NHS Lothian

Pharmacy Strategy
2013 – 2016

Better health, excellent pharmacy care

Version
January 2013

Pharmacy

From the Greek φάρμακον 'pharmakon' (drug), pharmacy is the health profession responsible for ensuring the safe and effective use of medicines.

Pharmacy Services

The services co-ordinated and provided by the pharmacy profession within a healthcare organisation.

Pharmaceutical Care

The responsible provision of medicine therapy for the purpose of achieving definite outcomes that improve a patient's quality of life.

The mortar and pestle, a symbol recognised throughout the world as representing the pharmacy profession

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Director of Pharmacy statement

This is the second Pharmacy Strategy generated by the Service. In the first edition (2009 – 12) the challenges for the Pharmacy Service were described and many of them still remain.

Pharmacy Services range from supply functions (procurement, distribution and formulation) to medicine information (to patients and professionals) and the provision of monitoring and evaluation of medicines to ensure maximising the benefits of medicines and anticipation of potential problems in order that therapy achieves an optimal outcome for the patient.

These services are delivered by our pharmacists, pharmacy technicians and supporting staff both from the Health Board Managed Services and community pharmacy contractors (independent contracts).

There are 182 Community Pharmacies serving the needs of patients/public/carers in NHS Lothian. The Scottish Government Review of Pharmaceutical Care in the Community, led by Dr Hamish Wilson and Professor Nick Barber, together with the Integration of Heath and Social Care, will create further opportunities to shape our Service to better meet the identified needs of the population of Lothian in collaboration with our managed service.

Advances in medicines, new methods of service delivery and redesign of the service will require a responsive approach and the extended Pharmacy Teams are ready to address the challenges.

The emphasis on Quality Driven care focused on the patient follows the national 'direction of travel' identified in the Scottish Government's Quality Strategy.

The influences of the financial constraints within which we will continue to function are acknowledged and creativity and innovation will remain a key focus.

Embracing change will be fundamental to the success of this Strategy with clear ownership by staff and contractors for goals achieved.

There are four key themes:

- Patient experience
- Patient safety through quality
- Efficiency and productivity
- Pharmacy workforce.

I wish my colleagues every good wish to continue to achieve excellence through strong teamwork throughout the next four years.

Professor Pat Murray
NHS Lothian Director of Pharmacy

Executive summary

The challenge for pharmacy

There are 182 community pharmacies serving the needs of patients in NHS Lothian. In parallel, there is a primary and secondary care pharmacy service, with a workforce of 291 staff (wte).

The vast majority of individuals who seek medical advice and treatment will access pharmacy services. The challenge for pharmacy in NHS Lothian is to sustain and improve on the excellent care we provide in a constantly changing environment. Advances in medicines, new methods of medicine delivery and redesign of healthcare services all demand a flexible yet focused service. This strategy will further enhance the commitment to collaborative working with all partners, including specialist services, general practice and health and social care staff, to create integrated and responsive systems to meet our patients' needs.

As the proportion of older people in Scotland continues to grow, alongside the increasing frailty of those living longer, we need to address the health and social care needs of this population in a way that is accessible, appropriate to their care needs and also financially sustainable.

Our vision is that all people, irrespective of their care setting, should have access to input from pharmacists in the management of their medicines to sustain their general health and wellbeing.

By building on the established principles of quality, safety, effectiveness and person-centred care, change in current practice models can be achieved through effective planning, long term improvement strategies and redeployment of resources. It will require an integrated approach from healthcare, social care, the independent sector, and patient and carer support groups to support the changes required.

Pharmacy is directly involved with, and leads on, innovative developments within and outside of their profession within a constantly changing environment. New medicines, new methods of delivery and new technologies all require to be assessed and prioritised in a planned manner. This strategy will support the production of a prioritised plan for the introduction of new technologies, e.g. robotics, electronic pharmacy stock management system and electronic prescribing. Pharmacy will also further develop its culture of improvement and research through use of 'Lean' methodology (an innovative management programme which helps to improve the quality of patient care) and by contributing to the NHS Lothian research strategy.

The service will respond in a manner that is considered, co-ordinated and effective to ensure the service can continue to meet its responsibilities whilst maintaining performance targets and clinical outcomes.

The delivery will depend on other support services/ infrastructure such as information systems and eHealth technology.

The strategy covers the period 2013-2016 describing a high level framework for the redesign and delivery of pharmacy services (across all sectors) and prioritises the key themes for pharmacy.

Patient experience

Pharmacy puts patients at the centre of everything it does. Pharmacy will further develop systems to seek out the opinions of patients whenever redesign of services is planned and will ask for the views of patients on existing services. Pharmacy will use their specialist skills to implement programmes of work that are designed to ensure equitable access to and the safe use of medicines.

Patient safety through quality

Prescribing, dispensing and supply of medicines involves complex processes. Quality assured and standardised operating procedures are necessary to ensure that patients and staff are not at risk of harm. In NHS Lothian there will continue to be a focus on ensuring that systems are properly designed, developed and updated in line with local and national standards.

Efficiency and productivity

The pharmacy team is a relatively small resource within a large organisation but has a track record of effective and efficient working practices. Medicines account for ten per cent of the total NHS budget and systems for ensuring effective procurement and prescribing will continue to be refined, in collaboration with others, to support this large budget. Effective team working will be a priority to maintain and improve patient care.

Workforce

To maintain our excellent service a clear career structure requires to be established for all staff across the sections. This must be done within national frameworks to ensure recruitment and retention rates that allow us to continue to provide the high level of service expected within NHS Lothian.

Conclusion

Every aspect of this strategy will encourage further improvements in the pharmacy service by setting challenging targets while still delivering safe and patient-centred pharmaceutical care on a daily basis.

Introduction, vision and ambition

All patients deserve to have access to the finest pharmaceutical care provided in an equitable manner and making the best use of available resources, whenever and wherever they present for care.

The design and development of future pharmacy services builds on strong foundations underpinned by a history of delivery, implementation of legislation, national, regional and local strategies and explicit standards of care.

The NHS Scotland Quality Strategy (2010) put people at the heart of everything the health service does. It established a commitment to ensuring that the way in which people receive healthcare is as important as how quickly they receive it. People are encouraged to be partners in their own care and can expect to experience improvements reflecting:

- caring and compassionate staff and services
- clear communication and explanation about conditions and treatment
- effective collaboration between clinicians patients and others
- a clean and safe care environment
- continuity of care
- clinical excellence.

The pharmacy services delivery plan arising from our strategy builds on this and Better Health, Better Care 2009, which set out the Scottish Government's programme to deliver a healthier Scotland. The national direction is to help people to sustain and improve their health, especially in disadvantaged communities, ensuring improved, local and equitable access to health care. This Lothian Pharmacy strategy continues to reflect these principles.

The NHS Lothian Pharmacy Service, provided from community pharmacy, primary care and secondary care settings, is committed to provide outstanding patient-centred pharmaceutical care. This is achieved by working jointly with patients, carers, health, social care and partnership colleagues. The pharmacy service has established the 'Patients Efficient Use of Medicines Group' and will build on the experience of working with patients and carers, for example in assessing the effectiveness of patient education, the development of ways of addressing medicines waste and on how to improve the repeat prescribing process. This strategy builds on the 2009-12 strategy, in support of achieving objectives and targets set by NHS Lothian.

The pharmacy service recognises the importance of the full implementation of the community pharmacy contract which is pivotal to supporting access to medicines and healthcare information for patients in their local environment.

The pharmacy service will be cognisant of the 'Review of NHS Pharmaceutical Care of Patients in the Community' Services Review', led by Dr Hamish Wilson and Professor Nick Barber.

- Service delivery should be informed by and meet the needs of the patient to deliver optimal outcome.
- The care delivered should be informed and shaped by NHS service planning and drivers.

A key focus for pharmaceutical care in the community should be when new medicines are initiated for patients. Medication review should be underpinned by the Scottish Patient Safety Programme and the recent

developments in 'polypharmacy' review, looking at the risk/benefit ratio of 'high risk medicines'.

- The future model of service provision should utilise the full breadth of pharmacists' skills and be more flexible in supporting specialist services, including complex medicines being delivered in the community environment.

In order to accomplish all of this, our strategy will be informed by the patient experience, address patient safety through quality, efficiency and productivity and be delivered by a pharmacy workforce utilising innovation and development of services.

Patient groups have appreciated the detailed work behind each statement of intent and how delivery could improve the patient experience. They have indicated a willingness to be involved in the implementation of the strategy and to work collaboratively on the various themes that emerged in discussions.

How will we get there?

The delivery of the strategy will be supported by a robust delivery plan – specific to each element of the pharmacy services – outlining their management /action plan. This will ensure a dynamic delivery framework identifying measures of progress, key leads and within defined timelines – with rapid escalation of exceptions, identification of barriers and opportunity for noting and sharing success (see Appendix 1).

Innovation and development will be key drivers for delivery of change throughout all elements of the service. Changes in service provision will be informed by staff alongside available training and development.

Four key themes

This strategy is set out around four key themes:

1. **Patient experience**
2. **Patient safety through quality**
3. **Efficiency and productivity**
4. **Pharmacy workforce.**

1. Patient experience

Patients will have access to the most cost-effective pharmaceutical care where patient safety is recognised as a core value, no matter where or when they present.

Strategic intents

Over the next three years we will:

1.1 engage with partners to ensure that the patient will have access to the right medicines and pharmaceutical care, at the best time and in the best place for them, thus increasing efficiency.

1.2 continue to put patient safety at the heart of practice and in the design of any future services.

1.3 raise the public perception of the professional role of the pharmacy services in patient care and how it benefits quality of life.

1.4 contribute to the development of an informed and knowledgeable patient, which improves their ability to maintain health and make informed decisions about appropriate treatments when needed.

1.5 in response to pharmaceutical care needs, optimise pharmaceutical care outcomes for all patients working in partnership across systems.

To achieve this

We will identify and overcome any barriers that may hinder cross sector working. We will ensure that accurate up-to-date information on the access to pharmacy services is available.

We will contribute to the provision of information about medicines in a language and medium that is appropriate.

Safe systems of work will be integral to the delivery of this key theme.

2. Patient safety through quality

Patient safety will continue to be at the centre of pharmacy services wherever they are delivered.

Strategic intents

Over the next three years we will:

2.1 continue to deliver and improve the quality and safety of our services to ensure that all patients receive the right medicine tailored to their needs.

2.2 work within national safety initiatives to provide a safe, effective, efficient and quality service to our patients and customers.

2.3 continue to work with prescribers, health and social care, voluntary organisations and other partners to ensure that patients understand and use their medicines safely to meet both health and social care needs.

2.4 identify and use available tools to implement new ways of delivering safe systems of working, including models that bring care in hospital and in the community together.

To achieve this

We will ensure that patient safety is at the forefront of all service delivery.

3. Efficiency and productivity (money and resources)

We will maximise the skills and resources to provide value for money and improve patient care.

Strategic intents

Over the next three years we will:

3.1 anticipate demands and proactively implement focused pharmacy initiatives to achieve the NHS Lothian strategic aims.

3.2 prioritise the unique value adding pharmacy service contribution and ensure investment / disinvestment is outcome focused and based on financial and benefits analysis.

3.2 develop knowledge and leadership within the pharmacy workforce to facilitate re-design of services using quality improvement methodology.

3.4 support the development and implementation of new systems with key partners, leading to improved patient care and reduced health inequalities.

3.5 utilise information and communication technology to ensure provision of seamless pharmaceutical care throughout the patient journey.

3.6 deliver the most appropriate and cost-effective, evidence-based treatments, interventions, support and services to meet the needs of the patient population to ensure equitable access.

To achieve this:

We will stop wasteful activity, remove unjustified variation to deliver a high quality cost-effective pharmacy service using our multi-skilled pharmacy workforce across the interface between primary and secondary care to meet patient need.

4. Pharmacy workforce

We will further develop the workforce plan that is flexible and responsive to the changing healthcare needs of the public.

Strategic intents

Over the next three years we will:

4.1 utilise the unique skill set of the pharmacy workforce to adapt and maximise efficiency of service delivery across all health and social care settings.

4.2 improve staff development through commitment to national and local education and training frameworks. This will lead to consistent delivery of care by highly proficient, knowledgeable and skilled staff to support changes in evidence-based practice.

4.3 contribute to local and national strategies through conducting and reporting project work with the aim of being at the forefront of health improvements.

To achieve this

We will motivate and empower our staff by providing development opportunities for individuals and teams.

We will engage staff to develop a culture of quality improvement in the delivery of pharmacy services.

Appendix 1

Delivery plan

Delivery Plan 2013 - 16

[Enter Name of Pharmacy Service]

KEY STRATEGIC AIMS:	
1	Patient Experience
2	Patient Safety through Quality
3	Efficiency and Productivity
4	Workforce

Key:
2013-14 - short term
2014-15 - medium term
2015-16 - long term

NB: only significant new developments or significant risks to delivering should be documented here.

Startegic Aim Theme	To Achieve This the *[Enter name of Service]* will	Outcomes	By When	By whom	Progress report

Pharmacy Strategic Intents 2013 to 2016

	Administration	Antimicrobial Team	Aseptic	Carstairs State Hospital	CHP/CH(C)P Primary Care	Clinical Pharmacy Services	Clinical Trials	Community Pharmacy	Controlled Drug Governance	Dispensing	ERD	Medicines Information	Medicines Management Team	Prescription Services	Procurement	Public Health	Quality Assurance	Radiopharmacy	State Hospital	Substance Misuse
Patient Experience																				
Engage with partners to ensure that the patient will have access to the right medicines and pharmaceutical care, at the best time and in the best place for them increasing efficiency												P								
Continue to put patient safety at the heart of practice and in the design of any future services												P								
Raise the public perception of the professional role of the pharmacy service in paitent care and how it benefits their life												P								
Contribute to the development of and informed and knowledgeable patient, which improves their ability to maintain health and make informed decision about appropriate treatments when needed												P								
In response to pharmaceutical care needs across systems work in partnership to optimise pharmaceutical care outcomes for all patients																				
Patient Safety Through Quality																				
Continue to deliver and improve the quality and safety of our services to ensure that all patients receive the right medicine tailored to their needs.												P								
Work within national safety initiatives to provide a safe, effective, efficient and high quality service to our patients and customers.												P								
Continue to work with prescribers, health and social care and voluntary organisations and other partners to ensure that patients understand and use their medicines safely to meet both health and social care needs.												P								
Identify and use available tools to implement new ways of delivering safe systems of working including models that bring care in hospital and in the community together.												P								
Effecency and Productivity (Money and Resources)																				
Anticipate demands and proactively implement focused pharmacy initiatives to achieve the NHS Lothian strategic aims.												P								
Prioritise the unique value adding pharmacy service contribution and ensure investment / disinvestment is outcome focused and based on financial and benefits analysis.												P								
Develop the skills, knowledge and leadership within the pharmacy workforce to facilitate re-design of services using quality improvement methodology												P								
Support the development and implementation of new systems with key partners leading to improved patient care and reduced health inequalities												P								
Utilise information and communication technology to ensure provision of seamless pharmaceutical care throughout the patient journey												P								
Deliver the most appropriate and cost effective, evidence-based treatments, interventions, support and services to meet the needs of the patient population to ensure equitable access												P								
Pharmacy Workforce																				
Utilise the unique skill set of the pharmacy workforce to adapt and maximise the efficiency of service delivery across all Heath and Social care settings																				
Improve staff development through commitment to national and local education and training frameworks. This will lead to consistent delivery of care by highly proficient, knowledgeable and skilled staff to support changes in evidence based practice												P								
Contribute to Local and National strategies through conducting and reporting project work with the aim of being at the forefront of health improvements												P								

sample

Appendix 2

Pharmacy organisational chart

Appendix 3

Description of pharmacy services

Administrative team

The aim of the administrative service is to develop, implement and maintain departmental administration and communication systems that support the safe, efficient and effective use of pharmacy staff and non-staff resources across all sites. An extensive and broad range of administrative activities are provided, recognising the diverse nature of pharmacy services across primary, secondary and tertiary care. This includes:

- co-ordinating the non-clinical aspects of the pharmacy department and pharmacy staff across the managed pharmacy services.
- development, implementation and maintenance of departmental administration and communication systems to support the safe, efficient and effective use of pharmacy staff and non-staff resources.
- accountability for the provision of secretarial services to senior pharmacy management across the managed pharmacy services ensuring resources are adequate
- co-ordination of secretarial staff in the pharmacy services across the Division ensuring consistency in approach to tasks

Antimicrobial management team

The Antimicrobial Management Team (AMT) is responsible for the implementation of the Scottish Management of Antimicrobial Infection Action Plan and encompasses a clinician–led multidisciplinary team. The AMT has established clear lines of responsibility and accountability as a subgroup of the Area Drug and Therapeutics Committee (ADTC) and provides progress reports to the Lothian Infection Control Advisory Committee and the ADTC. The AMT works closely with the Infection Control team, prescribers and healthcare staff to facilitate healthcare associated infection reduction strategies. Prudent use of antimicrobials and principles of antimicrobial stewardship are endorsed, with the aim of optimising clinical outcomes while minimising unintended consequences of antimicrobial use.

The AMT provides robust monitoring and feedback of antibiotic use in primary/secondary care in addition to surveillance of infection rates. There is collation, analysis and interpretation of data at local and national level. Antimicrobial performance indicators are reviewed by risk management and clinical governance bodies to ensure best standards of good quality and safe care. The AMT has responsibility for implementation and monitoring of antibiotic prescribing policies at local and national level. A programme of education sessions on prudent antimicrobial prescribing is provided by the AMT to medical and non-medical prescribers within both primary and secondary care.

Aseptic services

Five pharmacy Aseptic Units operate across NHS Lothian, Royal Hospital for Sick Children, Royal Infirmary of Edinburgh, St John's Hospital, Western General Hospital and the Edinburgh Cancer Centre. The dispensing of aseptic products is undertaken by highly skilled personnel adhering to national and local guidelines, with all members of staff undergoing regular reassessment of competency.

The units provide aseptically dispensed parenteral medicines for inpatients and outpatients. These include antibiotics,

antivirals, antifungals, cytotoxic chemotherapy, parenteral nutrition, intrathecal medication, monoclonal antibodies and miscellaneous other medicines including those for clinical trials and oral drugs too hazardous to prepare in clinical areas. All sites are audited, against the aseptic dispensing services national audit schedule, in a continual cycle of service improvement.

The aseptic management specialists contribute to national aseptic groups and clinical advisory contracting panels. A NHS Lothian group provides a single system approach to aseptic dispensing and the integration of national policies and quality standards into the service.

Clinical pharmacy

Clinical pharmacy is an area where pharmacists and pharmacy technicians provide direct patient care to individuals which optimises the use of medication and promotes health, wellbeing and disease prevention. Clinical pharmacy staff contribute to the care of patients in all health care settings including children's services, cancer services and mental health. They routinely provide medication therapy reviews and recommendations to patients and other healthcare professionals. Clinical pharmacists ensure appropriate use of medicines by working with other health care professionals or in some cases by prescribing themselves. This is undertaken by providing robust scientific information and advice regarding the safe, appropriate and cost-effective use of medicines. In addition, this expertise is used proactively to ensure and advance rational medication therapy, thereby averting medication therapy misadventures. Advice is given to medical staff, other healthcare professionals, patients and carers. Activity includes:

- prescription review – ensuring that all the medicines and the doses prescribed are appropriate for the patient, taking into account their medical and physical condition
- patient counselling – to ensure that medicines are taken in the most appropriate manner to maximise the benefit and minimise the adverse effect of taking the medicine
- transfer of information between healthcare settings – for example information on sourcing unusual medication is shared with the GP and the community pharmacists
- advising medical and nursing staff – this can be on individual patients or for groups of patients and may be on new medicines or new indications for more established medication
- advising on Therapeutic Drug Monitoring – to ensure that the dose given to the patient is appropriate, especially for medicines where the difference between too little medication and too much is small and consequently the dose of the medicine needs to be tailored for each individual patient.
- answering queries from healthcare staff and the public – this varies from simple questions on when medicines should be taken to complex enquires on specific patients, involving researching medical journals and checking how individual medicines may interact with each other.

On a service-wide basis clinical pharmacists support the wider healthcare agenda to improve quality of services and patient safety. Activity includes:

- supporting development of evidence-based practice – clinical pharmacists are routinely involved in the development of local, regional and national clinical guidelines that support best practice in the use of medicines
- supporting cost-effective use of medicines – within clinical management teams and clinical specialities clinical pharmacists support the efficiencies programme through evaluation of use and expenditure of medicines supporting prescribing initiatives to promote effective use of medicines within budgetary constraints
- supporting national patient safety initiatives – clinical pharmacists are involved in the roll out of medicines reconciliation programmes across NHS Lothian, work to improve safety with insulin and effective use of antibiotics
- teaching other pharmacy staff, other healthcare staff and the public – clinical pharmacists are pivotal in the training of pharmacy and medical students as well as nursing and other healthcare professionals
- pharmacist-led clinics – a number of clinical pharmacists are qualified prescribers and run clinics in primary and secondary care settings including diabetes cardiovascular risk reduction clinics and rheumatology clinics
- pharmacy Practice research, audit and service development – the clinical pharmacy team contribute to improving the quality of patient care by undertaking research themselves or supervising others
- contributing to the evaluated introduction of new drugs into clinical practice, which includes contributing to the work of the Scottish Medicines Consortium (SMC) on evaluating new medicines for use in Scotland.

Clinical trials

There are multiple elements to the pharmacy clinical trials service. These include the provision of pharmaceutical input into commercial and non-commercial trials; ensuring the safe and effective use of clinical trial medication; ensuring that clinical trials involving medicines are established in accordance with relevant local and national guidance; providing expert professional advice to researchers and the Research & Development department on the development and operation of research involving medicines and related substances and acting in an advisory role for academic partners (e.g. the University of Edinburgh and the BioQuarter collaboration) as well as other healthcare professionals and members of the wider research community. At any one time there are approximately 200 active interventional medicine trials of varying complexity ongoing in NHS Lothian.

Protocol and protocol amendment review is the main role for the pharmacists within the trials team, which utilises the skills of clinical pharmacists across NHS Lothian to provide rigorous clinical review for all proposed studies. The team have a longstanding and close working relationship with the ACCORD (Academic and Clinical Central Office for Research and Development) which ensures clear processes across the academic-NHS boundary.

Community pharmacy

Throughout NHS Lothian there is a network of 182 community pharmacies delivering high quality NHS services. These are found in diverse settings, from being the only pharmacy in a small village to one of many in a town centre or shopping centre. The range of NHS services available from community pharmacy has been changing, with all pharmacies providing core services, the most important and longstanding one being the dispensing of prescriptions and the sale and supply of medicines.

The first element of the revised community pharmacy contract introduced in 2006 was the Minor Ailments Service (MAS). Patients who are both in an exemption category for prescriptions and registered with the pharmacy may receive a consultation with the pharmacist and, if required, NHS treatment for many minor ailments.

The Community Pharmacy Public Health Service (PHS) was designed to harness skills of the pharmacist and their team in the pro-active support of self care, offering suitable advice and information to promote healthy lifestyles, with every pharmacy participating in national poster campaigns. A well used development of the PHS is the Community Pharmacy Stop Smoking Service which has been in place since 2008. It has proven to be popular with patients and demonstrates a good success rate.

The final innovation in the pharmacy contract is the Chronic Medication Service (CMS) which is targeted at patients with a long term condition. This involves the patient registering with the pharmacy of their choice and the pharmacist spending some time with them to assess their understanding of their medicines and ensure that they are taking then correctly. Any possible side-effects are also discussed and any other health or lifestyle issues the patient may wish to raise. In the future it is planned that pharmacists will take over care of repeat prescribing while still working closely with the GP.

There are also a number of locally negotiated services. These are not delivered from all pharmacies but the service is provided where there is a recognised need and providing a good geographical spread of access to these services. An example of one of the locally negotiated services is the Community Pharmacy Palliative Care Network. This service allows for access to essential specialist medicines required to manage patients during end-of-life periods. The service is delivered from 22 pharmacies which provide a good geographic coverage of NHS Lothian. An on call service augments the daytime access with 24 hour coverage 365 days each year.

There are various other local services provided where there is demand and these include supervised self administration of methadone and some other drugs, provision of injecting equipment and the provision of Medicine Administration Record Sheets for some patients receiving care at home from social services.

Community Health (Care) Partnership primary care pharmacy services

There are 5.5wte Primary Care Pharmacists (PCPs) posts across NHS Lothian situated within the north and south sectors of Edinburgh or the Community Health (Care) Partnership (CH(C)P) areas of East, West and Mid Lothian. The team are fully integrated within CH(C)P structures, working closely and meeting regularly with lead clinicians, clinical directors and finance/general management.

The PCPs contribute to the safe, effective and economic use of medicines, working within and promoting the implementation of

the NHS Lothian Medicines Governance Strategy. Pharmaceutical services are developed by the team to ensure delivery of high quality patient-centred pharmaceutical care in the community. This includes:

- providing independent advice on managing prescribing budgets
- promoting cost-effective and quality, evidence-based prescribing
- developing, implementing and reviewing prescribing policies
- introducing initiatives to tackle wasteful and harmful prescribing
- contributing to the development of patient information and education/training for various groups of healthcare staff, including community pharmacists
- close working with the Medicines Management Team in the development, implementation and reporting of prescribing indicators, formulary adherence and dissemination of prescribing information through the Prescribing Bulletin.

The PCPs are supported by a prescribing support team of pharmacists and technicians who work within protocols to deliver a range of prescribing quality, efficiency and productivity projects at GP practice level, compile and analyse prescribing data and work closely with the eHealth department to assist practices with electronic prescribing issues. There continues to be a focus to promote sharing and dissemination of the work of the PCPs across CH(C)Ps and at a national level. The primary care pharmacy team achieve these external working relationships through the Scottish Prescribing Advisers Association.

Controlled Drug Governance Team

The Controlled Drug Governance Team (CDGT), under the guidance of the Accountable Officer (the Director of Pharmacy), has specific responsibility for ensuring that all activities involving the management and use of controlled drugs within NHS Lothian are both legal and appropriate. This responsibility extends to ensuring adequate monitoring, inspection and auditing processes are available and employed.

The CDGT undertake inspection visits in all areas in NHS Lothian where controlled drugs are held to ensure that they are stored, recorded and destroyed in line with current legislation. The team work alongside colleagues in other bodies to strengthen and enhance existing monitoring and inspection arrangements. The team also has responsibility for the destruction of unwanted or expired controlled drug stock. All incidents or concerns involving controlled drugs are notified to the controlled drugs Accountable Officer and it is this team's duty to ensure that these are thoroughly investigated and appropriate action taken where necessary.

Patient and public safety is the focus of the CDGT and they aim to provide support and advice in relation to legislation and to improve governance of controlled drugs in partnership with healthcare, social care and the public.

Dispensing services

NHS Lothian hospital-based pharmacy dispensing services are delivered on nine sites, namely: The Royal Infirmary of Edinburgh, Princess Alexandra Eye Pavilion, Lauriston Building, Royal Hospital for Sick Children, St John's Hospital, Western General Hospital, Edinburgh Cancer Centre, Royal Edinburgh Hospital and Roodlands Hospital. The aim of the NHS Lothian hospital-based

pharmacy dispensing services is to deliver a safe and effective service to ensure quality of patient care in the provision of treatment with medicines. This is carried out within the legislative framework whilst ensuring continuous systems improvement within the context of clinical governance.

A large number of dispensing services are provided across the sites including:

- inpatient discharge prescriptions
- inpatient prescriptions in support of One Stop Dispensing (OSD); OSD refers to the practice of combining inpatient and discharge dispensing into a single supply labelled for discharge.
- pre-packing medicines in support of One Stop Dispensing including supply to the Lothian Unscheduled Care Service (LUCS)
- outpatient prescriptions for patients attending specialty outpatient departments
- clinical trial materials
- extemporaneous preparations
- named patient medicines
- oral cytotoxic medicines
- controlled drugs.

The management of dispensing services is supported by a NHS Lothian dispensary managers group made up of the dispensary managers from each of the sites. The purpose of the group is to maintain a consistent approach to operational management of dispensing services. The key areas of focus are quality improvement, delivery against key performance indicators and service development in line with local and national policy.

Education, Research and Development

The Education, Research and Development (ERD) team facilitates the organisation and delivery of local and national education and training programmes for pharmacists and pharmacy staff in NHS Lothian. The ERD team represents NHS Lothian pharmacy service on national groups to influence educational policy and ensure qualifications are designed to meet the needs of the workforce. Formal partnerships are established with Edinburgh's Telford College, Strathclyde Institute of Pharmacy and Biomedical Sciences, NHS Education for Scotland (NES) and University of Tromso, Norway. The team delivers services across East of Scotland (Lothian, Fife, Borders) on behalf of NES.

The ERD team supports workplace tutors and assessors and provides quality assurance and leadership to ensure staff registered for formal qualifications progress in a timely manner in accordance with the agreed training framework. Pharmacy staff are accredited with the General Pharmaceutical Council, University of Strathclyde, NES and the Scottish Qualifications Authority. The ERD team supports NHS Lothian staff who teach on formal academic programmes and provides leadership in pharmacy practice research, whether as part of an educational programme with academic partners, as funded health services research, or service development/evaluation studies.

Medicines Information

The Medicines Information (MI) Service provides support for clinical practice and pharmaceutical care of individual patients across NHS Lothian by providing an enquiry answering service for medicine-related issues; advice on cost-effective use of medicines; and provision of guidelines for intravenous use of medicines. The MI Service answers

approximately 2000 enquiries a year for healthcare professionals working in both primary and secondary care. In addition the service provides training in medicines information skills for optimal use of information resources.

Yellow Card Centre (YCC) Scotland, the adverse drug reaction centre for Scotland, is based within the MI service. YCC Scotland is responsible for:

- raising the profile of adverse drug reactions (ADRs) as an important health issue amongst both professionals and the public in Scotland
- enhancing the quality and quantity of spontaneous ADR reports
- improving education about ADRs for undergraduates and postgraduate healthcare professionals
- promoting research that facilitates better understanding of the causes, effects and avoidance of ADRs.

Medicines management

Medicines management aims to ensure that all patients who require drug therapy receive the most clinically and cost-effective medicines. The use of medicines is optimised by providing high quality, safe and appropriate prescribing by maximising therapeutic benefit, minimising medication errors, and avoiding drug interactions and adverse events. Achieving financial efficiency in prescribing by attaining value for money and reducing waste is also an important goal. Medicines management is a multidisciplinary activity involving doctors, pharmacists, nurses, managers, and many others who are involved in prescribing medicines and/or the implementation of prescribing policies. Those who are involved in the medicines management process in NHS Lothian have developed expertise and knowledge in data interpretation, prescribing regulations, the pharmaceutical industry, critical appraisal of drug trial information and skills in prescribing behaviour modification and communication.

The Medicines Management Team (MMT) for primary care co-ordinates a multiprofessional approach to medicines management by supporting and promoting an evidence-based approach to prescribing. The MMT works closely with the primary care pharmacy team, with the CH(C)Ps, and with many secondary care colleagues and teams. The MMT is responsible for maintaining and developing the Lothian Joint Formulary (**www.ljf.scot.nhs.uk**) in response to new developments in therapeutics and changing prescribing practice. The substantial number of committees and working groups that support this process enables and encourages ownership across primary and secondary care and across the health professions. The MMT is hosted within the pharmacy service and plays an active role in the delivery of key areas of the pharmacy strategy.

Pharmaceutical public health

Pharmaceutical Public Health advice is provided from the Public Health Directorate with close links to the Pharmacy Service. Leadership and advice is provided for the areas of pharmacy that include:

- reducing health inequalities via pharmacy delivery
- health improvement, e.g. smoking cessation, sexual health, healthy weight
- input of advice to areas of harm reduction led by the Specialist in Substance Misuse
- pharmaceutical care needs assessment, including developing methods of assessing need for pharmaceutical care and for assessing provision of need

- emergency Planning. Pharmaceutical aspects of emergency planning, including pandemic flu, avian flu and chemical, biological, radiological and nuclear hazards, business continuity planning and drug alerts
- Medicines Policy
- input to NHS Education Scotland from a pharmaceutical Public Health perspective for public health topics
- provision of pharmaceutical public health advice to ADTC, Pharmacy Senior Management Team, etc.

Prison services

The accountability and responsibility for the delivery of primary and community healthcare services, including pharmacy services, to HMP Edinburgh and HMP Addiewell transferred to NHS Lothian on 1 November 2011. The transfer of prison healthcare is to ensure equity in health care; prisoners will receive the same opportunities to benefit from NHS care as that offered to the general population. There is currently a national contract with an external provider for the supply of pharmaceutical goods and services to prisons.

NHS Lothian Pharmacy Services are involved in monitoring medicine use and formulary management within the prisons, promoting the safe use of medicines in line with the NHS Lothian Safe Use of Medicines Policy & Procedure whilst being cognisant of the prison environment, currency of medicines and the safe systems that are required in custodial environments.

Procurement and distribution of medicines

Procurement and distribution of medicines services are provided by pharmacy stores based at the Royal Infirmary, Western General Hospital, St John's Hospital, Roodlands and the Royal Edinburgh Hospital. Supplies and distribution to wards, clinics, theatres and other specialised units is administered through a pharmacy computer stock control system which allows tracking and costing of all medicines to each of these locations.

Regular review of purchase and issues data enables pharmacy store and distribution services in Lothian to forecast and anticipate customer needs. This ensures access to medicines when required and links to formulary and medicines management. The principles of efficient stock control, best price, and service effectiveness are managed, measured, monitored and reviewed using quality management systems. The quality of medicines purchased is managed by working in collaboration with pharmacy quality assurance services to purchase only from approved suppliers and via national procurement contracting systems.

The Area Pharmacy Store is located in St John's Hospital and acts as a regional store offering a range of procurement and distribution services to customers, Lothian and non-Lothian. The store has a wholesale dealer's licence which is audited, governed and authorised by the Medicines and Healthcare Products Regulatory Agency – the governmental agency with responsibility for standards of safety, quality and performance. The store provides:

- contracting and supply of a range of medicines across Lothian and to the East of Scotland Zone

- procurement, control and supply of vaccine services and campaigns to NHS Lothian public and staff, including childhood vaccines, seasonal flu and human papillomavirus (HPV)
- emergency planning holding site of agreed medicines for Scotland in the event of a terrorist attack.

NHS Lothian Pharmacy Store managers and staff continue to engage with continuous improvement processes to improve their own hospital site-specific services and collaborate using relevant techniques (e.g. Lean management) to rationalise procurement across Lothian Pharmacy.

Quality assurance services

The Quality Assurance Service (QAS) supports the NHS Lothian pharmacy service in the achievement of its objective of providing quality patient care across all of NHS Lothian. This is achieved through the provision of:

- quality assurance environmental monitoring/technical support to aseptic preparation services
- high hazard medical gas testing and routine testing of hospital medical air compressors
- maintenance and operation of the accredited quality management system for the pharmacy service
- provision of specialist input into Pharmacy risk management and governance strategies
- expert advice on the full range of specialist (quality) issues.

The key service drivers for QAS are regulatory requirements, quality improvement, patient safety and risk management (governance). QAS evolves by anticipating and responding to the changing roles of pharmacy in healthcare.

Radiopharmacy

The Radiopharmacy service is provided from a purpose-built unit located in the Department of Pharmacy, The Royal Infirmary of Edinburgh. The unit incorporates an aseptic suite, a facility for radiolabelling of autologous blood cells and laboratories, and operates under a Manufacturer's 'Specials' Licence granted by the Medicines and Healthcare Products Regulatory Agency. It is the only such facility in the area and prepares radiopharmaceuticals for use in diagnosis and therapy. A daily service is provided to ten departments in five hospitals across the Lothians and Fife.

In addition to this routine clinical service, radioactive and non-radioactive materials are prepared for clinical research and a small number of radiopharmaceuticals are supplied to the University of Edinburgh's Veterinary Equine Hospital at Easter Bush. The radiopharmacy also undertakes research and development into radiopharmaceuticals and radiopharmacy practice.

The State Hospital

The State Hospitals Board for Scotland provides care and treatment in conditions of special security for patients from Scotland and Northern Ireland with mental disorders who, because of their dangerous, violent or criminal propensities, cannot be cared for in any other setting. It is a public body accountable to the First Minister for Scotland through the Scottish Government. It is a Special Health Board and the only Hospital of its kind within Scotland.

NHS Lothian has provided Pharmaceutical Services to The State Hospital since 1994. The service encompasses four principal areas of work: medicine procurement and distribution, dispensing services, clinical pharmacy and medicines information.

Substance misuse team

The Pharmacy Team, Substance Misuse Directorate (SMD), based at the Spittal Street Centre (SSC), co-ordinate and improve the quality of pharmaceutical services to substance misusers, and contribute pharmaceutical expertise on substance misuse to strategic and operational planning within NHS Lothian, the SMD, Alcohol & Drug Partnerships and Community Pharmacy. The pharmacy team prescribe at the methadone and buprenorphine titration clinic at the SSC and provide a clinical pharmacy service to Lothians and Edinburgh Abstinence Programme.

They are responsible for and contribute to the provision of pharmaceutical care within the specialist services (Drug Misuse and Alcohol Problems Service, Harm Reduction Team, Blood Borne Viruses Team and Primary Care Facilitation Team). This includes providing professional advice and monitoring medicine use and formulary management within the SMD and providing information on medicine budgets for substance misuse, i.e. dispensing, prescribing and other related expenditure. In addition the team provides advice and support to community pharmacists who provide pharmaceutical care for substance misusers.

Appendix 4

Bibliography

Additional Pharmaceutical Services: Chronic Medication Service: High Risk and New Medicine Intervention Support Tools for the Pharmacy Care Record. NHS Circular: PCA(P)(2012)19. The Scottish Government. 27 November 2012
http://www.sehd.scot.nhs.uk/pca/PCA2012(P)19.pdf

An inquiry into the quality of GP prescribing – The Kings Fund. 2011.
www.kingsfund.org.uk

Better Cancer Care, An Action Plan. The Scottish Government. October 2008.
http://www.scotland.gov.uk/Publications/2008/10/24140351/0

Better Health, Better Care. Action Plan. The Scottish Government. December 2007.
www.scotland.gov.uk/Publications/2007/12/11103453/0

BS EN ISO9001:2008 Quality Management System. Requirements. British Standards Institute. November 2008.

Building a Health Service Fit for the Future: A National Framework for Service Change in the NHS in Scotland ['The Kerr Report']. Scottish Executive Health Department. May 2005.
www.scotland.gov.uk/Publications/2005/05/23141307/131044

Changing Scotland's Relationship with Alcohol. A Framework for Action. The Scottish Government. March 2009.
www.scotland.gov.uk/Publications/2009/03/04144703/0

eHealth Strategy 2011-2017. (Revised July 2012 to include sixth strategic aim). The Scottish Government. 28 November 2012
www.scotland.gov.uk/Publications/2012/11/7663/0

Integration of Adult Health and Social Care Bill – Programme for 2012-13. Scottish Government.
www.scotland.gov.uk/About/Performance/programme-for-government/ 2012-13/Adult-Health-Bill

Living and Dying Well: A national action plan for palliative and end of life care in Scotland. The Scottish Government. October 2008.
www.scotland.gov.uk/Publications/2008/10/01091608/0

Managing Long Term Conditions. Audit Scotland. August 2007.
www.audit-scotland.gov.uk

Medicines, Ethics and Practice: A guide for pharmacists and pharmacy technicians. Royal Pharmaceutical Society of Great Britain. No.36, July 2012.
www.rpharms.com/mep/download-the-mep.asp

Mental Health Strategy for Scotland: 2012-2015. The Scottish Government. 19 November 2012
www.scotland.gov.uk/Resource/0039/00398762.pdf

National Delivery Plan for Children and Young People's Specialist Services in Scotland. The Scottish Government. March 2008
www.scotland.gov.uk/Publications/2008/02/25093458/14

Patients and their medicines in hospital. The Scottish Government. March 2006.
www.scotland.gov.uk/Publications/2006/03/01111407/11

Procurement, Distribution and Storage of Medicinal Products. Action Plan 19. Scottish Health Management Efficiency Group (SCOTMEG). 1989.

Quality Strategy – putting people at the heart of our NHS. The Scottish Government. May 2010.
www.scotland.gov.uk/Publications/2010/05/10102307/0

Safe Use of Medicines Policy and Procedures. NHS Lothian. July 2012.
http://intranet.lothian.scot.nhs.uk/NHSLothian/NHS%20Lothian/BoardCommittees/AreaDrugTherapeutics/Documents/Forms/AllItems.aspx

The Lothian Joint Formulary. NHS Lothian.
www.ljf.scot.nhs.uk

The Patient Rights (Scotland) Act. 2011.
www.legislation.gov.uk/asp/2011/5/contents/enacted

The Right Medicine: A Strategy for Pharmaceutical Care in Scotland. Scottish Executive. 2002.
www.scotland.gov.uk/Resource/Doc/158742/ 0043086.pdf

The Scottish Management of Antimicrobial Resistance Action Plan [ScotMARAP]. Healthcare Associated Infection Task Force. The Scottish Government. March 2008.
www.scotland.gov.uk/Publications/2008/03/12153030/0

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