development programme offered by the three Trusts.

Due to funding constraints the programme should be targeted in partnership with higher education establishments where a nationally recognised qualification e.g. non-medical prescribing is required for an extended role, and in-house delivery through Trust developed schemes where there is no nationally recognised qualification, but there is a requirement for further training and competency assessment to undertake the new roles. Collaboration on the latter delivery option will deliver economies of scale and continued opportunities for the service and staff to develop despite funding constraints.

Objectives

To develop a comprehensive training and development programme to support clinical pharmacy and extended professional roles in line with the needs of service and to support the hospital pharmacy transformation plan.

Milestones	Start date	End date
Establish NNUH/QEH/JPH E & T group to document current E&T activities	Q2 2017/18	Q4 2017/18
Develop E&T strategy aligned to the Medicines Optimisation and Clinical Services work stream	Q3 2017/18	Q1 2018/19
Develop in-house Medicines Management/Medicines Reconciliation training across the 3 sites	Q2 2019/20	Q4 2019/20
Development of a rotational programme for junior pharmacists across the 3 sites	Q1 2019/20	Q4 2019/20

Risks:

1. Loss of funding from HEE for post-registration CPD courses.
2. Lack of funding for role development resulting in loss of regionally run courses such as those for technicians, NMP and Diploma courses.
3. Failure to educate sufficient pharmacy technicians due to lack of funding.
4. Increase in GP practice based pharmacists and movement of pharmacists from hospital to GP surgeries

KPIs to be monitored:

- E&T working group established
- Development of E&T strategy
- Development of in-house training programme for Medicines Management and Medicines Reconciliation
- Number of technicians successfully completing the in-house course
- Establishment of rotational junior pharmacists training programme across the sites
- Number of junior pharmacists completing modules of training

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Project: Medicines Information and drugs governance

Stream Lead: Chief Pharmacist

Narrative

The model used at the QEH for delivery of Medicines Information already mirrors the rationalised approach recommended by Carter. The pharmacy department does not have dedicated Medicines Information staff; instead we maintain UKMI-recommended reference sources which are used by clinical pharmacists to answer queries related to their own patients. A Band 7 pharmacist administers the service and coordinates responses to the patient-information helpline. This takes approximately 1-2 hours per week. The regional MI service is used to assist in answering other enquiries and for training.

This model reflects the aim of rationalising infrastructure services and using centralised resources for answering more complex MI enquiries.

Objectives

Engagement with further development of regional MI, establishment of RMOCs and maintenance of electronic sources, as outlined above, will be needed to deliver continued effective medicines optimisation at ward level.

Milestones	Start date	End date
Develop regional/national list of clinical specialists for sharing	Q2 17/ 18	
Review MI service provision at regional/national level	Q1/2 2018/19	
Regional/national IT engagement strategy for workforce and service users.	Q1/2 2018/19	

Risks:

1. Availability of the NHS SPS 7 day/week virtual service to support Trusts
2. Delivery at a regional and national level from locally held MIdatabank resource to a STP/regional/national solution

KPIs to be monitored:

- Numbers of level 3 MI enquiries referred to regional or specialist centre
- Implementation of a regional or national MIDatabank resource
- Use of the regional/national resources

Project: Medicines Optimisation and Clinical Services	**Stream Lead: Chief Pharmacist**

Narrative

The primary objectives of the HoPMOp are to increase patient-facing and governance activities of pharmacists and pharmacy support staff, to ensure the best possible outcomes from medicines can be achieved in a safe and cost-effective manner.

The QEH in collaboration with NNUH and JPUH have agreed to develop a standardised clinical service model that is transferable in its application across the NHG – the intention of which is to remove unwarranted variation in standards of care; improve patient experience and outcomes; improve efficiency, productivity and medication safety; and empower the patient to be part of the decision making process.

Devolved care pathways moving away from infrastructure services will be the key enabler in the strategic remodelling of the clinical service –with the formal incorporation of teams of pharmacists and support staff within the hospital divisional structure.

A drive to develop and recruit highly skilled generalist pharmacists will be the most significant component in the delivery of a high quality 7-day clinical service. Specialist pharmacists will be required to provide high-quality input cross-divisionally and escalation and prioritisation tools will be utilised in order to empower staff to refer and defer based on their skillset.

Objectives

The primary objectives of HoPMOp are to increase the patient facing and governance activities of pharmacists and their support staff, to ensure that the best possible outcomes from medicines can be achieved in a safe and cost-effective manner.

(See diagrams for vision)

Milestones	Start date	End date
Develop model and common standards for delivery of clinical pharmacy	Q4 2016/17	Q4 2016/17
Articulate the model within individual organisations	Q4 2016/17	Q1 2017/18
Gap analysis by individual Trusts	Q1 2017/18	Q1 2017/18
Develop business case to enable 7-day clinical service	Q1 2017/18	Q1 2017/18
Develop action plan to address gaps	Q1 2017/18	Q2 2017/18
Implement action plan and new systems of work	Q3 2017/18	Q4 2017/18
Monitor benefits to patients and delivery of medicines optimisation	Q1 2018/19	Q4 2018/19
= Business Case required		

Risks:

1. Failure to engage staff
2. Modification of roles and responsibilities
3. Lack of funding for 7-day clinical service
4. Lacking of funding for education to develop the workforce
5. Failure to develop tools to enable new systems of working
6. Failure to develop IT systems to optimise functionality
7. Cultural transformation
    a. 7 day service
    b. Extended opening

KPIs to be monitored:

- Development of common standards and model for clinical pharmacy
- Implementation of the model within each organisation
- Implementation of 7 day clinical service
- Benefits to patients
- Delivery of Medicines Optimisation parameters

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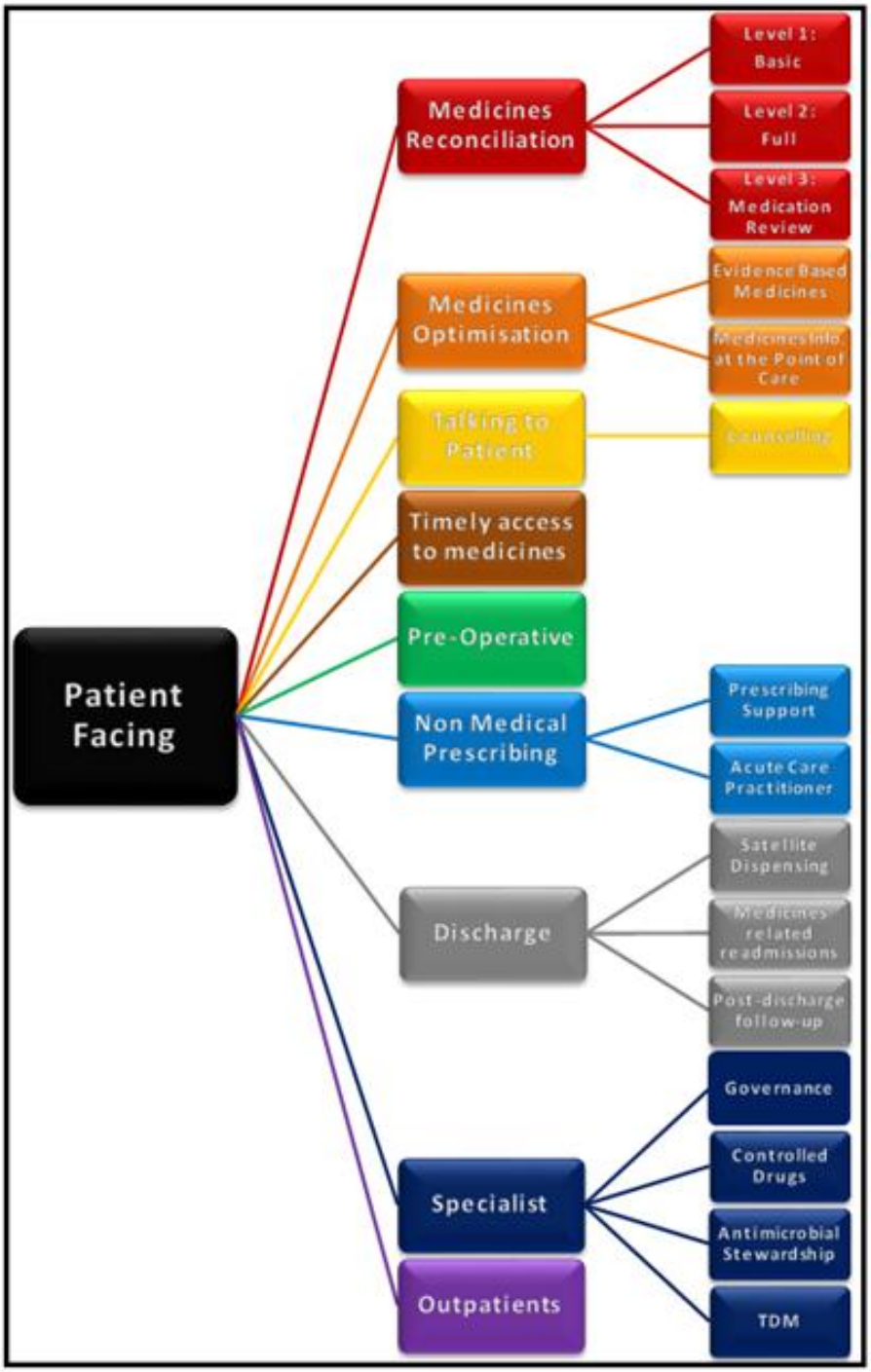
What is Patient Facing

A patient facing clinical service primarily focuses on optimisation of medicines at the point of care – the objectives being:

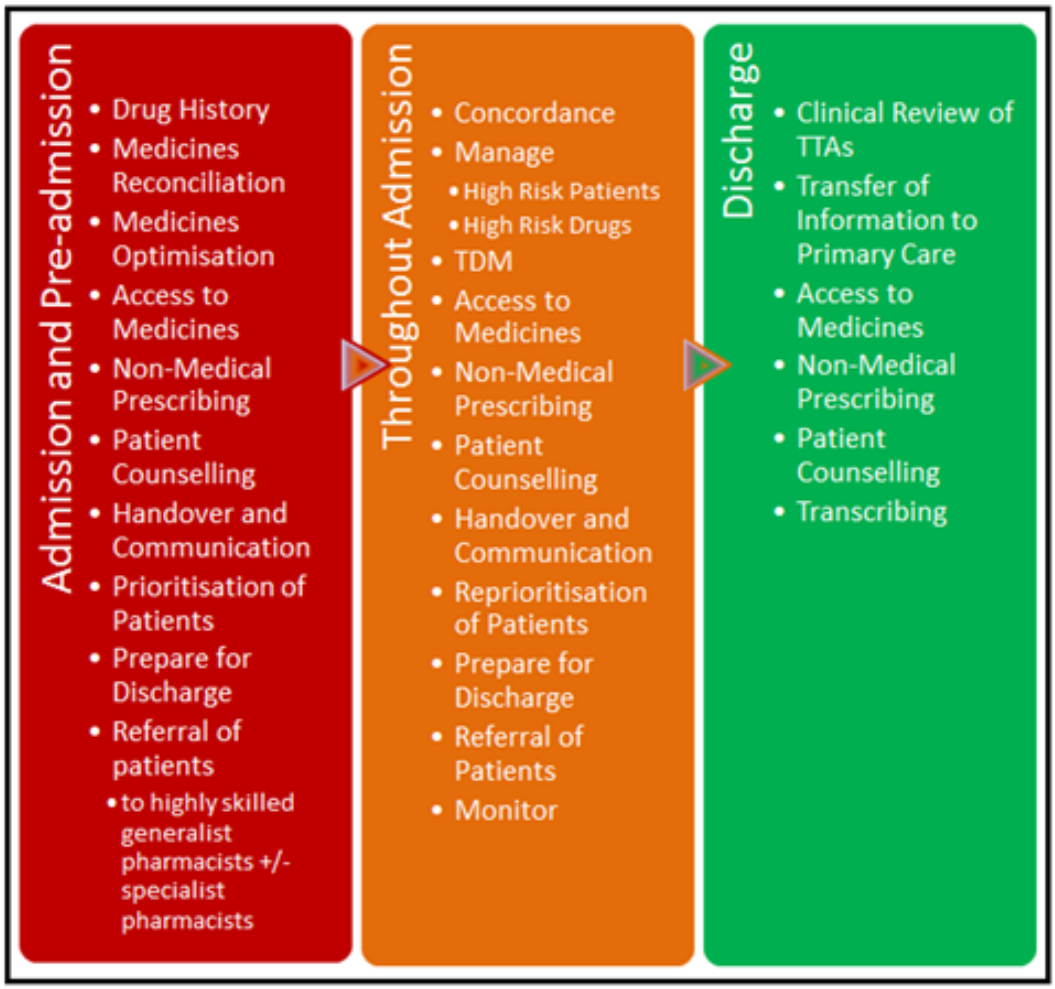
- Reduced variation in clinical services
- Improved patient experience and outcomes
- Improved clinical efficiency, productivity and medication safety
- Making the patient part of the decision making process.



The Clinical Pharmacy Service

The clinical pharmacy service is standardised in order to provide equitable pharmaceutical input across all divisional/directorate areas.

The biggest risk of harm due to medication is at the point of transfer between care sectors – the clinical pharmacy service seeks to mitigate the risk of harm by front-loading admission and pre-admission areas. For this reason, the target for Medicines Reconciliation within 24 hours of hospital admission is 90%. The service is structured to support medicine optimisation and/or referral to highly skilled generalist pharmacists and/or specialist pharmacists at the earliest practicable point – this allows medication queries and concerns to be resolved on admission, improves patient outcomes and expedites the process to discharge.



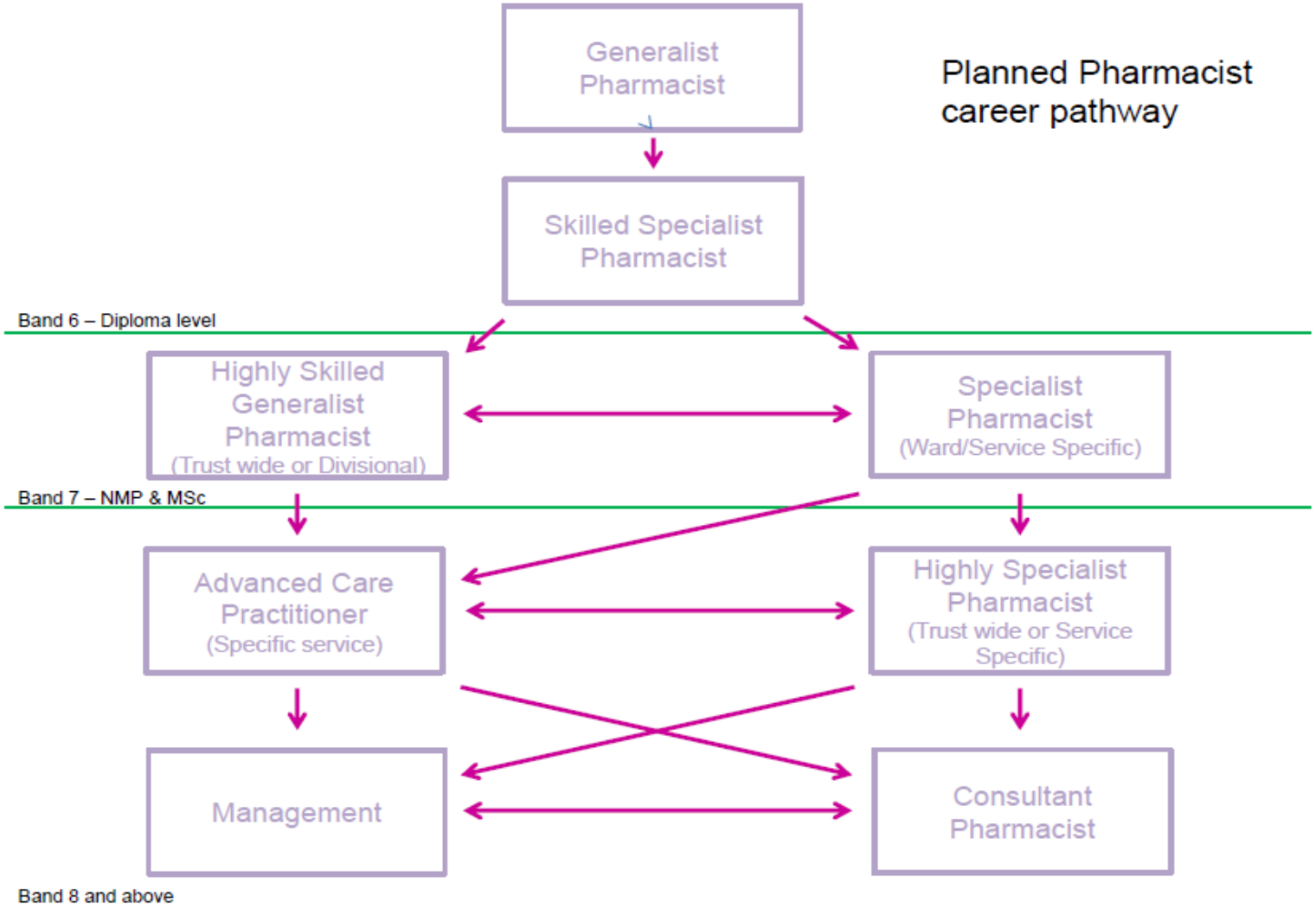
The Future of Patient Facing Services

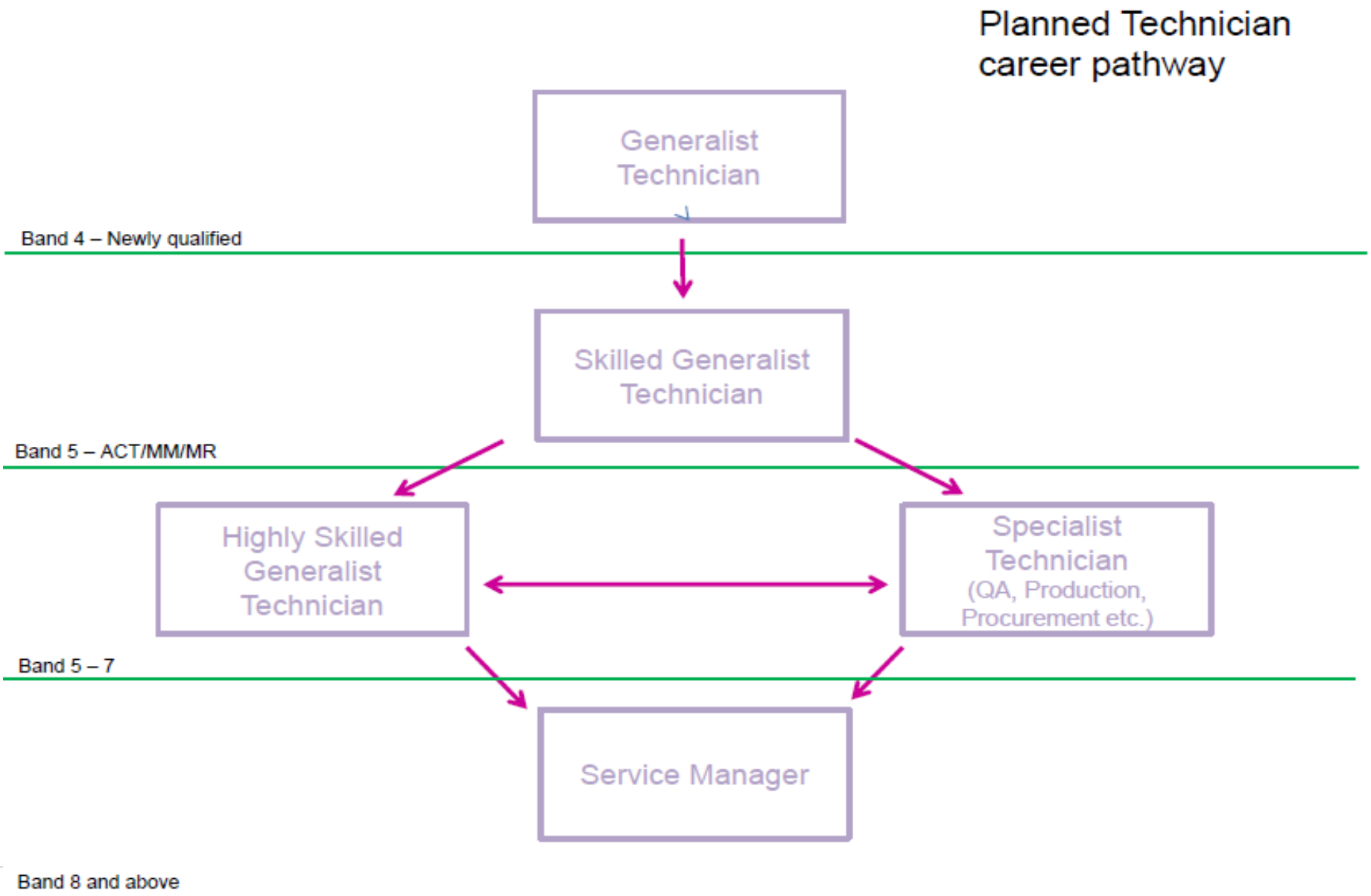
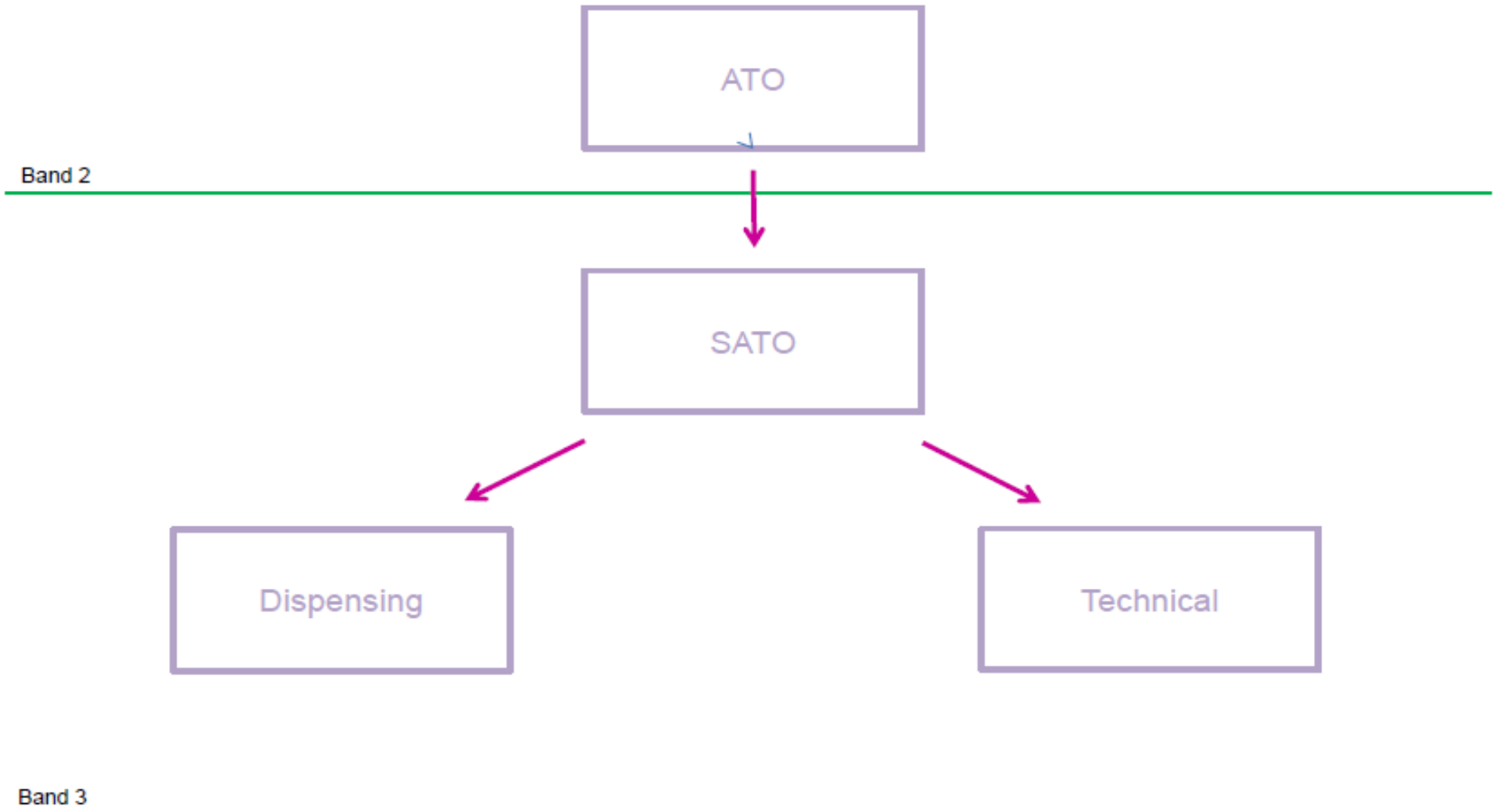
Standardising the delivery of the pharmacy clinical service is of utmost importance in achieving better patient outcomes through proficiency in optimisation of medicines.

The primary focus is on incorporating teams of pharmacy staff within the hospital's divisional/directorate structure.

Escalation and prioritisation tools should be utilised in order to empower pharmacy staff to optimise, refer and defer based on their skillset for those patients who require the greatest need – this should occur at the point of care.

Strategic remodelling of services will require highly skilled generalist pharmacists to input within a particular divisional/directorate structure. Specialist pharmacists should formally engage in the use of referral and prioritisation tools spanning the breadth of the hospital structure – this will be a key enabler in cross-divisional/directorate input for those patients requiring highly specialised pharmaceutical intervention.


Planned Pharmacist career pathway
Generalist Pharmacist
Skilled Specialist Pharmacist
Band 6 – Diploma level
Highly Skilled Generalist Pharmacist (Trust wide or Divisional)
Specialist Pharmacist (Ward/Service Specific)
Band 7 – NMP & MSc
Advanced Care Practitioner (Specific service)
Highly Specialist Pharmacist (Trust wide or Service Specific)
Management
Consultant Pharmacist
Band 8 and above


Planned Technician career pathway
Generalist Technician
Band 4 – Newly qualified
Skilled Generalist Technician
Band 5 – ACT/MM/MR
Highly Skilled Generalist Technician
Specialist Technician (QA, Production, Procurement etc.)
Band 5 – 7
Service Manager
Band 8 and above

Planned ATO career pathway