



# Whitaker Institute Policy Brief Series

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**Cluster:** Health & wellbeing

**Theme:** Sustainable and Inclusive Societies

**Further Reading:** Morrissey, E.C., Casey, M., Glynn, L.G., Walsh, J. & Molloy, G.J. (2018). Smartphone apps for improving medication adherence in hypertension: patients' perspectives. *Patient Preference and Adherence*, 12, 813-822.

Morrissey, E.C., Glynn, L.G., Casey, M., Walsh, J.C., & Molloy, G.J. (2017). New self-management technologies for the treatment of hypertension: general practitioners' perspectives. *Family Practice*, cmx100-cmx100.

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**Read More About:** The [Health and Wellbeing Research Cluster](#) in the Whitaker Institute for Societal Innovation and Change.

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## Using digital technologies to manage high blood pressure within the Irish health system

High blood pressure (hypertension) is a chronic condition in which the blood vessels have persistently raised pressure. It is one of the leading risk factors for heart attack and stroke and is one of the most common chronic conditions seen today. According to the TILDA study, approximately 65% of Irish adults over the age of 50 have high blood pressure. High blood pressure can be managed through medication, diet and exercise.

Digital technologies to support the self-management of chronic conditions have become more common in recent years. These include systems such as online portals where patients can seek advice from healthcare professional, self-monitoring of a health parameter (often with personalised feedback), access to online social supports groups, educational messages and videos, and activity monitoring. In the case of high blood pressure, most digital technologies for self-management include two main components: a reminder system for medication and home blood pressure monitoring.

### Key findings

The research found that both GPs and patients with high blood pressure felt that this type of digital technology could empower them. However, GPs were fearful of anything that could increase their workload and some patients were worried that over engagement with this kind of technology could lead to health related anxiety. As people with hypertension tend to be an older cohort, both groups felt that this type of technology may not have realised its full potential at the moment, but felt that future generations would undoubtedly be very engaged with it. Finally, both groups made suggestions about how this type of technology could be improved – GPs wanted stringent data protection in place and patients liked the idea of also being able to store medical and pharmaceutical information on the app in case of a medical emergency.

### Recommendations

There is a reluctance among GPs and some patients to engage with newer technologies. This reticence is likely to change if the emergence of newer technologies was accompanied by the emergence of an evidence base demonstrating effectiveness and cost-effectiveness, along with clear regulation and data protection systems. In particular, GPs would need to be convinced that engaging with these technologies does not add to their current workload and ideally contributes to reducing it. eHealth Ireland is a relatively recent addition to the national Health Service Executive's strategy and its work to date has focused on the development of the national electronic health record. Future work should have a role in quality control and the provision of explicit guidelines in relation to such digital technologies. An example of this that already exist are the NHS Health Apps library (<https://apps.beta.nhs.uk/>) in the UK which provides patients with access to a list of recognised and endorsed health apps.