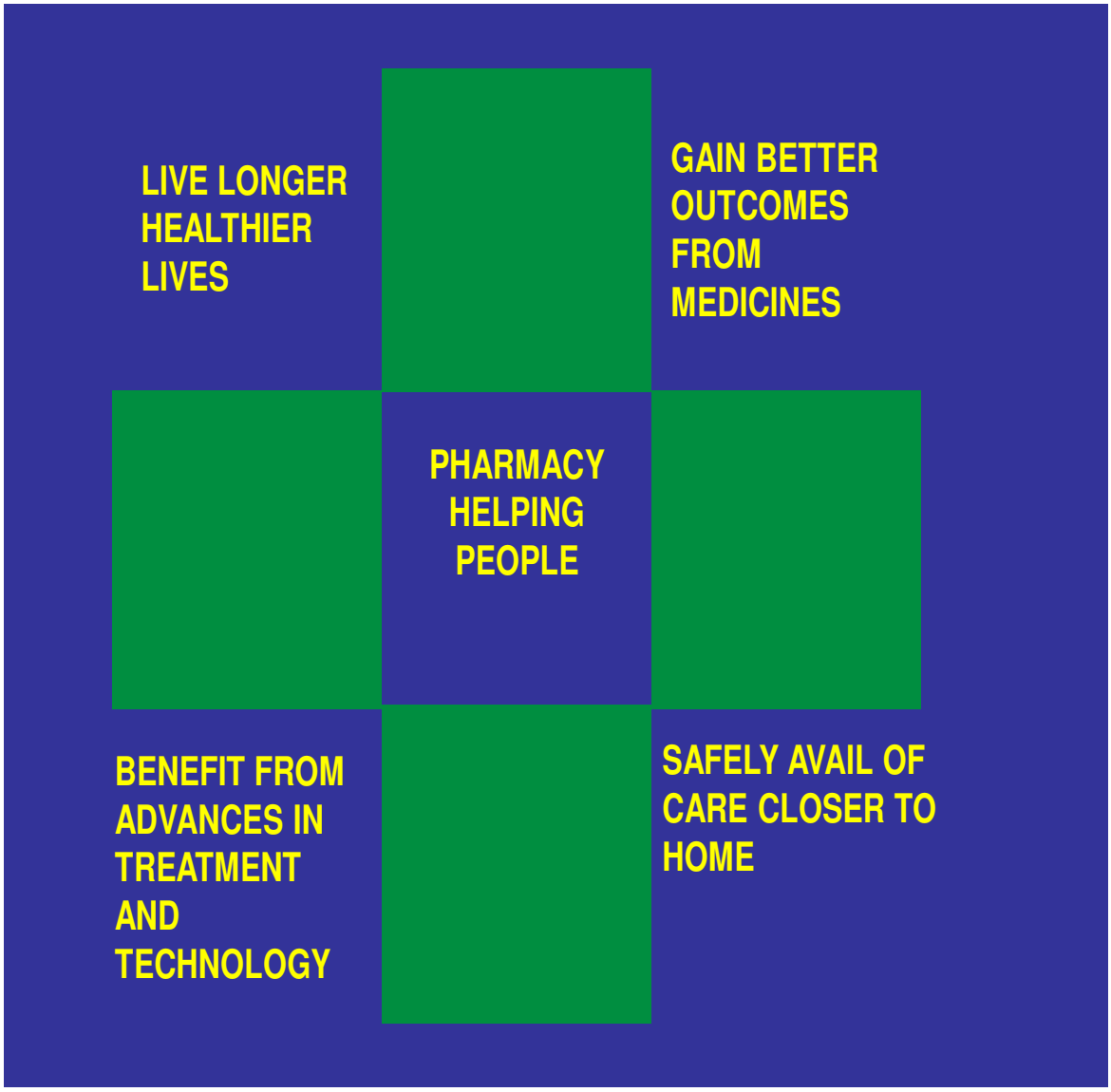
MAKING IT BETTER THROUGH PHARMACY IN THE COMMUNITY



A FIVE YEAR STRATEGY FOR PHARMACY IN THE COMMUNITY

MAKING IT BETTER THROUGH PHARMACY IN THE COMMUNITY

Contents Page no.

MAKING IT BETTER THROUGH PHARMACY IN THE COMMUNITY –

A 5 YEAR STRATEGY

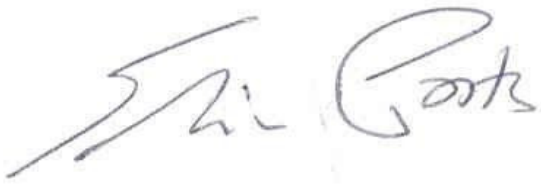
Foreword by the Minister for Health, Social Services and Public Safety

My vision for health and social care is to raise the quality of care for patients, clients and service users, improve outcomes, and enhance the patient experience. Pharmacy services in the community have a key role to play in delivering this vision by supporting the safe and effective use of medicines and promoting health and wellbeing.

I welcome the launch of this strategy which provides a clear direction for the delivery of pharmacy services in the community over the next 5 years. A direction which lies not only in the dispensing and supply of medicines, but also in the provision of advice, information and services to help people gain better outcomes from their medicines and live healthier lives.

A priority for me as Health Minister is to see an increased utilisation of pharmacists' clinical skills in the delivery of services in the community and greater collaboration of pharmacists with other health and social care professionals to demonstrably contribute to the improvement of the health of the population.

The development of the Strategy has been overseen by a Steering group established by the Department of Health, Social Services and Public Safety. The membership of the Steering Group was drawn from a wide range of stakeholders including Community Pharmacy Northern Ireland, community and hospital pharmacy, GPs, nurses, pharmaceutical industry, wholesalers and academia. The Department has also consulted and taken the views of individuals and community organisations in the development of the strategy. I am pleased to endorse the Strategy and would also like to express my appreciation of those people who took part in the development of the strategy and those who responded to the consultation.



EDWIN POOTS MLA
Minister of Health, Social Services and Public Safety

INTRODUCTION

Background

1. People recognise pharmacists as experts in medicines responsible for the safe supply and sale of prescriptions and over the counter medicines and the provision of information, advice and services that aim to support healthier lifestyles and to optimise the benefits of medicines use.

2. People regularly access pharmacy services in the community. It is estimated that on a daily basis approximately 9% of the population visit community pharmacies in the urban and rural areas where they live[1]. Community pharmacies are often open when other healthcare providers are unavailable and offer convenient access to a trained healthcare professional without the need for an appointment.

3. In addition, people increasingly access services provided by pharmacists in other locations in the community such as GP practices, at home, including nursing or residential homes, workplaces and in intermediate care settings.

4. This strategy provides a refreshed direction for the delivery of pharmacy services for people in the community which is aligned with current policies, plans for reform of the Health and Social Care Service (HSC) and changing population demographics and needs.

Purpose of Document

5. In 2004, the Department published "Making it Better -A Strategy for Pharmacy in the Community"[2], which led to the development of a number of regionally and locally commissioned services to address public health challenges and improve medicines use. This has resulted in a legacy of services which are available in most community pharmacies today including:

[1] DHSSPS Community Pharmacy Activity Survey (Pricewaterhouse Coopers), 2000
[2] DHSSPS Making it Better 2004

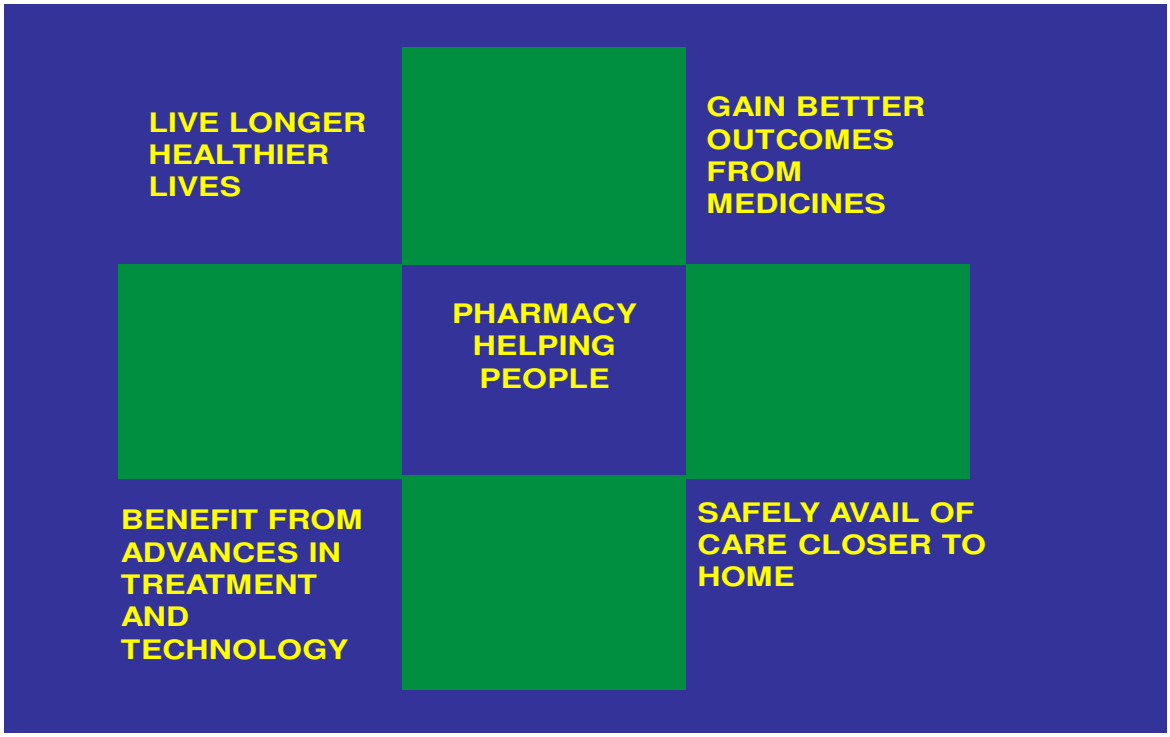
- A Minor Ailments Service which supports self care through improved access to advice and a range of medicines used to treat common conditions without the need for a GP consultation.
- A Repeat Dispensing Scheme which improves access to medicines for people receiving repeat prescriptions.
- A Manage Your Medicines Scheme that supports improved adherence through medicines reviews.
- A Smoking Cessation Service which offers people committed to quit a 12 week programme combining behavioural and cessation therapies.

6. The strategy also supported the development of the Building the Community Pharmacy Partnership[3] which supports projects that enable pharmacists, community groups and local people to work together to address health inequalities using a community development approach. In addition, new professional roles were developed in the period 2004 to 2013 involving pharmacists working as prescribers and providing support to GP practices to help manage the care of older people and people with long term conditions, provide medicines reviews and to support quality and cost effective prescribing.

7. The 2004 strategy is almost 10 years old and has been updated to provide a clear direction for the delivery of pharmacy services in the community which place the individual at the centre and aim to optimise their health and wellbeing throughout life by:

- Helping people to gain better outcomes from medicines;
- Helping people to live longer, healthier lives;
- Helping people to safely avail of care closer to home; and
- Helping people to benefit from advances in treatment and technology.

[3] CDHN, Building Community Pharmacy Partnership
http://www.cdhn.org/pages/index.asp?title=Building_the_Community-Pharmacy_Partnership



8. The above themes are described in chapters 1 to 4, each of which contains a strategic goal, sets out the background to this area, identifies what needs to be done to achieve or work towards the achievement of the goal and identifies what success might look like. The chapters and associated strategic goals are:

Chapter 1 - Helping people to gain better outcomes from medicines

Strategic Goal – To ensure that throughout life, in accordance with their clinical needs, people have access to timely, safe, quality assured medicines supplied with appropriate advice and support to help them gain the best outcomes from their treatment and avoid harm.

Chapter 2 - Helping people to live longer, healthier lives

Strategic goal – To provide people with access to advice and support from pharmacists in the community promoting, public health, self care, improved health and wellbeing and preventing illness.

Chapter 3 - Helping people to safely avail of care closer to home

Strategic Goal – To provide improved access to clinical expertise and interventions for patients closer to home by making the best use of the skills of pharmacists working together with/alongside other healthcare professionals.

Chapter 4 - Helping people to benefit from advances in treatment and technology

Strategic Goal – To support better health outcomes for patients through advances in medicines treatments and technology.

9. Taken together these chapters cover a broad spectrum of development designed to secure the strategic integration of pharmacy services across the HSC which will enable patient-targeted clinical pharmacy skills to contribute to better patient outcomes through improvements in quality, safety and effectiveness in the supply and use of medicines. Furthermore, the strategic integration of pharmacy services within communities will lead to improved engagement and partnerships with local people and community and voluntary organisations to address local health needs and tackle health inequalities.

Policy Context

10. The recent review of health and social care in Northern Ireland which led to the Transforming Your Care (TYC) proposals envisages a changing model of care for the people of Northern Ireland. Built around the needs of patients, plans are being implemented to increase individual choice and involvement in care, move care as close to home as possible and improve social care and support. The reform proposals also recognise the contribution that pharmacy services can make to deliver the new model of care and recommend an enhanced role for pharmacy with a greater focus on health promotion and medicines management, to support patient centred care by helping people stay independent and well, gaining optimal benefits from medicines when needed. The increased pharmacy focus on these areas has the potential when implemented to reduce the number of medicines related consultations at

GP surgeries and Out of Hours Centres and avoidable hospital admissions for medicines related issues.

11. In November 2011, *Quality 2020: A 10-Year Strategy to Protect and Improve Quality in Health and Social Care in Northern Ireland* was published[4]. It defines quality as having 3 key components; safety; effectiveness and patient/client focus; each of which are relevant to the delivery of pharmacy services. A number of other current strategies recognise the contribution of pharmacy services in the community to meeting their recommendations. These include for example; the Living with Long Term Conditions Policy Framework; the Older People's Service Framework; the Tobacco Control Strategy; the Breastfeeding Strategy and New Strategic Directions for Alcohol and Drugs, Phase 2.

12. The Programme for Government sets out 5 key strategic aims including improvements in social and economic conditions and health and well being and a number of cross cutting strategies have been published in response to these priorities including: Regional Development Strategy 2025[5]; Economic Strategy[6]; Sustainable Development[7]; and DHSSPS has also consulted on a Public Health Strategic Framework.

13. These strategies all have the potential to impact on the health and social care outcomes of the population and moving forward the development of effective inter-government department partnerships is expected to offer the opportunity for making the most of public expenditure and ensuring joined up action at a local level.

14. An agreed strategic direction for the integration and delivery of contracted and commissioned pharmacy services across HSC and community interfaces will support improved health outcomes for the population aligned to health promotion and medicines management services for patients closer to home.

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[4] *Quality 2020: A 10-Year Strategy to Protect and Improve Quality in Health and Social Care in Northern Ireland DHSSPS*
[5] Regional Development Strategy http://www.drdni.gov.uk/rds_2035.pdf
[6] Economic Strategy http://www.northernireland.gov.uk/ni-economic-strategy-revised-130312.pdf
[7] *Everyone's Involved'* 2010.http://www.ofmdfmni.gov.uk/focus_on_the_future.pdf

Economic Context

15. The current economic climate, which has given rise to increased levels of unemployment and deprivation and potentially to increased levels of ill health, presents a challenge for the delivery of all health and social care services. As financial pressures increase within health and social care budgets, the need to spend more on prevention becomes clearer, yet also more difficult because of the pressure on service delivery.

16. There are over 37 million prescription items dispensed annually in Northern Ireland at a cost of around £400m[8]. Measures have been put in place to ensure that high quality medicines are provided in the most cost effective way. However, prescribing costs are likely to continue to increase as demand rises, newer products become available and more expensive technological advances are introduced to improve medicinal care.

17. The overall policy direction envisages moving services and monies from the hospital sector to the community and will necessitate a change in the way that services are commissioned and delivered. It is important that the contribution of pharmacy services in the community is recognised as part of this transition and that the opportunities for improved outcomes are realised for the patient as a result of redirected services and associated investment.

Changing health needs

<u>An Ageing Population</u>

18. Northern Ireland has the fastest growing population in the United Kingdom. Currently there are approximately 1.8m people in Northern Ireland, a figure which is expected to rise to 1.937m by 2022[9]. From a health and social care perspective, possibly the most significant aspect of this increase is the rising number of older people.

[8] Prescription Cost Analysis Report BSO
[9] NI Census Data 2011

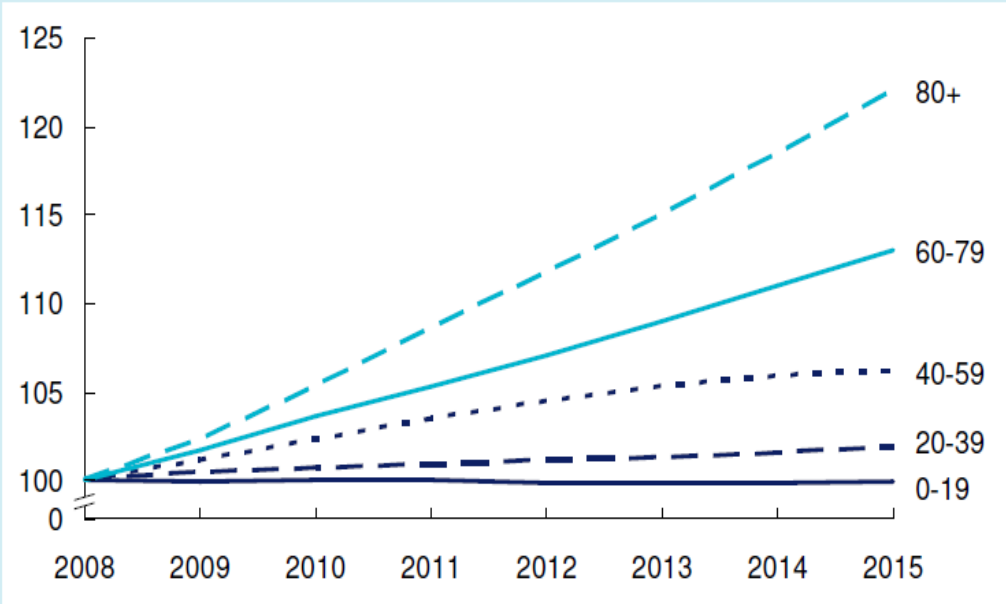

Figure 1: Projected Age Profile in Northern Ireland

19. The number of older people over 65 years of age will continue to increase as life expectancy increases. It has been estimated that the proportion of the population of pensionable age[10] in Northern Ireland will rise by 27% by 2015. Within the next 10 years it is estimated that the number of people aged 65 years and over will increase by 39% to 396,000 and those aged 85 years and over will increase by 67% to 47,900[11].

20. Older people consume a larger proportion of medicines than other age groups with many individuals commonly receiving three, four or more regular medicines. As both the number of older people and the number of treatments for chronic and degenerative diseases increase, there will be an exponential increase in demands for patient education, supported self management for people with long term conditions, therapy monitoring, prescribing advice and information for carers and support for older carers. Increasingly as people get older and continue to live in their own homes they will need support with medicines taking and adherence. Inevitably, this will impact on the provision of pharmacy services in the community.

[10] Pensionable Age over 65
[11] NI Census Data 2011

Chronic/long term conditions

21. As people get older they are more likely to develop a long term condition or to experience co-morbidities i.e. more than one long term condition. The Institute of Public Health in Ireland has estimated that in line with the ageing population that between 2007 and 2020 the prevalence of long term conditions amongst adults in Northern Ireland with hypertension, coronary heart disease, stroke and diabetes is expected to increase by 30%.[12]

Table 1

	2007		2015		2020	
	No.	% of population	No.	% of population	No.	% of population
Hypertension	395,529	28.7	448,011	30.3	481,867	31.7
CHD	75,158	5.4	87,848	5.9	97,255	6.4
Stroke	32,941	2.4	38,405	2.6	42,457	2.8
Diabetes (Type 1 & 2)	67,262	5.3	82,970	6.0	94,219	6.6

Source – Institute of Public Health in Ireland -"Making Chronic Conditions Count"

Public Health Challenges

22. There are a number of factors which contribute significantly to the overall prevalence of disease in Northern Ireland. These are - high blood pressure, tobacco use, harmful misuse of alcohol, high serum cholesterol, overweight, unhealthy diet and insufficient physical activity. Pharmacy services have a role to play in the management of all of these risk factors many of which are associated with health inequalities and related to lifestyle choices.

23. In addition, substance misuse, including alcohol and prescription drug misuse, is a significant public health and social issue in Northern Ireland. It is estimated that alcohol is a significant factor in 40% of all hospital admissions, rising to 70% of Accident and Emergency weekend attendances. One-fifth of

[12] Institute of Public Health in Ireland -"Making Chronic Conditions Count"

adults (aged 15-64 years) in Northern Ireland have used sedatives and tranquillisers (20%) and anti-depressants (21%) at some point in their lifetime with women reporting higher prevalence rates than males for lifetime use of sedative and tranquillisers and anti-depressants[13]. A number of initiatives are already in place involving pharmacy to address these issues but this remains a key priority for the Health and Social Care Service.

24. Healthy choices are most likely to be made by motivated people, and by people who have a family or wider support network in place. Conversely, it has been argued that for some people, in particular people who feel excluded from society, unhealthy choices can be a way of coping with stress or difficult living conditions. Lifestyle choices are greatly affected by social and economic environments in which people live and it is important to consider these wider factors – often described as the social determinants of health – when planning interventions to promote healthier lifestyles[14]. Risk factors often occur more frequently amongst people with low educational attainment, lower occupational status and lower income. One way to reduce lifestyle-related risk factors is to provide people with information about the negative effects on health of different risk factors to help support long term behavioural changes.[15]

25. A third of older adults in the UK have difficulties reading and understanding basic health related written information. Census data shows that almost 60% of adults aged 16 -74 in Northern Ireland have no or low level educational qualifications and this may impact health literacy. Not having English as a first language can also impact significantly on the ability to assimilate and use information. Poorer understanding is associated with higher mortality. Limited health literacy capabilities have implications for the design and delivery of pharmacy services and formats for the provision of information for people and carers.

[13] Belfast Healthy Cities, information on Health Equity in all Policies http://www.belfasthealthycities.com/phase-v-2009-2013/heiap.html

[14] DHSSPS Comparison of deprived areas and the Northern Ireland Average for Accessibility Indicators, http://www.dhsspsni.gov.uk/equality_inequalities_ap4.pdf

[15] Public Health Agency and HSC Board for Northern Ireland (2011) Community Development Strategy for Health and Wellbeing, http://www.publichealth.hscni.net/publications/community-development-strategy-may-2012

26. Resistance to antibiotics is an increasingly serious public health problem. Rising levels of antibiotic resistant bacteria could be managed by reducing the inappropriate use of antibiotics. Pharmacy can help address this through the provision of information, advice and services which support improved self care, health literacy and reduce avoidable attendances at GP surgeries and Out of Hours centres.

The Pharmacy Workforce

27. There are almost 2,100 pharmacists registered with the professional regulator - the Pharmaceutical Society of Northern Ireland. Of these 68% work in community pharmacy, 20% in hospital pharmacy and 12% in other settings. The majority of pharmacists working in the community are employees, rather than owners of the pharmacies in which they work. Around 10% of all registered pharmacists are qualified as independent prescribers, most working in hospital pharmacy or in GP practices. Pharmacist prescribers must comply with the provisions set out in guidance issued by the Pharmaceutical Society of Northern Ireland - "Professional Standards and Guidance for Pharmacist Prescribers". In addition pharmacist prescribers within the HSC work within the governance arrangements of HSC Trusts or the HSC Board.

28. Pharmacists in hospitals and in community pharmacies are responsible for the procurement of medicines and their supply to patients with provision of relevant information to support their safe and effective use. In addition, pharmacists use their clinical skills to improve patient outcomes through safe and effective medicines management.

29. As more people use medicines to manage one or more long term conditions and more specialist care is delivered closer to home, there will be an increasing demand for clinical advice and input on behalf of patients and carers in the community to support safe and effective medicines use. Pharmacists are well placed to provide this clinical role. Entrants to the profession of pharmacy complete a four-year Masters level degree course, encompassing pharmaceutical, clinical and behavioural sciences. Before they register with the Pharmaceutical Society of Northern Ireland (PSNI) they

complete a one-year, practice-based pre-registration training programme and subsequently complete a range of post-graduate training. This means that pharmacists are highly trained in medicines technology and therapeutics and offer a range of unique, accessible and valuable skills to the Health and Social Care Service. It is in the public interest to ensure that pharmacists' expertise is fully applied to benefit patients.

30. In community pharmacy, market forces have given rise to competition which has required business decision-making in line with efficiency, economic purchasing and value-added deployment of staff for pharmacies to thrive. This strategy recognises that pharmacists working in this setting balance their professional ethos and commercial duties and should continue to be supported to put the needs of the patient first and deliver quality pharmacy services. However, it should be possible to manage any perceived conflict of interest which may arise as a result of the increasing role of pharmacy contractors as service providers through the development of appropriate service specifications, outcome measurements and governance arrangements.

Advances in treatment and technology

31. In the future the number and technical complexity of prescription medicines that people use is likely to increase. This will be driven by:

- The development of more biotech medicines, including gene therapy;
- The development of medicines to treat previously untreatable conditions;
- Increased longevity due to medical advances; and
- Advances in selection and monitoring of medicines more closely tailored to the individual's requirements.

32. Advances will enable drug selection on the basis of an individual's genetic make-up. These techniques enable, for example, the identification of individuals who cannot metabolise particular drugs well and are therefore highly susceptible to side effects. Vulnerable patients can then be given lower doses or alternative, safer treatment. Increasingly technology will also be

applied to support patients and tele-monitoring and other developments will enable people to be supported to manage their health from their own homes.

33. There will be increasing use of electronics and computer technology which will provide opportunities for community pharmacy to provide more services and be integrated with other healthcare professionals. Electronic prescribing will enable the electronic transmission of prescriptions from GPs direct to pharmacies as is the case in other parts of the UK. There will be an increased use of automation in the management of stock and supply of medicines and 'dispensing robots' have already been installed in some hospitals and community pharmacies in Northern Ireland.

34. For people to gain the optimal health benefit from advances in treatment and technology related to medicines they will need access to pharmacy services providing advice, information and support in line with their clinical needs.

CHAPTER 1 – HELPING PEOPLE TO GAIN BETTER OUTCOMES FROM MEDICINES

STRATEGIC GOAL

To ensure that throughout life, in accordance with their clinical needs, people have access to timely, safe, quality assured medicines supplied with appropriate advice and support to help them gain the best outcomes from their treatment and avoid harm[16].

Introduction

1. Delivery of this strategic goal will involve pharmacy services maintaining timely access to safe, quality assured medicines with a renewed focus on optimising the health benefits of the medicines that are supplied, reducing the risks associated with their use and misuse, and minimising waste. This will represent a signature role for community pharmacy in medicines management, supporting care closer to home and contributing to a reduction in GP consultations and unplanned admissions to hospital for medicines related reasons. It will also support improved safety, quality and patient/client focus in the supply and use of medicines.

2. The Audit Commission (2001)[17] reported that effective medicines management is central to the delivery of good quality healthcare and an effective pharmacy service underpins this. It defined medicines management as "encompassing the entire way that medicines are selected, procured, delivered, prescribed, administered and reviewed to optimise the contribution that medicines make to producing informed and desired outcomes of patient care". Delivering effective medicines management is a priority for the HSC and significant improvements in the processes and systems related to medicines have already been delivered. In the future delivering high quality systems will remain important along with a renewed focus on supporting people to obtain the best possible outcomes from their medicines while minimising the risk of harm. This shift towards better patient outcomes built on quality systems is known as medicines optimisation.

[16] In this Strategic Goal medicines is a general term used to refer to prescribed medicines that are self administered and include, tablets, liquids, ointments and eye drops.
[17] Audit Commission – A Spoonful of Sugar 2001

3. Currently all community pharmacies contribute to medicines optimisation through the safe and effective dispensing, sale and supply of medicines. Many community pharmacies also provide services which aim to: improve access to repeat medicines (Repeat Dispensing Scheme); support high quality prescribing (Community Pharmacy Intervention Scheme) and support the safe and effective handling of medicines in domiciliary settings including residential and nursing homes. In addition optimising health outcomes for patients is supported through a number of services which seek to improve medicines taking and support adherence (Managing Your Medicines Scheme, Targeted Medicines Use Review, Instalment Medicines Scheme).

4. In primary care, pharmacist prescribing services are commissioned to support the management of patients with long term conditions and provide medicines reviews for elderly residents of care homes. Pharmacists also provide advice to GP practices. This contributes to improving the standards, quality and cost effectiveness of prescribing in compliance with the Northern Ireland Medicines Formulary.

What needs to be done?

5. In order to achieve this strategic goal there is a need to ensure that pharmacy services in the community focus on the following areas relating to medicines optimisation:

- Maintaining timely access to safe, quality assured medicines;
- Providing reliable, evidence based, accessible information when medicines are supplied;
- Optimising the health benefits of medicines by supporting improved adherence;
- Reducing harm related to medicines; and
- Reducing medicines waste.

Each of these areas is considered in turn below.

Maintaining timely access to safe, quality assured medicines

6. Each year community pharmacies in Northern Ireland safely dispense in excess of 37 million prescription items, for medicines costing over £400million. The majority of medicines are supplied from manufacturers and distributed through 3 main wholesalers to the community pharmacy and appliance contractor network. The system operates well at the present time, providing people with access to medicines in a range of locations across Northern Ireland.

7. This strategy supports the existing supply model which delivers access to safe, quality assured medicines from community pharmacies. However, it also recognises that the current model may need to adapt to support the strategic shift envisaged by Transforming Your Care towards patient care closer to home. For example, this could involve an increased role for community pharmacists in the supply and management of specialist medicines and technologies, currently handled by hospitals.

8. Pharmacists are required by their Professional Code of Ethics to ensure safe and timely access to medicines and the public expectation is that medicines should always be available for collection on presentation of a prescription form. This is normally the case although Northern Ireland is part of a wider UK and global medicines market and shortages in the availability of some medicines can arise. There are many potential reasons for shortages and when they occur it can be very distressing and worrying for patients.

9. Key developments in medicines manufacturing, pricing and distribution models in the wider UK can impact differentially in Northern Ireland due to location and logistics. In this regard there is a need to ensure that Northern Ireland can keep abreast of future developments and to ensure a safe and secure supply of medicines. This is particularly important in relation to the timely provision of medicines to the patient and the management of medicines shortages.

10. In tackling the issue of shortages the UK Governments have to date focussed on stakeholders' professional responsibilities relating to the sale and supply of medicines. However, it may now be necessary to seek a commitment from suppliers and distributors of medicines at community pharmacy, manufacturer and wholesaler level to provide a service within a set time frame.

11. One consequence of the current supply model is the challenge of managing resources associated with procuring medicines and maintaining an adequate stock base with resources needed to deliver face to face patient care. Delivery of this strategic goal will require more patient contact with pharmacists, particularly when medicines are supplied. In some community pharmacies this may require a review of standard operating procedures to ensure the optimal use of staff skills or automation. The effective use of existing pharmacy services such as the Repeat Dispensing Scheme would help to predict and manage stock control. Patient registration would further support this.

12. Community pharmacy has an important role in maintaining patients' access to medicines in emergency situations such as pandemic flu or severe weather and it is important that robust business continuity arrangements are in place to support this locally and regionally. In addition, effective arrangements should exist to enable patients to access medicines out of hours including those for palliative and end of life care.

13. Medicines in the UK are subject to rigorous scrutiny by the Medicines and Healthcare Products Regulatory Agency (MHRA) which ensures that they meet acceptable standards on safety, quality and efficacy and provides reassurance for the public accessing medicines through pharmacies.

<u>Providing reliable, evidence based, accessible information when medicines are supplied.</u>

14. Pharmacists follow professional guidance issued by the Pharmaceutical Society of Northern Ireland (*Professional Standards and Guidance on the Sale and Supply of Medicines)* which sets out what the public can expect

when medicines are either purchased over the counter or supplied on prescription. This guidance includes a requirement for pharmacists to complete a clinical assessment of each prescription and provide sufficient information and advice to enable the safe and effective use of the prescribed medicine.

15. There will be occasions when the pharmacist's clinical assessment of the prescription will indicate that specific or essential advice and information should be provided to ensure the safe and effective use of the patient's medicine. Alternatively there may be little or no need for the provision of extra information or advice other than that contained on the medicine's label and patient information leaflet.

16. All pharmacies should have as part of their standard operating procedures a risk stratification process, similar to the risk assessment approach currently in place in hospitals, which will help them to identify those patients who require specific information or advice from the pharmacist at the point of supply. Risks are higher for some medicines with evidence that 50% of preventable drug related hospital admissions are associated with four particular drug types – anti-platelets, NSAIDs, diuretics and anticoagulents. Risks are also higher for older people, children, people taking multiple medications and people transferring between care settings.

17. In addition, everyone in receipt of prescribed medicines should be asked, each time they receive a supply, if they have any questions about their medicines and have the opportunity to request additional advice and information from the pharmacist. Information should be provided in a form which the patient can understand.

18. Patients have an expectation that their medicines will look the same from one prescription to the next. This is especially important to older people and people with long term conditions obtaining repeat prescriptions. Under the current community pharmacy supply model this is not always possible, particularly for generic medicines, which are made by a wide range of manufacturers. Unexplained changes to how repeat medicines look may

reduce patient confidence and adversely affect adherence. Consistency should always be the aim and pharmacists must advise patients when the presentation of their medicine changes and provide reassurance of continued efficacy.

Optimising the health benefits of medicines by supporting improved adherence

19. Adherence is defined in the NICE Clinical Guideline 76[18] as the extent to which the patient's behaviour (relating to medicines taking) matches the agreed recommendations of the prescriber. Taking the right medicines at the right time is the final step in the medicines management process and perhaps the most important in terms of health outcomes, assuming the appropriateness of the prescribed treatment.

20. Medicines are the most common medical intervention within our population and at any one time 70% of the population[19] is taking prescribed or over the counter medicines to treat or prevent ill-health. Medicines use increases with age and 45% of medicines prescribed in the UK are for older people aged over 65 years and 36% of people aged 75 years and over take four or more prescribed medicines[20]. Although the volume and costs of prescribed medicines are increasing there is evidence that between a half and a third of medicines prescribed for long term conditions are not taken as recommended.[21] This can involve people taking either more or less medicines than prescribed or not taking them at all.

21. Non-adherence with treatment is common. It should not be considered simply as the patient's fault and it can result from a failure to fully agree the prescription with the patient in the first place and to support the patient once

[18] Nice Clinical Guideline 76
[19] Office of National Statistics Health Statistics 1997.
[20] Department of Health (2001). Medicines and Older People. Implementing medicines-related aspects of the NSF for Older People. Department of Health.
link:http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4008020
[21]) Horne R, Weinman J, Barber N, Elliott R, Morgan M. Concordance, adherence and compliance in medicine-taking. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R & D. 2005.
21a)Which drugs cause preventable admissions to hospital? A systematic review
R L Howard, A J Avery,[1] S Slavenburg,[2] S Royal,[3] G Pipe,[1] P Lucassen,[2] and M Pirmohamed[4]Br J Clin Pharmacol. 2007 February; 63(2): 136–147.

the medicine has been dispensed. The factors which contribute to non-adherence fall into two overlapping categories:

- Intentional where the patient decides not to follow the treatment recommendations perhaps because of concerns about the value or effectiveness of medicines, their side-effects, and the inconvenience of taking the drugs at the prescribed times and frequency.

- Unintentional where the patient wants to follow the treatment recommendations but is prevented from doing so by practical barriers which include cognitive problems, visual impairment, poor organisational skills, taking too many drugs and difficulty accessing medicines.[22]

22. Whatever the cause, non-adherence represents a health loss for patients and an economic loss for society. Consequences include; poorer than expected clinical outcomes; reduced quality of life; deterioration of health and unplanned admissions to hospital. In the United Kingdom the NHS costs of hospital admissions resulting from people not taking medicines as recommended were estimated at £36-196 million in 2006-7[23]. In addition, a large number of appointments with GPs and Out of Hours services are related to medicines use.

23. A Cochrane review 'Interventions for enhancing medication adherence' concluded that improving medicines-taking may have a far greater impact on clinical outcomes than improvements in treatments[24]. In this regard there is a key role for pharmacy in the community:

- Assessing and recognising non-adherence to identify those patients who may need support;

[22] Steinman MA and Hanlon JT. Managing Medications in Clinically Complex Elders "There's Got to Be a Happy Medium". Journal of the American Medical Association. 2010; 304(14):1592-1601. doi: 10.1001/jama.2010.1482
[23] NICE Costing Statement: Medicines Adherence: involving patients in decisions about prescribed medicines
[24] Haynes RB, Ackloo E, Sahota N, McDonald HP, Yao X. Interventions for enhancing medication adherence.

- Providing support to improve adherence, through discussion, provision of advice and information and other practical support including technology, to address the concerns and needs of the individual;
- Reviewing medicines, identifying adherence issues, supporting long term medicines use, agreeing actions to improve medicines taking, proposing changes to medicines regimens; and
- Improving communications between healthcare professionals involved in the individual's care.

24. Currently community pharmacists may identify issues relating to adherence, such as missed or irregular medicines-taking, when supplying prescribed medicines, particularly to their regular patients using repeat prescriptions.

Example of best practice

The Community Pharmacy Medicines Use Review Service

Many community pharmacies provide a Medicines Use Review (MUR) service which involves a one to one discussion between the patient and pharmacist to help identify and address issues relating to medicines taking and improve outcomes.

The service aims to improve patient knowledge, adherence and use of their medicines by:

- *establishing the patient's actual use, understanding and experience of taking their medicines*
- *identifying, discussing and resolving poor or ineffective use of their medicines*
- *identifying side effects and drug interactions that may affect adherence*
- *improving the clinical and cost effectiveness of prescribed medicines and reducing medicine wastage.*

The Targeted Medicine Use Review service was launched in April 2013 with a focus on respiratory medicines although in future the service may be expanded to include other clinical areas and to help support adherence for patients after discharge from hospital.

Reducing harm related to medicines.

25. All medicines can cause side effects and even when used as prescribed there is a chance of an adverse event or drug interaction occurring. Often the consequences are minor and transient however they can be serious, require hospital admission and result in death. The recent Practice study[25] found a prescribing error rate in general practice of around 7.5% and further evidence showed that around one in 15 hospital admissions are medication related,

[25] Investigating the prevalence and cause of prescribing errors in general practice www.gmc-uk.org ___The_PRACTICe_study_Reoprt_May_2012.

with two-thirds of these being preventable[26]. Community pharmacists can help patients avoid or reduce some side effects by advising of warning signs and promoting safe and effective use of medicines through discussion and the provision of information and advice.

26. Effective medicines governance arrangements exist within the Health and Social Care Service which focus on the safety and risk management issues concerned with medicines and importantly the systems risks that lead to error and resultant adverse incidents. It is important that community pharmacy is included in such networks and arrangements.

27. Planned changes to health and social care will mean that there may be a number of healthcare professionals and prescribers involved in the care of a patient at the same time. If harm related to medicines is suspected, for example as a result of an adverse event or non-compliance, effective communication between the patient, pharmacist and other healthcare professionals involved in their care will be essential. Information on medicines related harm should be recorded on the patient's Electronic Care Record which should be accessible to community pharmacies to enable the identification of patients who are most at risk and need pharmacy input to ensure the safe and effective use of medicines.

28. Risks associated with medicines related harm are higher in older people and those taking multiple medicines. Risks increase during transitions of care, for example, between home and hospital. Also as the frequency with which patients are transferred from one care setting to another rises there is an increasing risk associated with the management of their medicines. An increased role for pharmacists in the community providing medicines reviews pre-admission and post-discharge from hospital could assist safer and more efficient transitions.

[26] Garfield S, Barber N, Walley P, Willson A, Eliasson L. Quality of medication use in primary care--mapping the problem, working to a solution: a systematic review of the literature. *BMC Medicine* 2009; 7:50.

29. There is a growing concern about the misuse of prescription drugs and over-the-counter drugs, and this issue was specifically highlighted as an emerging issue in the New Strategic Direction for Alcohol and Drugs Phase 2[27]. The 2010/11 Drug Prevalence Survey highlighted that around one-fifth of adults (aged 15-64 years) in Northern Ireland had used sedatives and tranquillisers (21%) and anti-depressants (22%) at some point in their lifetime – compared to 14% and 10% respectively in the Republic of Ireland. In terms of those seeking treatment for drug misuse, benzodiazepines were the second most commonly reported main drug of misuse; reported by 24% of individuals in 2011/12.

30. The misuse of prescription and over the counter drugs can have real negative impacts on physical and mental health and there has been an increasing number of deaths related to the misuse of a range of prescription drugs. There are particular issues in relation to poly-drug use, especially when combined with alcohol. Community pharmacists can, and do, play an important role in identifying those who may be at risk of prescription drug and substance misuse; providing appropriate advice, support, and sign-posting to services; providing brief interventions; and delivering harm reduction services (such as needle exchange and substitute prescribing). The Department would be keen to build on this work into the future.

[27] DHSSPS (2011) New Strategic Direction for Alcohol and Drugs, Phase 2 2011-2016 http://www.dhsspsni.gov.uk/new_strategic_direction_for_alcohol_and_drugs_phase_2__2011-2016_

Example of Best Practice

The Integrated Medicines Management Service

The Integrated Medicines Management (IMM) service supports safer transitions between home and hospital providing medication reconciliation (medrec) on admission and discharge and clinical input from pharmacists during the patient stay. It has demonstrated significant improvements in patient care including:

- *Reduction in length of stay by an average of 2 days*
- *Reduction in re-admission rates of 20%*
- *Faster discharge process*
- *Improved accuracy of medication histories*
- *Decreased medicines administration error rates*
- *Improved medication appropriateness*
- *Reduction in drug costs*
- *Improved communication with primary care*
- *Improved utilisation of nursing and junior doctor time*

A recent review of this service recommended improvements in the service to ensure consistent communication with primary care including community pharmacies.

31. There is mounting evidence of poor medicines management within a variety of care settings, most recently highlighted by the Francis Report into the quality of care received by patients at Mid Staffordshire Hospital Trust[28]. Since the regulation of domiciliary care agencies by the Regulation and Quality Improvement Authority (RQIA) commenced, there has also been a growing awareness of the challenges facing the domiciliary care sector in relation to the management of medicines. The current service provided by community pharmacies to residential and nursing homes should be reviewed to focus on the pharmacist's clinical role in supporting improved health outcomes for residents.

[28] Report of the Mid Staffordshire NHS Foundation Trust Public Enquiey, Robert Francis QC,http://www.midstaffspublicinquiry.com/sites/default/files/report/Executive%20summary.pdf

Reducing medicines waste

32. The volume of prescription items is increasing by around 5% per year with an average of 19.9 issued per person per year in Northern Ireland, higher than England (17.7) and Scotland (17.6). Average annual costs per person are also higher in Northern Ireland at £19.90 compared to £17.70 in England and £17.60 in Scotland.

33. However, given the levels of non-adherence, and that medicines are not always managed as effectively as they should be, there is a high level of waste with evidence that around 11% of UK households have one or more medicines that are no longer being used[29]. Estimates, based upon a study conducted by the University of York, put the cost of wasted medicines in NI at £18m per year[30]. The study noted that many health professionals and members of the public believe that the physical waste of NHS medicines is a major issue and recommended that interventions should be commissioned to reduce waste.

34. The highest levels of wasted medicines are associated with repeat medicines that are ordered, prescribed, dispensed, collected by the patient/carer but never used and subsequently wasted. Waste in nursing and residential homes is recognised as a particular challenge.

[29] Woolf, M. Residual medicines: a report on OPCS Omnibus Survey data produced on behalf

[30] York Health Economics Consortium, University of York /School of Pharmacy, University of London. Evaluation of the Scale, Causes and Costs of Waste Medicines Final Report. November 2010 ISBN 978 090 293 620 1

Example of Best Practice

Don't Use it Don't Order it

Since 2010, a prescriptions waste advertising campaign – "Don't Use it, Don't Order It" has run in Northern Ireland involving TV, outdoor and indoor posters and information for GPs and community pharmacies[31]. The campaign has successfully raised awareness of the waste issue particularly in respect of patient attitudes and behaviours towards ordering medicines. There is evidence that the rate of annual increase of prescription numbers dispensed reduced during its first two years. However, any system which seeks to influence human behaviour takes time and recent evidence shows increasing trends in prescription numbers demonstrating the need for continued and consistent efforts to highlight the problem of medicines waste and how it can be reduced.

35. Although community pharmacies will make an important contribution to reducing medicines waste by supporting improved adherence they should have a more active role in addressing the over-ordering of medicines on repeat prescription. In this regard community pharmacies should include in their standard operating procedures the requirement to ask each patient collecting a repeat prescription whether they need all the medicines that have been ordered on this occasion. This is particularly important where the patient has delegated responsibility for re-ordering repeat prescriptions to the community pharmacy, a practice which is not recommended for most people and which could contribute to waste.

36. Another way that community pharmacy can contribute to a reduction in prescription waste is through the efficient provision of the repeat dispensing scheme and use of the existing system which enables items that are not needed not to be supplied. Unfortunately, the current paper-based repeat dispensing scheme is under-utilised and is considered to be labour intensive by both GP practices and community pharmacies. The development of an

[31] Don't Use It Don't Order It. http://www.nidirect.gov.uk/prescriptions-dont-use-it-dont-order-it.

electronic version of the service should be included in the first phase of the ICT programme for community pharmacy.

How can this be achieved?

Maintaining timely access to safe, quality assured medicines

- A robust supply model for medicines should be maintained which can adapt to support the needs of patients receiving treatment with specialist medicines at home.
- Access to medicines in Northern Ireland should be protected through continued vigilance of changes in the medicines supply chain and appropriate action, if required, to maintain supplies with commitments from community pharmacies, wholesalers and manufacturers as necessary.

Providing reliable, evidence-based, accessible information when medicines are supplied.

- A risk stratification process should be part of the standard operating procedure in all community pharmacies.
- Patients/carers should receive appropriate advice and information when prescription medicines are supplied and must be advised of changes to the presentation of their medicines and receive reassurance that the efficacy is the same.

Optimising the health benefits of medicines by supporting improved adherence.

- Systems should be developed for identifying and recognising patients' non-adherence to medicines at community pharmacies, including appropriate access to medication records through the electronic care record summary (ECR).
- A common assessment tool should be developed to determine the individual's needs to support improved adherence. For people with long term conditions this assessment should inform the medicines care plan component of their overall care package.
- Patients should have access to pharmacy services in the community which utilise advances in service delivery, ICT, technology and communication to support adherence.

Reducing harm related to medicines

- Information regarding medicines related harm associated with an adverse event or non-compliance should be recorded on the ECR.
- The importance of safe and effective medicines use and the role of the pharmacist in supporting this should be promoted to raise public awareness of the risks associated with medicines.
- Community pharmacists should have a defined role in the Integrated Medicines Management Service to support improved medicines management during transitions of care.

Reducing medicines waste

- All patients should be asked if they require all their medicines when repeat prescriptions are collected from the community pharmacy.
- The Repeat Dispensing Scheme Delivery should be refreshed and re-launched in an electronic form with a focus on the efficient use of medicines and adherence.

What does success look like/Outcomes?

- People will have access to safe, high quality medicines in the community.
- People will be provided with sufficient advice and information when prescription items are supplied to support safe, effective use and adherence.
- Non-adherence will be recognised and people most at risk will be provided with individualised medicines care plans in accordance with clinical need with access to pharmacy services to support improved adherence and medicines related outcomes.
- People will benefit from access to quality assured pharmacy services which utilise advances in information technology, access to their ECR, ICT and service development to support optimal health outcomes.
- People will need to go to GP, Out of hours and Emergency Departments less frequently with medicines issues and unplanned admissions to hospitals due to medicines-related factors will reduce.
- People will have an increased awareness of the potential risks associated with medicines and understand the role of the pharmacist in promoting their safe and effective use.
- The safe use of medicines will be supported by improved communications systems between community pharmacies, patients and the wider HSC.
- People will benefit from improved medicines management arrangements when moving between home and health care settings with a greater role for pharmacists in supporting safe and timely transitions.
- People will order and use medicines effectively with fewer medicines wasted, facilitated by updated standard operating procedures in pharmacies and electronic arrangements for repeat dispensing.

CHAPTER 2 - HELPING PEOPLE TO LIVE LONGER, HEALTHIER LIVES

STRATEGIC GOAL

To provide people with access to advice and support from pharmacists in the community promoting public health, self management, improved health and wellbeing and preventing illness.

Introduction

1. Delivery of this strategic goal will enable pharmacy to contribute fully towards the vision for Northern Ireland proposed in the new Strategic Framework for Public Health for Northern Ireland – "*Where all people are enabled and supported in achieving their full health and wellbeing potential."* The strategic goal is also in line with the recommendations of the Department's policy framework "Living With Long Term Conditions"[32] published in April 2012 and 'Transforming Your Care'[33] which proposes an expanded role for community pharmacy in the arena of health promotion both in pharmacies and in the community.

2. Community pharmacies are well positioned to undertake this role, providing accessible advice and services for the public, healthy and sick alike, without the need for an appointment. It is estimated that 123,000 adults visit community pharmacies every day and they are seen as the "open door" of the HSC, providing a welcoming and supportive environment with high levels of public satisfaction. Community pharmacies are often the first point of contact with the HSC and studies have shown that people interact with community pharmacists at an average of 12 to 15 times each year, often using the same pharmacy each time[34]. In contrast they may see their family doctor only 3 or 4 times a year. Community pharmacies are embedded in their communities and over 30% are located in disadvantaged areas.

[32] http://www.dhsspsni.gov.uk/living-longterm-conditions.pdf
[33] http://www.dhsspsni.gov.uk/index/tyc.htm

[34] DHSSPS. Community Pharmacy Activity Survey (Pricewaterhouse Coopers), 2000

3. As such community pharmacies are a key resource within communities and are well placed to provide a focal point for the provision of health advice, information and services to help people to manage their conditions more effectively. In addition, community pharmacies are well placed to work with community–based organisations and other service providers to tackle local health issues and inequalities.

What needs to be done?

4. There are a number of key areas where community pharmacy has a role to play providing the support and advice that people need to live longer, healthy lives. These areas are set out below.

Improved health and wellbeing

5. Community pharmacies provide the opportunity for pharmacists to act as front line advocates of public health within communities and to help increase health literacy. Community pharmacy also has a valuable role to play in contributing to regional and local health improvement goals through the provision of advice, information and services to people and carers which encourage improved self management and support people to make healthier choices. Information and advice needs to be provided to people in a format which they can understand.

6. To undertake this role, community pharmacies should be recognised by the public, commissioners and by other healthcare professionals, as frontline neighbourhood resources for health improvement. Some pharmacies have already taken steps to adapt their premises to help promote the public health role and shift the public perception from one of pharmacists solely as dispensers of medicines. Further help may be needed, for these and for other community pharmacies, to accelerate the adaptation of premises to accommodate the concept of “healthy living centres” with treatment, consultation and lifestyle information areas which provide the right environment where people feel they can seek advice and discuss issues with their pharmacist on a confidential basis. Pharmacists must comply with the Pharmaceutical Society of Northern Ireland’s “Professional Standards and Guidance for Patient Confientiality”.

Example

Health+Pharmacy - Supporting Your Health and Well Being

All community pharmacies in Northern Ireland have been invited to participate in a new ***Health+Pharmacy*** *initiative to develop and promote their pharmacy as an active and visible provider of public health advice, information and services within their local communities.*

This initiative aims to build on community pharmacy's strengths, connect them with the HSC public health agenda and increase their contribution to programmes for tackling regional public health challenges.
Health + Pharmacies will support health and wellbeing by:

- *Providing a community pharmacy environment which people will recognise as a place where they can access a consistently high quality of advice and quality assured services.*
- *Having staff members who are empowered through training and support to become active heath promoters within their own pharmacy and local communities.*
- *Being connected with local and regional public health services in the statutory, and community and voluntary sectors.*
- *Being recognised by commissioners as exemplar settings for public health initiatives and services within communities.*

Protecting and improving health through access to quality assured services.

7. People and their carers should be able to access a range of quality assured services at pharmacies that address their health needs and those of their community at times and in places convenient to their needs. A range of evidence based health promotion, protection and screening services should be commissioned from community pharmacy by the HSC relating to the major causes of health morbidities and inequalities. These services should include smoking cessation, obesity, mental health, alcohol, sexual health and immunisation. The services should be monitored and relevant outcomes, where appropriate, should contribute to wider public health evaluation and surveillance.

8. There is also scope for utilising the skills of community pharmacists to provide annual or periodic health checks or screening services to detect early signs/symptoms of illness in conjunction with the provision of lifestyle advice. These services would need to be consistent and integrated with other services commissioned by the HSC Board. Greater use of community pharmacy premises should also be made as settings for public health campaigns, for the provision of emergency medicine and for helping to deal with pandemics.

9. It is recognised that many people find it difficult to talk to their GP or, indeed, other healthcare professionals about their health issues. Pharmacy can be seen as a more informal and friendly setting in which to discuss health issues, particularly where separate counselling areas are available. Developing further competencies in public health and communication skills would increase public acceptance of a more prominent role for community pharmacists and pharmacy staff as advocates of public health and providers of health advice.

10. There are a number of areas where it is considered that community pharmacy could contribute to health improvement and public health throughout the life course through the provision of services and advice and information on the management of conditions to people and their carers and, where appropriate, to parents. These are set out in Table 2.

Table 2

Pre birth and early years	Children and young people (4 – 16 years)	Early adulthood	Adults	Elderly
Advice on the safe, effective and appropriate use of medicines	Advice on the safe, effective and appropriate use of medicines	Advice on the safe, effective and appropriate use of medicines	Advice on the safe and effective use of medicines and support to optimise adherence	Advice on the safe and effective use of medicines and support to optimise adherence
Advice and treatment of minor ailments and childhood illnesses	Advice and treatment of minor ailments and childhood illnesses	Advice and treatment of minor ailments	Advice and treatment of minor ailments	Advice and treatment of minor ailments
Advice, information and access or referral to specialist services relating to • Obesity • Smoking • Drug and alcohol misuse	Advice, information and access or referral to specialist services relating to • Smoking • Obesity • Drug and alcohol misuse • Sexual health • Mental health/suicide	Advice, information and access or referral to specialist services relating to • Smoking • Obesity • Sexual health • Mental health/suicide • Drug and alcohol misuse	Advice, information and access or referral to specialist services relating to • Smoking • Obesity • Mental health/suicide • Drug and alcohol misuse • Sexual health	Advice, information and access to or referral to specialist services relating to • Smoking • Obesity • Drug and Alcohol misuse • Mental health/suicide • Dementia • Falls prevention
			Access to health checks for early detection of disease, warning signs or risk factors	Access to health checks for early detection of disease, warning signs or risk factors
Advice on nutrition during pregnancy, breast feeding and early years	Advice on nutrition for people with long term conditions or special dietary needs	Advice on nutrition for people with long term conditions or special dietary needs	Advice on nutrition for people with long term conditions or special dietary needs	Advice on nutrition for the elderly
Advice, information and access to, or referral for, immunisations	Advice, information and access to, or referral for, immunisations	Advice, information and access to, or referral for, immunisations	Advice, information and access to, or referral for, immunisations	Advice, information and access to, or referral for, immunisations

Sign-Posting and Referral

11. The provision of information, whether it is about medication or more general information about the patient's condition, service provision or support networks, is a valuable tool in enabling people to manage their condition, reduce anxiety and feel more in control of their lives. The needs of people and their carers for information can vary over time and the provision of information is not a one-off activity. Similarly, the information needed may not be directly health related.

12. Pharmacists have a role to play in providing information to patients and carers which meets their needs at the time. It is the responsibility of the HSC Board to ensure that pharmacists and other healthcare professionals have access to quality assured information which can be provided to people and carers. The development of a central HSC information hub/portal would facilitate the provision of links or directions to appropriate information and a directory of local and regional services provided by statutory and other providers for use by pharmacies and other health and social care professionals.

13. People visiting pharmacies for information or advice should be referred, when necessary, to other healthcare professionals or to other community or voluntary services or statutory agencies which may be better placed to provide the targeted advice or support that they may require. Similarly, healthcare professionals, community and voluntary groups should refer people to the pharmacist for the advice and services that they provide.

Self Management

14. Helping people to have a good understanding of their own physical and mental health and how to manage their condition can enable them to care for themselves and their families, to stay well and remain independent throughout life. Self management can also provide value for money by reducing attendances at GP surgeries, helping people to continue living in their own home and helping to reduce critical episodes which can lead to avoidable admissions to hospital. Self management does not mean leaving people to manage their conditions alone and without support. The ability of people to manage their condition will vary over time depending on their circumstances and the progression of their condition and they should always know where and from whom to seek help and know that help will be available when needed.

15. Community pharmacy should help people to develop their ability to manage their own health through the provision of timely and relevant advice, information, support and monitoring, and the supply of medicines on prescription or other appropriate medicines (where they might be beneficial).

Information which could help people to make positive lifestyle choices which may impact on their overall health and wellbeing should be provided and community pharmacies should be commissioned to provide targeted interventions relating to key public heath themes through which people are supported to self care or signposted to appropriate services or agencies.

16. A wide range of patient education/self management and training programmes are provided within the HSC and by voluntary and community organisations to help provide people with the skills and tools they need to self care/manage. The programmes often utilise the skills and expertise of specialist nurses and allied health professionals but a structured pharmacy input to these types of programmes should also be considered.

Example

Healthy Hearts in the West

Ten community pharmacies in West Belfast are involved in a major initiative aimed at improving heart health in the west of the city, which was launched by the West Belfast Partnership Board in January 2012.

Levels of cardiovascular disease (CVD) including heart disease and stroke are higher in West Belfast, an area of severe socioeconomic deprivation, than most of the North of Ireland causing disability and premature mortality.

The vision behind 'Healthy Hearts in the West' is that people living in West Belfast experience heart health equivalent to the best in the North of Ireland

The programme aims to raise awareness, of CVD and involve people in a range of healthy activities. A major focus of 'Healthy Hearts in the West' is on promoting prevention of CVD though weight management, healthy eating, physical activity and raising awareness of risks associated with smoking and high alcohol consumption.

Participating community pharmacies offer cardiovascular screening and a weight management programme which contribute to the wider programme's objectives of increasing awareness, improving heart health and promoting healthier lifestyles.

Community Integration

17. While some progress has been made in recent years, the delivery of health promotion messages has been less effective for people living in disadvantaged areas although these are the communities in which the greatest health gain could be made and health inequalities reduced. Within

these communities there are well defined but hard to reach target groups which do not routinely access services.

18. Community pharmacy has a role to play in helping individuals and communities to identify their own health needs and have improved access to health advice, information, services and treatment. The Building the Community Pharmacy Partnership (BCPP) initiative has demonstrated the ability of community pharmacy to engage with hard to reach groups. The experience gained needs to be comprehensively harnessed and the opportunity taken, perhaps within Integrated Care Partnerships (ICPs), to build on existing partnership and develop new links with other health/community/voluntary service providers and organisations to reach these groups and increase the numbers of people accessing public health and health improvement services to address health inequalities.

19. A number of initiatives are underway within community pharmacy to support/reach vulnerable groups and individuals. A more formal/structured approach should be taken by commissioners to mainstream these activities involving ICPs, where appropriate. Social Enterprise models which utilise private sector business expertise in community pharmacy and use it as a local resource within communities to facilitate inter-agency working to deliver specific health objectives should be considered.

Building the Community Pharmacy Partnership

The Building the Community-Pharmacy Partnership (BCPP) is a partnership between the Community Development and Health Network (CDHN) and the Health and Social Care Board (HSCB).

Established over 10 years ago BCPP has supported over 500 projects involving partnerships between community pharmacists and community groups responding to a diverse range of issues relating to local health needs and inequalities.

BCPP aims to influence health outcomes in three main areas: improved accessibility and responsiveness re engagement in local services, particularly of more disadvantaged groups; change in use and understanding of pharmacy and associated services and perceived improvements in health and understanding of how to take increased responsibility for health.

Newtownabbey Senior Citizens Forum with Boots and Collinward, Pharmacy

Newtownabbey Senior Citizens' Forum (NSCF) strives to enable people aged 50+ to work together to improve the quality of life of older people and address issues effecting everyday life at all levels e.g. social isolation, health issues, physical activity, mental well-being and mobility. They have been involved with BCPP on 2 occasions and have successfully developed partnerships with 2 local pharmacies. The pharmacists have led sessions, attended activities, offered 1-1 support and been very pro-active in signposting and referring people into the project. Overall 59 sessions were delivered to 32 women over the course of the project. Outcomes indicate:

- *7 participants received training as part of the project.*
- *52 referrals were made to other organisations (some participants benefited from referrals to several organisations).*

Carrick YMCA with Medicare

Carrick YMCA operates a youth centre, provides support to at-risk young people and has a Parents and Kids Together (PAKT) programme which operates in a few local housing estates. They have been involved with BCPP through a partnership with their local Medicare Pharmacy working with women and more recently with teenagers from areas which experience issues relating to paramilitary conflict. A good relationship has developed between the pharmacist and the parents and young people and there is a notable change in how people are accessing health advice, information and services from the pharmacy and GP.

- *All participants perceive they are now confident using the pharmacy as a source of support and advice.*
- *Participants indicated their use of a GP on a once a month or more often basis reduced by 25%.*

More examples of BCPP projects are detailed on the website: www.cdhn.org/bcpp/projects

How can this be achieved?

- HSC business plans should describe the contribution of community pharmacies to the delivery of key public health goals.
- Community pharmacies should be integrated with the wider public health workforce and developed as frontline public health neighbourhood resources with defined roles and responsibilities.
- The public health role of pharmacies should be promoted to increase public awareness.
- The Health + Pharmacy initiative should be implemented across Northern Ireland.
- Pharmacy owners should consider the design and layout of their premises allied to the delivery of new roles and services.
- A range of quality assured health promotion and protection services related to key public health goals should be commissioned from community pharmacy by the HSC.
- Commissioners should use pharmacies to provide increased choice and access to services such as annual/periodic health checks, targeted screening e.g. diabetes or vaccinations.
- Pharmacists and pharmacy staff should build on their existing training to enhance their competencies in public health and social/inter-personal skills.
- People, including carers, should have access to advice, support and treatment from pharmacists to help them manage a self limiting or long term condition
- A structured pharmacy input to patient education/self management programmes for people with long term conditions should be considered.
- Pharmacists should build on existing partnerships and develop new links with other health/community/voluntary service providers and organisations to target hard to reach groups.
- Social enterprise models which facilitate inter-agency working should be considered.

What does success look like/Outcomes?

Improved Health and Wellbeing

- People recognise pharmacists as advocates for public health and community pharmacies as frontline neighbourhood resources for improving health and wellbeing and reducing health inequalities.

Protecting and improving health through access to quality assured services

- People access quality assured public health pharmaceutical services commissioned to contribute directly to HSC health protection and health improvement priorities.

Sign-Posting and referral

- People visit pharmacies for the provision of information on/or referral to services and support that will have a positive impact on their health and wellbeing, facilitated through active partnership working and referrals between pharmacies and other statutory, voluntary and community sector service providers.

Self Management

- People develop the skills and knowledge to manage their own health assisted by pharmacists through the promotion of healthier lifestyles and advice about managing their medicines safely and effectively.

Community Integration

- Individuals, communities and pharmacies work in partnership to identify local health needs to ensure that there is appropriate access and provision of quality integrated services and advice.

CHAPTER 3 – HELPING PEOPLE TO SAFELY AVAIL OF CARE CLOSER TO HOME

STRATEGIC GOAL

To provide improved access to clinical expertise and interventions for patients closer to home by making the best use of the skills of pharmacists working, together with/alongside other healthcare professionals.

Introduction

1. Current proposals for delivering services closer to home provide a further opportunity for pharmacy to re-position as a provider of care and services to help to tackle the burden of an ageing population, often living alone, dependent on paid and unpaid carers for support and requiring more interventions over a longer period. Earlier chapters have concentrated on how pharmacy can help people to gain better outcomes from medicines and manage their own health and well being more effectively. This chapter focuses on the role that pharmacy, working within integrated primary care teams, should undertake in supporting people in the community closer to home and so help reduce visits to GP practices and avoidable admissions to hospital.

2. The emphasis on shifting services from hospitals to home and community settings will necessitate a shift in activities to GP surgeries and increasingly towards community pharmacy. This will need to be underpinned by changes to planning and commissioning processes which recognise the contribution that pharmacy services will play within the integrated healthcare team to achieve improved health outcomes. In addition, individual care plans and care pathways will need to clearly describe the input of pharmacy to the care and treatment of patients.

3. Pharmacists in the community are well placed to deliver locally based and accessible services and many pharmacies already have areas of specific clinical interest and specialism, for example, around palliative care or respiratory care. The community-based pharmacy workforce should be developed further to provide a wider range of clinical and other services, commissioned to directly contribute to patient care closer to home.

4. However, not all pharmacies may be in a position to, or want to, deliver additional services and may want to continue to focus solely on the supply of medicines to patients. Commissioners should be conscious of the need to develop models of service provision which balance access to local dispensing arrangements and access to a wider range of pharmacy services closer to peoples' homes. Commissioners also need to ensure that an enhanced role for pharmacy supports and complements the services provided by other health and social care professionals and does not simply duplicate existing services.

What needs to be done?

5. There are a number of development areas which will need to be taken forward to ensure that the clinical expertise of pharmacists can be accessed closer to home, delivered by pharmacists in conjunction with other healthcare professionals to provide seamless and integrated care for patients. These areas are set out below.

Access to services

6. In Chapter 2 the role and development of pharmacies as a focal point for the provision of information and advice and for health promotion/improvement schemes and initiatives was highlighted. However, people should also have access to a wider range of pharmacy-led, patient–focussed clinical services provided in the community to reduce avoidable visits to hospital and improve health outcomes. These services could be provided by a pharmacist located within a community pharmacy or in another community setting. To undertake this wider role, the role of community pharmacies as front-line service providers with clinical expertise needs to be further publicised and formally recognised by commissioners and by other health and social care professionals in developing services in the community.

7. The future direction of pharmacy services in the community lies not only in the dispensing and supply of medicines, but also in the provision of advice, information and services to help people gain better outcomes from their medicines and live healthier lives.

8. In recent years new clinical roles for pharmacists have developed in primary care that involve pharmacists working in partnership with GPs to support better outcomes for people with long term conditions and safer and more effective medicines use for people living in residential and nursing homes. While these clinical pharmacy roles have, to date, largely been based in GP practices these could also be provided by community pharmacists in the community pharmacy setting.

9. As technology advances it will be possible for pharmacists with access to patient records to hold clinics within a community pharmacy setting utilising their clinical expertise to conduct medication reviews and adherence support. For example, a prescribing pharmacist could provide a service adjusting and monitoring therapy for patients with long term conditions such as hypertension and diabetes. These types of arrangements present new possibilities for service provision but will need to be considered and developed and agreed in conjunction with the full range of healthcare professionals and commissioners involved in the care of patients. Commissioners should consider how clinical pharmacy services can be further developed and incorporated into patient pathways to optimise outcomes from medicines, reduce duplication and streamline care provision.

Pharmacist Prescribing in a community setting

The HSC Board manages the delivery of a development programme which supports new roles for pharmacist prescribers working with GPs in primary care to support care for patients with long term conditions (LTC) and older people through the provision of medicines reviews which aim to optimise the outcomes from medicines, improve adherence and cost effectiveness. Currently most pharmacist prescribers work within GP practices but a new initiative is being piloted in Portadown. Hypertensive patients registered with The Orchard Family Practice are being offered an appointment for annual review with a pharmacist prescriber on a Saturday morning in the community pharmacy instead.

The pilot allows the pharmacist prescriber full access to a patient's clinical records using remote access. The clinic structure in community pharmacy

will mirror that of a blood pressure clinic in the GP practice with the pharmacist prescriber undertaking:

- *Blood pressure assessment*
- *Interpretation of lab results*
- *Cardiovascular Risk Assessment*
- *Lifestyle and Dietary Advice*
- *Issuing of prescriptions when appropriate*
- *Full medication review*

10. It is important to ensure that as services are shaped around patients, that the pharmacy workforce in the community is considered an appropriate provider of these services and is prepared in terms of any workforce training which may be required. In putting in place these services, commissioners also need to ensure that the services are consistent with and integrated with other services commissioned by the HSC Board. Professional issues in relation to the provision of pharmacy led services in the community, the potential overlap with other services, cost-effectiveness and the outcomes required all need to be considered.

11. Consideration also needs to be given to the location of these services. TYC describes a model of community care and treatment centres based in larger towns acting as "hubs". Surrounding areas will look to these hubs to provide services on their behalf, particularly more specialised services such as diagnostic imaging and specialist clinics. This approach to service delivery does not always entail services to be located in the same place. The majority of services provided by pharmacists will continue to be delivered in community pharmacies closer to people's homes and with links to the "hub" and wider care network. In this context, the ability for pharmacies to access and share patient records will be essential.

12. In developing the proposed "hubs" and any centralisation of services, commissioners should be aware of the need to maintain a sustainable pharmacy network and the accessibility of community pharmacies for dispensing and other services. The location of pharmacy services such as patient education programmes, screening, specialist clinics (which could take

direct referrals for more intensive pharmacy interventions/support) and long term condition management within the proposed" hubs" should, however, be considered. There are a number of ways in which this could be managed and the HSC Board/LCGs will need to work with providers to decide the most appropriate way forward in their area. Regulatory change may also be required to allow some of these developments to be implemented.

13. Changes in legislation such as "The Responsible Pharmacist" provisions will provide opportunities, under certain circumstances, for a pharmacist to be absent from the pharmacy for a limited period. This period of absence could be used constructively to provide services away from the pharmacy. It would also allow other models of provision to be developed e.g., the establishment of "group" pharmacy practices providing the capacity and opportunity to deliver innovative/ specialist services in locations other than pharmacies.

Managing Transitions/Integration of care within the pharmaceutical sector

14. As noted earlier in this document, good medicines management can deliver significant benefits to patients and help shift the balance of care from hospital into a community setting. The improvement of the interface and the proper management of transitions between hospitals, intermediate care facilities and nursing homes can improve the health and wellbeing of patients and deliver significant benefits to the HSC in terms of reduced adverse reactions to drugs and admissions to hospital. The proper management of such transitions within the community e.g., admissions to residential homes for respite care or rehabilitation are equally as important.

15. As far as possible, from the patient's point of view, these transitions should be seamless in terms of continuity of care with no queries, delays or repetition. This will require information and medicines records to be shared between, hospital pharmacy and community pharmacy and between the wider primary care multi-disciplinary team.

16. Pharmacy in the community should support the consistent use of formularies. For patients the consistent use of formularies whereby hospital doctors, GPs

and other prescribers are selecting and prescribing the same drugs and medicines would support continuity, safety and quality of care.

17. The growing pharmacist prescribing workforce working within primary and secondary care settings also provides an opportunity for the provision of targeted services to be developed focusing on safe and effective medicines use for older people and those with long term conditions during transitions of care.

Pharmacists as part of the care team

18. One of the main drivers for transformational change within the health service will be the establishment of Integrated Care Partnerships (ICPs) which will be a collaborative alliance of statutory, independent and voluntary and community practitioners brought together in partnership to deliver better services for the local population through the development and delivery of tailored packages of care. The initial focus of ICPs will be on the frail elderly and on aspects of care, including palliative and end of life care for some people with long term conditions such as respiratory conditions, diabetes and stroke care. This collaborative approach provides an opportunity to strengthen the role of community pharmacy and ensure that people with long term conditions should have the opportunity, where appropriate, to consult directly or to be referred to pharmacy services integrated within the community setting to handle ongoing monitoring and treatment of specific conditions in conjunction with other multidisciplinary services provided locally.

19. This support for people with long term conditions, particularly for those with complex conditions who need a more intensive level of care, will require a more flexible, responsive community pharmacy workforce which is viewed as an integral part of the multi-disciplinary primary care team. Fundamental to this approach is partnership working whereby people with long term conditions, carers and all other members of the support team fully understand the input and skills of all providers on the team and the role each has to play.

20. The management of adults with long term conditions as set out in “Living with Long Term Conditions – A Policy Framework” is generally co-ordinated by a

case manager or key worker in line with a personal care plan based on an assessment of the patient's needs. The plan should set out the information and advice that people need, handover arrangements covering illness and absence of members of the support team, anticipatory arrangements for deterioration and for emergency and out-of-hours situations. It should also contain the individual's medicines regime and their medicines management needs should be regularly reviewed in line with the overall care plan. The role of the pharmacist in supporting patients' needs should be understood by the patient, the carer and all members of the team.

21. In addition, to being the named pharmacist on a care plan, there may be scope for pharmacists in the community to have a role in the management of care for people with long-term conditions, for example, as a co-ordinator of the care plan for an individual with more complex conditions. This type of approach would require pharmacists to have access to and be able to update patient records and links to the other healthcare professionals involved in the care of the patient. The use of technology to permit information sharing and real time care planning will be essential to improve outcomes for patients.

22. To ensure that the focus of care is directed to patients with the greatest need, it is essential that those with the most significant needs and at risk of becoming ill are identified. Modelling work has already been undertaken in secondary care to identify/define the types of patients who would derive most benefit from additional help with their medicines. A similar approach should be undertaken by ICPs in conjunction within community pharmacy to enable early intervention and treatment to prevent patients becoming unwell and requiring admission to hospital.

23. A patient registration scheme should be developed and piloted to formalise and ensure a consistent approach to this type of pro-active management arrangement. The concept of registration could also be applied to ensure the effective management of other services provided by community pharmacy.

24. The fulfilment of the enhanced role envisaged for community pharmacy as part of the wider transformation change in Health and Social Care may require

pharmacists to work outside the conventional community pharmacy environment, for example, in health and care hubs, in GP practices and in peoples' homes. Pharmacists working in the community should have access to any training which may be needed to undertake any element of this new role. In addition, to clinical training already received at undergraduate level pharmacists working in the community should receive clinical training at post-graduate level.

Planning for an Integrated Care service/Integrated service planning

25. The key to the delivery of an integrated health and social care service throughout the life course of the patient is a system centred on patients and their needs – not around healthcare professionals. Nor is the delivery of an integrated system necessarily dependent on the co-location of community pharmacists with other healthcare professionals. The opportunities for pharmacists to become involved in the delivery of care through a multi-disciplinary team will increase as healthcare reforms progress. However, behavioural change and acceptance of a multi-disciplinary ethic for the delivery of services will be just as important as any structural changes.

26. However, to make this work the contribution of pharmacy needs to be better understood by other stakeholders and to be recognised in the development of operational and strategic policies at regional and at local level. HSC Board, LCG and PHA commissioning plans and Trust implementation and delivery plans should be explicit in relation to the role and contribution that pharmacy will make in optimising services. The input necessary from community pharmacy to the achievement of desired service outcomes should be embedded in a contract (the outputs should be valued and measureable) and facilitated by IT infrastructure so that information is captured along the integrated care pathway. Care must also be taken to avoid duplication of services except where there is evidence that the service could be delivered in a more effective and efficient way by pharmacy.

27. The vast majority of patients receive medicines as part of their care and, with the increasing emphasis on improving medicines management, the

participation of community pharmacy in ICPs is critical to ensure the successful delivery of improved patient outcomes and best use of resources.

Pathways

28. Care pathways can facilitate the co-ordination and integration of care by mapping out the services available for the treatment and ongoing support of patients with specific conditions. The pathways should describe how the different elements and providers of care are connected. ICPs will have a key role in the design and local implementation of care pathways and the involvement and input of community pharmacists in ICPs will be vital to ensure that the role of pharmacy and the input that pharmacy can provide to the support and treatment of patients is clearly mapped out on care pathways. The mapping process may in turn help to increase the awareness of the public and other health and social care professionals of the contribution that pharmacy can make.

29. The new role of pharmacy needs to be underpinned by a solid evidence base and where there is a lack of evidence research should be initiated to explore and evaluate such roles. To support this, a network of community pharmacies interested in participating in research should be established to contribute to ongoing evaluation and service development and to collaborate with research institutions or bodies to develop research protocols etc

30. Care pathways, which include a description of the pharmacy interventions appropriate to the life course and the clinical condition should be developed. They should reflect the role of pharmacy in the ongoing support and treatment of people with long term conditions, in making and taking referrals to and from other healthcare professionals, as providers of advice, information and clinical interventions and the links/interfaces with other services and healthcare professionals. A key point to note is that patients may have a number of conditions and, whilst the pathways may relate to one condition, the management of the patient's medicines will need to be looked at in the context of the range of conditions for which they are being treated.

31. Integrated Care Partnerships working within their LCGs' populations should develop local care pathways setting out the pharmacy input to service provision and the relationship between pharmacies, hospitals and the wider primary care sector in their area.

How can this be achieved?

Commissioning/Planning

- Arrangements to promote collaboration between pharmacists and other health and social services and voluntary sector services should be developed by HSC Board.
- HSC business plans should set out the explicit contribution of pharmacy services.
- Commissioners should consider how clinical pharmacy services can be further developed and incorporated into patient pathways.
- Descriptions of integrated services should be explicit in relation to the pharmacy contribution and outcomes and embedded in a contract.
- A patient registration scheme should be developed and piloted.
- Pharmacy input to patient education and self management programmes including monitoring and review for people with long term conditions should be commissioned.

Workforce development/Training

- Joint training programmes for pharmacists, doctors, nurses and allied health professionals should be considered.
- In addition, to clinical training already received at undergraduate level pharmacists working in the community should receive clinical training at post-graduate level.
- Pharmacists should have access to any training required to provide enhanced roles.
- The community pharmacy workforce needs to be flexible and responsive to change, working as part of a multi-disciplinary team supporting people with complex needs.

IT/Connectivity

- There should be a robust ICT infrastructure for community pharmacy to promote access and sharing of information and patient records to promote delivery of new pharmacy roles – see Chapter 4.
- A communications programme should be developed and implemented to

improve awareness and understanding of the contribution and role of pharmacy in TYC.

Pathways

- Develop a regional evidence base for pharmacy and formulate and develop pharmacy role/input.
- A network of community pharmacies should be established to participate in research.
- Care pathways which describe the pharmacy interventions appropriate to the life course and the clinical condition should be developed regionally and adopted locally where appropriate.

What does success look like/Outcomes?

Access to Services

- People will have access to pharmacy-led clinical services in the community including prescribing roles which support optimal medicine use, improved adherence and health outcomes based on assessment of need.
- People will be referred by hospitals, GPs and other healthcare professionals to pharmacy services. Pharmacists will be able to refer people directly to GPs and to other healthcare professionals and services.

Transitions

- People moving from hospital to the community or moving to different settings within the community will have an uninterrupted access to supply of medicines and appliances without delay.

Pharmacists as part of the care team

- People with complex needs and their carers will be supported by a flexible, pro-active community pharmacy workforce working as part of a multi-disciplinary team.
- People will access advice and services from pharmacists who can refer to and update the medicines related information contained in their medication record.

Integrated Service Planning

- People will have access to advice and services from pharmacists delivered as part of a multi-disciplinary approach to support people nearer to home and prevent avoidable admissions to hospital.

Pathways

- People will understand the role of pharmacy in their care and care pathways will clearly describe the contribution of community pharmacists to the ongoing support and treatment of people with long term conditions.

CHAPTER 4 – HELPING PEOPLE TO BENEFIT FROM ADVANCES IN INNOVATION AND TECHNOLOGY

STRATEGIC GOAL

To support better health outcomes for patients through advances in treatments, technologies, products and services.

Introduction

1. As set out in earlier chapters, the future direction of pharmacy services in the community lies not only in the dispensing and supply of medicines but also in the provision of advice, information and services to help people gain better outcomes from their medicines and live healthier lives. In this regard, pharmacy will contribute to the TYC aim of care closer to home and help reduce GP consultations and unplanned admissions to hospital. To deliver this new agenda pharmacy services must be connected and integrated within the wider HSC through a robust ICT infrastructure for community pharmacy.

What needs to be done?

2. There are a number of ways and areas in which ICT support and the utilisation of technological advances can be harnessed to ensure that the new agenda set out in chapters 2 - 4 is delivered and communicated within a robust quality framework:
    - ICT Infrastructure;
    - Robotics and increased automation;
    - Medicines Technology; and
    - Improving Quality and Governance

ICT Infrastructure

3. The development and implementation of an ICT infrastructure for community pharmacy is essential:

    - To support an increasing clinical role for pharmacists and pharmacist prescribers authorised to access appropriate patient information held in the Electronic Care Record. This will enable the delivery of high quality integrated services that aim to improve medicines adherence, optimise

health outcomes and help maintain independence particularly for older people and those with long term conditions being cared for at home.

- To support the delivery of quality assured public health services promoting prevention, self care and early intervention. This will allow real time recording of patient/client data and electronic monitoring and evaluation of outcomes which could interface with regional and national surveillance networks.

- To support effective communication and the sharing of information required for patient care and medicines governance between Community Pharmacy, GPs, Secondary Care, Community Care and the HSC Board and Trusts and patients particularly during transitions of care.

- To support the electronic transmission of prescriptions (ETP) from GPs to community pharmacies which will improve safety and convenience for patients, reduce administrative workload for GPs and support improved stock and time management at pharmacies.

- To enable patients to register with community pharmacies for additional services relating to their medicines, health and wellbeing.

- To support pharmacy payments, stock validation and management, analysis and delivery of services and reduce workload and paper based bureaucratic burdens.

- To enable new patient held electronic technologies such as tele-monitoring and adherence tools to link with community pharmacy to assist in the safe use of medicines and optimal patient outcomes.

- To enable people visiting community pharmacies to access contemporary health information and advice in a format that they can understand and sign post them to local services through internet access at health zones within Health+Pharmacies.

- To provide a sound, recorded evidence base of pharmacists' activities which will ensure that pharmacy's contribution to improving patient care and medicines safety is recognised and valued.

Using ICT to improve adherence

Currently, community pharmacy systems support one element of adherence support through the provision of medication re-packed in monitored dosage systems. However, technology supported adherence tools are under development which will effectively identify the patient's needs and provide a range of solutions to the individual to help improve their medicines use. Hand-held devices known as Personal Digital Assistants (PDAs) are available and have the ability to handle a vast amount of information and instantaneous speed of operation makes them ideal for medicine information services. The Short Message Service (SMS) on mobile phones, as a form of e-messaging has been employed in promoting adherence to medicine therapy especially in the treatment of chronic diseases such as hypertension, HIV/AIDS, diabetes and osteoarthritis and mental health issues.. APPs have also been developed for smart phones which can be linked into electronic medication records to provide dosage prompts.

Robotics and Increased Automation

4. The use of robotics and automated electronic processes will also enable efficiencies in the dispensing process. This will also free up the pharmacist's time providing more opportunities for pharmacist/patient interactions in community pharmacy.

Medicines Technology

5. Most medicines are taken by mouth which can affect how the medicine works and the time it takes to act and how long the effect lasts for. Some medicines are injected directly into the blood stream or implanted into the body to allow for slow release of medication. New non-invasive systems are being developed which will allow medication to be directed into the body bypassing the digestive system but do not require injection into the blood stream. This

new technology has the potential to target specific areas of the body and ensure that the medicines act where and as they should.

6. Increasingly advances in drug delivery technologies will make medicines more convenient and acceptable to patients by simplifying the dosing regimen and improving administration. These improvements have the potential to improve adherence, which in turn helps improve patient outcomes, quality of life and reduce costs. Another consequence of reducing dosing frequency is that fewer care giving interactions are needed which could become increasingly significant in the context of an ageing population and care closer to home.

7. People using specialist medicines and technologies in their own homes will need to be able to access appropriate advice about their medicines and treatment regimen. A recognised role for pharmacy within integrated healthcare teams working with specialist medicines and technologies in the community is needed. Pharmacists will have a key role in the management of specialist smart drug delivery systems which will provide an increase in the number of effective medicines available to treat complex disease states.

Advances in medicines technology in LTC

With medications for long term conditions that display time-dependent symptoms, such as ulcers or asthma, drug delivery systems can control the formulation release according to the timing of symptoms. For example, they can enable a drug to release when asthma attacks occur, generally in the middle of the night. This technology can provide valuable and clinically proven therapeutic benefits.

Improving Quality and Governance

8. Computer-based tools are currently used in the pharmacy setting to support incident reporting and analysis and management of the professional development of staff. In the future pharmacy ICT will provide assurance on the quality and safety of medicines through the use of medicines electronic barcode scanning and electronic Adverse Drug Reaction reporting.

ICT and quality assurance

An ICT system for recording the quality of pharmaceutical care provided to patients currently operates in the hospital setting in Northern Ireland and has been created with a regionally agreed data set. Pharmacists can record, grade (in terms of severity) and assess the level of risk posed to a patient (using the National Patient Safety Agency (NPSA) risk matrix) all their interventions. The software is installed in ten hospitals across N. Ireland. This software could form the basis for the roll-out of medicines management and public health applications in community pharmacy.

9. Medication errors are common and are associated with considerable risk and harm to the patient. Recent developments include the pharmacy-led technology intervention (PINCER[35]) which supports pharmacist assessment, feedback, patient education and dedicated support and has been demonstrated as an effective method for reducing the range of medication errors in general practice. An essential component of this service is the use of electronic health records, which effectively reduces errors.

10. Systems such as PINCER intervention will be suitable for implementation in a Primary Care setting where clinical records are computerised and where the role of pharmacists in monitoring proactively for clinical important medication errors is in place.

[35] Avery et al**:** A pharmacist-led information technology intervention for medication errors (PINCER): a multicentre, cluster randomised, controlled trial and cost-effectiveness analysis

How can this be achieved?

- An ICT programme for community pharmacy should be developed and implemented during the period 2014-2019.
- Legislation should be introduced to enable e-prescribing in primary care and e-claiming by community pharmacies.
- Work to enable the electronic transmission of prescriptions from GPs to community pharmacies should be completed.
- A patient registration scheme for community pharmacy should be developed, piloted and implemented, subject to public consultation.
- Pharmacists commissioned to provide clinical roles in the community should have access to the Electronic Care Record.
- Pharmacists should have a recognised role in supporting the care of patients using specialist medicines and technologies in their own homes.
- People visiting community pharmacies should have access to web based contemporary health information.
- Technology support for assessing medicine related needs for the individual including the development of a common assessment tool.
- Technology solutions tailored to patient specific needs.

What does success look like/Outcomes?

- People will benefit from improvements in the delivery of pharmacy services across all sectors of pharmacy which will be underpinned by effective and robust IT systems.

- People will be assured of a safe and high quality medicines service as relevant patient information is available to health professionals with an involvement in their care.

- People will experience fewer medicines related issues when moving between care settings as the quality of medicines information will be maintained across all transitions of care minimising errors in prescribing.

- People will save time by nominating a pharmacy to which their prescriptions will be electronically transmitted.

- People will have the opportunity to register with a pharmacy of choice for additional medicines and health promotion services knowing that their personal data is safely stored and used appropriately.

- Patients and their carers will have access to technology to help them manage their own medicines.

- People will be able to access health information in a format that is accessible and appropriate to their needs.

Appendix A

Glossary of Terms

Allied Health Professionals	Groups of professionals working in Health and Social Care Services including, for example, physiotherapists, occupational therapists and dieticians.
Care Pathway	The steps in the treatment and care of a patient with a particular condition. Care pathways set out the expected progress of the individual as their condition progresses.
Carers	Carers are people who, without payment, provide help and support to a family member or friend who may not be able to manage at home without this help because of frailty, illness or disability.
Commissioning	The process of identifying local health and social care needs, making agreements with service providers to deliver services to meet these needs, and monitoring outcomes. The process of commissioning seeks to improve quality of life and health outcomes for patients and carers.
Key worker	A named member of a multi-disciplinary team with particular responsibility for co-ordinating care.
Medicines	Prescribed medicines that are self administered including, tablets, liquids, ointments and eye drops.
Multi-disciplinary Team	A group of people from different disciplines who work together to provide and/or improve care for patients with a particular condition. The composition of multi-disciplinary teams will include

	people from various disciplines (both healthcare and non-healthcare).
Morbidity/Co-morbidity	Applies to illness or disease. The morbidity rate is the incidence of disease in a population over a given period of time. Co-morbidity is where one or more diseases occur In addition, to a primary disorder.
Primary Care	Family and community health services and major components of social care which are delivered outside the hospital setting. Primary care will usually be the person's main contact with the HSC e.g. GP, Community Nurse, dentist).
Secondary Care	Care that is usually provided in a hospital or a particular specialised centre. Secondary care is usually accessed as a result of referral from primary care.

Appendix B

Abbreviations

AHPs	**Allied Health Professionals**
CPNI	**Community Pharmacy Northern Ireland**
DHSSPS	**Department of Health, Social Services and Public Safety**
GMS	**General Medical Services**
GP	**General Practitioner**
HSC	**Health and Social Care**
LCG	**Local Commissioning Group**
NHS	**National Health Service**
NISRA	**Northern Ireland Statistics & Research Agency**
P&CC	**Patient and Client Council**
PHA	**Public Health Agency**
RCGP	**Royal College of General Practitioners**
TYC	**Transforming Your Care**

Appendix C

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Appendix D

Membership of Steering Group

ORGANISATION	REPRESENTATIVE
Department of Health and Social Services and Public Safety	Dr Norman Morrow (Chief Pharmaceutical Officer) Dr Mark Timoney Mrs Cathy Harrison
General Practitioner Council (GPC)	Dr Brian Dunn
Community Pharmacy Northern Ireland (CPNI)	Mr Gerard Greene Dr Vanessa Chambers
HSC Board	Dr Sloan Harper Mr Joe Brogan
Southern LCG	Mr Sheelin McKeagney
Public Health Agency (PHA)	Dr Janet Little
Northern HSC Trust	Prof Mike Scott
Belfast HSC Trust	Ms Jackie Keys
British Association Pharmaceutical Wholesalers (BAPW)	Mr David Cole
Association of British Pharmaceutical Industry (ABPI)	Mr Stephen Kennedy
National Pharmacy Association (NPA)	Ms Ann McAlister
Pharmacy Defence Association (PDA)	Mr Harry Harron
Queens University Belfast (QUB)	Dr Sharon Haughey
University Ulster (UU)	Prof Paul MCarron
Community Development Health Network (CDHN)	Ms Sharon Bleakley
Belfast Healthy Cities	Ms Ruth Fleming
Ulster Chemists Association (UCA)	Mr Stephen Slane
Patient Client Council (PCC)	In receipt of Steering Group papers

*Chaired by Chief Pharmaceutical Officer

Secretariat provided by Medicines Policy Branch (DHSS&PS)

**Pre-consultation events held as follows:

- Farset Centre – attended by Patient Client Council, older people representing Age Sector Platform, representatives of community and voluntary groups across NI.
- Glasshouse Stormont Estate – attended by representatives of professional organisations and commissioners.