Keywords Digital technology/Triage/Self-care/Public health

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In this article...

- What eHealth literacy means, its importance and the barriers to it
- How NHS 111 online works, and the outcomes it provides for users
- A study's findings about why people do and do not use NHS 111 online

eHealth literacy and NHS 111 online: accessing urgent care

NIHR

We select NIHR-funded research studies that are most likely to inform and be of interest to health and care professionals, policy makers, patients and the public.

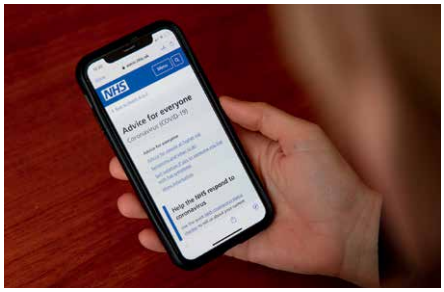
Key points

Online health services are commonplace, but people's level of eHealth literacy varies

NHS 111 online assesses users' symptoms, then provides appropriate signposting or advice

A study explored NHS 111 online users' and non-users' eHealth literacy, preferences and demographics

User numbers declined with increasing age and increased with increasing digital literacy score and reported level of education



INK DROP/SHUTTERSTOCK

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Abstract The NHS uses online services to support care delivery. For example, NHS 111 online assesses and signposts users to other health services where necessary. However, while digital technologies may seem almost ubiquitous in daily life, millions of people in the UK do not go online or lack the skills to do so. Therefore, the push towards accessing care online may exacerbate health inequalities due to variations in eHealth literacy. This article summarises a study that measured the eHealth literacy and preferences of users and non-users of NHS 111 online.

Citation Turnbull J et al (2025) eHealth literacy and NHS 111 online: accessing urgent care. *Nursing Times* [online]; 121: 10.

During the Covid-19 pandemic, the use of online general practice and urgent care health services rapidly accelerated in many countries. Alongside telephone services, online services are now central in the NHS to delivering primary, urgent and emergency care services. NHS 111 online assesses and triages people aged ≥5 years with urgent (non-emergency) care needs to a range of health services. Launched in 2017 as an extension to the NHS 111 telephone service, NHS 111 online is a free web-based service, available via smartphone, tablet or computer. Users answer questions about symptoms or concerns, resulting in them being signposted to an appropriate service (such as ambulance, emergency department or general practice) or provided with self-care advice.

NHS 111 online has the potential to provide 24/7 assessment and timely, convenient access to care. In November 2024, 636,800 online triages were completed; most resulted in advice to contact a health service, although some people were empowered to manage their own health (Fig 1) (NHS England, 2025).

Users of online symptom checkers and assessment services often report high levels of satisfaction. However, there may be barriers to using online health services for particular groups of people, for example, older people, disadvantaged socioeconomic groups, those with a disability or long-term condition (LTC), and people without access to digital technology. These groups are typically less likely to search for health information and use symptom checkers online.

eHealth literacy

UK policy has positioned technology to play a central role in future service delivery. Patients are increasingly encouraged to use online health services. This requires them to have sufficient knowledge, skills, resources and motivation, for example, to complete online assessment tools or digital forms, or to participate in video consultations with health professionals.

eHealth literacy means having both:

- An understanding of health/illness and health services (for example, awareness of service provision and symptoms of illness);

- Digital literacy (the ability to use digital technologies, such as the internet or smartphones).

Such technologies are so commonplace, it might be assumed that most people can and regularly do access the internet for health information. However, in the UK, 11 million people lack the skills to use the internet effectively and 5 million never go online (NHS England, 2023). This suggests difficulty in access for a considerable proportion of the population. Lower levels of eHealth literacy are associated with increased age, lower levels of education, lower socioeconomic status, and the presence of an LTC.

However, previous research has focused on using the internet for health information seeking, rather than online triaging services. Because NHS 111 online is used directly by patients or the public – where there is no call handler or clinical intermediary – there are additional concerns about eHealth literacy as a barrier to access. This article summarises a study that measured the eHealth literacy and preferences of users and non-users of NHS 111 online.

The study

The study was a cross-sectional survey of a convenience sample of 2,754 adults; the data was collected in 2020-2021. The sample was drawn from users of primary, urgent and emergency care services, third sector organisations, and the NHS 111 online website. The survey also collected sociodemographic characteristics, and asked respondents whether they had previously used other urgent and emergency services. Additionally, respondents were asked to rate their likelihood of using NHS 111 online for 10 hypothetical scenarios, for example, a child with a temperature, on a five-point Likert scale.

The survey included Kayser et al's (2018) validated 35-item eHealth literacy questionnaire (eHLQ), which measures people's reported competencies, experiences and interactions with technologies and services on a four-point scale, from 'strongly disagree' to 'strongly agree'. It includes seven dimensions of eHealth literacy, for example, 'using technology to process health information' and the 'ability to actively engage with digital services'.

Study results

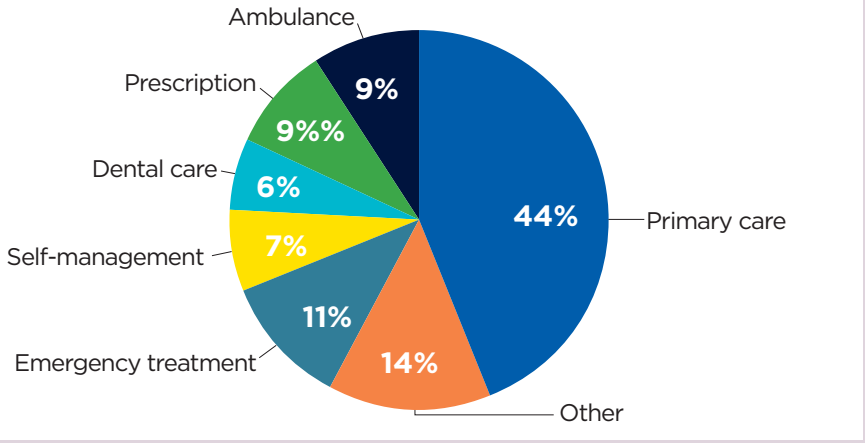
Of 2,754 respondents, two thirds were female, 44% were aged 45-64, and almost half reported an LTC. In total, 59% had not used NHS 111 online ('non-users'). More women reported using NHS 111 online, and the proportion of users declined consistently with higher age and increased with reported level of education. In total, 44% of people with an LTC had used NHS 111 online.

Both users and non-users were especially likely to use NHS 111 online for the scenarios 'young child with a temperature and crying' and 'severe chest pain that goes away after a few minutes'. A sizeable proportion of non-users reported that they might use NHS 111 online for advice about young children (76%) or severe chest pain (69%).

As might be expected, NHS 111 online users had higher digital literacy scores across most eHLQ dimensions than non-users. Differences between users and non-users were largest for the domains focused on their ability and motivation to use technologies ('using technology to process health information', 'ability to actively engage with digital services' and 'motivated to engage with digital services'). Interestingly, respondents with an LTC tended to have lower eHLQ scores but were more likely to have used NHS 111 online. However, people with an LTC who were non-users of NHS 111 online had the lowest eHLQ scores.

Logistic regression was used to explore which patient characteristics predicted use of NHS 111 online, including age, gender, education, presence of an LTC, and mean scores for the seven eHLQ dimensions. Younger age was a predictor of using NHS 111 online, with respondents aged ≤44 years more likely to have used it. Four eHLQ domains were significant predictors of NHS 111 online use. Although more women reported use, gender was not a significant predictor. Education level was not a strong predictor of use, although those with no formal qualifications were less likely to report using NHS 111 online.

Fig 1. **Results of contacts with NHS 111 online in England in November 2024**



Adapted from: NHS England (2025)

Conclusions

Our findings may not be surprising: younger, more educated people are more digitally literate and so may be expected to be better able to use NHS 111 online. However, we found differences in reported eHealth literacy between users and non-users – notably, for those with LTCs. While digital devices are necessary for many aspects of modern society, access remains an issue. We must ensure that digital-first policies do not exacerbate health inequalities. Users and non-users were both willing to use NHS 111 online for a range of health scenarios, indicating broad acceptability of online health services. However, not everyone is able or likely to do this. Understanding the potential demand, and eHealth literacy, is important as online services develop. **NT**

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