Improving Care for People with Long Term Conditions

December 2016

IMPROVING CARE FOR PEOPLE WITH LONG TERM CONDITIONS

The expertise and clinical knowledge of pharmacists must be fully utilised to support people with long term conditions and help them to achieve the desired outcomes from their medicines, thereby making more efficient use of National Health Service (NHS) resources.

This policy document focuses on the essential role of the pharmacist as part of a multidisciplinary approach in tackling the challenges facing the NHS in treating and supporting people with long term conditions (LTCs).The recommendations in this policy are aimed at key stakeholders who have collective responsibility for ensuring the best care for individuals living with a LTC.

Key Recommendations

1. Pharmacists providing direct patient care should have the opportunity to train to be a prescriber, fully utilising those skills as part of the multidisciplinary approach to managing and supporting people with long term conditions.

2. The patient journey will be made easier by enabling pharmacists to directly refer to appropriate health and social care professionals, improving patient access to care and reducing the number of unnecessary appointments.

3. Patients will benefit from further integration of pharmacists into their multidisciplinary team, ensuring support at every stage of their journey, from prevention through to treatment and management of their long term condition(s).

4. All pharmacists directly involved in patient care should have full read and write access to the patient health record, with patient consent, in the interest of high quality, safe and effective patient care.

EXECUTIVE SUMMARY

Approximately two Million people in Scotland are affected by at least one long term condition (LTC) which impacts on their quality of life in human, social and economic terms[1], and people often suffer from more than one LTC. (see figure1) People with several long-term conditions have a markedly poorer quality of life, poorer clinical outcomes, longer hospital stays, and are the most costly group of patients that the NHS has to look after[2].

Medicines are the most common intervention in the NHS and their safe use requires collective and collaborative effort between the multidisciplinary team and patients[3]. They can be life-prolonging and life-saving in the management of LTCs but they can also cause harm if used incorrectly.

In order to improve people's quality of life as our population lives longer with more LTCs, our aim must now be to reduce any unintentional harm caused by inappropriate polypharmacy and to ensure everyone has access to high quality pharmaceutical care.

This policy takes into account the principles and aims of the National Clinical[4] strategy and Realistic medicine[5] which have outlined the need for a wider primary care team, using the expertise of all health professionals to their maximum potential to reduce the waste, harm and variation in treatment.

The policy draws on the substantial body of reports and reviews[6] which have established that we are not using the clinical resources available in the pharmacy profession to best advantage to improve public health[7], patient outcomes and to minimise unplanned hospital admissions.

Pharmacists have a unique training in all aspects of medicines and can play a key role in on-going monitoring, support and treatment of patients with LTCs, as well as delaying or preventing the onset of a LTC, but the profession could do much more. We have identified some of the enablers and changes which support and align with the current strategic drivers in Scotland and are necessary to fully utilise the pharmacist's expertise to improve health outcomes. Our recommendations if implemented will support the transformational change required to build a sustainable NHS for the future.

The policy takes a principle-based approach to the management of LTCs. Taking into account the increased prevalence of multimorbidities, it is not condition specific, but rather takes a holistic and overarching view of the contribution of the pharmacy profession to support all patients with LTCs.

CONTEXT FOR CHANGE

It is widely acknowledged that LTCs are the greatest challenge currently facing the NHS and demand for services is predicted to rise[8]. In Scotland, 40% of the Scottish population, have at least one long term condition, and one in four adults over 16 report some form of long term illness, health problem or disability[9]. As well as affecting an individual's health, there can be associated wider social and economic challenges for the individual and implications for family members, who may be providing care for a loved one. LTCs are responsible for 60% of deaths in Scotland and take up 80% of GP appointments[10].

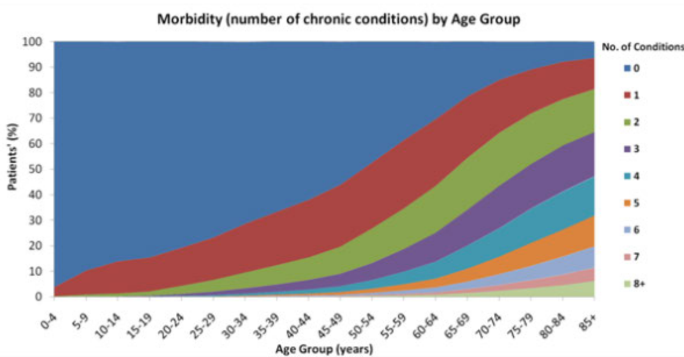

Figure 1: Mercer, Guthrie, Wyke: Scottish School of Primary Care

People with multiple LTCs are likely to require more complex medication regimens and more intensive support from health professionals. It is recognised that the impact of co-morbidity is profound and multi-faceted. Patients with several long-term conditions have poorer quality of life, poorer clinical outcomes, longer hospital stays and more post-operative complications, and are more costly to health services[11]. The rise in the number of patients with LTCs and co-morbidity is known to have increased prescribing rates with the proportion of patients receiving 10 or more medicines has grown from 1.9% in 1995 to 5.8% in 2010 (see figure 2).

We know that approximately 50% of medicines are not taken as prescribed[12] and that medicines contribute to between 1.4 -15.4% of preventable unplanned hospital admissions[13] with this figure rising to 26% in the frail elderly population[14]. This equates to 61,000 non elective hospital admissions due to medicines every year[15].

Primary care has come under increasing pressure in recent years, with higher demands on General Practitioners (GPs) and increased waiting times[16]. Alongside this, demands on urgent and emergency care are rising[17]. People with a LTC are twice as likely to be admitted to hospital as a patient without such a condition[18]. Not only is this distressing for patients but puts unnecessary and avoidable pressure on secondary care resources. With the average cost of a hospital stay for a non-elective inpatient in 2015 estimated to be £2746[19], it is becoming increasingly vital for people to be supported in their communities in a way that will improve their health outcomes, support to self – management and avoid hospital admissions wherever possible. The National Polypharmacy guidance is an invaluable tool to support practitioners in this[20].

This is particularly acute in deprived areas where the life expectancy is on average 10 years less than more affluent communities and community pharmacies are often the nearest and most accessible health professional[21].

The funding for additional pharmacists to work in GP practices presents an ideal opportunity to enable pharmacists to work with their GP and other primary care colleagues to improve the care of people with LTCs. The joint statement from RPS and RCGP Scotland outlines how this expertise can best be captured[22].

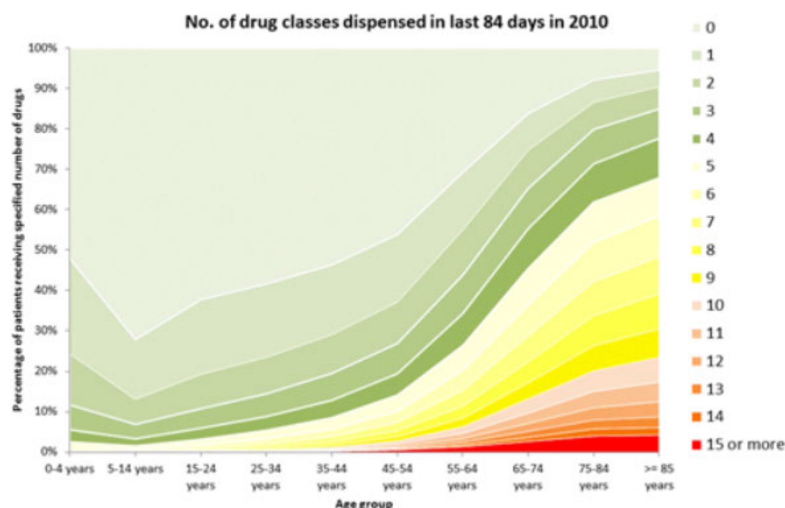

Figure 2: Mercer, Guthrie, Wyke: Scottish School of Primary Care

RECOMMENDATIONS TO ENABLE TRANSFORMATIONAL CHANGE

Professional development

- Opportunities must be created for multidisciplinary teams to train and develop together starting from undergraduate training and continuing in all sectors of practice.
- Pharmacists working in all sectors must have protected learning time to advance and develop their practice.
- Working with their medical colleagues and ensuring the appropriate breadth of multidisciplinary working experienced independent pharmacists prescribers should be enabled to become designated practitioners, allowing them to mentor /supervise others through their independent prescribing courses.

Workforce re-design and utilising professional expertise

- The funding for pharmacists working in GP practice should be made permanent to enable continuity of care and build the wider primary care team.
- Models of care need to be explored to allow community pharmacists to work alongside their primary care colleagues, as part of the multidisciplinary healthcare team, freeing up time to provide more pharmaceutical care.
- In order to streamline the patient journey, pharmacists must be able to facilitate direct referral to other health professionals, social care and other appropriate services.
- There is opportunity for GP practice pharmacists and those in community, working together to make more use of the Chronic Medication Service, which is designed to improve access to medicines and pharmaceutical care for people with LTCs.
- All practicing pharmacists providing direct patient care should have the opportunity to train as independent prescribers.
- There should be a better use of skill mix with more pharmacy technicians to support pharmacists in GP surgeries and help free up time for more pharmaceutical care in community pharmacies.

Co-production

- People with LTCs must have the opportunity to work with their multidisciplinary team to shape their own care plan ; focusing on what matters to them; to be involved in decision making and more informed about treatment options.
- Local delivery plans and Community Planning partnerships should include community pharmacy services when assessing community assets and include them in plans to improve patient outcomes , tailoring their services to the need so the local populations, using the information available through prescribing data on prevalence of LTCs

Utilising technology

- In the interest of safe and effective patient care, with patient consent, all pharmacists involved in an individual's care should have appropriate read and write access to the patient health record.
- As a starting point, community pharmacists must have access to the Emergency Care Summary, Key Information summaries and Immediate Discharge Letters.

PATIENT HEALTH JOURNEY FOR LONG TERM CONDITIONS

Effective, joined-up care between community pharmacists, GP practices and hospitals can help reduce the need for costly and invasive medical treatment for people with long-term conditions.

Evidence shows the likelihood of people with long-term conditions requiring inpatient or emergency care can be reduced by several factors including;

- lifestyle change[24]
- using medicines and treatments correctly[25]
- support to live independently[26]
- the ability to understand, monitor and manage their condition[27] contact with professionals able to assess the degree of illness progression and recommend the most appropriate treatment[28]

Pharmacists working in all sectors are already making important contributions to the prevention and support for the management of LTCs however the potential of the pharmacy workforce has not yet been fully maximised. There are pockets of good practice where patients benefit from coordinated care for LTCs yet there is no consistency to the services provision. We need to ensure we minimise avoidable harm and variation in practice and provide appropriate support wherever patients are in their journey. Self-management must be encouraged and supported to allow people to remain independent for as long as possible and inappropriate polypharmacy must be addressed.

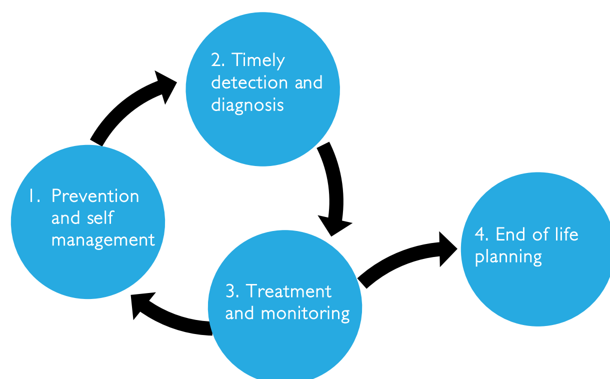

Figure 3: Support for people with long term conditions Cycle (LTCs Cycle)

Individuals must benefit from access to the right health and social care skill set at the right time to meet their physical and mental health care needs. Individuals must feel empowered to be decision-makers in their own care to help shape their desired outcomes at all points of the LTC cycle.

Case study 1: Asthma
Working together to improve outcome

According to Asthma UK[29] there were 1,216 deaths from Asthma in the UK in 2014, and approximately 75% of the hospital admissions and 90% of deaths which then occurred were preventable. With a maximum of 70% of patients attending for asthma reviews annually there is considerable scope for improving patient outcomes.

Greater Glasgow and Clyde Health Board have funded a Local Enhanced Service[30] coordinating asthma care between GP practices and community pharmacies. The aim is to achieve improved patient outcomes through:

- Pharmacist checking and advising on patient's inhaler technique
- Reported improvement in symptoms for those patients with asthma and/or Chronic Obstructive Pulmonary Disease (COPD)
- Providing targeted information about relevant services available to patients with asthma and COPD e.g. smoking cessation and pulmonary rehab;
- Promoting the use of the Managed Clinic Network Asthma Action Plan (where appropriate)
- Improved partnership working with General Practice.

Whilst prescribing might be optimal, if a patient with asthma or COPD cannot use their inhaler properly there is a risk their lack of control will result in poor drug delivery, decreased disease control and increased inhaler use with treatment interventions becoming more intensive (such as unnecessarily higher inhaled corticosteroid doses or greater reliever use)[31]. The cost of medicines waste resulting from suboptimal inhaler use is considerable. Poor condition control also leads to extra cost with regard to GP/practice nurse appointments and hospital admissions.

Patients who are not attending for routine asthma reviews in their GP practice are referred to their local community pharmacy. The pharmacist, with support from their pharmacist technician conduct asthma reviews in the same way as the GP practice including establishing a treatment plan, checking adherence and ensuring good inhaler technique.

Follow up regular reviews are conducted through the Chronic Medication Service when patients pick up their regular prescriptions to provide ongoing continuity of care.

PATIENT HEALTH JOURNEY FOR LONG TERM CONDITIONS

Case study 2: Asthma Practice and Community Pharmacist

In Grampian Health Board area, Jonathan Laird, a pharmacist independent prescriber, supports asthma patient working in both GP practice and community pharmacy. Working within the multidisciplinary team, Jonathan holds regular clinics in the GP practice to review any COPD and asthma patients who have recently been hospitalised with an asthma attack or exacerbation of their COPD.

Aligning with local managed clinic network guidelines this includes checking inhaler technique and adherence, changing inhalers and doses as required. When stabilised patients are referred back to the practice nurse for their routine annual asthma reviews. Working alongside his GP colleagues Jonathan also ensures that the practice is routinely prescribing according to the latest evidence based and cost effective guidelines, and local formulary choices, across the spectrum of therapeutic areas.

When working in the community pharmacy Jonathan carries out brief interventions, using a protocol agreed and developed with the GP practice and targeting smokers. The national smoking cessation service can then be used to support patients to quit smoking. He can also provide a holistic approach to care and has identified and addressed other issues such as psoriasis, or depression, prescribing appropriately or referring back to the GP as necessary and can follow up community intervention in his practice clinic.

Case Study 3:

"A 67 year old male with COPD and was having problems with shortness of breath. He was understandably depressed particularly because he could no longer tend to his garden and be outdoors.
He could only walk a few short steps and needed to use his salbutamol inhaler to get around. He just wanted to be able to breathe easier so that he could do more.

He attended our pharmacy COPD Spirometry clinic regularly and over several months, prescribing in line with Fife COPD guidelines and formulary his peak flow improved from 250 to 460, he rarely needed his reliever inhaler, his medications are reduced and has had no chest infections in a year.

GP Communication

I communicated the changes with my GP practice via email using a clinical handover tool, (Situation, Background Assessment and Recommendations (SBAR)) and the practice made the necessary changes to the patient's health record and repeat prescription forms. I agreed to share outcomes from my follow up appointments. N.B. Read and write access to the health record would have made this communication much less time consuming.

Outcomes

The most important thing for this person was not what his peak flow read or his oxygen saturation, it was feeling he could breathe every day. Going into his garden in any weather and having the health to enjoy his retirement especially being able to go on day trips with his wife. His mental health had improved remarkably and he just cannot believe he is so well on fewer medicines."

Bernadette Brown, Community Pharmacist Independent Prescriber- Improving Quality of life with LTCs

PREVENTION AND SELF-MANAGEMENT IN THE COMMUNITY

"The Health and Social Care Alliance Scotland (the ALLIANCE) supports the Royal Pharmaceutical Society's call for growing involvement of pharmacists in supporting people living with long term conditions, as part of the wider health and social care team. Pharmacists have unique skills and expertise which make them well placed to work in partnership with people living with long term conditions to support self-management and enable them to achieve the outcomes that are important to them."

Ian Welsh, Chief Executive,
The ALLIANCE

All individuals must be encouraged and given the tools to maintain their own health and well-being. Scotland's "House of Care" approach supports and enables people to articulate their own needs and decide on their own priorities, through a process of joint decision making, goal setting and action planning with the health professionals involved in their care[32]. Pharmacists are well placed to support people in managing their condition within these initiatives and must be included in the multidisciplinary team approach to care.

The Self Care Forum describe a 'four pillars of engagement'[33] approach to self-care. While all pharmacists can support people with LTCs wherever they are practicing the following "pillars" illustrate where the accessibility of the community pharmacy team can particularly facilitate this.

- Lifelong Learning: Over 600,000 people visit a community pharmacy in Scotland every day. The often informal nature of the contact with a pharmacy means that it is possible to provide opportunistic education with brief interventions. , advice and support for people at every stage throughout life.
- Empowerment: There are currently around 1,200 community pharmacies in Scotland.[12] The accessibility of the community pharmacy network on the high street, supermarkets, in deprived and rural communities provides a gateway to health and medicines advice from a healthcare professional without the need for an appointment, offering reassurance and empowering people to take greater control of their own health and wellbeing.
- Information: As a trusted healthcare profession, pharmacists provide a reliable and confidential source of health and medicines information. The pharmacy team can also ensure that individuals are signposted to trusted resources and groups for further information about their physical and mental health.

elf-assessments tools on how to reduce risk could also be used with individuals, to asses and understand their relative risk of developing a long-term condition. Obesity and smoking, for example, are linked with most long term conditions[34]. Pharmacists can advise on reducing risk by providing information on positive lifestyle choices, information on self-care and providing services such as stop smoking and brief interventions on alcohol[10].

- Local and National Campaigns: An essential service that a community pharmacy provides is the promotion of healthy lifestyles, one way this is undertaken is via public health campaigns. Each community pharmacy undertakes 6 public health campaigns every year which provide a real opportunity for consistent messages to be delivered to all individuals and could be further developed through coordinated national campaigns.

Giving people the information and tools to make positive lifestyle choices and self-care is an essential step to help maintain good health and prevent illness. Improved health literacy, starting from school age onwards would support self-care and self-management in the longer term. Shifting resources to further support people to stay in the prevention phase of the long term condition cycle (figure 2) for as long as possible will help to move the NHS from an 'illness' service to a 'health' service. Public health initiatives can offer people local support tailored to their individual needs[35].

Case Study 4: Mental Health

"In our pharmacy we have redesigned the way we support young adult patients with depression and anxiety. All patients receiving new medication are offered a one to one private consultation to advise them on how best to use their medication and also discuss any other questions and issues. We advise on key lifestyle factors such as good sleep hygiene, and for patients who are students can signpost to various academic support services also. We arrange both telephone and face to face follow ups and once patients are settled on repeat medication make sure we check how they are progressing with their treatment. For patients we feel are at risk of harming themselves we liaise closely with our GP colleagues, ensuring patients get timely appointments and the regular contact and support they need."

Jonathan Burton, community pharmacist
Supporting young patients receiving treatment for depression and anxiety

TIMELY DETECTION AND REFERRAL

When an individual first starts to experience symptoms of ill-health, they will often seek advice from a pharmacy and this is an ideal opportunity for the pharmacist to detect early warning signs of what could become a LTC. Early detection and timely referral can make a significant difference to people's quality of life, particularly at the early stages of LTCs such as rheumatoid arthritis[36] and dementia[37].

The current referral process leads to delays in access to treatment for the patient and contributes to unnecessary workload for the GP.

Currently, the primary care system creates a barrier for direct referral from one health professional to another. When people present at a pharmacy with symptoms that require referral, the pharmacist has few options other than the traditional route of referring individuals to their GP. The pharmacist may have already recognised that the patient would benefit from quick access to another health or social care professional (e.g. dietician or physiotherapist) but this would require onward referral from the GP.

To ease the pressures on GPs, direct referral arrangements to other healthcare professionals for minor health conditions must be routinely available, enabling GPs to focus on diagnosing new conditions and providing complex care. This would ensure the patient journey is streamlined, reducing duplication and improving cost effectiveness of services.

More opportunities for simple screening for LTCs should be explored as part of preventative approaches to healthcare (e.g. testing blood sugar levels for diabetes in high risk groups or blood pressure measurements to prevent strokes among smokers). Early detection with appropriate information and support, simple lifestyle changes, social prescribing and signposting to local resources including third sector support , could prevent significant medical interventions and hospital admissions in the longer term.

TREATMENT AND MONITORING

Once an individual has been given a diagnosis of a LTC and stabilised by their GP or appropriate specialist, ongoing support should be provided by an appropriate multidisciplinary team. When prescribed and used effectively medicines have the potential to significantly improve quality of life and improve outcomes for individuals with a LTC. By focusing on a holistic approach to pharmaceutical care, pharmacists can support individuals to maintain good health and wellbeing and help avoid complications of their existing LTC, as well as working to prevent the development of further LTCs[38].

Using multiple medicines (polypharmacy)[39] can become problematic where medications are prescribed inappropriately, or where the intended benefit of the medication is outweighed by the risk. The more medicines an individual is prescribed, the greater the risk of drug interactions and adverse drug reactions, as well as impaired adherence to medication and a reduced quality of life.

As the number of individuals with co-morbidities become more prevalent, the challenges associated with prescribing the right medicines and supporting patients to use them effectively should not be underestimated. This increase in complexity means that besides developing and maintaining prescribing competency for individual conditions, prescribers have the challenge of keeping up to date with new medicines and the potential for interaction between medicines prescribed for different conditions[40,41].

Managing polypharmacy is where the expertise of the pharmacist is essential as part of multidisciplinary approaches to care. The in-depth pharmacology and medicines expertise of the pharmacist is essential when considering the optimal medication regimen for an individual with co-morbidities. Following condition specific guidelines may no longer be the most appropriate course of action for the individual. Pharmacists therefore play a leading role in the optimisation of medication regimens for people with LTCs; ensuring appropriate use of medicines, stopping inappropriate medicines as well as considering opportunities for lifestyle changes and non-medical therapies. In primary care the Chronic Medication Service is an ideal way to provide this and General Practitioners and Pharmacists must work closely together to make maximum use of this service.

Case Study 5: Independent Prescriber (IP) Hypertension clinic run from Community Pharmacy in Ayrshire and Arran

Patients were identified by medication history within Community Pharmacy (CP) and invited for ongoing Blood Pressure review at a convenient time for them, usually tying in with their routine medication supply. The consultation included measuring BP, weight and BMI, and discussing lifestyle choices. The pharmacist prescriber made any changes required to treatment and offered lifestyle advice to improve overall results. Patients were enrolled in the Chronic Medication Service to enable ongoing pharmaceutical care and if appropriate and agreed between the GP, patient and pharmacist would then be eligible for repeat dispensing.

Suggested outcomes so far are reduced GP/nurse appointments for hypertension queries, increased access for hard to reach patients, offer of lifestyle advice before prescribing changes, increased self-management of condition by patient, increase compliance with medication and a reduction in medication waste.

Case Study 6: Pharmacist led pain clinics in GP practice

The focus of the pharmacist pain reviews was to optimise therapy and support self-management through a holistic person centred approach. The reviews demonstrated a reduction in pain severity and the pharmacist frequently signposted/referred patients on to physiotherapy and to education classes.

The number of subsequent GP and consultations for pain issues was halved from an average of 2.6 in six months to 1.3 in six months and a similar reduction was seen in the number of secondary care pain clinic reviews

ACCESS TO PATIENT HEALTH RECORD

Patients need to be assured and confident that their records are safe and that confidentiality is assured. They need to know that their records can only be accessed by a registered professional and then only after the patient has given consent.

Each healthcare professional records important information about a patient's care but these are separate records and cannot be accessed by other healthcare professionals.

One single patient health record where all essential information is stored would enable more informed and safer health decisions to be made by practitioners and patients.

Pharmacists working in GP practice or in hospital have access to patient health records but this is not yet the case in community, although there are pockets where access to a clinical portal is being tried and evaluated. Currently community pharmacists have no accurate diagnosis and have to use their professional judgement and discretion when speaking to patients about their condition. e.g. when medicines have dual purposes such as for pain and/or depression or epilepsy.

According to research from YouGov, an overwhelming majority of the British public, 85%, said they want any healthcare professional treating them to have secure electronic access to key data from the GP record.[43]

With the advent of new clinical services, the minor ailment service and the growing number of pharmacist prescribers, more information on pharmaceutical care issues is being recorded and stored in community pharmacy systems. This information should be transferred back to the GP to provide an accurate overall view, but currently there is no link between the pharmacy record and the GP record. Also, medicines that a patient may purchase from the pharmacy are currently unknown to the prescriber.

Pharmacists must have full read and write access to the patient health record to improve patient care and patient safety. Information is key to delivering more effective pharmaceutical care to patients, improving medicines adherence and reducing the medicine related errors which contribute to unplanned admissions to hospital.

"Being able to access a patient's record, when consent has been given, and understand the nature of their condition can help pharmacists provide better information and support to them, so that they can get the best out of their medicines."

Richard Meade Head of Policy and Public Affairs, Marie Curie Scotland.

Community Pharmacy example from pilot trial of access to patient records

A customer complained of tiredness symptoms and requested to buy iron tablets. The pharmacist checked her blood test results to find her iron levels were fine and that iron tablets were not required; however, on checking, her last blood tests showed her thyroid hormone levels were on the lower side of normal and recommended that she should see her GP to review the dose of her levothyroxine treatment. Her dose was increased and her symptoms resolved.

"New figures from the Scottish Government show that 50% of adults now live with long term conditions. Epilepsy Scotland believes pharmacists are ideally placed to help deliver even better patient care to this growing sector of the population. Three of four new key policy recommendations for pharmacists would lead to increased multidisciplinary working, making direct referrals to appropriate health and social care professionals and having full access to the patient health record, with prior consent. All these steps can only benefit the ongoing care and management of people with long term conditions. When it comes to epilepsy prescribing, managing this complex condition requires a high degree of specialist clinical skill. Clinical pharmacists will require appropriate epilepsy and learning disability training and are likely to work as part of the patient's multi-disciplinary team."

'Pharmacists have a crucial role to play around drug compliance. We are aware that up to half of patients seen in A&E with recurrent seizures are noncompliant. Pharmacists must actively encourage people, and especially those who have epilepsy, to use the Chronic Medication Service. Optimising a person's understanding and effective use of drug therapy is paramount to their wellbeing."

Allana Parker, Public Affairs Officer, Epilepsy Scotland

NEXT STEPS

This policy has been developed to instigate action at national and local levels to ensure people with long term conditions can benefit from greater access to the expertise of pharmacists. The implementation of these recommendations will help to drive quality improvements in the delivery of care by the multidisciplinary team and will contribute to the changes needed to reduce demands on our health and social care services, including out of hours services. Action will be required across NHS Scotland to review plans for long term conditions and to address the role that the pharmacy profession can play in the development of effective models of care.

The Royal Pharmaceutical Society in Scotland is committed to working with the NHS and other stakeholders to drive this important agenda forward and to evaluate the effectiveness of new initiatives, using pharmacists' expertise in improving patient care.

References

1. Health Improvement Scotland http://www.healthcareimprovementscotland.org/programmes/long_term_conditions.aspx (accessed 23/11/16)
2. The King's Fund. Managing People with Long Term Conditions. Research paper 2010
3. Greater Glasgow and Clyde health Board Medicines Reconciliation in Hospital policy October 2015
4. The Scottish Government, A National Clinical Strategy for Scotland February 2016
5. NHS Scotland, Realistic Medicine. Chief Medical Officer's Annual report 2014-2015
6. Review of NHS Pharmaceutical Care of Patients in the Community in Scotland. Scottish Government 2013
7. Reducing premature mortality: the role of community pharmacies Royal Society for Public health Vision, Voice and Practice
8. Dept. of Health Compendium on Information – Long Term Conditions - 2012
9. Scottish Government: http://www.gov.scot/Topics/Health/Services/Long-Term-Conditions (accessed 5/10/16)
10. Ibid
11. Fortin M, Soubhi H, Hudon C, Bayliss EA, Akker M v d (2007). 'Multimorbidity's many challenges'. BMJ 334 (7602): 1016–17
12. http://www.nice.org.uk/nicemedia/pdf/CG76FullGuideline.pdf
13. Howard RL, Avery AJ et al, British Journal of Clinical Pharmacology, Vol63, issue 2,Feb2007, 136-147
14. Arch .Intern. med/vol171(No11), June 13, 2011
15. Healthcare Improvement Scotland. Safer use of medicines August 2015
16. Royal College of General Practitioners: http://www.rcgp.org.uk/news/2013/december/27m-patients-to- wait-week-or-more-to-see-gp-in-2014.aspx
17. Hospital Episode Statistics Accident and Emergency Attendances in England – 2012-13, Health and Social Care Information Centre published 28th January 2014
18. Wales Audit Office. 2014. The Management of Chronic Conditions in Wales – An Update.
19. Scottish health service costs ISD publication report 24th November 2015 https://www.isdscotland.org/Health-Topics/Finance/Publications/2015-11-24/2015-11-24-Costs-Report.pdf
20. NHS Scotland Polypharmacy guidance 2015
21. http://bmjopen.bmj.com/content/5/5/e007328.full accessed 171116
22. RPS and RCGP Scotland Joint Policy Statement on General Practice Based Pharmacists September 2016
23. NHS in Scotland 2016 Auditor General October 2016
24. Billings J, Dixon J et al (2006) Case finding for patients at risk of readmission to hospital: development of algorithm to identify high risk patients, British Medical Journal, London: Vol 333 (7563) pp.327-330
25. Howard RL, Avery AJ et al (2007) in British Journal of Clinical Pharmacology London: Vol 63, Issue 2, pp.136-147
26. National Patient Safety Agency (2007) Safety in doses: medication safety incidents in the NHS London: NPSA
27. Begum N, Donald M et al (2011) Hospital admissions, emergency department utilisation and patient activation for self-management among people with diabetes published in Diabetes Research and Clinical Practice Vol 93 (2) pp.260-7
28. Goodwin N, Curry N et al (2010) Managing people with long-term conditions London: The King's Fund
29. https://www.asthma.org.uk/about/media/facts-and-statistics/ (accessed 21/11/16)
30. Greater Glasgow and Clyde Health Board Community Pharmacy Respiratory Augmented Pharmaceutical Care Scheme (APCS)Contract Mechanism and Specification 2016 -17
31. https://www.ncbi.nlm.nih.gov/pubmed/21367593/ (accessed 21/11/16)
32. http://www.alliance-scotland.org.uk/what-we-do/our-work/primary-care/scotlands-house-of-care/ (accessed 28/11/16)
33. The Self Care Forum Manifesto: My Health, My Life Achieving Engagement. Available at http://www.selfcareforum.org/wp-content/uploads/2014/11/SelfCareForumManifestoNov2014.pdf
34. Lifestyle: Obesity and Smoking – and the Health of the Population. Dr Abhijit Bagade. January 2015. Available at http://www.greatyarmouthandwaveneyccg.nhs.uk/uploads/files/Item%2015%20-%20Lifestyle%20Obesity%20and%20Smoking%20%20and%20the%20Health%20of%20the%20Population.pdf
35. Evaluation of the Healthy Living Pharmacy Pathfinder Work Programme 2011-2012
36. Department of Health: Supporting people with long term conditions to self-care. A guide to developing local strategies and good practice. Available at http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4130868.pdf
37. The Kings Fund: Managing people with long-term conditions. Available at http://www.kingsfund.org.uk/sites/files/kf/field/field_document/managing-people-long-term-conditions-gp-inquiry-research-paper-mar11.pdf
38. http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/polypharmacy-and-medicines-optimisation-kingsfund-nov13.pdf
39. NHS Scotland Polypharmacy Guidance 2015
40. National Institute for Health and Clinical Excellence. Multimorbidity: clinical assessment and management. Expected publication September 2016. https://www.nice.org.uk/guidance/indevelopment/gid-cgwave0704
41. The Royal Pharmaceutical Society; A Competency Framework for all Prescribers. Publication date: July 2016
42. Royal Pharmaceutical Society: Your Care, Your Medicines.
43. https://www.emishealth.com/news-and-events/news/public-support-wider-access-to-gp-record/

ROYAL
PHARMACEUTICAL
SOCIETY
Scotland