

Keeping Pace with the Expanding Role of Health Coaching

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J Gen Intern Med 34(1):5–6
DOI: 10.1007/s11606-018-4730-1

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In this issue of JGIM, Scuffham et al. report the results of a trial of population-based health coaching to improve disease management.¹ To better understand these results, it is useful to consider the recent evolution and expansion of the role of health coaching in health care. Health coaching has been defined as a patient-centered process in which a trained coach works with a patient to identify health-related goals, providing education and working with the patient to create action plans to achieve these goals while self-monitoring behaviors to increase accountability.² The conceptual basis for health coaching draws from psychological theories of adult learning and personal development with the aim of creating sustainable behavioral changes based on a patient's personal values.³ In practice, health coaching often uses methods derived from models, including Motivational Interviewing,⁴ Patient Activation,⁵ Health Belief Model,⁶ and Social Cognitive Theory Communication.⁷

The increasing use of health coaching in the delivery of primary care roughly corresponds to the rise of patient-centered models for care of chronic disease, notably the Chronic Care Model, introduced by Wagner over 20 years ago,⁸ which includes patient self-management and decision-making support. The most extensive evidence for the effectiveness of health coaching in primary care comes from randomized controlled trials of health coaching for patients with type 2 diabetes.^{9, 10} Additional studies have found that health coaching can benefit patients with hypertension, obesity, COPD, and heart disease,^{11, 12} though the evidence for these conditions is more limited.

As health coaching has expanded into mainstream health care delivery, it has been adapted and expanded. Inevitably, the definition of health coaching has been stretched and efforts to evaluate the impact of health coaching have not kept pace with the proliferation of models being employed. Scaling up health coaching to large populations of patients through health care delivery systems is an exciting adaptation of the health coaching model, in that it provides an opportunity to reach large numbers of patients. Thus, the randomized controlled trial of population-based health coaching reported by Scuffham et al. is a welcome addition to the literature.

In the Costs to Australian Private Insurance—Coaching Health (CAPICHe) trial, Scuffham et al.¹ randomized 44,418 adults, out of nearly 4 million Australians receiving private health insurance through Bupa Australia, to be actively offer health coaching in addition to usual disease management support from Bupa Health Dialog, versus usual support alone. Patients were eligible for randomization if they had a diagnosis of one or more chronic conditions (heart failure, chronic obstructive pulmonary disease (COPD), coronary artery disease, diabetes, or low back pain) and were predicted to have high claims costs in the next 12 months. Patients with end-stage renal disease, with human immunodeficiency virus infection, under cancer treatment, or having had an organ transplant in the past year were excluded. While patients randomized to the control group could also request health coaching, only 153 (1.7%) did so. Although the paper does not provide a detail description of the training of health coaches or the content of the health coaching, the investigators state that the program was modeled closely on the intervention used by Wennberg et al.¹³ which clearly meets common criteria for health coaching. The primary outcome of the Scuffham study was the dollar amount paid by Bupa Australia for claims from “impactable” hospital admissions over 12 months. Costs paid by the Australian government were not included. Hospital admission not considered impactable, such as maternity care, mental health issues, and same-day diagnostic or treatment procedures (listed in eTable 1), were excluded from the analysis. Secondary outcome was the cost of overnight and same-day admissions analyzed separately. The investigators found only a small (\$66 per member per year) and non-significant difference in total cost, even though the intervention group had significantly lower costs for same-day admissions (−\$40 per member per year, $p < 0.001$) and fewer such admissions (530 vs 614 per 1000 person-years, $p < 0.01$). Among patients with diabetes, those in the intervention group incurred even lower same-day admission costs (−\$86 per patient per year, $p < 0.001$) and had significant fewer total (1146 vs 1299 per 1000 patient-years, $p = 0.008$) and same-day (612 vs 758 per 1000 patient-years, $p = 0.007$) admissions.

The CAPICHe trial was modeled on an earlier study by Wennberg¹⁴ and the authors state that they expected to see a larger effect in the CAPICHe trial, based on the older age of the CAPICHe population (mean age of 72 years vs 37 years for Wennberg). In fact, the opposite seemed to be true, with no effect being seen in patients age 65 and older in the CAPICHe trial, which mirrors the finding of the Wennberg study which found only a small (3.7%), non-significant difference in

hospital admissions for patients 65 and older in contrast to a significant difference of 10.1% overall.¹³ The CAPICHe study did not measure costs of the health coaching program, but in the paper by Wennberg, the cost of this intervention was estimated to be \$200 per patient per month.

It is worth noting that, in contrast to non-population-based randomized controlled trials of health coaching, both the current study and the study by Wennberg randomized patients who had not chosen to enroll in a study of health coaching and who, therefore, would be expected to be less receptive to health coaching, on average. Nevertheless, in both studies, approximately 40% of patients who were contacted with an offer of health coaching accepted at least one coaching session. In contrast, less than 2% of patients who were simply informed of the availability of coaching actually sought coaching, demonstrating the importance of active outreach for population-based health coaching.

What do we know and what do we need to know about delivering health coaching at the population level? We know that it is possible to do so, though it requires active outreach to patients. We have evidence that the original health coaching model, which is based on a sustained, usually in-person, relationship with a relatively small number of selected patients interested in engaging in health coaching, can also have an impact when scaled up to being offered by telephone to a broad population of patients with multiple conditions who have not been pre-selected for their interest in health coaching. Since health coaching was not originally designed to reduce health care utilization and costs, any evidence for such a reduction seems remarkable. We do not know from either the current study or the study by Wennberg if population-based health coaching improves disease-specific outcomes, patient-centered outcomes, or processes of care. Other studies of population-based health coaching for patients with chronic disease have shown a modest positive impact on quality of life, particularly for patients with diabetes.¹⁵⁻¹⁷

We also have more to learn about which groups of patients are more likely to benefit from coaching. The strongest evidence for benefits of health coaching comes from randomized controlled trials of patients with diabetes. Like the Scuffham study, the study by Wennberg found that health coaching resulted in a greater reduction in hospital admission for patients with diabetes. In addition, based on the both the Wennberg and Scuffham studies, it appears that population-based health coaching may be most effective at reducing health care utilization and medical costs for patients less than 65 years of age.

The study by Scuffham et al. provides useful information for systems considering implementation of health coaching models. Ultimately, the reach of health coaching will depend on our ability to tailor it to patient needs, using the resources available, under a compelling business model. While short-term direct health care cost and return on investment is one aspect of a business model, other factors, including improved processes of care, disease control, patient quality of life, and patient and provider satisfaction, are also important

considerations. Future studies of population-based health coach are critical to expanding the evidence base for health coaching in the real world of health care delivery.

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Compliance with Ethical Standards:

Conflict of Interest: The author declares that he does not have a conflict of interest.

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