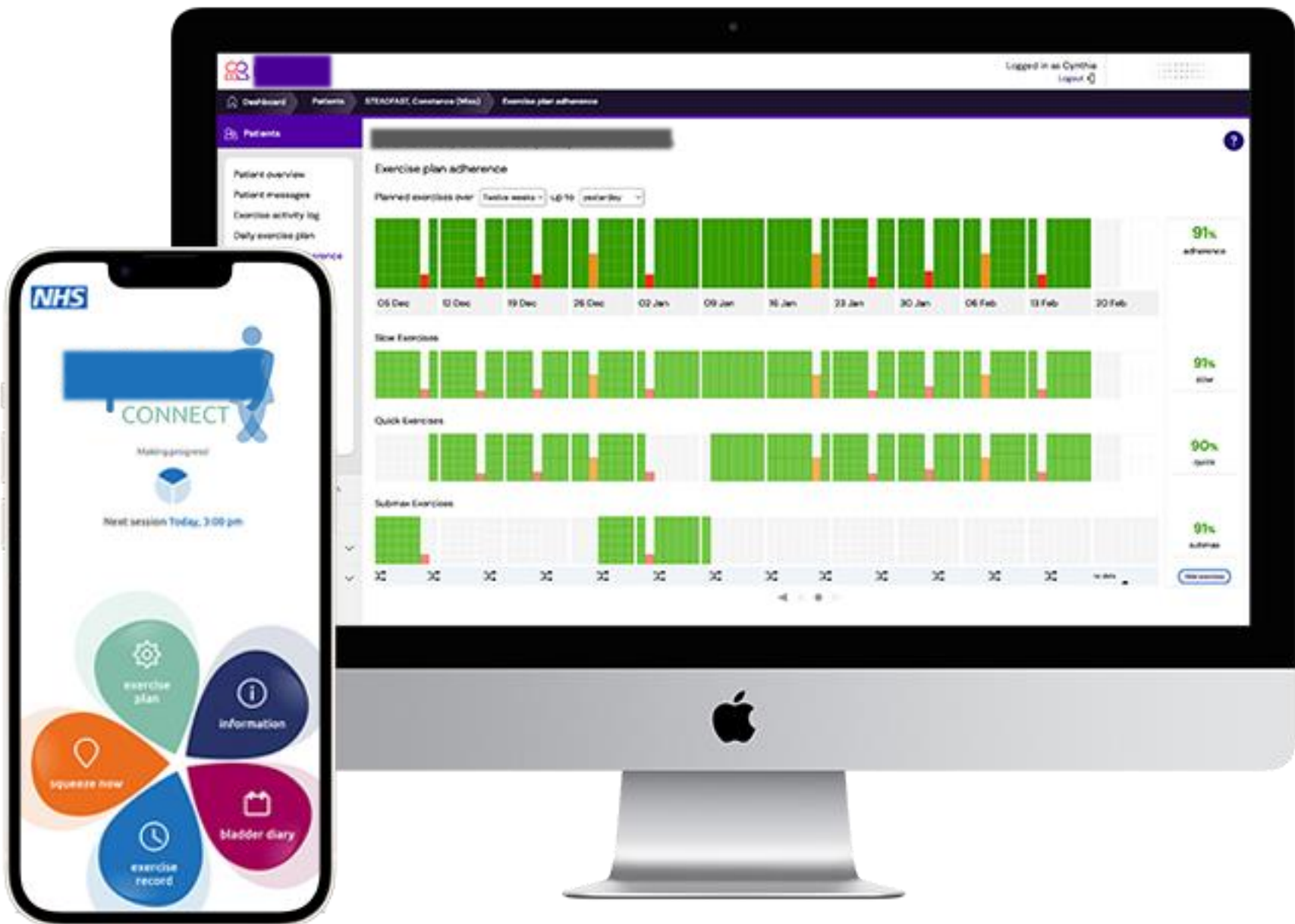# Digital Barriers and Insights
#328

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AIM

Digital technologies are becoming more prevalent in healthcare. Smartphones were used by 6.65 billion people worldwide in 2022 and it is estimated that 85% of the time spent on smartphones is spent on apps. The average person uses 9-10 apps per day and 250 million apps were downloaded daily between 2019 and 2020.(1)

Apps are increasingly popular in managing health, from sleep tracking to data collection for health professionals. Growth in the healthcare app industry is expected to be 14% year on year, for the next five years (2). Acceptance by patients has increased but was only 46% in 2021 (2).

In pelvic health, apps are used for supporting pelvic floor muscle exercises. This abstract refers to an app with a connected platform, allowing clinicians to send patients a link to the app along with advice and information, bladder and bowel diaries and outcome measures. The clinician can view completed diaries and outcomes, track adherence and manage patients remotely where needed. This app is used in the author's clinical practice in the NHS (UK).

The first challenge is to ensure that the patient downloads the app and engages with it. Investigating initial app uptake can provide essential information on some of the digital barriers that may exist. The ability to track a patient's initial engagement may also give us an indication of adherence to clinician requests, which is less easy to track in traditional consultations.

METHOD

The clinical lead of one NHS Trust, using the digital platform, audited 10 patients. All patients had seen a pelvic health nurse or physiotherapist. All patients were asked if they would like to use the app, and it was demonstrated to them. They all consented to use it. The patients were advised that they would be sent an email link to download the app and register to use it. They also had a text reminder sent.

The survey selected ten patients who had not responded to the email invitation in the previous month, with at least two weeks having elapsed between their invitation date and the audit date.

The patients were sent an email to explain that the service was trying to understand what the barriers were to them downloading the app and completing the registration process. They were invited to choose from a list of possible options and to add their own reasons, or other comments.

RESULTS

- Four out of ten emails received a response. Two emails immediately bounced back with an incorrect address.
- One patient reported that she had been busy, and had forgotten to download the app but would do so.
- One patient reported that she had difficulty with her internet but would download the app using data.
- The fact that 20% of email addresses were incorrect is perhaps unsurprising, given that many addresses are not standard or recognisable names. This highlights the problem of accuracy of data input.
- The overall response rate is reasonable for surveys. Both patients who responded had intended to download the app (and did do so after the email exchange) but were distracted by other issues.
- There are a number of questions that this raises:
  - How many patients leave a consultation with the intention of carrying out an action, but are distracted and forget?
  - How many assumptions are made about an individual's digital literacy? For example, the second patient had difficulties with her internet but did not automatically consider downloading the app using mobile data.
  - What style and frequency of reminders are useful to help improve adherence to clinician requests?
- Finally, four of the six patients who did not respond to the email did go on to download the app. This suggests that the email served as an effective reminder.

CONCLUSIONS

Clinicians may forget that patients may not be as adherent as we expect! Information given in a consultation is often complex, and may be more than someone can take on board at that time. It is important to ensure that they understand what they need to do.

Digital technologies and apps can be very effective and efficient ways of distributing information, managing patients remotely and supporting patient and clinician interactions. It is important to be aware that not everyone has high levels of digital literacy or confidence, and clinicians must ensure that instructions are clear and suitable. Written information and a clear way of accessing support are important. Reminders and nudges are of immense value at all stages of an assessment and treatment pathway.

The practical issues around accurate data entry suggest that asking patients to enter their own email addresses, or check the entries made by a clinician, will reduce errors (in this case by 20%).

Digital barriers are likely to be a reflection of barriers that are in place for many "clinician to patient" interactions, but they allow us to identify them in ways that have not always been possible before. It is essential that barriers are identified and managed so that we can maximise the benefits of these technologies.

REFERENCES

REFERENCES

1. 40 Fascinating mobile app industry statistics (2023); zippia.com, 3 2023

2. Health apps usage statistics; vicert.com 12 2022