

NHS England and NHS Improvement Board meetings held in common

Paper Title: Clinical Innovations during COVID-19

Agenda item: 6 (Public session)

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Paper type: For approval

Organisation Objective:

NHS Mandate from Government	<input type="checkbox"/>	Statutory item	<input type="checkbox"/>
NHS Long Term Plan	<input checked="" type="checkbox"/>	Governance	<input type="checkbox"/>
NHS People Plan	<input type="checkbox"/>		

Action required:

The Boards are asked to endorse the work to support the NHS to embed and accelerate clinical innovations that have arisen in response to COVID-19.

Executive summary:

The COVID-19 pandemic has generated significant clinical innovations and ways of working across the NHS. Many of the changes have been delivered at a pace not previously considered possible. The national Beneficial Changes programme was set up by NHS England and Improvement in May 2020 to identify innovations that have resulted in improvements to care, safety, patient experience, staff health and wellbeing, and efficiency.

This paper provides an overview of the work to capture and embed clinical innovations, focusing on clinical innovation specifically.

Background

1. COVID-19 has changed healthcare delivery in England necessitating innovations in clinical care. Early in the pandemic, NHSEI clinical leaders, also working on the frontline, began signposting changes they believed were beneficial. Early indications suggested that these innovations had led to improvements in patient outcomes, safety, efficiency and other impacts, and the need to identify, assess and encourage their spread was acknowledged.
2. Changes necessitated by the pandemic have meant an acceleration in many of our NHS Long Term Plan ambitions, such as boosting healthcare delivered safely in the community to reduce pressure on emergency departments and mutual aid that has helped develop integrated care systems. This period has also seen our clinical and policy teams developing innovative responses to strategic healthcare challenges such as the cancer drug treatment options.

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And the results of research, using NHS patients, have been swiftly embedded into NHS care with the RECOVERY trial making clinically effective treatments available to COVID-19 patients. See section 10.

Approach to capturing clinical innovations & methodology

3. The work to identify key innovations commenced in May 2020, following a call for submissions from the National Improvement Director, National Medical Director and the Chief Nursing Officer across clinical pathways and settings (primary and community care, secondary care, health & justice, specialised commissioning, ambulatory care and mental health). NHSEI's clinical leaders were encouraged to work with their professional networks to highlight improvements and innovations to clinical pathways that had the ability to significantly improve services in the longer term. In order to assess the potential of scaling up the innovations, they were asked to provide early evidence of impact and to identify what was required to sustain the change, as well as any potential adverse/ unintended consequences. Submissions were gathered through an online survey distributed through clinical networks. Separate surveys were conducted for primary, community, secondary and ambulance care and specialised commissioning, although the questions were consistent. The surveys generated a strong response from frontline healthcare professionals, including 300 responses received for primary care, 300 for community care and 1,000 for secondary care. A health equality impact assessment has been built into the evaluation process, and the process involves testing innovations with patient groups and those with lived experience, in collaboration with the NHSEI patient experience team and other stakeholders.

Initial themes & findings

4. Analysis of the responses is still underway, but early findings indicate that changes and innovations broadly fall into four main categories: **i) digitization, ii) workforce changes, iii) service integration, and iv) person-centred care:**
 - i. **Digitisation** includes remote clinical interactions, remote diagnostics/ testing, remote staff training/ education, and remote monitoring.
 - ii. **Workforce changes** include flexible staffing, role changes, new working patterns, redeployment, hierarchy mixing in teams
 - iii. **Service integration** covers new ways of working across organisational boundaries, including new referral pathways, integrated commissioning, improved clinical pathways (i.e. cancer), increased data sharing across organisations (e.g. GP practices within a PCN)
 - iv. **Person-centred care** includes patient supported self-care, empowerment, choice, monitoring and education.
5. The benefits of a significant **culture shift** on the front line has also been highlighted, including: staff empowerment; patient and clinician adoption of digital activities and an increase in homeworking which has provided a more agile workforce and supported increased collaboration. These have been incorporated into the developing People Plan. Many innovations have been

developed within specific settings, but have already been, or have the potential to be, applied within a wider system. Some innovations have also been coordinated nationally.

Key examples of innovations

6. Examples of innovations delivered during the pandemic include:

Rapid deployment of online consultation and video consultation in General Practice

7. At the beginning of the pandemic general practice was asked to remotely triage incoming appointment requests to reduce footfall in practices. To support this there was a rapid expansion of practices that had access to online consultation systems to enable digital triage. This was done through providing support on procurement and contracting, issuing guidance on digital triages, drawing together resources from NHSE/I, NHS X, NHS Digital, CSUs, AHSNs and others to provide implementation support for practices.
8. As a result, the availability of online consultation tools expanded from ~30% of practices in January 2020, to ~90% in June. There are currently over 500,000 patient interactions with practices through these tools every week. Video consultation capacity was also rapidly taken up by practices, from ~30% of practices in January 2020 to ~99% in June. Suppliers made the software available at no cost for the emergency period and national funding has been allocated for the remainder of the financial year.
9. Feedback from patients and clinicians has been positive and evaluation work is underway to understand the impacts of these changes more systematically. The intention is that all practices should retain the ability to digitally triage using an online consultation system, and that the few remaining that don't yet have the capability should put it in place. Video consultation capability will also be retained. Support for practices will remain in place and use of the tools is expected to climb. This work is funded through the Digital First Primary Care programme under the Long Term Plan

Acceleration of Electronic Prescribing Service (EPS) in General Practice

10. To support patients with access to their regular medicines the national and local NHSEI, NHS Digital and NHS X teams collaborated to accelerate the deployment of EPS so that now 96.8% of all practices are live with the service. This has resulted in 82.5% of all prescriptions now delivered digitally for dispensing, which is an increase of 12.5% since the start of the pandemic. GPs have also been supported to facilitate electronic repeat dispensing (eRD) for patients working with community pharmacists to directly support patients with their monthly repeat prescriptions over a 12 month period. Further developments in EPS are in progress through to September to enable EPS to issue one-off prescriptions that can be collected by the patient at any pharmacy to support access when medication is urgently needed or when the patient cannot access their usual pharmacy.

RECOVERY trial

11. Overall, more than 130,000 NHS patients have enrolled in Covid-related randomised trials in record time. NHS hospitals treating COVID-19 patients joined the RECOVERY clinical trial, an adaptive trial to identify treatments for people hospitalised with Covid-19. Twelve thousand NHS patients were rapidly engaged in clinical trials. The steroid, dexamethasone, in a lower dose than previously tested was proven to reduce the risk of death by a third for patients on ventilators and by a fifth for those on oxygen. The RECOVERY trial includes convalescent blood plasma which contains antibodies that help fight the virus. The trial also identified that two treatments are of no benefit to COVID-19: hydroxychloroquine and lopinavir/ritonavir.
12. The collaborative RAPID-C19 (research to access pathway for investigational drugs) between NHS England, NIHR, MHRA and NICE has successfully managed the rapid access to treatments showing positive clinical trial results. The antiviral drug remdesivir was shown by an international study, including UK centres (ACTT), to reduce recovery time for some people with COVID-19. An early access to medicines scheme was following by a 4-nation clinical policy led by NHS England providing access on the day of European authorisation.

Accident & Emergency – ‘111 First’

13. The social ‘lockdown’ to control the spread of COVID-19 saw a sharp reduction in attendance at Emergency Departments (EDs), and a large increase calls to the NHS 111 service and use of NHS 111 Online. Subsequently call volumes have returned to near normal and levels of attendance to ED are increasing.
14. The NHS ‘111 First’ programme is working to introduce a number of initiatives to reduce the number of face-to-face contacts patients will need to experience in accessing urgent care services. The option of the NHS111 First ‘prescription’ includes a number of different interventions which are aimed at remotely triaging patients through existing NHS111 online and telephony services in order to advise and navigate patients to the service that best meets their needs. Once patients have been triaged a wider range of directly bookable services will be available to 111 callers, including Same Day Emergency Care and specialty ‘hot’ clinics. If users of the NHS 111 service do need to attend an Emergency Department a referral system will be in place so that the ED knows the patient will be coming. As a ‘heralded’ patient they will also be able to receive a specific timeslot in which to attend. As recommended by the Royal College of Emergency Medicine, the aim is to enhance patient experience by avoiding unnecessary time in A&E departments whilst managing the risk of A&E overcrowding and nosocomial infection.

Ambulance - Video conferencing for patients with stroke symptoms

15. Typically, patients with stroke symptoms (FAST) are taken to the hyperacute stroke unit for further assessment. Transient ischaemic attack (TIA) patients are taken to the Local ED for assessment. During COVID-19 London

Ambulance Service and University College London Hospital Trust saw an opportunity to enhance the triage of these patients by using video conferencing at the site meaning patients were conveyed to the best place for their presenting condition, risk of exposure to COVID-19 was minimised, and they had access to quicker treatment. This trial is being closely monitored but early results look positive and there is interest from other parts of the country.

16. Annex A provides further examples of beneficial changes/innovations from COVID-19.

Embedding innovations to support recovery and improvement

17. Different mechanisms for wider adoption are now being considered, including: embedding them into national programmes (e.g. GIRFT, Improvement Directorate resources e.g. RightCare, Elective and Emergency Care Improvement Support and Long Term Plan programmes); sharing them directly with clinicians and professionals, and collaborating with AHSNs to further test and evaluate the delivery, impact and cost-effectiveness of innovations. The newly devolved Regional Improvement Hubs are being established to support the embedding of these beneficial clinical changes within systems and providers and will be fully functional from September 2020.

Funding stream/requirement

18. At national level innovations may be built into LTP programmes or commissioning arrangements where appropriate – funding requirements to be confirmed. Funding decisions may also be made locally depending on need and planning.

Conclusion

19. The Boards are invited to note this programme, and comment on its direction.

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Annex A

Further examples of local beneficial changes/ innovations from COVID-19:

Innovation	Clinical area
<p>COVID-19 has rapidly accelerated the development of Urgent Community Response (as part of the Community Services & Ageing Well Programme) services many of which operate 24/7 responding to people at home often within two hours – mostly to older people and adults with complex needs. For example, in the Cornwall system 10,500 people were referred through their new community coordination centre which provides a single point of access to all out of hospital services and ensures a timely response. A new Microsoft Power BI tool was developed to collect and understand live data across multiple organisations and with PCNs enabling live deployment of staff.</p>	Community services
<p>Community services reablement and rehabilitation teams are using a range of innovative methods to support people recovering from COVID-19 (post a stay in hospital and those who may not have been admitted) at home and in community settings. These methods include online rehab sessions and providing access to self-management tools e.g. breathing exercises. For example, at Solent NHS Trust, team members from the Pulmonary Rehab, Home Oxygen and Specialist Palliative Care Team developed a Respiratory Response Team to work alongside the Intermediate Care Team for patients that have, or have had, COVID-19. Assessments were delivered along with information and education packages for this patient group. The team provided additional resources if patients need could not be met by the Intermediate Care Team, for example, further specialised input from oxygen provision or anxiety management for breathlessness management.</p>	Community services
<p>GP practices rapidly adopted AccuRx to perform telephone and video consultations with patients remotely, ensuring that care could continue whilst reducing risk to staff and patients. The respondent noted that the 'Florey' feature on AccuRx enabled the practice to monitor asthma remotely and screen patients for COVID-19 symptoms before entering the practice.</p>	General Practice
<p>GP Practice and Community Pharmacy integration: Community pharmacists support patients with Ear, Nose, Throat and Eye conditions by making medicine recommendations without the need of a prescription from a GP.</p>	General practice



Community pharmacy has installed a free-standing automated medicine dispenser capable of handling refrigerated medicine inside their carpark in response to their reduced opening hours and high demand. The dispenser is accessible 24/7 via SMS pin-code when prescriptions are ready to be collected.	Community pharmacy
National procurement of home spirometers for cystic fibrosis patients. Allows patients aged 6+years to monitor and share vital lung function information with clinicians from home.	Specialised Commissioning – Cystic Fibrosis
Introduction of rehab case managers for Spinal Cord Injury (SCI) and neuro-rehab. Trusted assessors working across commissioning boundaries, including private providers.	Specialised Commissioning – neuro and SCI
Rolling programme of clinical skills education for "B" nurses to be clinically prepared to support the Critical Care "A" nurses in bedside delivery.	Intensive care management
Home-reporting radiology workstations provided for Radiologists shielding.	Radiology
Creation of a wider respiratory team by pulling staff from services across therapies to support ICU, CPAP and acute respiratory wards. Upskilled staff to carry out respiratory related assessment and treatment.	Physiotherapy Midlands