City Hospitals Sunderland NHS
NHS Foundation Trust

CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST

DIRECTORATE OF PHARMACY

MARCH 2017

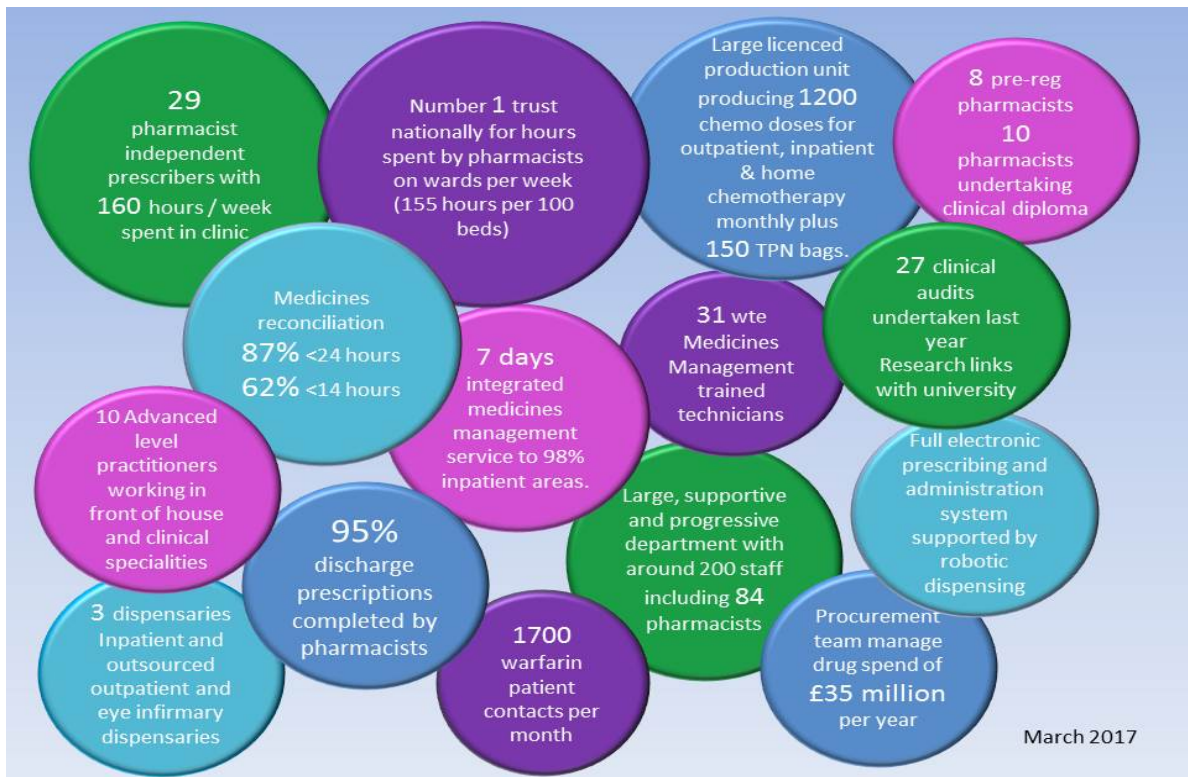
HOSPITAL PHARMACY TRANSFORMATION PLAN

Executive Summary

This final updated Hospital Pharmacy Transformation Plan (HPTP) builds upon the draft HPTP and Assessment and Action Planning Tool (AAPT) that was submitted to NHS Improvement in October 2016 following Executive "confirm and challenge" via oversight at the Project Management Group involving the Chief Operating Officer, Director of Finance and Director of Human Resources. Since that submission there has been both general feedback through national workshops and specific feedback on the CHS draft plan by the Hospital Pharmacy and Medicines Optimisation/Operational Productivity (HoPMOP) team at NHS Improvement. The draft plan was highly rated and as the emphasis was to move to the final plan without imposing a significant burden this final HPTP plan is largely an update of that approved draft plan.

As with the draft plan the development of this final 5 year HPTP by the Chief Pharmacist was supported by the Trust's Project Management Office (PMO), who provide a co-ordinating role now under the direct management of the Director of Quality and Transformation. There is recognition that this will be an on-going programme of work so we have an agreed internal allocation of future work within the existing senior pharmacy team and the respective agreed priorities have been determined (see appendix 1a and 1b) both locally, within the existing South Tyneside and Sunderland Healthcare Group and collaboratively with existing partner organisations within the North East.

The Trust, from its available metrics, can be seen pharmaceutically as an exemplar "Carter Model Hospital" delivering many of the benchmarks. This is particularly apparent in its deployment of Clinical Pharmacy services, Electronic Prescribing and Medicines Administration, Coding of Medicines and a relatively reduced infrastructure activity. This is due to the fact it has had a long term service strategy of decentralising staff and services and centralising and/or outsourcing infrastructure services. There is a widespread use of advanced clinical pharmacy practitioners supported by 7 day integrated medicines management services with 85% of eligible pharmacists either undertaking or being currently trained in prescribing. We actively promote this delivery to public, existing and potential future pharmacy employees in a simple diagram as shown overleaf. These "circles of achievement" ,which are displayed on the Trust website, are regularly updated.



There is a long tradition of "regional" pharmaceutical collaboration (see appendix 2). Further co-operation across the wider footprint of 3 STPs is underway particularly building on this previous work in relation to procurement, education and development and research and development.

In line with our local STP plan we have commenced work as part of the South Tyneside and Sunderland Healthcare Group's programme through a joint clinical service review, to address significant pharmaceutical infrastructure difficulties at South Tyneside. It proposed to build upon the core components and shared facilities already in place e.g. licensed manufacturing unit, dispensary automation, outsourced dispensaries in Sunderland. They are formally proposing: upgrading existing aseptic facilities in Sunderland to centralise aseptic production on one site; transferring the supply of stock medicines for the purposes of healthcare from South Tyneside to Sunderland, to provide further funds for the required ward storage automation (e.g. Omnicell); and expanding the outsourced dispensing model for outpatients/discharges utilised within Sunderland to the main hospital site in South Tyneside. This will, in the next six-twelve months, progress into a more comprehensive clinical services review to support a wider local transformation to improve patient care with the aim of delivering increased patient-facing pharmacy practitioners and importantly improving the overall pharmaceutical service quality within both organisations.

The key risks/issues that previously have been highlighted to the Executive Team as part of the initial submission of the draft HPTP/AAPT with proposed mitigation include

- Concerns over the appropriateness, balance and complete accuracy of the benchmarks and metrics produced to date.
- Ability of NHS providers to collectively bring about the supply chain reconfiguration required to address some of those metrics accepting it is, especially in relation to new innovative and often more expensive medicines, a supplier led market.

- The lack of capital funding in a financially austere NHS environment to deliver the infrastructure changes desired.
- Capacity and capability of commercial providers to provide the range, depth and quality of outsourced infrastructure services at an economic price that will allow large scale local disinvestment and redeployment opportunities in the required timescales.
- Willingness of, in particular specialist, commissioners to fully incentivise and share risks to improve the efficiency and productivity of service delivery through patient facing redeployment.
- Confirming that the education changes planned for pharmacy technicians allow the future clinical development of this and other roles e.g. Pharmacy Associate.
- The ability to maintain and increase the support from medical practitioners to deliver increased numbers of pharmacist prescribers with the requisite advanced clinical skills, although new proposals for experienced advanced practitioner pharmacists to fulfil this role is welcomed.
- Ensuring that there are enough quality pharmacist graduates undertaking pre-registration training and importantly there are training posts, that are sufficiently funded to recognise the required quality input, for the individual to not only enter the register but develop into the required clinically adept patient facing practitioners.
- Making sure, with the increasing range of options available in primary care to clinically able pharmacists and technicians, City Hospital Sunderland and going forward the Healthcare Group remains an employer of choice.
- Competing demands for any productivity and efficiency savings generated are addressed to ensure that all parties, but particularly patients, share in the benefits.

Introduction

South Tyneside and Sunderland are currently working as a single Healthcare Group to seek to rebalance services across the two organisations to ensure safe and sustainable services removing inappropriate duplication. Pharmacy as a clinical support service will be required to review its own services delivering many of the attributes outlined in the Carter Review by seeking efficiencies through shared use of the existing and improved infrastructure services and facilities to improve the ability of the two services to deliver more pharmaceutical support at the patient's bedside. We will therefore be undertaking a clinical service review by the end of 2017-18 to address the Group's objectives. Any potential solutions must achieve relevant quality/safety standards and deliver all regulatory requirements; deliver sustainable services; and ensure services are efficient and cost effective. This will potentially expand from 2019-20 in relation to acute service provision at North Durham to make the best use of the specialist workforce alongside other NHS providers within the wider STP.

The HPTP fully recognises the presence of this on-going development whilst recognising that the current maturity of the process means definitive timescales are difficult. The plan is consequently flexible, importantly recognising many of the advances in clinical service delivery have been already delivered. It is built upon the existing Trust direction of developing a third specialist centre in the North East whilst simultaneously delivering a safe and effective transfer of some care with an associated reduction in existing activity through improved collaboration with colleagues in primary and social care.

Progress on the Local Delivery of required "Carter" Recommendation 3

Recommendation 3: *Trusts should, through the Hospital Pharmacy Transformation Programme (HPTP), develop plans by April 2017 to ensure hospital pharmacies achieve their benchmarks such as increasing pharmacist prescribers, e-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.*

The clinical pharmacy and infrastructure services show that for pharmacists and pharmacy technicians we currently already deliver 80% of professional staff working on patient facing and/or organisational assurance activities. This is due to the fact we have a large number of advanced and specialist pharmacy practitioners in patient facing prescribing roles e.g. general surgery, bariatrics, heart failure, cardiology, palliative care, stroke, chronic pain, diabetes, gastroenterology, endocrinology, Opthalmology, haematology, oncology, VTE, neurology, falls, dementia, renal, rheumatology and respiratory medicine. These support clinical service delivery both back and front of house, including Acute Admissions, Frailty and A&E. We deliver as part of a number of AQP commissioned services over 18 anticoagulation clinics spread geographically across Sunderland and North Durham. This is further supported by an extensive Hospital Wide Integrated Medicines Management (IMM) service delivering pre-admission clinics, medicines reconciliation and review, board and ward round attendance with management of the medicines discharges including primary care correspondence on medication management. The service operates on the principle of "consult" and "delegate" rather than "triage" and "refer" ensure patients are seen within the admission stage by the most clinically adept practitioner from advanced to specialist pharmacist supported by a team of 31 wte IMM technicians. These services, to varying extents, operate extended hours and

across the full 7 day period. We have recently undertaken clinical work in care homes, post discharge out-of-hospital care and had begun to consider patient facing roles in General Practice with local commissioners. The integral nature of patient facing pharmaceutical care is best described by the fact that Clinical Directors have collectively requested a 14 rather than 24 hour medicines reconciliation target for patients admitted as an emergency as part of our safe and sustainable care programme.

We have had an active strategy "centralise production/decentralise staff/services" over the last decade disinvesting in supply services involving community, mental health, prisons (and hospices) to the extent that the CHS Pharmacy Directorate has gone from operating five to six dispensaries to a single unit. We are building on the work of our licensed production unit by upgrading the facilities so we can expand the existing licence to generate efficiencies through "dose-banding" of chemotherapy and/or centralised production of intravenous drugs to reduce the current workload on nursing staff within South Tyneside and Sunderland Healthcare Group and particularly seek to negate the need to re-provide replacement facilities at the neighbouring South Tyneside Foundation Trust.

Pharmaceutical services can address many of the pressures faced by both our medical and nursing colleagues whilst recognising any increases in scale and scope of our patient facing care ultimately depends on demand from other services and internal service capacity, and importantly the ability to further generate resources from within existing revenues. The effect on junior medical workload is possibly best demonstrated that within the 31 days of December over 96% of discharge medication requests and associated GP information reports were undertaken by a pharmacist. Our current and future pharmaceutical priorities are increased patient facing pharmaceutical care to specialist areas such as oncology day units; intensive care and renal medicine units through in part working with our outsourced dispensing partner. We have considered roles for both pharmacy technicians and/or assistants in medicines administration, but these with the agreement of our Director of Nursing are currently on-hold.

We have through a City wide partnership with Sunderland University sought to increasingly develop not only our Research and Development activity, but also sought to use this partnership to support these new roles through developing "region-wide" postgraduate programmes and potential future clinical academic roles. With the transfer of the location from Stockton campus to Newcastle we are currently exploring further expanding our educational and research activity with joint funded posts with the former Durham School of Pharmacy.

Electronic Prescribing and Medicines Administration (EPMA) is completely implemented Trust wide for basic core prescribing and administration of medicines to inpatients so we have no paper "Kardexes". We are currently working on delivering the more complex prescribing and administration areas replacing existing supplementary charts e.g. anticoagulation, IV Fluids, oxygen, diabetes, palliative care. All pharmacists and technicians work with patient specific electronic care plans which are utilised to address specific clinical issues and manage the patient medication journey including the provision of information on medication changes and their rationale to General Practitioners on discharge. We also operate a patient specific referral system to Community Pharmacists using PharmOutcomes, which is shortly progressing to a pilot of routine pharmaceutical transfer of care on discharge for all patients.

Prescriptions undertaken in the outsourced outpatients and, for the few remaining non IMM wards, discharges at main hospital site are electronically generated on 70% of occasions. We already have all prescribing of nurse administered drugs in our specialist clinics electronically prescribed and importantly electronically administered as part of the completed implementation of our chemotherapy system. We are also currently in the process of a phased implementation programme at our specialist Eye Infirmary for outpatient electronic prescribing and within specialist clinics with similar use of the prescribing/administering of "high cost" contract excluded drugs with expected completion within the next 6 months. The system is currently supported with an extensive decision constraint system consisting of a commercial system, provided by FDBE, reviewing drug interactions, allergies and duplications supported by locally generated rules and "dose strings". Development of true decision support system has commenced for clinicians with the implementation of UK compatible evidence based (Zynx) prescribing and clinical management pathways for the twelve most frequent clinical conditions on admission. Nursing administration of medicines supported by Bedside Medication Verification (BMV) using the barcodes generated by our automated dispensing processes is also in operation.

This work is recognised as part of City Hospitals Sunderland's status as a global digital exemplar.

Accurate Coding of Medicines is achieved with all potential high cost drugs either by drug, service or both. They are identified by potential commissioner and can be linked to the majority of patients on issue and more importantly for accurate reconciliation and billing of drugs administered by nurses in hospital increasingly by actual administration from electronic records following the upgrade of our Meditech system to provide EPMA for all oncology regimes.

Medicines Stockholding and Supply Chain has, due to the amount of activity outsourced provided a residual stockholding of around 15-17 days. Deliveries are on average are about 12 per day but this target does in some way conflict with the above especially the purchase of high cost drugs which have more frequent ordering cycles to reduce stock values. Eventual full delivery of both these benchmarks will however require a major external change in the medicines supply chain. Pharmacy already transmits near 100% of orders electronically, although some suppliers only have the capability to receive these orders from GHX via email. We believe there are few efficiency and productivity gains, within pharmaceutical services, from electronic invoicing, accepting that currently the maximum achievable is just over half of potential invoices and the acceptance of fully correct invoices are a single manual keystroke in the current system.

Finally in relation to the **Overarching recommendations** with the advantage of a pro-active innovative Trust that has already invested in electronic systems, automation both within the pharmacy and to an extent in ward areas along with the 7 day provision of the evidence based system of Integrated Medicines Management local patients have the benefit of an active clinical pharmacy workforce. We still recognise that there are some weak areas, namely delivery into some specialist service roles supporting governance and patient care (ICCU, NICU and the Oncology Day Unit) and we face increasing demand for service expansion within a resource constrained system. These requirements make further efficiency and productivity gains important in the utilisation of medicines so we have both the capacity to address service weaknesses, demands from other areas we clinically support and deliver increased savings to assist the Trust and wider health economy as a whole.

With regard to pharmacist prescribers we are currently above the metric bench mark, for those that can prescribe, with in excess of 85% of eligible pharmacists being either trained or actively prescribing and as discussed we have worked with our partner University so now have prescribing integrated into core foundation training, not only for ourselves, but through our HEE local office for others within the North East.

HPTP Plan Summary

In many ways our strategy and accompanying corporate investment over recent years has meant we are delivering the majority of the key recommendations of the report.

Work building on the existing template for regional procurement and regional co-ordination of education and training has commenced to move to common consumables, common systems and common training and procedures to allow consolidation should further reconfiguration and/or rationalisation be possible in the supply chain, MI/Formulary and Aseptic Dispensing/Manufacturing services.

Locally as part of the wider 3 STPs footprint we have commenced consideration of how we can share the existing facilities, expertise and overall infrastructure as part of a formal Healthcare Group with a neighbouring acute Trust. This includes rationalisation of manufacturing onto a single site, single site provision of drug storage and ward stock - although this has potential licensing questions- and the transfer of expertise in relation to outsourced dispensing services for outpatients and discharges, education and training provision including undergraduate placements and medicines information resources.

Risks and Mitigations

Supply chain reconfiguration is a major unknown currently with about 50% of lines currently delivered by manufacturers and any achievement of reduced frequency of deliveries that also maintain low stock holding will require a radical shift to a majority (80%) wholesaler distribution method, but work will, in the interim, be undertaken to move to common systems and maintain the current joint collaborative working with regional colleagues.

Drug supply is an unusual with a highly specialist and regulated market in that often the power equation is with the supplier rather than the purchaser of “goods”. For example this supplier led market means it is not possible to always have our preferred option of a single outsourced partner, due to dedicated distribution routes including “pharma-funded" home care schemes. We have commence two programmes of repatriation from multiple home delivery providers and we have in collaboration with our outsource partner and our local commissioners been able to employ a specialist pharmacist working in both Gastroenterology and Rheumatology to progress work on biosimilar switching for Infliximab, Etanercept and Rituximab. We have also, with specialist commissioners sought to promote cost efficient prescribing by the transfer of some high-cost medicines to our outsource provider but this currently excludes chemotherapy and agents for Hepatitis C. Longer term it is currently unclear how manufacturers will in future further seek to control the supply chain through nominated distribution points and/or direct supply, but we are working collaboratively with regional colleagues on procurement to maximise current opportunities to both maximise productivity and efficiency and where possible patient choice of supply method.

Currently the commercial sector provision is an under-developed market, where no company has a fully integrated outsourced model but rather each can demonstrate a series of pilots undertaken across different NHS sites depending on local circumstances. Hence it is currently unclear whether commercial suppliers will seek to "cherry pick" or whether they will have the range or depth or quality - homecare is a salient example - to allow the disinvestment in local facilities or equally importantly without a working costed model whether they will be economically viable. We await the outcome of the work taking place in the East Midlands for aseptic production and Manchester or Yorkshire for storage and distribution that have sought funding for exploratory projects. Meanwhile we have drawn up an outline broad service specification along with pharmaceutical colleagues in the region and locally began exploratory discussions with commercial colleagues of potential future feasibility as few NHS colleagues want to expand their services to support the wider STP in an uncertain financial environment.

The availability of sufficient designated medical practitioners with a reducing medical workforce to support the development of pharmacist practitioners is a potential future constraint. We are aware that work is taking place nationally to possibly allow sufficiently competent pharmacist practitioners to act in this role. Most medical staff within the Trust, especially those that have experience of working with our advanced and specialist practitioners have more than actively supported the development of further pharmacist prescribers. This has been done to support the continuing delivery of their services so this has not been a major problem to date with service delay, rather than non-implementation, being the worst outcome. We have a number of advanced pharmacy practitioners already in place if a change takes place within the regulations. In fact we already plan to use these to increase our local advanced clinical skills training with appropriate University accreditation. Within the next 5 years we will seek to develop some of these posts into Consultant practitioners with their own independent caseload and an appropriate education and research portfolio to further support this process.

It is important that pharmacist postgraduate training is increased in scope and scale with sufficient available places on clinical skills and prescribing courses for all foundation pharmacists. Hence we have worked with our local HEE office to access these core elements whilst accepting this improvement has to be delivered with a reduced overall cost. So we have replaced the current system of a fully funded diploma for two years, followed by a separate prescribing qualification and then another advanced clinical skills programme taking close to five years with an integrated core 3 year foundation training programme at a reduced overall cost per individual. A further national change in the regulations and undergraduate training to allow supervised prescribing from registration as envisaged in the integrated degree would also be beneficial to this process.

Pharmacy is a wider profession than just pharmacists and there are risks with the regulators requirement to provide a standard qualification for entry onto the register that the education changes planned for pharmacy technicians do not fully allow the future development of appropriate clinical practice and other roles. We have locally amongst Chief Pharmacist in the North East sought to consider the potential of more advanced entry roles e.g. pharmacy associates.

Issues and Mitigations

We retain concerns over the appropriateness, balance and complete accuracy of the benchmarks and metrics produced to date. Some parts of our available data is now nearly 4

years old, it is based on reference costs so there is a concern on accuracy of the derived metrics like cost per WAU. There is also the danger that simply achieving targets alone may be detrimental without an appropriate set of balanced metrics for example stock turnover data without a corresponding balance of availability of medication for patients could lead to medication unavailability. We have sort to mitigate this risk by appropriate information to all management levels in the Trust on what are the service priorities, goals and measures with a service delivery priority ranking based on patient safety, patient flow and then medication logistics.

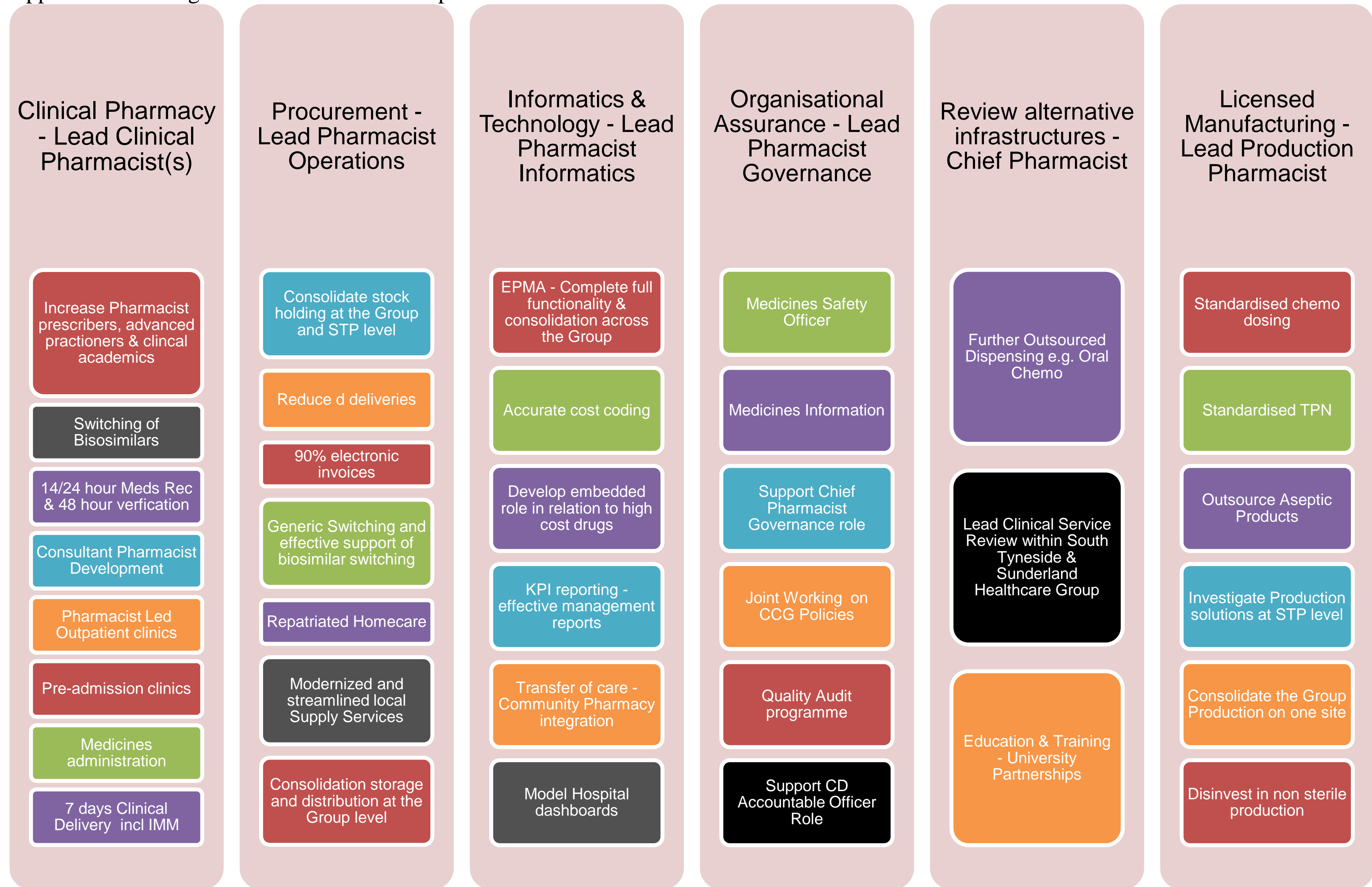
We accept there will be competing demands for any savings generated through services changes within the pharmaceutical service at all levels of the existing NHS from service commissioners, the Trust and other external commissioners, who may seek to use any infrastructure savings to address short term financial pressures rather than seek potential mutually beneficial long term strategic gains. It is important that pharmaceutical service leads provide both the internal and external evidence and practitioners on the ground deliver value based services that support any business case for reinvesting any savings for further gains in overall efficiency and productivity from a safety, productivity and efficiency perspective. These will often be based around improved patient flows and where possible the subsequent economic benefits will be identified. The clinical emphasis of the service is recognised with local performance indicators focusing on medicine reconciliation rates at 14 and 24 hours, medication review and verification rates at 48 hours and pharmacist attendance on board/ward rounds.

There are obvious pressures on HEE, one of the external commissioners, that despite the increasing demands for pharmacist and pharmacy technicians to cover shortages in other professions, there have to date been no significant increases in pre-registration commissions. Additionally there is the increasing risk going forward that these commissions will not be fully-funded leading to a bottle neck from reduced numbers at the entry level point.

There have been many varied and interesting developments both nationally and due to circumstances locally in relation leading to an increased demand for clinical adept pharmacists and to lesser extent pharmacy technicians, in these patient facing roles. The Chief Pharmacist, working both nationally and locally with HEE is aware that NHSE due to recruitment concerns has just conducted a national workforce survey this shows 500 vacancies in hospitals (250 at Band 7) and an expectation of the development in the near future of 700 Specialist (Band 7)/Advanced Practice (Band 8) posts. Additionally there is the programme of an additional 1500 pharmacists by 2020 to undertake work in "patient facing" roles in GP practices to supplement the initial 500 currently being developed. These demands have to be viewed within the context that there are only currently around 7000 wte hospital pharmacist posts in England. As many of these roles currently operate on a Monday to Friday 9-5 basis compared to a 7 day extended working week within the hospital environment it is important that we remain for these young (in some cases older) professionals the employer of choice. To this end we are developing a staff compact that consolidates our aim of a 90% benchmark for band 6 and band 7 pharmacists in non-infrastructure roles and a formal education and development programme across the early years designed to enhance their skills for working in that future environment. Our work in this area is reflected in our significantly lower than average turnover rates and retention of staff from pre-registration right through into an increasing number of advanced practice roles.

Although there has been some progress, particularly with local, but also to an extent specialist commissioners, concerns remain on the provision of sufficient incentives both in quantity and length of funding and/or willingness to share both the risks and/or gains in order to develop new ways of working from the consolidation of infrastructure services to increase the number of patient facing pharmacists available. Progress will be based on the recognition that there have to be a number mutual gains in the system from clinical service providers, the Trusts and its outsourced partners, the commissioners purchasing the service and ultimately the patient who seeks a safer, more accessible and effective service.

Appendix 1a – Programme of work and lead personnel



Appendix 1b – Prioritisation of Work Plan

PRIORITY FOR ACTION

Delivery of Group infrastructure
Biosimilar Switching
Increase patient facing roles and Associated Competencies
Modernise Local Supply Chain
Repatriation Homecare
Effective Reporting
Consolidate with standard chemo/TPN
Disinvest in non-sterile Production
Maximise Outsource Opportunities
90% Medicines Reconciliation & Verification

WILL MAINTAIN

Available clinical workforce
Training with clinical skills (Prescribing)
Delivery of pharmacist clinics
7 day delivery of IMM
EMPA – Digital Exemplar
Accurate Drug Costing
Consolidate EPMA across the Group
Transfer of Care
Safety and Governance Support
Education – University Partnerships
Effective Generic Switching
Joint Formulary & Transfer Policy with CCG

LONGER TERM REVIEW

Medicines Administration
Consultant Pharmacist
Embedded Role – High Cost Drugs
Complete Clinical Service Review
Quality Audit Programme
Further STP solutions - Infrastructure

ON HOLD

Reduced deliveries to 5 per day
90% Electronic Invoices
Clinical Service Consolidation

Appendix 2 –collaborative regional pharmacy groups operating in the North East and North Cumbria

The following groups exist within the North East and North Cumbria area to facilitate collaboration, share good practice, improve decision making and reduce duplication.

1. North East and North Cumbria Senior Pharmacy Manager's Network

The North East and North Cumbria Senior Pharmacy Manager's Network (NESPM) provides a strategic, collaborative and cross sector forum for senior Pharmacy managers working within geographical areas of North Cumbria, Northumberland, Tyne and Wear, Durham, Darlington and Teesside. All sectors of the profession (hospital, community, primary care, and academia) are represented in this group, and in subgroups as appropriate.

The Group:

- Works together for the benefit of patients, staff, services, organisations, and the Pharmacy profession
- Considers and proposes strategic solutions to medicines related problems, particularly where a cross sector approach is necessary
- Identifies, develops and shares good practice
- Shares information e.g. DH policy, local workforce projections
- Collaborates on project work where there is benefit in doing so
- Co-ordinates the work of specialist sub-groups and other task and finish groups
- Provides professional leadership
- Influences policy-making locally and nationally e.g. making recommendations to HEE NE
- Cultivates, innovates and improves safety and quality within the profession and across all member organisations
- Works with other regional/national Pharmacy groups, particularly on issues relating to specialised services
- Currently focused on collaboration to effect change relating to the organisation of services as a result of the Hospital Pharmacy Transformation Programme.

This community of professionals operates collaboratively at every level; strategically e.g. co-creation of a regional vision for services, to operationally e.g. one representative from the Group will often attend national conferences on behalf of the Group and feedback to minimise costs and reduce staff time lost.

Subgroups, and related regional groups, all operate with similar principles. Those that exist and collaborate across the North East and North Cumbria area are listed and described below:

2. North East Workforce Training & Development Group

Constitution:

- A member of Pharmacy staff from each of the Trusts that make up the North East Hospitals Senior Pharmacy Managers' Group (NESPM).
- Chairs of the Operational Group, Quality Assurance, Production and Preparation Group, and the Clinical Network
- Regional Specialist Pharmacist, Education & Training (North East & North Cumbria)
- Regional Principal Pharmacy Technician (North East & North Cumbria) and NHS NVQ Assessment Centre Manager (Pharmacy)

Members (and their representatives) have sufficient management standing and influence to be able to represent their NHS Trust.

Representatives of Higher Education Institutions and CPPE are invited for specific agenda items, and to provide updates, as required.

Main Purpose:
To deliver a collaborative approach across the Health Education England North East (HEE NE) geographical area to inform, influence and implement local and national strategies and policies for the education, training and development of the hospital Pharmacy workforce. The Group promotes and supports education, training and workforce development for all members of hospital pharmacy staff in order to ensure the delivery of quality pharmaceutical care to the NHS.

Main Functions:

- Provides direction to the education and training of pharmacy staff at preregistration and post-registration levels across the North East and North Cumbria to support the development of the knowledge, skills, abilities and behaviours necessary for excellent healthcare and health improvement.
- Supports Trusts in preparing for, and responding to, changes in health and healthcare education and training, especially outcomes from Modernising Pharmacy Careers
- Contributes to national and regional consultations on issues relating to workforce planning, training and development, and professional standards affecting the pharmacy workforce.
- Helps to develop an education and development programme taking in to account, individual training and development needs, service developments and future professional requirements.
- Shares good practice in the management of training, education and development of the workforce between participant organisations.
- Undertakes joint research/project work, as appropriate.
- Supports, advises and approves the frameworks for regional course.
- Develops and maintains links between regional academic providers and others delivering educational opportunities to NHS staff within the region
- Promotes pharmacy careers in schools by developing and maintaining links with organisations within the region engaging with young people e.g. Skills for Health.
- Through the Pharmacy and Education Training Office representative develops and maintains effective communication and consultation with regional and national E&T groups e.g. NESPM, HEE NE Pharmacy Sub-group, HEE Pharmacy Leads, and NHS Pharmacy Education & Development Committee and associated Specialist Groups.

Output examples:

- Development and annual review of regional Frameworks to develop pharmacy technicians post-basic qualification e.g. medicines management, Technician Checking of Dispensed items, Technician Checking in Aseptic Services.
- Review of regional recruitment of preregistration trainee pharmacy technicians and introduction of values-based recruitment.
- Identification of alternative ways of providing evidence for the NVQ in order to provide a wider experience for the preregistration trainee pharmacy technicians.

3. North East and North Cumbria Pharmacy Education & Training Office (PETO)

PETO was set up in 1996 to provide a collaborative approach to the education, training, and development of staff working in hospital pharmacy within the region.

Staffing:
Regional Specialist Pharmacist, Education and Training (North East and North Cumbria)
Regional Specialist Pharmacy Technician, Education and Training (North East and North Cumbria)

Main Purpose:
Co-ordination, management and quality assurance of the education and training of hospital pharmacy staff delivered, at a regional level, within the North East and North Cumbria. This includes preregistration pharmacists and preregistration pharmacy technicians commissioned by Health Education England North East (HEE NE), and other non-commissioned training.

Working collaboratively with key stakeholders (e.g. HEE NE Pharmacy Subgroup, HEE Pharmacy Leads, NESPM, Workforce Development Group), PETO:

- Informs, influences and implements local and national education, training and development strategies and policies for the hospital Pharmacy workforce; coordinating and managing at a regional level.
- Informs and influences regional trainee commissions based on trust workforce needs, and their ability to deliver training

Main schemes managed on a regional basis:

a. As an NVQ approved Centre PETO manages and quality assures the NVQ training in Pharmacy Service Skills:
    - Level 2 – pharmacy assistants and
    - Level 3 – pre-registration trainee pharmacy technician training programme (including the delivery of the Pharmacy Advanced Apprenticeship)
b. Pre-registration pharmacist training
c. Post qualification education and training
    - Development and maintenance of regional frameworks to develop pharmacy technicians post-qualification e.g. Medicines Management, Technician Checking of Dispensed items / Aseptic Services.
    - Organisation and administration of regional courses and ad-hoc study days for pharmacy staff.

Key areas of work

- To support the delivery of high quality learning environments for hospital pharmacy trainees, and manage placement quality, capability and capacity.
- Work closely with HEE NE quality team and pharmacy departments to continually improve the quality of the training for Pharmacy Advanced Apprenticeship/trainee pharmacy technicians and preregistration pharmacists.
- To ensure the education and training provided and the trainee support meets the requirements of regulatory bodies e.g. GPhC, Awarding organisations, Ofsted, Skills Funding Agency.
- To work collaboratively, on behalf on the North East and North Cumbria, in the development and maintenance of regional, national, regulatory and professional networks to ensure effective two-way communications and feedback relating to workforce planning, education, training and development of the pharmacy profession.
- Regional recruitment and employment of preregistration trainee pharmacy technicians.
- Supporting the local implementation of outcomes from Modernising Pharmacy Careers e.g. national recruitment of preregistration pharmacists; educational supervisor training pilot.
- Quality assurance of the qualification provided by the local college for preregistration trainee pharmacy technicians.
- Preparation of underpinning knowledge training packages to support pharmacy assistant and preregistration pharmacist training.
- To provide advice and guidance to trainees and Trust staff on any aspect of education & training.

- To lead on a regional approach to:
  - Development of post-qualification training and development for pharmacy staff.
  - Pharmacy workforce issues/planning (surveys (national and local), reports, consultations etc.).

4. Northern NHS Pharmaceutical QA/QC Network Operational Group

Constitution
All Quality Assurance leads and QC laboratory managers in the North (NE, NW, Yorkshire). Chaired by a Regional QA Specialist

Main Purpose:
- Making and implementing policy on quality assurance or quality control issues locally.
- Contributing, via the Regional QA Specialists, to relevant national policies and standards, e.g. NHS Pharmaceutical QA Committee documents, Microbiology Protocols Expert Group.
- Advising Chief Pharmacists in the North on all aspects of pharmaceutical Quality Assurance and pharmaceutical quality systems.
- Regular communication across the network via meetings and e-mail.
- Sharing of regulatory updates and current best practice.
- Initiating and co-ordinating research work, in association with the national Research and Development Group where applicable.
- Liaison with technical services groups, e.g. Quality Assurance Production and Preparation Group (North East), Yorkshire Pharmaceutical Technical Services Group (YPTS), North West Aseptic Services Group, North West Classical Manufacturing Group and other relevant groups to spread best practice.
- Involvement in training of all grades of staff in quality assurance issues.

Output examples:
- Sharing of best practice to reduce unwarranted variation over the wide geographical area of the North, such as in environmental monitoring practices.
- Contribution to research, nationally (via national R&D Group) and regionally. A specific example is the recent publication of a paper on the microbiological medium in use in NE & North Cumbria in a European peer-reviewed journal.
- Providing expert input to national and international quality standards e.g. ISO, British Pharmacopoeia, EU GMP, QAAPS5.
- Assisting NHS pharmacies to implement policy in practical terms to increase co-ordination and to reduce unwarranted variation e.g. by training, advice etc. For example, many of the members of the group contribute to the Joint (all North) Technical Services annual meeting, and also to the NHS National Technical Services Symposium as either speakers or poster presenters.
- Working with SPS procurement to get best value for consumables by tendering over a wider geographical area.
- Acting as a central horizon-scanning system for regulatory updates to reduce duplication of effort and thereby conserve NHS resources.
- Providing specialist input to national committees and working parties e.g. Pharmaceutical QA, National Clinical Trials, Advanced Therapy Medical Products, Medical Gases Working Party etc.
- Coordinating medical gases testing to reduce unwarranted variation and protect patient safety. For example, a standard testing record sheet is under development.
- Monitoring of standards in QC Laboratories via participation in the national inter-laboratory testing scheme (Pharmassure) and discussion of feedback to promote uniformity.
- Producing a database of laboratory capabilities to assist with contingency planning.

5. Quality Assurance/Production & Preparation Group (QAPP)

Constitution:
Production, preparation & quality assurance representations from all licensed manufacturing units and any units with aseptic activity in North East and North Cumbria. Chaired by the Regional QA Specialist.

Main Purpose:
The main aim of the Group is sharing information and good practice on any issue affecting preparation and production of medicines in hospital Trusts in the North East and North Cumbria. In practice this involves:

- Regular communication on local, regional and national issues via meetings and e-mail. Regular reports are received from the specialist national committees: Pharmaceutical Quality Assurance, Pharmacy Production, Pharmacy Aseptic Services Group.
- Making and implementing policy on technical issues locally and contributing, usually via the Regional QA Specialist, to relevant national policies and standards.
- Initiating and coordinating research work, in association with other groups where applicable.
- Liaison with the Northern NHS Pharmaceutical QA/QC Network Operational Group, Yorkshire Pharmaceutical Technical Services Group, North East Senior Pharmacy Managers, and other relevant groups, e.g. the short life working group producing the NHS Manufactured Medicines catalogue.
- Involvement in training of all grades of staff in technical issues.

Output examples:

- Support from peers from licensed units prior to, and following, MHRA inspection (All units in North East & North Cumbria have performed well at recent inspections).
- Contribution to NHS PQA Committee advisory documents e.g. Ambient Temperature Storage of Medicines in Clinical Areas. (This national "yellow covered" document includes a case study from Newcastle.)
- Working with SPS Procurement to get best value for outsourced products (e.g. PN framework agreement, North Chemotherapy tender) and aseptic consumables.
- Provided practical advice on implementation of MHRA policy in all aseptic units e.g. introduction of sporicides.
- Influenced development of innovative products e.g. needle-free $^{i}/_{v}$ bags.
- Set up & running of the joint (all North) technical services annual meeting to co-ordinate and to provide sharing of best practice across a wider geographical area and to reduce unwarranted variation.
- Implements, co-ordinates and monitors the regional cleanroom clothing laundering contract to ensure optimum pricing and to maintain quality.
- Co-ordinated work on capacity planning in aseptic units to reduce duplication of effort.
- Input to the national technical services symposium and feedback to improve in future.
- Co-ordination with SPS Procurement & QA with respect to implementation of procurement contract changes (to ensure best value for money).
- A member of the Group is leading nationally on the innovative area of advanced therapies and increasing awareness of this topic within the group.
- Regular input to, and influence over, national specialist committees: Pharmaceutical QA, Pharmacy Production, Pharmacy Aseptic Services Group.
- Provided advice on electronic documentation in use in aseptic units to maximise safety for patients (in response to the Toft report).

6. Network Chemotherapy Group (NCG)

Constitution:

- A sub group of the North of England Cancer Network (NECN) which is one of the four networks within the Northern England Strategic Clinical Networks (SCN).
- The SCN is part of NHS England; the Network provides administrative support and governance oversight of the activities of the Network Chemotherapy Group.
- The Network Chemotherapy Group is a requirement of Cancer Standards, which are monitored by the Quality Surveillance Team (QST), formerly National Peer Review Programme (part of NHS England).
- Representative from each Acute Trust in North East and North Cumbria Local Chemotherapy Group, plus oncology, haematology, chemotherapy nursing and oncology/haematology pharmacy.
- Reports to Clinical Network Cancer Board

Main Purpose:
The purpose of the Network Chemotherapy Group is to ensure best practice in the use of cancer chemotherapy and systemic therapies in the NECN.

Terms of Reference:
http://www.nescn.nhs.uk/wp-content/uploads/2015/02/NECN-Chemo-group-Terms-of-Reference-June-15-v2.0.pdf

Output examples:
Manage the following:

- Network formulary/ list of approved regimens
- Network of Chemotherapy Policies
- Network Chemotherapy Regimen protocols
- Chemotherapy Education Study Days
- Chair is co-signatory to all Network tumour site specific group clinical guidelines

Website
http://www.nescn.nhs.uk/networks/cancer-network/cancer-network-groups/nccg-chemotherapy-group/

7. North East Antimicrobial Pharmacy Group

Constitution:
Representation from each acute trust in the North East as well as primary care representation from NECS

Main Purpose:

- Initially developed as a support network as most of the antibiotic pharmacists working within the North East were relatively new to post and rates of *Clostridium difficile* and MRSA were increasing.
- Share ideas and provide advice and support.
- Develops guidelines for local adoption where possible.
- Network for sharing ideas on how to achieve the national AMR CQUIN as well as raising knowledge of primary care QP.

Output examples:

- Development of vancomycin guidelines which were adopted by a selection of providers
- Agreement of local holding centres for uncommon antimicrobials
- Provide support for NECS primary care guideline by reviewing clinical content and distributing to regional Microbiologists

8. North East and North Cumbria Informatics Group

Constitution:
North East and North Cumbria Operational and Pharmacy IT leads

Main Purpose:
There are 3 separate pharmacy IT systems in use across the region – Emis [Ascribe], JAC and Meditech. The majority of Trusts in the region are currently using Emis
The main purpose of the Group is to work collaboratively across the region, sharing IT information, problem solving (IT systems permitting).

Output examples:
- Trusts sharing expense of training day [in progress] – several trusts using Emis as a provider are upgrading to a new version. In order to reduce the cost of on-site training, Trusts are collaborating to arrange one training day attended by several Trusts
- Meeting organised with IT provider to discuss IT issues – meeting arranged with Emis to discuss customer service issues. This meeting was attended by Emis Ascribe lead and customer care team. The Group identified areas of service they felt needed improving. After the meeting there was an initial improvement in customer service reported.
- Development of robot tender document – several Trusts are looking to purchase / renew robots. The tender document currently being worked on by one Trust will be available for other Trusts to base their tender on if required.
- Collaborative working on Powergate – one Trust in the region is using Powergate for the majority of their purchasing. They have hosted training sessions for other Trusts and offered implementation support.
- Sharing good practice/problem solving for IT related systems (Omnicell, e-prescribing etc.).
- GS1/Scan4Safety updates from the region's chosen demonstrator site.

9. North East Pharmacy Procurement Group (NEPPG)

Constitution:
The NEPPG is chaired by a Chief Pharmacist and membership comprises representatives of provider and commissioning organisations across the North East of England and North Cumbria as well as expert QA and procurement specialist support.

Main Purpose:
- To coordinate the collaborative procurement of medicines across the region and provide a source of expert advice to Chief Pharmacists on the safe and cost effective purchasing and distribution of pharmaceutical products.
- To lead the tendering and contracting for medicines and pharmaceuticals (in conjunction with the Commercial Medicines Unit (CMU)).
- To act as a focal point for medicines procurement issues for local healthcare organisations and the pharmaceutical industry.

- To keep appraised of developments in pharmaceutical procurement both nationally and internationally and identify procurement opportunities for pharmaceuticals and associated services (e.g. homecare) for the member organisations.

Output examples:
- The Group has consistently delivered a favourable return on investment and 2015/16 saw total savings of £7,577,359.
- These savings were achieved from a variety of framework contracts which were tendered regionally; by the NE Pharmacy Procurement Service (NEPPS), and nationally; by the Commercial Medicines Unit (CMU).

NEPPS, which is funded by, and works on behalf of the group, delivered framework contracts including:
- Wholesaler service
- Contrast media
- Parenteral Nutrition
- Human Albumin
- Medical gas cylinders
- Homecare – dispense and deliver

CMU delivered framework contracts including:
- National generic and transition products
- North of England branded medicines (Tranches A and B)
- North of England Dose Banded Chemotherapy

Recently the Group has been looking at the measurement of efficiencies in procurement processes and the supply chain within the region as part of the 'Carter' work stream. This includes looking at options for regional stores.

10. Regional Clinical Trials Pharmacy Group

Constitution:
Chaired by Pharmacy Lead North East and North Cumbria Clinical Research Network (NENC CRN). Consists of designated lead pharmacy personnel in clinical trials from all partner organisations of the NENC CRN.

Main Purpose:
- Purpose is to provide a forum for exchange of ideas, resolving common issues across the regional pharmacy trials and sharing of good practice.
- Provide interpretation of national and local research network policies for pharmacies across the NENC.
- Support pharmacy clinical trials staff in the region with changes to national approval processes specifically those pertaining to pharmacy technical reviews.
- Set and evaluate timelines and metrics for pharmacy clinical trial activities within the NENC region allowing evaluation of practice to improve and streamline services. Using these metrics and data to review our practice nationally.
- Identify training needs of all levels of pharmacy clinical trials staff. Provide support to pharmacy clinical trials staff throughout the region.
- Develop strategies for increasing capacity to support research activity both in terms of scale and scope.

Output examples:

- Pharmacy metrics covering review of clinical trials and set up timelines have started to be collected by each partner organisation. The analysis of this has shown our timelines as positive in comparison to the national data collected so far.
- Multisite costing of commercially sponsored clinical trials being set up at multiple sites in the region has been started and are being reviewed on an ongoing basis. This should help to streamline processes with commercially sponsored studies and improve our reputation as a network with industry.

11. Cumbria and NE LWAB Pharmacy Workforce Subgroup

Constitution:

- The chief pharmacists from the nine separate NHS acute and two mental health trusts in the North East and North Cumbria;
- Higher Education Institutions with which HEENE and NHS commissioned health providers in the North East has / could have a contractual relationship;
- The North East Pharmacy Education & Training Office;
- Representatives of community pharmacy, primary care providers, commissioners and non-NHS providers;
- Representative from CPPE
- The Health Education England North East (HEE NE) business lead

Main Purpose:

Act in a formal advisory capacity to HEE North for workforce, education and training decisions supporting the LWAB in relation to the pharmacy workforce across three NE and Cumbria STP footprints. The sub-group relates to key programme and national advisory boards, and also ensures broad links to the relevant outcomes frameworks for the NHS, public health and social care.

Key responsibilities:

- To help shape the content of the Workforce Development strategy
- Consider and advise on the implications of regulatory changes, innovation, societal and demographic changes on workforce plans
- Consider and advise on the education and training commissioning plans
- Identify skills gaps in the local labour market and advise on how they can be met
- Advise on how the quality of education and training can be further enhanced within the resources available

Output examples:

- Regional Pharmacy Workforce Education, Training and Development Strategy (2014-29) developed, which has influenced the commissioning numbers of preregistration pharmacy trainees and post graduate education.
- Closer working with other professions, and cross sector working ensuring commonality of training and development with a health economy approach to workforce
- Work with local HEI providers to amend the Clinical Diploma Programme to integrate into a standard pharmacist foundation development programme suitable for all sectors delivering advanced clinical/diagnostic skills
- Work with HEENE Clinical Quality Business Lead to adopt a common approach to regular Deanery meetings on the quality of provider training.
- Regional approach via Oriel for pre-registration recruitment including building on existing regional resources e.g. NE recruitment websites used for medical recruitment

- Joint working on developing apprenticeship programmes for bands 1-4, pharmacy technicians and going forward foundation pharmacists
- Collaborative exploration of new roles e.g. pharmacy associate, consultant pharmacists and increased pharmacist prescribers with associated multi-sectorial business cases where appropriate
- Continuation of vacancy survey on a NE regional basis to provide workforce intelligence across the managed sector.
- Professional input into the three HEENE task and finish groups address workforce shortages in Emergency Care, General Practice and Mental Health highlighting and sharing extended pharmacy roles in these areas.
- Shared approach along with HEI colleagues addressing national developments in educational supervision and prescribing assessments in pre-registration pharmacists,

12. Regional Medicines Information Group

Constitution:
Pharmacists from Trusts across North East and Cumbria, Bradford Teaching Hospitals NHS FT, Mid Yorkshire Hospitals NHS Trust and Regional Drug and Therapeutics Centre; noting that some members engage virtually and/or receive important information as part of a professional network. Centrally generated and offered resources, training and information is shared with all members.
Main Purpose:
- Keep abreast of developments in therapeutics, professional practice, technology and information sources to support continuing professional development within the specialty and to ensure that the service provided is as up to date as possible.
- Network with others to share information and experience
- Provide a forum for the sharing of information, ideas and examples of good practice.

The above are delivered whilst operating within the overarching aims of UKMI, which includes:
- Support the safe, effective and efficient use of medicines by the provision of evidence-based information and advice on their therapeutic use.
- Support medicines management within NHS organisations
- Support healthcare professionals optimise use of medicines for individual patients

Output examples:
Resource Management:
- Access to group purchasing deals on key recommended MI resources and enquiry recording database (MiDatabank).
- Group kept aware of updates to essential resource list and any limitations, errors and version problems associated with certain commonly used MI resources.
- UKMI MiDatabank User Group and update on developments.

Clinical Governance:
- UKMI Clinical Governance Working Group update and discussion of key topics as they impact on practice.
- Peer Review of enquiries (particularly useful for lone workers / MI ‘leaders’ to evaluate their practice against set standards and avail of external feedback.
- IRMIS Reports promoted and circulated and key themes (time, support for junior staff, calculation errors, drugs with similar sounding names) highlighted with appropriate actions agreed.
- UKMI Audit tool promoted as means of self-audit where external audit is not undertaken.

- Yellow Card Centre presentation on key issues, MiD electronic YC reporting data, YC reporting performance of regional trusts and MHRA Yellow Card updates.

UKMI National Work and Executive Committee Update

- UKMI Practice Development Seminar Feedback: Members of the group that attended fed back on the UKMI PDS and presented summaries of the different plenary sessions and workshops attended, highlighting the key messages for MI services and pharmacists and posters of particular interest.
- Detailed feedback on recent UKMI Executive Meetings and activities; generating useful Q&A sessions.

UKMI Support

- Telephone Skills Evaluation Tool can be used as a training tool or for periodic review of calls.
- MI Training (Pharmacists and Pharmacy Technicians), MiCAL and UKMI Workbook: sharing of training packages, points of interest, feedback on what has gone well/not so well etc.

Service Performance:

- UKMI Core Performance Indicators highlighted and use encouraged. Additional, optional KPIs can be selected in accordance with Trust priorities.
- UKMI User Survey circulated and discussion about how the information could be, or is currently, used by members of the group.

Injectable Medicines Guide

- Member of the MI Group who is also a member of IMG reports back on any developments at each meeting.

Mental Health update

- Members from mental health trusts highlight key issues that may be relevant to the Group as a whole.

Other

- Formal round table contribution on specific work or projects being undertaken or on conferences attended, by each member of the group. This is to facilitate the sharing of ideas and examples of good practice e.g. discussions on Patient Help Lines and how each Centre that offered them, marketed the service and the impact of flyers in bags etc.

13. North East and North Cumbria Hospital Clinical Pharmacy Network

Constitution:
Representation from all 9 acute hospital trusts and the 2 mental health hospital trusts based in the North East and North Cumbria. Each trust nominates a Lead Clinical Pharmacist to represent.

Main Purpose:
To collaborate on development of clinical pharmacy services across the North East and North Cumbria. By working together we can pool resources to achieve a greater impact. The focus of the network's work is looking at how we can share and standardise good practice across the region, develop the clinical workforce and improve the services we provide.

Output examples:

- A Pharmacist Independent Prescribers toolkit for practice

The Network identified that pharmacist prescribing was being implemented with significant variation across the region. We initially determined the causation behind the inconsistency in uptake. We discovered that the main barrier to developing pharmacist prescribing was a lack of confidence and insufficient support. The Network identified that Clinical Supervision was the mechanism that we could use to support pharmacists to implement prescribing. We developed a Clinical Supervision Framework as part of a toolkit to support prescribers. This has now been implemented across the region. This work has led to 3 publications in peer reviewed journals, awards from national clinical pharmacy associations, presentation at national conferences and application for RPS endorsement. This work has also been fed back to the GPhC as part of their consultation on supervision of PIP in training. The pharmacists who have had supervision are reporting that they feel supported and confident to implement prescribing into their practice.

- Clinical Pharmacy Triage and Prioritisation

The NHS is under significant pressure to deliver increased services with fewer resources. Pharmacy needs to play a key role in delivering this efficiency. All the trusts in the region are looking at ways to extend services and how to optimise the efficiency and effectiveness of the pharmacy workforce. The Network identified that each clinical team was working in a different way with different priorities and were using different methods for prioritisation. We have looked at how pharmacists view prioritisation and how they prioritise patients in practice. The Network are now using this data to develop principles about how clinical pharmacy workload can be prioritised with the aim of ensuring efficiency of clinical services whilst also improving the quality of clinical pharmacy intervention.

14. North East and North Cumbria Academic Health Sciences Network Medicines Optimisation Programme Steering Group

Constitution:

Membership of the steering group reflects the collaborative nature of the projects undertaken and includes representatives from across the health professions and health sectors, academia, and the pharmaceutical industry, all with a role in driving medicines optimisation. Programme lead is responsible to the AHSN CEO.

Main Purpose:

The Academic Health Science Network for the North East and North Cumbria (AHSN NENC) is dedicated to improving healthcare, driving wealth creation and promoting research participation across the region. Through collaborative working with a wide range of other stakeholders, including companies, charities and Local Authorities the role of the AHSN is to ensure that areas of best practice and innovation are identified and disseminated at pace and scale regionally.

The AHSN Medicines Optimisation (MO) Programme is committed to working across sectors and disciplines as a means of producing innovative workable solutions to medicine related issues, including aspects of safety. It cuts across other AHSN clinical programmes in addition to initiating specific MO and patient safety work. There is also a strong national AHSN MO network with good communication links ensuring good practice is shared and disseminated beyond regional boundaries.

Output examples:

Transfer of Care Project

- This project has delivered the ability for all acute Trusts within NENC to make electronic referrals to Community Pharmacy. Collaboration with Community Pharmacy has been a significant output. Early evaluation demonstrates a statistically significant reduction in re-

admission rates for those patients who received a follow up with their community pharmacist following a referral (*http://bmjopen.bmj.com/content/6/10/e012532.full*). Collaboration now extends across England with roll out of "clinical handover" being undertaken by all AHSNs.

Supporting Vulnerable Adults with their Medicines

- This project has provided information about the current activity in the NENC with regards to medication reviews being conducted in care homes. The report (http://new.ahsn-nenc.org.uk/wp-content/uploads/2015/01/AHSN_Report_Medication_Review_Jan_16_updated.pdf) highlighted inconsistencies in commissioning and the outcome measures used. Potential for further cost savings was also identified. The intention is to present the report to CCGs and social care providers.

15. Regional Pharmacy Research Group (RPRG)

Constitution:

The RPRG is co-chaired by two lead clinical pharmacists and membership comprises representatives of all acute and mental health trusts in the North East of England and North Cumbria as well as local university representatives.

Main Purpose:

1. Develop a strategy to guide research priorities and direction within the region.
2. Provide the region with a nationally recognised research brand that promotes the great work being done within pharmacy.
3. Encourage collaboration between trusts within the region to increase pharmacy based research.
4. Provide a research network within the region to support those undertaking research.
5. Provide a platform to showcase regional research.

Output examples:

This is a newly formed group with work underway to set a firm foundation for going forward which will include branding, group structure and scoping current research activities within the region. A vision statement has been agreed: "*For the North East and North Cumbria to be a recognised leader in pharmacy and medicines optimisation research for patient benefit across all care settings*".

16. North East & North Cumbria Operational Pharmacy Managers Network

Constitution:

This includes all Hospital Trust Operational Pharmacy Managers (Pharmacist or Pharmacy Technician) from the North East and North Cumbria, nominated by their Chief Pharmacist or NESPM member. This includes acute and mental health Trusts and the regional procurement pharmacist.

Main Purpose:

Identify, discuss and recommend action in a collaborative forum on any issue affecting the operational pharmaceutical services in hospital Trusts in the North East and North Cumbria, and also electronically outside of meetings. This is to be achieved by:

- Sharing good practice
- Sharing information

- Collaborative working
- Providing professional leadership for the operational pharmacy services
- Working to an annual work plan developed in conjunction with the NESPM

Output examples:
Waste Management
- How medicines waste is managed in Trusts, including destruction and returns processing. Including security issues raised by CQC comments on return medication for pharmacy not being a secure process.

Key Performance Indicators/Benchmarking
- Optimising medicines related processes e.g. reduction in expired stock value and returns transactions; improved stock turnover etc.

Skill Mix
- Shared good practice to aid adoption of better ways of utilising skill mix to deliver services more cost effectively. Included sharing of business cases, job descriptions etc.

Management of Controlled Drugs
- Primarily to improve governance around the supply and monitoring processes. Shared Intelligence.

Transfer of Medicines
- Review of how Trusts transfer patients in ways to avoid missed doses, out of hours call outs, wastage and costs. Also looking improving ways in which internal transfer of medicines is managed when patients move within Trusts.

Error Recording
- Recording and learning from errors / near misses in the dispensing process.

Management of Antidote and Emergency Medicines
- Sharing information on management of these medicines as recommendations change. Working together to manage medicines most efficiently.

Sharing Good Practice and Standard Operating Procedures (SOPs)
- Sharing SOPs to minimise management time in production. Helping each other to understand gaps in services and how to resolve issues

17. Medicine Safety Officers Network – North East and North Cumbria

Constitution:
The MSO network is chaired by a Senior Pharmacist and membership comprises representatives of provider and commissioning organisations across the North East of England and North Cumbria as well as representatives from Specialist Pharmacy Services, North East Ambulance Service and Schools of Pharmacy. There is also a link to the CQC Specialist Pharmacist covering the North.

Main Purpose:
- Share learning from medicines safety incidents
- Collaborate on medicines safety initiatives
- Collaborate on the implementation of national medicines safety alerts
- Undertake audits and research on medicines safety

- Provide supportive network for MSOs locally – an opportunity to discuss challenges and solutions
- Share documents, tools and policies
- Early warning of medication risks through sharing of incidents locally
- Benchmarking of medication incidents with other Trusts
- Link to the national MSO network

Output examples:

- Review of all insulin incidents across all acute Trusts and Mental Health Trusts
- Discussion at the network following the recent NHS England alert on 'Open Systems' has identified regional challenges with implementation as a result of common practice across acute Trusts which will be shared with NHS England Patient Safety Team
- Each month MSOs bring examples of incidents and local learning for sharing
    - Never events
    - Near misses
    - Attendance at a coroner's court
- Documents and guidance that have been shared
    - IV phenytoin guidelines
    - Insulin discharge form
    - Safety bulletins