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Digital Platforms in Primary Care: Leveraging Asynchronous Consultations to Support Management of Cardiometabolic Diseases and Risk Factors

Zare et al[1] found that structured consultations between patients and pharmacists, delivered through a 12-month Medication Therapy Management programme, reduced uncontrolled hypertension. This suggests that systematic approaches to patient-professional interactions, a modifiable aspect of care, can support improved cardiovascular disease management. Alongside workforce changes, including the introduction of allied health professionals such as pharmacists, digital technologies are also reshaping primary care and creating new opportunities to manage cardiometabolic conditions and risk factors.

Evidence suggests that patient-centred consultations, which consider the needs, expectations and preferences of individual patients, are associated with improved cardiovascular disease risk factors such as glycated haemoglobin (HbA1c), blood pressure and lipid profiles.[2-5] This is supported by a recent review showing that tailored patient-provider communication helps chronic disease self-management.[6] Our 2016 systematic review and meta-analysis of interventions to alter patient-practitioner consultations in patients with type 2 diabetes found inconclusive effects on cardiovascular risk factors, likely due to variations in intervention design, context and patient populations.[7] Although the effects were inconclusive, the consultation remains an important alterable component of care that may influence long-term health outcomes.

Before the COVID-19 pandemic, evaluations of digital consultation tools in UK primary care showed low uptake, limited impact on clinical workflow and mixed experiences among patients and staff.[8-11] Online systems such as WebGP, AskMyGP, Tele-Doc and eConsult were mostly used for administrative or relatively minor clinical issues, often by younger and more affluent patients, with limited reach to older adults.[11-13] Although some patients found these platforms convenient, digital requests frequently required telephone or face-to-face consultation follow-up, thereby reducing any anticipated efficiency gains.[11]

Since the COVID-19 pandemic, the use of online tools in primary and community care has accelerated, driven by national digital transformation policies.[14] In particular, the UK National Health Service aims to 'put digital tools in place so patients can be supported with high-quality information that equips them to take greater control over their health and care'.[15] Patients can submit symptoms, photographs or administrative queries through digital platforms, which are reviewed asynchronously by primary care teams. A systematic review found that asynchronous consultations were effective for diagnosis, prescribing medications, timely care, and patient convenience but were associated with increased workload and disrupted workflow.[16]

Digital tools could gather structured data, provide self-management prompts and trigger timely lifestyle or behavioural interventions. Some pre-consultation questionnaires also incorporate elements of patient-centred care, including questions about patients' ideas, concerns and expectations for the consultation or contact.[17] However, the current focus on operational metrics, such as appointment rates, convenience, costs and patient satisfaction, is a missed opportunity to improve clinical outcomes. Moreover, improved access does not necessarily translate into better health outcomes. Easier access may preferentially benefit relatively healthy individuals from higher socioeconomic groups, who are more likely to present with minor illnesses, rather than those with unmet health needs.[18]

There is also a risk that digital-first models worsen inequalities, as users of online consultation systems tend to be younger, more affluent and digitally literate.[11-13] Groups at higher risk of cardiovascular disease, including older adults, ethnic and racial minorities and those from deprived areas, may be underrepresented. In addition to these demographic disparities, uptake of digital technologies in primary care also varies geographically, with some regions in England classified as digitally disengaged, particularly in parts of London.[19] It is encouraging that in Zare et al's[1] study, which included virtual meetings between pharmacists and patients, 78% of participants were Black, and 40% had Medicaid insurance. Future evaluations must focus on whether digital systems improve outcomes for those most at risk, not just those most able to use them.

Digital consultations, including pre-consultation questionnaires, are changing how patients interact with primary care. However, there is little evidence that they improve the

management of cardiometabolic diseases or their associated risk factors. If digital systems are to deliver more than administrative efficiency, they must be redesigned to support structured management of diseases and their risk factors and evaluated against clinical endpoints. Otherwise, they risk entrenching a reactive, episodic model of care that does not lead to meaningful population health gains.

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