

# Current experience and future potential of facilitating access to digital NHS primary care services in England: the Di-Facto mixed-methods study

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## Scientific summary

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# Scientific summary

## Background

The NHS is facing the increasing demands of a growing and ageing population, technological progress and changing public expectations. Current NHS policy in England encourages enhanced digital opportunities and enhanced digital access in primary care provision. Drivers behind this move include the assumption that online services lead to improved choice, convenience, and ease of access for users, improved triage systems and streamlining of service delivery.

In this research, we addressed 'digital facilitation' [digital facilitation (DF)] – 'that range of processes, procedures and personnel which seeks to support NHS patients in their uptake and use of online services'. We investigated the provision by general practices to support access to NHS online primary care services by their registered patients and carers of those patients. Support in accessing and using services is required at all stages: initial registration for online services; subsequent continued use; and navigating the wide range of NHS online provision. Hence, it is important to understand the extent to which approaches to DF are applied, how they are applied, the impact such efforts have on uptake of online services, and how such uptake may affect patient health and access to healthcare information and services.

## Aims

- Identify, characterise and explore the potential benefits and challenges associated with different models of DF currently in use in general practice in England which are aimed at improving patient access to online primary care services.
- Use the resulting intelligence to design a framework for future evaluations of the effectiveness and cost effectiveness of such interventions.
- Explore how patients with mental health conditions experience DF and gauge their need for this support.

## Methods

The project comprised four interlinked elements.

Initially we undertook a scoping review and narrative synthesis of published literature, seeking to understand and characterise the range, effectiveness and cost effectiveness of models of DF for improving access to online services within health. Searches of academic databases and grey literature published between 2015 and 2020 were undertaken, including snowballing from the publications they cited.

We surveyed general practice staff and patients (with an additional boost sample of patients living with mental health conditions, which was in direct response to a National Institute for Health and Care Research commissioning brief) and undertook analyses of data from the national General Practice Patient Survey (GPPS). The practice staff questionnaire included items addressing which online services were being used and what steps had been implemented in practices to promote and support the use of such services. We implemented a sequential mixed mode when inviting staff from 500 general practices to complete the survey online or on paper. The patient questionnaire addressed patients' familiarity and confidence with information technology (IT) and internet use, their awareness and uptake of online services, and their experiences of any support provided by their practice. Questionnaires were sent by

post with the option of replying online or by post. We also analysed responses to questions from the English national GPPSs (2019–22) concerning awareness and use of online booking of appointments, ordering repeat prescriptions and accessing medical records, and additionally the use of online consultations. Logistic regression models were used to examine how the awareness and use of online services, the awareness and use of facilitation efforts, and experience of other support varied by patient characteristics.

We undertook a qualitative exploration of DF comprising two elements: focused ethnographic case studies in general practices, and an interview study with key stakeholders. Focused ethnography was used to explore, in-depth, the use of DF in general practices. Eight general practice case study sites were recruited to provide variation in terms of their DF offering, and in terms of a range of practice characteristics (practice setting, deprivation status and size, and the age profile of registered patients). We undertook: non-participant observation of the process of DF and how practice staff and patients/carers interact with different types of DF, semistructured interviews with staff members and patients in each practice, and collected secondary analysis of documentation pertaining to digital services or facilitation within the practice. This was augmented by 10 interviews with patients living with mental health conditions from the case study sites; these sought to explore their experiences of DF. The interview study with key stakeholders sought understanding of the broader context and wider drivers of DF in primary care. We conducted semistructured interviews with stakeholders providing a level of insight beyond individual practices, including policy-makers, commissioners and third- sector organisations. Data from the focused ethnographic case studies and stakeholder interviews were analysed together using thematic analysis.

We conducted a synthesis of the evidence generated by each element of the study. We employed Weiss's approach to theory-based evaluation as a theoretical framework. A pragmatic, iterative and cumulative approach was applied to synthesising the findings from all elements and to developing programme and implementation theories. We triangulated findings, summarising the results in a matrix, which evolved into thematic groupings as the study progressed and as evidence from our work packages (WPs) became available. Findings were brought together in a series of three workshop meetings of researchers and patient/public participants as individual WPs were completed. The synthesis process concluded following an online discussion with national and regional stakeholders. We used the synthesised findings to identify the key aspects of a framework aimed at informing future research on DF.

Patient and public involvement and engagement (PPIE) was embedded throughout this research, from the original conception through to the design and conduct of the research, and the synthesis and interpretation of findings. Our team has benefited from a patient co-investigator, a dedicated PPIE co-ordinator, and an actively engaged Patient Advisory Group (PAG). All WPs have worked with the PAG to ensure the research is patient focused and addresses patient needs. The PAG was augmented with additional members with lived experience of mental health conditions to ensure that the additional work focused on patients living with mental health conditions was appropriately framed. Members of the PAG were fully involved as equal voices alongside the research team in the synthesis workshops.

## Results

The synthesis of findings from the literature review, surveys and qualitative work resulted in the identification of 11 thematic groups (distinct from, but incorporating, the results of the qualitative thematic analysis): 3 scene-setting themes relating to the context in which DF takes place, and 8 themes related to types of DF, their implementation and effectiveness.

*Scene-setting themes:* The first theme related to the **value and purpose of digital services**. The qualitative exploration found that the need for, and value of, digital services are not always clear and that there is a lack of shared understanding or belief about what digital services should achieve. The second theme

related to **conflation of the digital environment with other routes to access**. For example, the qualitative exploration found that digital services can both enable access and be a barrier to access, and that patient priorities are often to navigate the system to access health care, making access a more important concept than DF to many. The third theme related to the **impact of the COVID pandemic**. Many practices responding to the practice survey reported increased digital service offerings and reduced provision of traditional forms of access. The exception to this was in relation to online appointment booking, where 44% of responding practices reported that they had offered this service pre-pandemic but did not do so at the time of the survey. Furthermore, in the qualitative exploration we found that the pandemic was associated with some initiatives being halted that have not subsequently resumed.

*Digital facilitation themes:* The fourth theme related to how people **define and identify DF**. While, as a research team, we proposed a definition of digital facilitation, it is not yet a widely recognised concept and the qualitative exploration found that it was often difficult to have a working definition for DF given that it is movable and relative to a person's circumstance. The fifth theme related to the **types of DF**. In our literature review, we found a focus on interventions that require practices to actively support patients to use digital services. This was in striking contrast with our practice survey where we found that the majority of practices reported passive and reactive modes of facilitation (e.g. 88% of practices used text messages or e-mails for DF and 91% provided ad hoc support to patients).

The sixth theme relates to the **differing foci of DF** on initial sign-up versus supporting sustained use over time. The majority of research found in our review focused on initial sign-up. While in the patient survey we did find that registration was a substantial barrier (20% of responders to the patient survey cited not knowing how to register or finding registration too difficult as a reason for not using online services), the qualitative exploration found that supporting patients to register was often still reactive. Furthermore, although recognising that DF could go beyond initial sign-up, some practices felt that this was their only required contribution to the task of extending digital access. The seventh theme relates to **who delivers facilitation**. There was a mismatch between existing evidence identified in WP1, which suggested that general practitioners (GPs) and nurses undertake most facilitation, and our survey and qualitative findings that most facilitation efforts were conducted by receptionists and administrative staff. We also found a 'bystander effect', with patients, different staff groups and stakeholders all assuming that responsibility for DF lies elsewhere.

The eighth and ninth themes related to the **enablers and barriers of DF**, respectively. Findings from our qualitative work were consistent with much of what emerged from the literature review. Enablers of DF include someone having specific responsibility for such efforts, with associated funding, time and other resources, platforms that enable easy registration and use, and a clear rationale for the digital services that can be understood by practice and patient (i.e. products that have a 'good fit' with what is needed). Barriers to effective facilitation include confusion about who is responsible for DF and why; practices using a variety of digital platforms; lack of consideration for the individual circumstances of patients; and assumptions being made about what people can and cannot do digitally based on stereotypes. In our patient survey, we found very low awareness of DF activities (apart from use of e-mail and text messages). Few (13%) responders to the patient survey reported being given help to use online services, but when that help was given, it was generally rated as useful.

The 10th theme focuses on **digital access and DF for patient subgroups**. Age emerged as a common important dimension across the WPs. The literature review identified that older people may particularly benefit from direct, human support in accessing digital services. In the practice survey, most practices reported targeting older adults. However, in the patient survey we found that older patients were less likely to be aware of or make use of DF and were less likely to be told about or receive help to use digital services. In the qualitative work we found that the age of the individual is perceived to have an impact on both staff and patients' digital knowledge, understanding, experience and confidence. Responders to the patient survey who were from ethnic minorities had long-term health conditions, did not speak English as a first language, or were in receipt of repeat prescriptions, were more likely to report

awareness of and use of (passive) facilitation than other patients. But these groups were also less likely to be told about online services or to have received help to use them.

The findings of our work focusing on patients living with mental health conditions were largely concordant with the findings of the main patient survey and qualitative research. There were some differences in the way that specific mental health conditions impacted on individuals' contact with their practice, and consequently in the use by such individuals of digital services and in their need for DF. Responders in the patient survey mental health sample were more likely to report using digital services and to being aware of DF efforts than were responders to the main survey, but this was largely explained by differences in the sample demographics.

The final theme considered the **effectiveness of DF**. There was no evidence around the cost effectiveness of DF, and the limited existing evidence on effectiveness almost entirely focused on initial sign-up of services. Reflecting this, our qualitative exploration found that some practices focused on the number of patients signed up to a service as evidence of the effectiveness of their facilitation efforts.

## Conclusions

Digital facilitation is important in the context of the move to an NHS-enhanced digital opportunities and enhanced digital access in primary care service provision. Staff are spending time and effort to provide DF in general practices in England. Digital facilitation is viewed to have value and potential to increase the uptake of online services. Digital facilitation can take many forms, though most such efforts are reactive and passive. There is clear scope to develop a more proactive approach to facilitation that actively engages patients. There is currently a disconnect between the expectations and perceptions of what DF is happening and its potential effectiveness, and the reality seen in everyday practice. This is related to a lack of clarity over the responsibility for delivering DF and pressures on the time of general practice staff. Establishing clear lines of responsibility, and the development of digital tools and platforms that work for patients and practice staff, will both be needed, alongside investment in staff time and training, if DF is to deliver on the intended digital revolution.

This project set out to explore DF that was already underway, with the potential of identifying good practice. However, we did not find an example of what might form a complete, practical intervention package. Future research should therefore focus on:

1. co-development, involving patients and general practice staff, of DF, seeking to ensure a responsive and adaptive approach
2. improving the presentation of practice websites for patient engagement with the intent of increasing uptake of digital tools and reducing the need for DF
3. the best approaches to tailoring DF to different patient groups and identifying which patient groups are most likely to benefit from such efforts
4. ensuring that the digital exclusion of certain groups, including, but not limited to, older patients, is investigated
5. monitoring the sustained use of online services, not merely initial sign-up.

## Study registration

This study is registered as ResearchRegistry6523 ([www.researchregistry.com/browse-the-registry#home/?view\\_2\\_search=Di-Facto&view\\_2\\_page=1](http://www.researchregistry.com/browse-the-registry#home/?view_2_search=Di-Facto&view_2_page=1)) and PROSPERO CRD42020189019 ([www.crd.york.ac.uk/prospéro/display\\_record.php?RecordID=189019](http://www.crd.york.ac.uk/prospéro/display_record.php?RecordID=189019)).

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