

PEOPLE-CENTRED CARE

IMPROVING OUTCOMES FOR PEOPLE LIVING WITH LONG-TERM CONDITIONS

The exceptional demands that the COVID-19 pandemic has placed, and continues to place, on the NHS have stretched resources, capacity and the workforce like never before. Services have been repurposed and resources reprioritised to manage the pandemic response. Patients worried about contracting the virus or burdening the NHS may have avoided engaging with the healthcare system. The result is that people living with long-term conditions (LTCs) are facing significantly increased waiting times for appointments, diagnostics and referrals.

The short-term demands of COVID-19 cannot compromise outcomes for people living with LTCs. This report includes replicable solutions to improve diagnosis, optimise care and manage LTCs, based on Lilly's experience of working in partnership with NHS teams in multiple therapy areas.

As we consider a post-COVID healthcare service, it is vital that we look at how to improve diagnosis and management of LTCs for a more sustainable future approach. This report highlights recommendations for system changes that could help transform outcomes for those living with LTCs, and ultimately help to deliver on the ambitions of the NHS Long Term Plan.



3m

During the first peak of the pandemic there was an estimated backlog of three million people waiting for cancer screening services, with 350,000 'missing' urgent suspected cancer referrals between April and August 2020.¹



46%

The number of type 2 diabetes diagnoses was down 46% in England between March and July 2020, with 60,000 diagnoses either missed or delayed in the UK between March and December 2020.²



77%

In April 2020, the rate of diabetes monitoring (HbA1c blood tests) in people with type 2 diabetes dropped by 77% in England.²



1.2m

No routine cholesterol testing was carried out through the pandemic due to the halting of an estimated 1.2 million NHS Health Checks, representing a significant missed opportunity to prevent major cardiovascular disease (CVD) events including strokes and heart attacks.³



1 in 4

The number of people with LTCs is growing; one in four have two or more LTCs.⁴ Treatment and care for people with LTCs accounts for 50% of GP appointments, 64% of outpatient appointments and 70% of inpatient stays.⁴



£7 in £10

It is estimated that £7 in every £10 of total health and social care expenditure is spent on LTCs,⁵ and approximately 18 million people in England live with a LTC.⁶

DIAGNOSIS

SUPPORTING IMPROVED DIAGNOSIS RATES IN LONG-TERM CONDITIONS

The COVID-19 pandemic highlighted the importance of ensuring people living with LTCs are identified early and provided with necessary care. Improved and earlier diagnosis is a key pillar of the NHS Long Term Plan, which sets out specific commitments on early diagnosis rates in cancer, diabetes and cardiovascular disease (CVD). When we consider a post-pandemic environment, there is an opportunity for the NHS and life sciences companies to collaborate to improve diagnosis of key conditions by adopting new approaches in digital technology and looking to enhance primary care services' role in spotting early signs of LTCs.

PRIMARY CARE NETWORKS

The NHS Long Term Plan includes a commitment to roll out Primary Care Networks (PCNs) across the country. PCNs will eventually be required to deliver a set of seven national service specifications, with three having commenced in April 2020, including supporting early cancer diagnosis. PCNs are a key building block for NHS England's plans for integrated care and have the potential to reduce variation in diagnosis rates across the country and improve early diagnosis with more effective referral pathways.

RECOMMENDATION:

Primary care services are the first line of defence in spotting the early signs and symptoms of LTCs. Following the introduction of three PCN national service specifications in April 2020, these measures should now be expanded beyond cancer to improve diagnosis in other key long-term conditions such as diabetes.

DIGITAL TECHNOLOGY

The COVID-19 pandemic fundamentally changed the use of digital technology in primary care. Prior to the pandemic, 90% of GP consultations with patients were face-to-face, while during the height of the pandemic 90% were happening virtually.⁷ Pre-pandemic, the healthcare system did not have a strong track record in implementing new technologies, but 2020 demonstrated how the NHS can adapt quickly and at scale when all those involved in the delivery of care work together. Technology that supports increased engagement between patients and clinicians can mean better detection of early signs and symptoms of LTCs.

RECOMMENDATION:

ICs have the potential to work with their local Academic Health Science Networks (AHSNs) and industry partners to explore how digital technology and phone applications such as rapid point of care blood tests to monitor symptoms can be harnessed and used within the community to speed up diagnosis.

GENOMICS

The NHS Long Term Plan committed to offer whole genome sequencing as part of routine care, extending access to molecular diagnostics and offering genomic testing routinely to all people with cancer. To deliver on this ambition and support early diagnosis, the Genomic Laboratory Hubs will play a critical role in providing a world-class genomic testing service.

RECOMMENDATION:

The pandemic delayed the rollout of the Genomic Laboratory Hubs across the country, with some Hubs coming online sooner than others. Equitable access to genomic testing is a priority for the NHS with the establishment of the NHS Genomic Medicine Service (GMS) Alliances. The accelerated rollout of Hubs will support parity in the service and provide people with access to standardised, end-to-end care pathways including genomic testing, clinical genetics personalised treatments and genomic counselling services.

SPECIALISED WORKFORCE

Research by Cancer Research UK found that oncology staff numbers in the UK may need to double by 2027 to meet the needs of the growing number of cancer patients.⁸ In dermatology, analysis suggests that in England, a 28% increase in current staffing levels is needed to reach the recommended ratio of one full-time consultant dermatologist per 62,500 patients.⁹ In neurology, the ratio of consultant neurologists to general population is 1 per 91,175, with significant variation across the UK and far fewer consultants when compared to similar European countries such as France and Germany.¹⁰

RECOMMENDATION:

The Long Term Plan sets out a vision to accelerate the shift from highly specialised roles to a more generalist workforce, as many people currently live with two or more long-term conditions. Training needs to support doctors to manage comorbidities, and not just single conditions. Alongside this endeavour, competency frameworks could be created for non-specialist healthcare professionals (HCPs) to deliver specialist services in LTCs. Following the pandemic, NHS England and Health Education England (HEE) should work with clinical professional groups to identify gaps in specialist care in LTCs and consider how to deliver specific services for patients.

LILLY UK CASE STUDY: TELE-DERMATOLOGY APPLICATION 'MYSKINSELFIE' TO AID DIAGNOSIS IN NEWCASTLE

Lilly is currently working with Newcastle Upon Tyne NHS Foundation Trust on the MySkinSelfie mobile phone app for skin self-monitoring. The app is used to support photographic skin self-monitoring between patients and their clinician. The app was designed and built by Newcastle Hospital NHS Trust in collaboration with the OpenLab for human computer interaction, based at Newcastle University School of Computing Science.

In a recent study of urgent and non-urgent skin cancer referrals in Bristol and Newcastle, it was found that patient uptake of the MySkinSelfie app nearly doubled during the COVID-19 pandemic (51% compared to 26%).

The app provided an effective alternative that reduced face-to-face visits during the COVID-19 pandemic, aiding remote consultations and diagnosis in both centres. The app reduced face-to-face appointments by 58% for basal cell carcinoma referrals compared to before the pandemic, and by 63% for two-week-wait skin cancer referrals during the pandemic.

Phone applications and digital technology such as MySkinSelfie provide easily implementable cost-saving measures that keep patients out of hospital and free up clinical capacity.

OPTIMISING CARE

SUPPORTING ENHANCED CARE IN LONG-TERM CONDITIONS

The demands of delivering care during the pandemic created such significant change that it is widely expected that the NHS is unlikely to fully return to its pre-pandemic operating model. Patients and HCPs alike have started to rely on solutions to deliver care outside of hospitals and clinics, such as virtual consultations and remote monitoring. This rapid adoption of digital tools in healthcare provision creates more opportunities for the sharing of data, and a chance to optimise patient care by using the data generated to inform longer-term care decisions. Both the NHS and the Government have been more willing to rapidly embrace medical innovation, which we hope will continue in a post-pandemic world.

MEDICINES OPTIMISATION

The NHS's New Medicines service has provided support for people with long-term conditions to help improve medicine adherence since 2011. From July 2020, this service evolved into the NHS Discharge Medicines Service, aiming to avoid unnecessary re-admissions due to non-adherence. The roll out of this service has the potential to create efficiencies and keep people out of hospital through empowering prescribers such as pharmacists.

RECOMMENDATION:

The cost of wasted medicines to the NHS due to non-adherence is estimated to be £300 million each year, not counting the additional cost of unnecessary appointments, tests and avoidable hospital admissions.¹¹ Under the NHS Discharge Medicines Service, hospitals will be able to refer patients who would benefit from extra guidance around new prescribed medicines to their community pharmacy. The conditions eligible for referral to this service should be regularly reviewed to ensure that all patients with LTCs who may benefit are able to do so.

LILLY UK CASE STUDY: CLINIC@HOME - DIABETES PATIENT SUPPORT APP

A team of healthcare professionals from across Wales worked with academic staff at Swansea University to develop an education app for patients with diabetes. The project was supported by Lilly UK under a joint working agreement. The free to download app helps patients on insulin therapy check for injection site reactions and learn how to manage them.

The idea for the app came from healthcare professionals who were concerned that this essential check was being neglected during the switch to remote consultations because of COVID-19. Following successful testing within Wales, the app is now being rolled out across the UK. More details can be found at: <https://clinicathome.swan.ac.uk>

DIGITAL TECHNOLOGY

The pandemic has caused a significant shift to the use of remote patient monitoring for LTC management and clinical trials. Improved use of data and digital technology substantially improved patient-centric care and patient involvement. The pandemic swept away many social and cultural barriers. The permanent uptake of new technologies that offer significant opportunities to improve health care should be encouraged.

RECOMMENDATION:

There is an immediate opportunity for local commissioners to consider new technologies and applications to deliver care virtually and support remote monitoring. When considering best practices, global digital exemplar (GDE) blueprints (a range of best practice guides developed by NHS Trusts to support the adoption of digital technologies) provide a helpful and effective framework to drive adoption. Barriers exist when attempting to move new models of care from pilots to business-as-usual. Commissioners should therefore consider support for providers by securing funding via relevant Commissioning for Quality and Innovation (CQUIN) payments.

PERSONALISED CARE

The Long Term Plan includes a range of commitments to give people more control over their own health and more personalised care when they need it. For example, the NHS Comprehensive Model of Personalised Care is currently being implemented across England and NHS England aims to roll it out to 10 million people by 2034.

The Plan also looks to expand social prescribing through social prescribing link workers, and introduce Personal Health Budgets, both of which aim to increase quality of life for people with LTCs.

RECOMMENDATION:

Shared decision making can empower prescribers and patients, but it can be difficult to implement in practice. There is a role for NICE to consider leading on the development of evidence-based decision support tools, to ensure shared decision making is built into relevant decision points in all pathways. In addition, Primary Care Networks could identify clinical champions for personalised care to lead on implementation within their localities.

LILLY UK CASE STUDY: HALVING IN-CLINIC WAITING TIMES FOR CANCER PATIENTS - BEATSON WEST OF SCOTLAND CANCER CENTRE

In 2018, the National Institute of Health and Care Excellence (NICE) updated their treatment standards for metastatic soft tissue sarcoma (STS). The new regimen involved the addition of a new chemotherapy drug to the existing standard single agent therapy, requiring patients to spend more time in hospital receiving treatment.

Lilly UK collaborated with the Beatson West of Scotland Cancer Centre on a joint project which identified a need to improve the efficiency and patient experience of the chemotherapy service and minimise the time patients would spend attending the clinic.

Working together, we identified areas for service improvement and implemented a new nurse-led service to provide care from a single specialist nurse.

The new service was able to reduce patients' time in hospital by an average of 53.6%, saving patients an average of 4 hours 34 minutes per visit. The partnership not only improved patients' experience and care but also resulted in efficiencies for the centre as empowering nurses to lead the system reduced the time required from other members of staff.

SLOWING PROGRESSION

IMPROVING MANAGEMENT OF LONG-TERM CONDITIONS

In the acute phase of the pandemic response, demand on hospital and A&E services created the need to better manage long-term conditions at a local level and in the community. As the NHS looks to adapt for the future, more innovative ways of managing long-term conditions and slowing progression will become a significant priority when helping the service to build back better.

INTEGRATED CARE

The creation of Integrated Care Systems (ICSs) offers the opportunity to manage patients with LTCs and slow disease progression more holistically and effectively. ICSs are designed to remove the issue of providers working towards different individual incentives and instead shape the local health economy towards better patient outcomes. The focus on community-based care should mean closer engagement with people with LTCs and could help to address current inequalities in patient outcomes in England.

RECOMMENDATION:

To deliver a population health management approach across a health economy, individual multi-disciplinary teams (MDTs) in Trusts could explore opportunities to work collaboratively. A potential model to demonstrate this form of working includes the Diabetes Improvement Collaborative, which brings together secondary care diabetes teams, allied health professionals, managers, administrators and service users in South London to share best practice and training to improve insulin pump uptake in Type 1 diabetes patients. This collaborative approach could be rolled-out across other LTCs to support new models of care.

INVESTMENT IN SECONDARY PREVENTION

Since 2010, public health and prevention services have faced significant funding cuts, despite ringfenced budgets for NHS front-line services. Public health programmes play an important role in preventing the progression of diseases and reducing inequalities in the impact of the social determinants of health.

While primary prevention is critical to protect the population, given the increasing number of people with long-term conditions, secondary prevention medicines have a role to play in preventing disease progression.

RECOMMENDATION:

With the formation of ICSs, integrated care can support greater collaboration between primary and specialist HCPs to improve secondary prevention and provide care in the community. In line with the Five Year Forward View and the NHS Long Term Plan, CCGs have a role in facilitating collaboration between PCNs, community health services and secondary care specialists to create appropriate MDTs that support enhanced prevention services to slow down progression of LTCs.

DIGITAL TRANSFORMATION

Digital technologies can be an effective tool in the management of long-term conditions and there is much more to be done to roll out these services nationwide. The Technology Enabled Care Services (TECS), as used for the National Diabetic Eye Screening Programme, have proven to be effective in improving access to services for patients. Using novel technology and ensuring adequate upskilling can enable care to happen more locally. This is likely to prevent referral to secondary care (and the associated costs) and reduce complications and disease progression resulting from delays in care.

RECOMMENDATION:

CCGs and providers could work with their local AHSNs and industry partners to identify innovative technologies which would support service optimisation, expand NHS capacity and improve patient experience and outcomes in their local population. In line with the Topol Review recommendations, AHSNs have the opportunity to support the upskilling and training of staff in data and digital technology.

LILLY UK CASE STUDY: PRO-ACTIVE REGISTER MANAGEMENT (PARM) IN TYPE 2 DIABETES

Lilly UK and NHS Devon jointly developed the ProActive Diabetes Register Management (PARM), a simple to use clinical data tool, which uses practice-level data to enable the quick and easy identification of diabetes patients who most need intervention and a multi-disciplinary approach to care.

The tool works by identifying the most appropriate cohort of patients in their catchment area to be reviewed by clinicians. This supports more patients to manage

their own health, be discharged from secondary care faster and be given the right level of support from their practice. Equally, it provides multi-disciplinary teams with valuable educational tools to manage more complex patients in primary care settings.

The excel-based tool is free to use and has been successfully rolled out across Devon, Cornwall, parts of Kent, and North West London.

CONCLUSION

As we emerge from the COVID-19 pandemic, there is an opportunity to vastly improve the ways in which we diagnose and manage LTCs. This report has highlighted some of the recent work Lilly has done in partnership with NHS teams, and has drawn on this experience to set out some recommendations to enhance care for long-term conditions. They are:

DIAGNOSIS

- The measures set out in the PCN national service specifications should be expanded beyond cancer to improve diagnosis in other key long-term conditions such as diabetes.
- ICSs could work with their local AHSNs and industry partners to explore how digital technology and phone applications such as rapid point of care blood tests for monitoring symptoms can be harnessed and used within the community to speed up diagnosis.
- The accelerated rollout of Genomic Laboratory Hubs will support parity in the service and provide people with access to standardised, end-to-end care pathways including genomic testing, clinical genetics, personalised treatments and genomic counselling services.
- Competency frameworks could be created for non-specialist HCPs to deliver specialist services in LTCs. Following the pandemic, NHS England and Health Education England (HEE) should work with clinical professional groups to identify gaps in specialist care across LTCs and consider how to deliver specific services for patients.

OPTIMISING CARE

- Under the NHS Discharge Medicines Service, hospitals will be able to refer patients who would benefit from extra guidance around new prescribed medicines to their community pharmacy. The conditions eligible for referral to this service should be regularly reviewed to ensure that all patients with LTCs who may benefit are able to do so.
- There is an immediate opportunity for local commissioners to consider new technologies and applications to deliver care virtually and support remote monitoring. Barriers exist when attempting to move new models of care from pilots to business-as-usual. Commissioners

should consider support for providers by securing funding via relevant Commissioning for Quality and Innovation (CQUIN) payments.

- There are a number of barriers to shared decision making. Therefore, there is a role for NICE to consider leading on the development of evidence-based decision support tools, to ensure shared decision making is built into relevant decision points in all pathways. In addition, PCNs could identify clinical champions for personalised care to lead on implementation within their localities.

SLOWING PROGRESSION

- To deliver a population health management approach across a health economy, individual multi-disciplinary teams (MDTs) in Trusts could explore opportunities to work collaboratively. A potential model to demonstrate this form of working includes the Diabetes Improvement Collaborative, which brings together secondary care diabetes teams, allied health professionals, managers, administrators and service users in South London to share best practice and training to improve insulin pump uptake in Type 1 diabetes patients. This collaborative approach could be rolled-out across other LTCs to support new models of care.
- In line with the Five Year Forward View and the NHS Long Term Plan, CCGs have a role in facilitating collaboration between PCNs, community health services and secondary care specialists to create appropriate MDTs that support enhanced prevention services to slow down progression of LTCs.
- CCGs and providers could work with their local AHSNs and industry partners to identify innovative technologies which would support service optimisation, expand NHS capacity, and improve patient experience and outcomes in their local population. In line with the Topol Review recommendations, AHSNs have the opportunity to support the upskilling and training of staff in data and digital technology.

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