ROYAL PHARMACEUTICAL SOCIETY
England

Frontline pharmacists:
Making a difference for people with long term conditions

NOVEMBER 2016

Supported by Pharmacy Voice

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Speaking up for community pharmacy

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INTRODUCTION

The Royal Pharmaceutical Society (RPS) believes that pharmacists have a crucial role to play in the support of people with long term conditions.

The management of long term conditions represents a significant strain on an already overstretched primary care system and an unnecessary burden on secondary care resources through avoidable hospital admissions.

The RPS believes that 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.

Our approach

This report takes a principle-based approach to the management of long term conditions. Taking into account the increasing prevalence of multimorbidities, it is not condition-specific but rather takes a holistic and overarching view of the potential contribution represented by the pharmacy profession to support all people with long term conditions.

This report focuses on the need to enhance the role of pharmacists as part of a multidisciplinary approach to help tackle the challenges facing the NHS in treating and supporting people living with long term conditions.

This report takes into account the main objectives of NHS England's *Five Year Forward View* and proposes that optimal use of pharmacists to support people with long term conditions can:

- Improve health by maximising pharmacists' role in health and wellbeing;
- Transform care by utilising pharmacists' skills, expertise and knowledge in medicines and their holistic approach to patient care; and
- Help to control costs by reducing medicines waste and unplanned admissions to hospital by better use of medicines.

All of these are key areas outlined in the NHS Business Plan 2016/17.[1]

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EXECUTIVE SUMMARY

The effective management of long term conditions is widely recognised to be one of the greatest challenges for the NHS this century.[2] More than 15 million people are currently living with at least one long term condition[3] and this number is expected to continue to rise. Long term conditions place a huge burden on the NHS, particularly in primary care but also in secondary care through avoidable outpatient appointments and visits to Accident and Emergency (A&E).

Pharmacists already play an important role in the ongoing monitoring, support and treatment of people living with long term conditions.

The RPS believes that 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 NHS resources.

The patient journey for people with long term conditions is represented by four stages: prevention and self management; timely detection; treatment and monitoring; and palliative and end of life care. To maximise the contribution of pharmacists to the management of long term conditions at each stage of the patient journey, The RPS recommends the following actions:

Our vision for Great Britain

1 Pharmacists providing direct patient care should have the opportunity to train to become 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.

England specific recommendations:

1 Commissioners, NHS Trusts, General Practice (GP) surgeries and community pharmacies should develop collaborative arrangements for specific categories of patients with long term conditions to be partly or completely managed by pharmacists.
2 Commissioners should develop collaborative arrangements to enable pharmacists with appropriate skills and knowledge to manage the long term care of frail, elderly people living in care homes and other domiciliary settings.
3 Public health organisations should fund the use of community pharmacies to target specific health promotion subjects that impact on the management of long term conditions.
4 Steps should be taken at national and local levels to develop ways of working that enable healthcare professionals to operate efficiently and effectively across traditional sectors.
5 Pharmacists must play an important role in the safe management of people with one or more long term condition, and on several medicines (polypharmacy), by improving adherence to treatment, reducing side effects and admission to hospital, de-prescribing where appropriate.
6 Pharmacists will contribute, with others, to the prevention and screening of disease, self-care and supporting patients diagnosed with a long term condition from disease progression by supporting their health and wellbeing.
7 Opportunities must be created for multidisciplinary teams to train and develop together to encourage greater collaboration and sharing of expertise.
8 Pharmacists must have protected time to advance their practice and to sustain their professional development.

The implementation of these recommendations will ensure people with long term conditions can benefit from greater access to the expertise of pharmacists, and in the long term, create cost efficiencies across the healthcare system.

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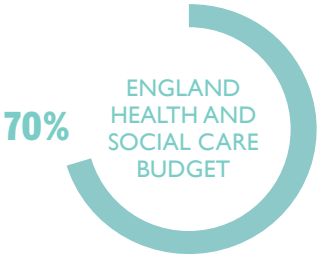
CALCULATING THE VALUE OF PHARMACISTS IN IMPROVING CARE FOR PEOPLE WITH LONG TERM CONDITIONS

More than **15 million** people in England have at least one long term condition[4]
By 2025, **18 million** people will have one or more long term conditions[5]

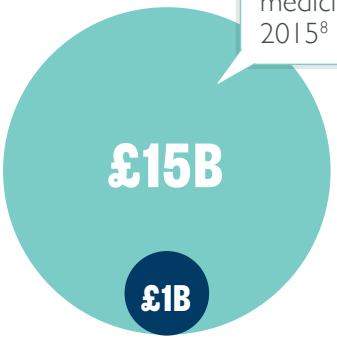
70% is spent on caring for people with long term conditions[6]



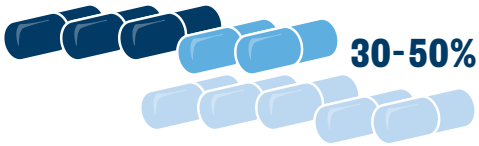
Up to **£3,000** annual costs for living with one long term condition[7]

Up to **£8,000** annual costs for living with three or more long term conditions[7]

£15 billion was spent on medicines in 2015[8]

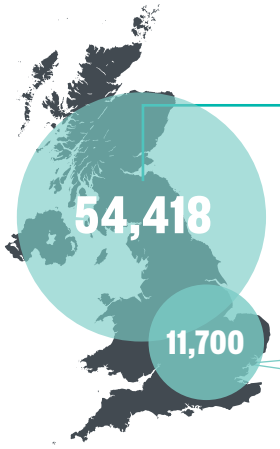


Almost £1 billion was spent on prescriptions to treat and manage diabetes alone[9]



of medicines prescribed for long term conditions are not taken correctly[10]

Long term conditions account for 50% of all GP appointments[11]



54,418 registered pharmacists in Great Britain[12] and **11,700** community pharmacies in England[13]

Adults in England visit a pharmacy on average 16 times a year[14] and **1.2 million daily visits** to pharmacies are for health-related reasons[15]

£500m

Up to £500 million of extra value could be generated if medicines were used in an optimal manner in just five therapeutic areas:[16]

- **asthma**
- **diabetes**
- **raised blood pressure**
- **vascular disease**
- **the care of people with schizophrenia**

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CARING FOR PEOPLE WITH LONG TERM CONDITIONS

More than 15 million people in England have at least one long term condition[17] and the effective management of long term conditions is widely recognised to be one of the greatest challenges facing the 21st century NHS in England.[18] Caring for long term conditions currently accounts for approximately 70% of the health and social care budget in England.[19] This burden is set to increase with a projected rise in the number of people with one or more long term conditions to around 18 million by 2025.[20]

A long term condition is often defined as a condition that cannot, at present, be cured but can be controlled by medication and other therapies. Examples of long term conditions include diabetes, heart disease, asthma and chronic obstructive pulmonary disease. A substantial proportion of people with long term conditions also experience co- or multimorbidity – the presence of two or more conditions simultaneously.[21]

It has been estimated that the number of people living with multiple long term conditions is also predicted to rise to 2.9 million in 2018 (from 1.9 million in 2008).[22] This would represent a significant increase in cost burden. The average health and social care cost per person per year rises exponentially with the number of long term conditions with which they are living. Costs rise from just over £1,000 for someone with no long term conditions, to around £3,000 for someone with one long term condition and up to nearly £8,000 for someone living with three or more long term conditions.[23]

Department of Health data shows that long term conditions are more common in people from lower socio-economic groups; those from unskilled occupations (52%) suffer from long term conditions more than groups from professional occupations (33%).[24] Multimorbidity is also more common among deprived populations.[25]

A system under pressure

The Department of Health estimates that, in England, long term conditions account for around 50% of all GP appointments.[26] Primary care has come under increasing pressure in recent years, with higher demands on GPs and longer appointment waiting times. There is also growing consensus that GPs require longer appointments to adequately manage the health needs of more complex patients, such as those living with one or more long term conditions. A recent report from the Royal College of General Practitioners stated that:

> ***Only 8% of UK GPs feel that the current consultation length is long enough for patients with long term conditions***[27]

Alongside this, demands on urgent and emergency care are also rising.

> ***Long term conditions are estimated to account for 68% of outpatient and A&E appointments and 77% of inpatient bed days.***[28]

With the average cost of a hospital stay for a non-elective inpatient estimated to be £1,565 per day,[29] there is a clear need for more effective support to help manage people living with long term conditions in their communities, in order to improve patient outcomes and reduce hospital admissions.

Frontline pharmacists

Pharmacists already play an important role in the ongoing monitoring, support and treatment of people living with long term conditions. With more than £15 billion spent on medicines in 2015, medication is the most common intervention in the management of long term conditions. For example, prescriptions to treat and manage diabetes accounted for almost £1 billion of NHS spending in 2015.[30]

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As experts in medicines and their use, pharmacists can ensure patients receive the best outcomes from their medicines, reduce adverse events, minimise avoidable harm and unplanned admissions to hospital, and deliver efficient medicines use for the NHS. Adults in England visit a pharmacy on average 16 times a year.[31] This frequency of access means pharmacists are ideally placed to recognise the early signs and symptoms of many long term conditions. Pharmacists also play an important role in preventing long term conditions by promoting health and wellbeing.

As of 30 September 2016, there were 54,418 registered pharmacists in Great Britain.[12]

The RPS believes that the expertise and clinical knowledge of the pharmacist workforce can be more 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 NHS resources.

This view has been echoed by stakeholders in many areas of the health sector.

> *"I welcome the recommendations of this report and the direction of travel which the RPS has outlined.*
>
> *"Community pharmacists are skilled, registered health professionals who are the experts in medicines use and optimisation. I want their clinical skills to be much more available to patients to help them manage not just their medicines but also their overall health through the provision of healthy lifestyle advice.*
>
> *"This is particularly true for patients with long term conditions who may be taking many medicines and where there is evidence that outcomes are not always as good as they could be.*

> *"The RPS's report is timely because the Independent Review of Community Pharmacy Clinical Services will rep ort later this year and it will recommend how the NHS should develop and improve clinical pharmacy services for patients."*
>
> David Mowat MP,
> Parliamentary Under Secretary of State
> for Community Health and Care

> *"It is so important that patients have quick and easy access to care. Being able to speak to a local pharmacist could mean that patients are able to access the right care closer to home or their workplace; completely removing the challenges of booking an appointment with a GP, cutting out waiting times and taking out the worry for many patients who get anxious visiting a surgery.*
>
> *"The Patients Association warmly welcome pharmacists becoming trained prescribers, not just because it will take pressure off GP surgeries meaning a better service for patients who need to see their GP, but also because it is a better for patients who don't need to see their GP. It is a win-win situation for patients."*
>
> Katherine Murphy,
> Chief Executive,
> The Patients Association

> *"National Voices congratulates the Royal Pharmaceutical Society for its consistent efforts to shape future roles for pharmacists that help create better lives and outcomes for people with long term conditions. In dialogue with our member charities who work with hundreds of thousands of people, RPS has shown genuine commitment to mutual learning and to pursuing effective person centred care, as reflected in this new policy position."*
>
> Don Redding,
> Director of Policy, National Voices

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"Diabetes UK fully supports the recommendations of this report. Pharmacists are working with patients in their communities every day. Integrating them into the multidisciplinary team could really support people living with diabetes and other long term health conditions.

People with diabetes get just three hours support from traditional diabetes team members each year on average. Extending the role of pharmacists into areas such as prescribing and specialist referral could mean people with diabetes have more support when they most need it."

Simon O'Neill,
Director of Health Intelligence,
Diabetes UK

"Seven in ten people with dementia live with one or more other health conditions. With different doctors working in different parts of the health service prescribing medicines to treat each condition, people with dementia often end up with complex, outdated treatment packages. Pharmacist-led medicine reviews ensure holistic oversight of a person's treatment, ensuring the medicines are working effectively, complement each other and that a person is able to adhere to them.

People living with one or more long term conditions need holistic and well co-ordinated support to live as well as possible for as long as possible. Pharmacists can play a significant role in prevention, early detection, supported self-care and ongoing management of long term conditions. We all know that pharmacists need to be deployed much more effectively to enhance the accessible, person-centred contribution they can make to health and wellbeing. It is now time to make this ambition a reality not just for small minorities of patients who benefit from pilots and innovation, but for everyone who lives with a long term condition."

Dr Charlotte Augst,
Partnership Director,
Richmond Group of Charities

"An enhanced and more integrated role for pharmacists in the NHS has the potential to bring significant benefits for people with dementia. A diagnosis of dementia is crucial to get the right information, treatment and support, yet a third of people living with the condition still don't have one. Pharmacists' routine contact with patients make them ideally placed to spot the early signs of dementia and make referrals to the GP for a diagnosis."

Jeremy Hughes,
CEO Alzheimer's Society

"This report from the Royal Pharmaceutical Society highlights the important, indeed vital, role pharmacists are playing in supporting people with long term conditions. Its case studies and examples highlight the growing evidence that the greater use of pharmacists within a multidisciplinary approach to care can improve outcomes, with the accessibility and convenience of the community pharmacy setting providing an ideal place for expanding the opportunities for prevention and screening as well as using the skills of community pharmacists to support those living with a long term condition. The report is a timely call to action, and the recently announced Pharmacy Integration Fund should be used to develop these new pharmacy-based models of care, and explore how we they should be commissioned and delivered at scale. With increasing numbers of people living longer while managing one or more long term conditions, it's time for a change of pace in developing the pharmacist's contribution through patient-centred approaches that help people use medicines to achieve the right result for them, while maximising the efficient use of vital NHS resources."

Rob Darracott,
Chief Executive,
Pharmacy Voice

"High quality care for people living with long term conditions depends on substantial multidisciplinary working, involving specialist and community nurses, pharmacists, allied health professionals, social care workers, health care assistants, and others.

Nurses are often closely involved in the care and assessment of people who are receiving long term care. Particularly in community and primary care settings, a specialist nurse will often assist other healthcare professionals as much as patients: a specialist nurse will support GPs and practice nurses as well as providing advice and support to patients. They often give advice and support which may prevent the need for secondary interventions.

Nurses will also work closely with pharmacists regarding medicines management. In this way, their expertise is central in supporting an integrated system of care, from acute and specialist services to self-management.

Self-management is also important, and community nurses and community pharmacists can play a crucial role in helping individuals to manage their own conditions. It is vital that people living with long term conditions are given the information and training to make choices about where and how they want to live, and are supported by appropriate, competent staff."

Wendy Preston,
Head of Nursing Practice,
Royal College of Nursing

"The Faculty of Old Age Psychiatry welcomes this report. It highlights the increasing number of people living with long term physical or mental conditions with older individuals in particular often having multiple comorbidities. It stresses the importance of health professionals including the pharmacist working collaboratively and in an integrated manner across all systems to ensure the person with the long term condition gets the best possible advice and support.

Older people with mental health issues benefit from early recognition of their symptoms and prompt signposting for support/treatment. Pharmacists are in a unique position to see people with long term conditions on a regular basis and so are well placed to recognise any signs and symptoms of mental health issues such as depression or dementia."

Dr Amanda Thompsell FRCPsych,
Chair of the RCPsych's Faculty of
Old Age Psychiatry

"Through its Future Hospital Programme, the RCP has long recognised the importance of bringing care closer to the patient by integrating care across the primary, secondary and community care sectors. As healthcare professionals on the high street, pharmacists are there for patients and families every day. Enhancing their role as part of the multidisciplinary team will open up new opportunities to identify and manage patients with long term conditions, help patients better manage their own health and avoid hospital admissions."

Dr Andrew Goddard,
Royal College of Physicians

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THE PATIENT HEALTH JOURNEY FOR LONG TERM CONDITIONS

People living with long term conditions must benefit from access to the right health and social care skill set at the right time to meet their physical and mental health needs. They should feel empowered to act as decision-makers in their own care to help shape their desired outcomes at all points of their long term condition journey.

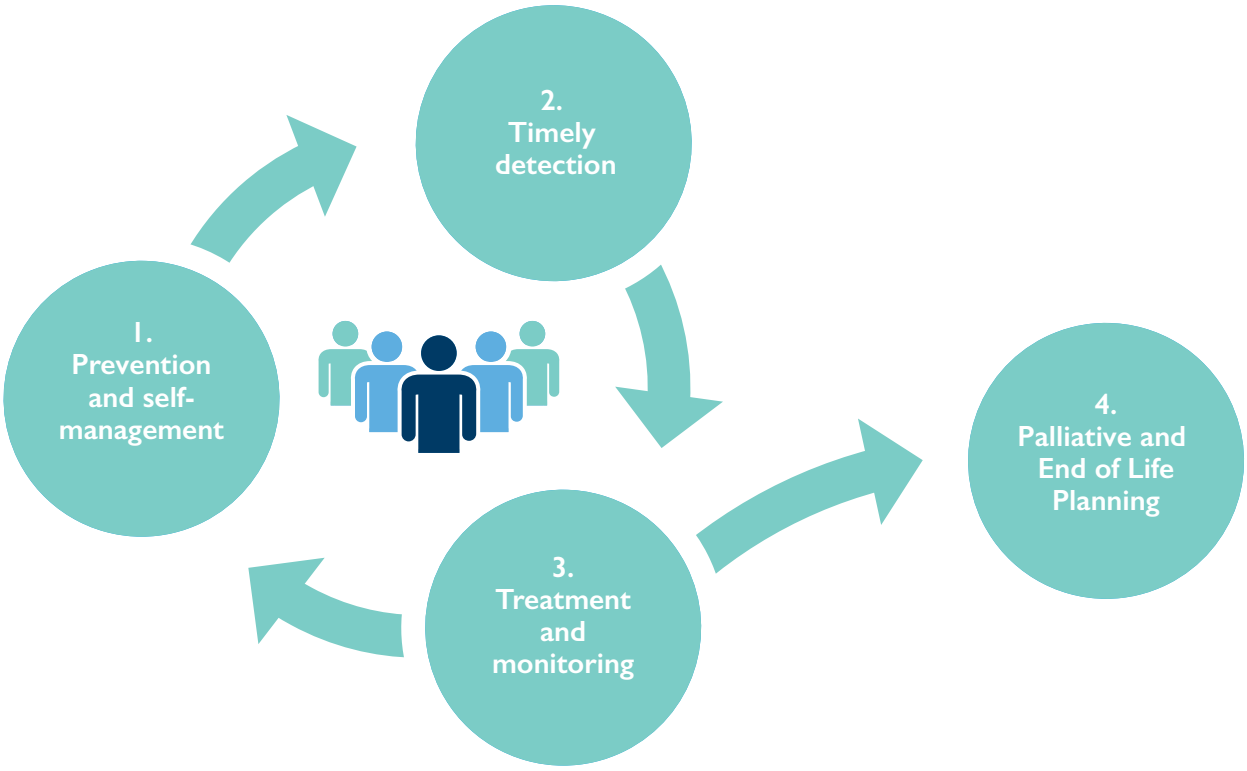
Figure 1 represents key stages in this journey. The role of pharmacists at each stage is further explored in this report.

The RPS believes that 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).

The RPS believes that pharmacists will contribute, with others, to the prevention and screening of disease, self-care and supporting patients diagnosed with long term conditions from disease progression by supporting their health and wellbeing.

The RPS believes that commissioners should develop collaborative arrangements to enable pharmacists with appropriate skills and knowledge to manage the long term care of frail, elderly people living in care homes and other domiciliary settings.

Figure 1: The long term condition patient journey



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PREVENTION AND SELF-MANAGEMENT

Everyone should be empowered and given the tools to maintain their own health and wellbeing. The Self Care Forum describes a 'four pillars of engagement' approach to self-care: 1. Lifelong Learning; 2. Empowerment; 3. Information; and 4. Local and National Campaigns.[32] Pharmacists are well placed to support people at each point of this model:

1. Lifelong learning

An estimated 1.6 million visits to community pharmacies take place daily, of which 1.2 million are for health-related reasons.[33] This regular contact, without the need for an appointment, means pharmacists are well placed to provide opportunistic health education, advice and support and to make every contact count. This is particularly true for people with diagnosed long term conditions who regularly interact with pharmacists when collecting prescriptions.

2. Empowerment

There are over 11,700 community pharmacies in England.[34] Most of the population in England (89%) is estimated to have access to a community pharmacy within a 20 minute walk and access is even greater in areas of highest deprivation (99.8%).[35] This level of access is particularly important in the management of long term conditions, which are more prevalent in lower socio-economic areas.

3. 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 patients are signposted to trusted resources and support groups, both national and local, for further information about their physical and mental health.

Pharmacists play a particularly important role in the prevention of long term conditions. For example, obesity and smoking are risk factors for a number of long term conditions.[36] Pharmacists are able to advise on reducing risks by providing information on smoking cessation and weight loss through a number of established community pharmacy programmes.

4. Local and national campaigns

Pharmacists and community pharmacies are highly engaged with both local and national health campaigns. Community pharmacies are contracted to undertake at least six locally-determined public health campaigns every year,[37] as well as their involvement in national campaigns like 'Stoptober'. Over 9,000 pharmacies in England supported Smoke Free January in 2015 and nearly 10,000 pharmacies supported Stoptober in 2015.[38]

Giving people the information and tools to make positive lifestyle choices and to engage in self-care empowers patients and is an essential step in maintaining good health and preventing illness. Shifting resources to support people to stay in the prevention stage of the long term condition journey (see Figure 1) for as long as possible will help the NHS move from an illness service to a wellness service.

NHS England's *Five Year Forward View* states that, 'the future health of millions of children, the sustainability of the NHS, and the economic prosperity of Britain all now depend on a radical upgrade in prevention and public health'.[39]

The RPS believes that public health organisations should fund the use of community pharmacies to target specific health promotion subjects that impact on the management of long term conditions.

89% of the English population is estimated to have access to a community pharmacy within a 20 minute walk.

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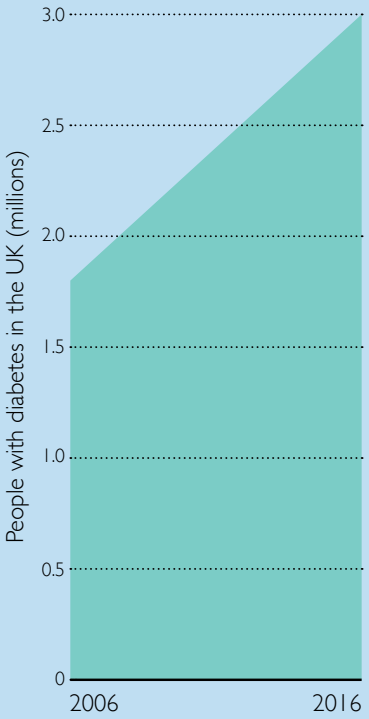
CASE STUDY

TYPE 2 DIABETES PREVENTION

Over the past 10 years, the number of people with diabetes in the UK has risen from 1.8 million to 3 million.



This growth is set to continue over the next decade.[40]

Lloyds Pharmacy has been offering free screening nationwide for Type 2 diabetes since 2003 and has carried out over 1.5 million assessment checks. It is estimated that had these been carried out by the NHS, it would have cost it £18.5 million. The screening service has resulted in the referral of over 75,000 people considered to be 'at high risk' to their GP for further investigation or diagnosis.

In 2013, the national pharmacy chain launched a new foot check advice service for diabetes patients. It was used by over 30,000 people in the first two weeks of it being available.

"Through our experience of providing the Lloyds Pharmacy Type 2 Diabetes Screening Service in community pharmacies for over 13 years, we know there are many opportunities to help find the millions of people that are at risk or have the condition and don't know it. Through engaging customers and patients in conversations about their health and lifestyle we can help to identify them early and provide the necessary advice, guidance and signposting in a friendly and familiar setting.

The fact that we have now performed over 1.5 million checks shows that pharmacy is an ideal place to provide such interventions. Our services extend to supporting people with a diagnosis, in helping them to manage their condition effectively, such as foot care awareness and medicines advice, which go some way to support the multi-speciality care required to manage diabetes."

Sam Preston, Prescription and Services Manager, Lloyds Pharmacy

TIMELY DETECTION

When someone first starts to experience the symptoms of ill health, they may initially attempt to self-manage. At this stage, people will often seek advice from a pharmacy; this is an ideal opportunity for pharmacists to detect the early warning signs of what could potentially be diagnosed as a long term condition.

Early detection and timely referral can make a significant difference to patients' quality of life, particularly in conditions such as dementia.[41] The regularity with which pharmacists see patients means that they are well placed to detect signs and symptoms of some long term conditions on an opportunistic basis.

Currently, the primary health care system includes barriers to direct referral from one health professional to another. When someone presents at a pharmacy with symptoms which require referral, the pharmacist has few options other than the traditional route of recommending that they visit their GP. The pharmacist may have already recognised that the patient would benefit from direct access to another healthcare professional, such as a dietician or physiotherapist, but this currently requires onward referral from a GP. This adds additional burden to the already overstretched GP network and can lead to delays in access to treatment.

The RPS believes that pharmacists should be an integral part of referral systems within the multidisciplinary team. Pharmacists should be able to directly refer to other health and social care professionals for minor health conditions. Pharmacists should also be referred to for common ailments, medicines reviews and the ongoing monitoring, support and treatment of patients with long term conditions.

This would improve access to care and reduce unnecessary appointments, enabling GPs to focus on diagnosing more complex conditions. It would also streamline the patient journey and improve cost efficiency.

Pharmacists already conduct a number of screening programmes for long term conditions. More opportunities for simple testing for long term conditions should be explored as part of a preventative approach to healthcare, for example atrial fibrillation detection, blood pressure monitoring for hypertension and testing blood sugar levels for diabetes.

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CASE STUDY

EARLY DETECTION OF ATRIAL FIBRILLATION THROUGH 'ENHANCED' MEDICINES REVIEWS

Atrial fibrillation (AF) increases the risk of stroke, reduces quality of life, and increases morbidity and mortality.[42] A significant number of patients who have AF are asymptomatic, which often leads to a delay in diagnosis. Too often, AF is only detected when the patient presents with serious complications, such as a stroke. Anticoagulation reduces the risk of stroke, but data have shown that only around half of patients eligible for an anticoagulant actually receive one.[43]

Community pharmacists currently provide medicines use reviews to patients and are ideally situated to facilitate the diagnosis of AF.

The Royal Brompton and Harefield NHS Foundation Trust is currently running a programme to assess how the detection and treatment of AF can be improved via 'enhanced' medicines use reviews in community pharmacies.[44]

Ten community pharmacists are carrying out detailed medicines reviews for patients with risk factors for developing AF, for example high blood pressure or diabetes. In patients with existing AF, they are checking that they are receiving optimised treatment and are taking anticoagulants. As part of the consultation, the pharmacists are using a portable electrocardiography (ECG) device, called an AliveCor monitor, to detect AF.

Patients who are found to have undiagnosed AF, are not appropriately anticoagulated, have poor heart rate control, or have high symptom burden, will be referred to the Arrhythmia Care Team at Harefield Hospital, where they will be reviewed and offered individualised treatment.

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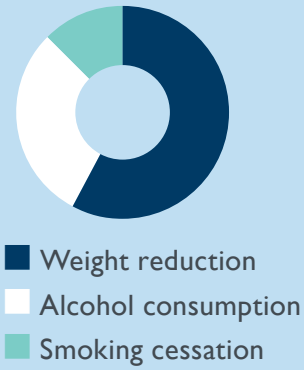
CASE STUDY

ATRIAL FIBRILLATION SCREENING

Many patients with AF are asymptomatic and diagnosed via opportunistic screening. Community pharmacy has been advocated as a potential resource for opportunistic screening and lifestyle interventions.

During October 2014 – January 2015, six pharmacies in Kent undertook AF screening among eligible patients as identified through pharmacy records and the completion of a short questionnaire.[45] Of 594 patients screened, nine were identified as at risk of having AF and were referred to their GP.

The service also identified 109 patients with undiagnosed hypertension, 176 patients with a BMI of >30,131 with an Audit-C score of more than 5, and 59 smokers.



Pharmacists provided 413 interventions in 326 patients aimed at weight reduction (239), alcohol consumption (123) and smoking cessation (51).

This service evaluation revealed that patients are willing to be screened for AF through community pharmacies and that pharmacists are able to identify patients at risk of AF as well as other risk factors to health. Community pharmacists were able to provide advice to patients and make GP referrals as a result of this opportunistic screening.

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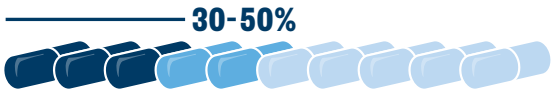
TREATMENT AND MONITORING

Once a patient has been diagnosed with a long term condition and stabilised by their GP or specialist, ongoing support should be provided by an appropriate multidisciplinary team to provide patient-centred, integrated care.

When prescribed and taken appropriately, medicines have the potential to significantly improve quality of life and health outcomes for people living with long term conditions.



> ***However, it is estimated that between 30-50% of medicines prescribed for long term conditions are not taken correctly.[46]***

It has been suggested that improving the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments.[47] A report in 2010 stated that up to £500 million of extra value could be generated in just five therapeutic areas (asthma, diabetes, raised blood pressure, vascular disease and the care of people with schizophrenia) if medicines were used in an optimal manner.[48]

The principles of medicines optimisation describe how healthcare professionals can enable patients to improve their quality of life and outcomes from medicines use by having a sustained focus on the need to optimise patients' medicines.[49] By focusing on a holistic approach to pharmaceutical care and optimisation of medicines, pharmacists can support people living with long term conditions to maintain good health and avoid complications, as well as working to prevent the development of further conditions.

The RPS believes that commissioners, NHS Trusts, GP surgeries and community pharmacies should develop collaborative arrangements for specific categories of patients with long term conditions to be partly or completely managed by pharmacists.

The RPS believes that steps should be taken at national and local levels to develop ways of working that enable health professionals to operate efficiently and effectively across traditional sectors.

The RPS believes that opportunities must be created for multidisciplinary teams to train and develop together to encourage greater collaboration and sharing of expertise.

The RPS believes that pharmacists must have protected time to advance their practice and to sustain their professional development.

Multimorbidity and polypharmacy

Alongside the rise in numbers of people living with several long term conditions (multimorbidity), it also recognised that these patients experience poorer quality of life, poorer clinical outcomes, longer hospital stays, more post-operative complications and are therefore more costly to health services.[50]

> ***People living with long term conditions are also more likely to need complex medicines regimens with more intensive support from health professionals.***

The rise in the number of people living with multiple long term conditions is recognised as a key factor in the increase in prescribing rates. The proportion of patients receiving ten or more medicines has grown from 1.9% in 1995 to 5.8% in 2010 and the average number of items per person increased by 53.8% between 2001 and 2011.[51]

The use of multiple medicines (polypharmacy) can become problematic when medicines 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 medicines and a reduced quality of life.[52]

> ***Research also demonstrates that people with long term conditions are two to three times more likely to experience mental health problems than the general population.***

Much of the evidence relates specifically to affective disorders such as depression and anxiety, however multiple morbidities are also common in dementia, cognitive decline and some other conditions.[53]

As the number of people living with multiple long term conditions 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 are faced with the challenge of keeping up-to-date with new medicines, managing the risk of adverse events and the potential for interaction between medicines prescribed for different conditions.[54,55]

Managing polypharmacy is where the expertise of the pharmacist is an essential part of multidisciplinary approaches to care. Pharmacists' in-depth pharmacology, therapeutics and medicines expertise is extremely valuable when considering the optimal medicines regimen for a person with multiple morbidities. Ensuring the appropriate use of medicines, stopping inappropriate medicines, as well as considering opportunities for lifestyle changes and non-medical therapies are key areas in which pharmacists can play a leading role.

There are currently 3,319 independent pharmacist prescribers in Great Britain.[56] Pharmacist prescribers can increase capacity in primary care by taking on some of the prescribing burden for long term conditions.

The RPS believes that pharmacists must play an important role in the safe management of people with one or more long term conditions, who are taking several medicines (polypharmacy), by improving adherence to treatment, reducing side effects and admission to hospital, and de-prescribing where appropriate.

The RPS believes that pharmacists providing direct patient care should have the opportunity to train to become a prescriber, fully utilising those skills as part of the multidisciplinary approach to managing and supporting people with long term conditions.

ROYAL PHARMACEUTICAL SOCIETY
England

CASE STUDY

PHARMACIST MANAGEMENT OF ASTHMA REVIEWS

"Research has shown that the delivery of regular structured reviews of people with asthma can reduce their day-to-day symptoms and reduce the burden of providing emergency care on the NHS. However, it is reported that only two-thirds of patients with asthma have a routine asthma review each year.[57] Asthma reviews are mainly undertaken by practice nurses and GPs. The Signposting, Inhaler technique, Medication, Peak flow, Lifestyle and Education (SIMPLE) intervention package was developed to assess the potential value of patients receiving a structured review at their community pharmacy.[58]

In collaboration with other health professionals, community pharmacists were given extra training to deliver structured asthma reviews. 13 pharmacists carried out reviews in Leicester city centre on 165 patients with follow-up appointments at three and six months.

Of those reviewed:

42% of patients had not had an asthma review at their GP practice in the last 12 months

56% had not had their inhaler technique checked in the last year.

Using the validated Asthma Control Test (ACT) the results showed most improvement in those patients who had not had an asthma review from their GP in the last 12 months; showing patients receiving significant clinical and quality of life improvement.

It is known that people only take their medicines as prescribed 50% of the time which leads to poor outcomes and wasted resources.[59]

The study found considerable improvement in patients' compliance with their medicines, resulting in better overall asthma control.

The study demonstrated

32%

decrease in GP appointments

40%

reduction in hospital admissions

The project team concluded that to improve patient outcomes and thus decrease hospital admissions, pharmacist asthma reviews should be targeted at patients who have not had a review from the GP recently, capitalising on the accessibility and approachability of the community pharmacist."

Anna Murphy,
Consultant Respiratory Pharmacist at University Hospitals of Leicester NHS Trust and honorary visiting professor, School of Pharmacy, DeMontfort University

ROYAL PHARMACEUTICAL SOCIETY
England

The New Medicines Service

The New Medicine Service (NMS) is offered in England by community pharmacists to people starting a new medicine to help improve medicines adherence for the following long term conditions: asthma/chronic obstructive pulmonary disease (COPD), type 2 diabetes, hypertension or antiplatelet/anticoagulant treatment. The intervention is based on the pharmacist having a consultation with the patient 7-14 days after initial presentation with a prescription for a new medicine.

A 2014 evaluation of the NMS showed that it significantly increased patients' adherence to their new medicine and that delivery of the service will save the NHS money through better patient outcomes at overall reduced costs to the NHS.[60]

The NMS significantly increased adherence by about 10% and increased numbers of medicines problems identified and dealt with, compared with current practice.[61] The NMS alone has been estimated to have generated £17.3 million in health system cost savings net of the cost of delivery.[62]

CASE STUDY

THE FOUR OR MORE MEDICINES SERVICE

Inappropriate prescribing and non-adherence have a significant impact on hospital admissions and patient quality of life. The English government has identified that community pharmacy could make a significant contribution to reducing non-adherence and improving the quality of prescribing, reducing both hospital admissions and medicines wastage. Four or more medicines (FOMM) is a community pharmacy support service aimed at patients >65 years old who are taking four or more medicines.[63]

In an evaluation of this service, 620 patients were recruited by 25 pharmacies across all socio-demographic areas across Aston, Leigh and Wigan. 441 (71.1%) completed the six-month study period. Pharmacists made 142 recommendations to prescribers in 110 patients largely centered on potentially inappropriate prescribing of nonsteroidal anti-inflammatory drugs (NSAIDs), proton pump inhibitors (PPIs) or duplication of therapy.

After six months, patients had experienced a significant:

- **increase in medicines adherence;**
- **reduction in medical and self-treated falls; and**
- **increase in patient quality of life.**

Pharmacy teams picked up on a range of issues - not all medicines related. Patients were more satisfied with the management of their condition - a key NHS objective. Quality of life was improved in small but significant ways, such as advising on the correct length of walking sticks and how medicines could fit in with home and social life.

Based on the findings from the FOMM Service, it is estimated that if the service was delivered through 11,100 pharmacies in England to 954,600 patients, the NHS would see annual benefits of:

- **£35.57 million** in reduced medicines costs and hospital admissions as a result of STOPP / START recommendations
- **£33.87 million** in reduced hospital costs due to reduction in falls that result in fractures.
- a total of **17,200** Quality Adjusted Life Years (QALYs).

Benefits as a result of improved medicines adherence, pain, and falls that do not require secondary care treatment have not been quantified.

This study shows that by focusing on patients over the age of 65 years with four or more medicines, community pharmacists can improve medicine adherence, clinical outcomes and patient quality of life – all at a potential cost-saving to the NHS.

ROYAL PHARMACEUTICAL SOCIETY
England

CASE STUDY

PHARMACIST PRESCRIBERS: ANTI-COAGULATION SERVICE

"Regulations to allow pharmacists to prescribe independently for any condition within their clinical competence came into effect in 2006.[64] Pharmacists at Boots UK have been caring for patients taking warfarin by initiating therapy and monitoring ongoing dosing through community-based anticoagulation services for almost 10 years.

Following the publication of the updated Atrial Fibrillation National Institute for Health and Care Excellence (NICE) guidelines in June 2014[65] which included the recommendation that the decision around anti-coagulation treatment should be made after an informed discussion between clinician (including pharmacist clinicians), and the patient, Boots worked closely with Bromley CCG to develop a new clinical pathway to support the guidelines. The new pathway uses independent pharmacist prescribers to encourage a shared decision making discussion with patients to offer all available treatments for anticoagulation, not just warfarin.

Once patients are referred by their GP, independent pharmacist prescribers (IPs) carry out a thorough consultation with patients and where clinically indicated, the IPs can prescribe the patient's anticoagulant of choice. Patients who are prescribed warfarin then go on to join the Boots Anticoagulation Service for ongoing management and patients who choose a Direct Oral Anticoagulant (DOAC) are monitored for a period of three months before their care is transferred back to their GP.

Since the introduction of the new pathway in January 2016, Boots IPs have initiated either warfarin or a DOAC for over 80 patients resulting in significantly positive outcomes.

Key findings:

- **Extremely positive patient satisfaction with regular 100% scores in patient feedback questionnaires**
- **Patients seen in clinics within days of the completed referral being received, minimising potential delays to initiating therapy**
- **Freed up capacity in the Trust haematology department allowing increased focus on patients and inpatients with more complex needs**
- **Fantastic clinical development route for pharmacists to train and practice as IPs; demonstrating how pharmacy supports the wider health system**

I was the first IP to pioneer this new model of care in the Bromley service and wrote the first FP10 prescription. It was a very proud moment for Pharmacy, for Boots UK and for me to carry out an activity that would have historically only been done in secondary care. We have moved from being a fragmented pathway across primary and secondary care to offering a more complete and seamless level of care for our patients. Developing similar pathways in other regions would I believe, benefit the health system as a whole."

Shirley Walker, Healthcare Partnership Manager and Independent Prescriber, Boots UK

ROYAL PHARMACEUTICAL SOCIETY
England

Caring for people living with multiple long term conditions

In 2012, the Central London Community Healthcare NHS Trust began running a pilot to support medicines optimisation in the >65s. The service involved the Clinical Medication Review Pharmacist, alone or accompanied by a GP or nurse, visiting the elderly patients in their home to conduct a Level 3 medicines review. Patients were referred by any member of the multidisciplinary team (MDT). The patients were mostly housebound and taking a number of medications for long term conditions. On the basis of its success, the service was re-commissioned following the pilot.

A member of the Medicines Management Team - Clinical Medication Review Pharmacist, Nicole Le Morgan - describes one of her recent cases:

"A GP referred an elderly lady to me who had been discharged from hospital with queried dementia. The lady had COPD, hypertension, chronic pain as a result of osteoarthritis, and atrial fibrillation. She was also at a high risk of falls. The GP was unclear about the appropriateness of the medications she was currently being prescribed and had requested a review be carried out at the patient's home.

On visiting the patient, I saw numerous medications scattered around her home. Blister packs from previous prescriptions were evident as were expired medications. The patient was evidently drowsy, even though it was the middle of the day, and she had stomach pain. She was unclear what the medications she was taking were for and was taking them incorrectly.

On assessment of her medications, I found that her antihypertensive medication (for very low blood pressure and risk of falls) had been stopped in hospital but this change had not been carried through on discharge. I found her to be on too low a dose of anticoagulant given her high risk of stroke. Her drowsiness was due to her taking a sleeping tablet late at night to relieve itching which, in turn, was due to the pain-relief patches she had been prescribed years ago for lower back pain, but were actually no longer required. She had been missed off the flu jab list and was not currently being prescribed bone protection supplements which she was clearly in need of. She also had a very poor inhaler technique.

I liaised with the MDT to make the necessary adjustments to the patient's medications. I was able to counsel her on her inhaler technique and also referred her to the local memory service and I provided her with a medication chart as a reminder of what she should be taking and what each medicine was for. She was subsequently diagnosed with mild-moderate dementia.

On my second visit to the patient, accompanied by the district nurse, it was evident that the patient was much improved. She no longer had stomach pain, her blood pressure had improved and she was much more alert. It is likely that her risk of falls and stroke had been reduced, and she was finding the medication chart to be helpful with compliance.

Through a 45-minute visit to the patient in her home, I was able to get a full picture of the medication needs of the patient. As well as adjusting her medications, I was also able to put her in touch with other services critical to her holistic wellbeing."

PALLIATIVE AND END OF LIFE CARE

Palliative and end of life care are not necessarily an inevitable part of the long term condition cycle. People can live well with a long term condition, providing that it is managed effectively. However, should a patient's condition begin to deteriorate, it could become a necessary extension of their treatment and management plan, as illustrated in Figure 1.

People with palliative care and end of life care needs must be treated with dignity and respect and empowered to shape their own patient journey.[66] End of life care can be a very difficult process for families and carers; some may have to take over decision-making for their relative and so it is vital that families and carers are supported and given as much advice and information as they need, at a time that is appropriate for them. Support for the patient and carer or family must also include dialogue between the whole multidisciplinary health team, social care and third sector to ensure the patient's needs are effectively met in the care setting of their choice. Co-ordination and communication across the multidisciplinary team will be critical to delivering high quality and responsive palliative and end of life care. This can be facilitated by read and write access to the electronic patient record.

The RPS believes that 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.

Medicines can be of significant benefit during end of life care to control pain, alleviate symptoms and stabilise conditions. This is an area in which patients can benefit significantly from the support and expertise of a pharmacist to help them make decisions about their medicines and healthcare.

There are often problems in accessing palliative care medicines in the last few days of life as the needs of the patient change rapidly, especially for opioids or for injectables for syringe drivers. Access to medicines needs to be effectively managed to avoid medicines wastage. Within an area, a network of pharmacists could be established that hold such supplies and have expertise within this area of care.

ROYAL PHARMACEUTICAL SOCIETY
England

CASE STUDY

MANAGING END OF LIFE THROUGH AN EFFECTIVE MULTIDISCIPLINARY TEAM[67]

The NICE Quality Standard 13[68] specifies that palliative care must be developed in accordance with a personalised care plan, including rapid access to administration of medicines, and should also consider the patient's needs and preferences for place of death.

In 2013, the Argyle Care Home Service was commissioned by Ealing CCG to provide medical and pharmaceutical care to patients across 19 nursing homes. The multidisciplinary team (MDT) consisted of GPs, an independent prescribing practice nurse, and full skill mix of clinical and prescribing pharmacists and pharmacy technicians. Prior to this, nursing home patients' deaths in hospital were significantly higher than the national average and deaths in nursing homes significantly lower.

Working with the local palliative care team, the MDT implemented several initiatives to improve upon this:

- **Training and support for nurses in homes and community pharmacists;**
- **Joint MDT working and scheduled visits to provide truly holistic patient-centred care;**
- **Development of formulary of anticipatory medicines designed to meet the needs of most patients;**
- **Identifying pharmacies that will stock and supply anticipatory medicines urgently;**
- **Improving communication between the 'trinity' of home, general practice and pharmacy;**
- **Support and teaching for doctors, GP pharmacists and pharmacy technicians; and**
- **Integrated working with community pharmacies to ensure timely supply.**

Through these initiatives, there was a reduction of more than 40% in admission to hospital for end of life care from 2013-2016. 36% of patients had anticipatory medicines in place at time of death which were used in 61% of patients. The initiatives resulted in the increased empowerment of nurses, carers and pharmacists, and improved facilitation of patient and family wishes at end of life.

Nursing home manager's feedback:

"With the support [the MDT] give, our residents generally die within the home around faces they recognise. I hope the Argyle Surgery will continue to run the Home Service in future as this makes the difference between residents dying with dignity around people they care for or residents being rushed off to hospital in an emergency and dying without dignity around people they don't. As all our residents have dementia, this makes a real difference to patients and families."

NEXT STEPS

This report 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.

Implementation of this report's 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 health and social care services, including emergency care in England.

Action will be required across NHS England to review current plans for long term conditions and to address the role that the pharmacy profession can play in the development of effective models of care. This should be a key element of the new Sustainability and Transformation Plans.

The RPS in England is committed to working with the NHS and other partners to drive this important agenda forward and to evaluate its effectiveness in improving patient care.

ROYAL PHARMACEUTICAL SOCIETY
England

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