

# Clinical care for people living with long term conditions – the role of digital communication between NHS clinical teams and patients

## Key messages from our research

- ❖ **Digital access to the right clinical team at a time when it makes a difference to how patients manage their health condition is valued as an addition to traditional clinic appointments.** It is most valued when patients are in transition – changing treatments, deteriorating in condition, moving between child and adult services, changing their life circumstances. It works well where there is an existing, trusting relationship between clinical team and patient. An agreement on the content, channel of communication, and boundaries of access appears to be important.
- ❖ **Messages sent via mobile phone, email or internet (asynchronous communication) allows users to attend to the message when they choose.** Short messaging is good for test results, follow up of specific issues and prompting contact for further discussion. Email is good for guidance on how to use a treatment, description of symptoms and patient worries. Asynchronous communication is appreciated by patients and health professionals for allowing thinking time between communications.
- ❖ **Audio (with or without visual) digital communication is good for urgent problems and where discussion is needed.** As it is more like traditional consulting health professionals find this easier and, apart from urgent calls, it can be scheduled just like traditional clinics. Patients need to find a private space for holding conversations.
- ❖ **International research evidence** indicates that digital communication between health providers and patients improves health outcomes when it overcomes physical barriers to access such as distance, and when used to prompt behaviour change (e.g. medication adherence and therapy in mental health).

## Where does Artificial Intelligence fit in?

### **Clinical team and chatbot work alongside each other to respond to patient communications in-between face-to-face consultations:**

- The chatbot learns from the digital communications between a clinical team and their patients;
- The chatbot learns to respond to straightforward questions such as requests for information and supplies;
- With access to clinical records, the chatbot learns from the clinical team, how to give straightforward advice;
- When the question is complex a member of the clinical team picks it up.

## Benefits of AI based collaboration between clinical teams and their chatbot

- Patient access to information and advice between face-to-face encounters is increased. This is likely to reduce distress for the patient when struggling to manage their condition
- The fear of being overwhelmed by requests for information and advice from their patients in-between face-to-face consultations is reduced for the clinical team as they have help
- Patient trust in their clinical team is maintained as the chatbot is part of the team – not a bolt on that doesn't quite fit
- Levels of interest and motivation increase within the clinical team as they engage with complex patient issues rather than routine questions
- Patients who need intensive and complex input from their clinical team get it when they need it
- When patients have straight-forward questions they feel able to ask as they know it is not burdening their clinical team.

## What is needed?

- Clinical teams trained and confident in the use every-day digital communication channels with patients in-between traditional consultations, with due regard for patient safety, ethics, governance and cost. This experience gives the health professionals insight into the different types of communication, its content and complexity, enabling them to transition to working with a chatbot
- Patients with experience of contacting their clinical team digitally between traditional consultations and getting a timely answer. These patients will gain insight as to how chatbots and health professionals can work in partnership and so be prepared to trust them as a team
- Innovating partnerships between AI developers and health professional enthusiasts within a framework that rewards appropriately and limits duplication of effort
- Research evidence on whether access to timely digital communication between patient and clinical team, in-between traditional consultations, strengthens the management of health conditions and improves both clinical and psychological outcomes for patients (e.g. condition-related distress).

This policy brief is built on the results of a research study funded by the National Institute of Health Research. We observed and interviewed nearly 200 members of specialist clinical teams from across the UK working with young people living with long term conditions. We interviewed over 150 young people living with a range of conditions including diabetes, cancer, mental illness, liver disease, kidney disease, blood disorders, cystic fibrosis, inflammatory bowel disease and arthritis.

The study name is

Improving health outcomes for young people with long term conditions: the role of digital communication in current and future patient-clinician communication for NHS providers of specialist clinical services; the LYNC study

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Further details about the study are available at:

<https://www2.warwick.ac.uk/fac/med/research/hscience/sssh/research/lyncs/>

Available on the website:

- Based on our study findings the [Quick Reference e-book](#) with 10 [Topic Guides](#) are for patients and professionals who are using or considering the use of digital communication on clinical matters. The e-book and Topic Guides are free to download.
- Dramatised stories of [Sophie](#), 17yrs with type 1 diabetes and [Abdul](#), 21yrs with depression, as they manage their long term conditions independently. Co-developed from study findings with Face Front Inclusive Theatre Company.
- Details of professional development course on [Digital Communication for Health](#) developed from study findings.

