RESEARCH ARTICLE

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Effects of non-medical health coaching on multimorbid patients in primary care: a difference-in-differences analysis

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Abstract

Background: Health systems, globally, are attempting to strengthen primary care to promote a population-health management approach to care provision, incentivising prevention and self-management. This paper evaluates the "Enhanced Primary Care" model implemented in a geographical region in England. Enhanced Primary Care introduces a new non-medical role, health coaches, to the traditional primary care team to provide additional support for patients with chronic conditions. We evaluate effects of health coaching on patient outcomes using a quasi-experiment.

Methods: We estimate the programme's effects on health status (EQ-5D-5L, physical functioning, psychological wellbeing, and resilience), health behaviour (smoking habit), experience of care (person-centeredness and continuity of care), and health care (primary care) utilisation using data from 3.5 million respondents to the national GP Patient Surveys between 2013 and 2017.

We use a weighted difference-in-differences design to compare changes in outcomes over time between intervention practices and comparable control practices in the rest of England. We conduct our main analysis on multimorbid patients and additional analysis on all patients to assess population-level effects.

Results: For multimorbid patients, we find reductions in psychological wellbeing (short and medium term) of -0.0174 (95% confidence interval -0.0283 to -0.0065), relative difference -2% from the pre-intervention mean; and person-centeredness (short term) of -0.0356 (-0.0530 to -0.0183), -4%. We find no significant effects on other outcome measures. For population-level effects, in the short term we find reductions in primary care utilisation of -0.0331 (-0.0448 to -0.0214), -5%. All other outcomes are not consistently statistically significant.

Conclusions: Our results show that there is very little effect of health coaching on patient experience and outcomes in the short-to-medium term (up to 14 months). Introduction of Enhanced Primary Care was associated with slightly lower psychological wellbeing and person-centeredness amongst multimorbid patients (it might be initially difficult for patients to adjust to the model). However, it was also associated with a decline in primary care visits at the population-level (potentially freeing up practitioner time for more complex patients). The results raise important questions regarding primary care workforce changes advocated in the NHS Long Term Plan, and the time horizon of any benefits of prevention strategies.

Keywords: Health coaching, Task-shifting, Multimorbidity, Population health, Chronic disease, Primary care, Workforce, Prevention strategies, Self-management, Difference-in-differences



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