Can automation help with growing dissatisfaction among GPs?

Research in the spotlight

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One of the benefits of being a research funder is that you can stand back, look across research studies you have supported and pull out golden threads, which together tell a fuller story than single studies alone. One of these golden threads emerges from our growing body of work exploring the health and social care workforce.

The thread starts in our analysis of the Commonwealth Fund's survey of primary care doctors across 10 countries, signalling what should be a pressing concern: high stress and low job satisfaction among UK GPs in comparison to peers across other high-income countries. In 2012 UK GPs were among the most satisfied. Now just under a quarter (24%) are 'extremely' or 'very satisfied' with practising medicine – similar to France but lower than all other countries surveyed. The expressed dissatisfaction in survey responses includes time spent on administrative work.

This thread also runs through a recent study from THIS Institute, funded by the Health Foundation, which highlights the role of operational failures in GPs' dissatisfaction. Such operational failures include errors or defects in workflow or failures in technology affecting activities that might be termed administrative, such as issuing prescriptions and writing and reading letters. Using time and motion methods, ethnography and interviews, the study found that clinical paperwork took up to 12.8% of GPs time and concluded that the burden of admin was greatly increased by disruption from operational failures and interruptions.

And here's where the thread begins to interweave in a back stitch into an earlier Health Foundation funded study exploring the extent to which administrative tasks in primary care can be automated. Also using ethnography, the researchers came to similar conclusions, asserting that administrative tasks, such as paperwork, take up a 'considerable amount' of GP time and arguing that almost half of these tasks could be 'fully' or 'mostly automated.

Both studies call for ways to reduce inefficiency and make time for 'more rewarding tasks' relating to patient contact. Quotes echo each other and reinforce frustrations over time spent 'compensating' for inefficient processes:

'The GP explained that letters from the hospital can be 10 pages long — it's really not clear where the important information is.' (GP_L5_observation, Sinnott et al, 2022)

'This is all I need, out of this whole document [9-page letter], this is what is relevant to me.' (Willis et al, 2020)

Both quotes also concern the use of letters, singled out by the study on automation as one of the most common forms of communication in primary care and one of the most amenable to the use of machine learning.

These studies underline the potential for automation to help maximise time to care and give us good cause to embrace technology. Our analysis of the Commonwealth Fund survey on GP dissatisfaction found that aside from Germany (which is similar), GPs in the UK spend the least amount of time with patients (10 minutes) compared with GPs in the other 10 countries surveyed (15 to 25 minutes).

However, the studies exploring how time is spent in primary care also weave in notes of caution, raising issues that have become more familiar to us lately such as consideration of automation bias, the risks of impacting negatively on <u>relational practice</u> and the need for rigorous evaluation. Moreover, the automation study references the deterministic approach adopted in <u>Better health and care for all</u>, to caution against designing workflows around the technology rather than the problem or the people. The threads tying these studies together

remind us that automation needs to lead to better care, which means firstly starting with the person or the problem, rather than designing workflow around the technology, and secondly trying to ensure that technology doesn't become the replacement operational failure. In THIS Institute's study, failures due to technology represent 8.6% of the failures experienced by GPs but also eat up 14.2% of time spent dealing with failures – precious time that could be spent with patients.

If we accept the National Engineering Policy Society's conclusion that system errors are 'inevitable', then while we should move quickly to embrace technology, this golden thread raises the question of how far we should depend on it and whether we need to adopt a 'proceed with care' approach to increasing automation in all aspects of health care? The potential for Al solutions such as ChatGPT is being tested for administrative health care tasks such as writing letters. Even for this seemingly straightforward task, the complex nature of decision making and moral and ethical responsibilities involved (as well as the risk of operational failures) mean that the benefits must be carefully assessed from the perspective of those on the using and receiving end of technology. Survey research conducted by the Health Foundation has started to signal this thread of inquiry is worth further exploration.

Going forward we will increasingly be trying to pull out these threads from our research, through a synthesis of our back catalogue, and looking to weave this particular golden thread around technology in health care into a richer tapestry. Our funded research to date clearly signals there are many threads worth pulling.

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https://www.health.org.uk/news-and-comment/blogs/can-automation-help-with-growing-dissatisfaction-among-gps