

Left Behind Online: Digital Access as an Overlooked Determinant of Health in UK Primary Care

Background

Digital-first systems such as online triage and e-consultations are now central to UK primary care (1). However, an estimated **7 million adults in the UK remain digitally excluded**, disproportionately affecting older adults, people living in deprivation, and individuals with mental health or long-term conditions (2,3).

Evidence from UK primary care demonstrates that digital exclusion is associated with **reduced ability to book appointments, poorer continuity of care, and lower engagement** with healthcare services (4). While digital transformation has improved efficiency for many patients, it risks widening existing health inequalities when inclusive, non-digital alternatives are not actively maintained (1,5).

Recognising **digital access as a determinant of health** provides a clearer framework for designing equitable, population-centred primary care services as digital transformation continues.

Methods

A structured, UK-focused literature review was conducted between **August–September 2025** to explore digital access as a determinant of health within primary care. Sources included **PubMed, Google Scholar, NHS England and NHS Digital** publications. Search terms addressed *digital exclusion, primary care, digital-first access and health inequalities*.

Eligible sources were UK-based publications from **2010–2025**, prioritising peer-reviewed primary care research and national policy documents. Non-healthcare literature and opinion-only sources were excluded. Evidence selection followed a **PRISMA-style screening process**.

Findings were synthesised using established **UK health inequality frameworks**, including the Marmot model, and contextualised through **UK primary care digital inclusion case studies**. This approach enabled integration of empirical evidence with policy and service-level perspectives to inform an equity-focused interpretation of digital access in primary care.

References & Acknowledgements

Key sources include UK primary care research, NHS England and NHS Digital publications, Office for National Statistics data, and national health inequality frameworks.

Please scan the QR code to access the full reference list.

Figure 1: National persistence of digital exclusion despite overall decline

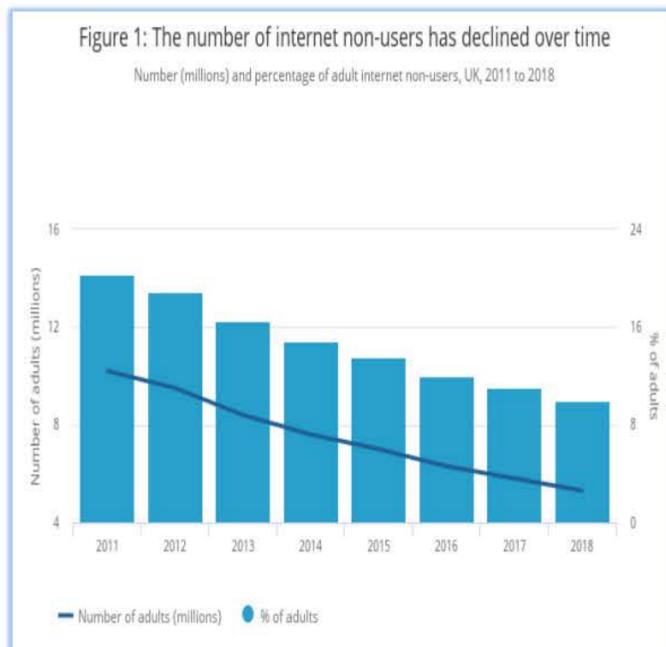


Figure 2: Digital exclusion as a spectrum shaped by access, skills and trust

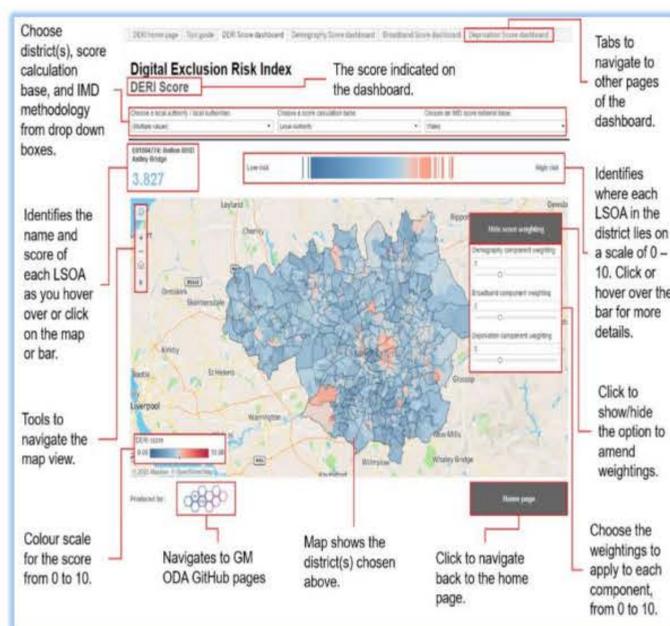
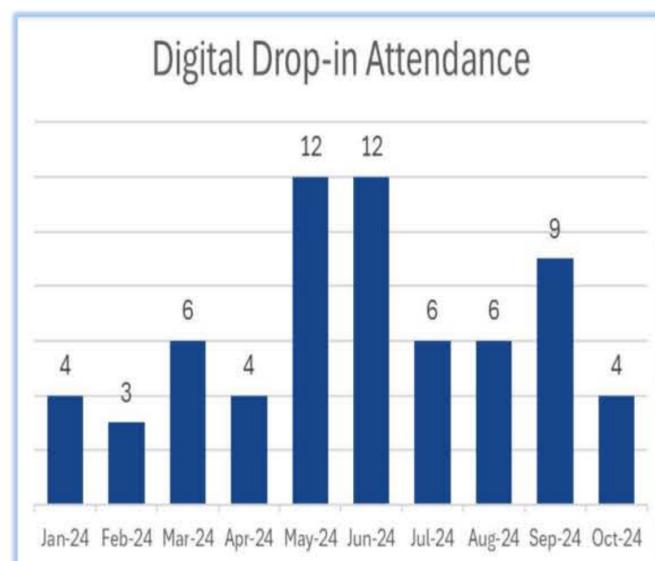


Figure 3: Local PCN interventions demonstrating blended digital and non-digital access



Results

National data show that digital exclusion persists in the UK despite overall declines in internet non-use, with exclusion concentrated among **older adults, people living in deprivation, and those with mental health or long-term conditions** (Figure 1) (2–4).

UK primary care evidence links digital exclusion to poorer access, including difficulty booking appointments, reduced continuity of care, and lower engagement with services (5). While **digital-first policies improve efficiency for digitally confident patients**, they risk widening inequalities where non-digital routes are reduced, with marked regional variation in **assisted digital support** (1,6,7).

Digital exclusion operates along a spectrum shaped by access, skills, and trust, rather than simple internet non-use (Figure 2). **PCN-level interventions**, including digital drop-in services, demonstrate that **blended digital and non-digital access can reduce exclusion**, but implementation remains **locally driven and inconsistently embedded nationally** (Figure 3) (6–8).

Discussion

These findings support conceptualising **digital exclusion as a determinant of health**, rather than a secondary access issue (4). Framing digital access in this way aligns with established UK health inequality frameworks and highlights that digital-first primary care represents an **equity-sensitive intervention**, not merely a technical service change (1,4).

UK policy analyses emphasise that evaluating digital transformation primarily through efficiency risks overlooking its impact on equitable access (1,3). Integrating empirical evidence with national policy demonstrates how digital exclusion operates at the intersection of **health need, deprivation, and service design**, reinforcing the need for deliberate inclusion within digital primary care models.

Conclusion

Digital exclusion is an under-recognised driver of health inequality in UK primary care (2–4). Without deliberate inclusive design, **digital-first systems risk widening disparities** rather than improving access for all patients (1,3).

Recognising digital access as a determinant of health provides a practical framework for designing more equitable, patient-centred primary care services as digital transformation continues (4).

