

Task Sharing Chronic Disease Self-Management Training With Lay Health Coaches to Reduce Health Disparities

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Chronic disease self-management training improves health outcomes and reduces cost.¹ However, one size does not fit all in self-management training interventions. Several factors, such as distance to self-management training program locations, educational level, and inequitable access to health care resources, affect utilization of these services in the minority and rural populations.^{2,3} Time constraints limit primary care physicians' abilities to care adequately for patients with multiple chronic illnesses.⁴ Lay health coaches can share tasks with clinic teams to provide self-management training support in low-resource settings.⁵⁻⁸

Two articles in this issue of *Annals of Family Medicine* use lay health coach–delivered interventions to provide self-management training to disparate populations. The study by Andreae et al proposed to improve the functional status of rural adults with diabetes by targeting chronic pain for intervention, and Willard et al aimed to improve medication adherence in low-income urban populations with moderate to severe chronic obstructive pulmonary disease (COPD).^{9,10} Both studies included predominantly African American participants.

In a cluster-randomized controlled trial by Andreae et al, a 3-month, peer-delivered, telephone-administered diabetes self-management program integrated cognitive behavioral therapy (CBT) principles to overcome pain as a barrier to physical activity in rural, low-income, predominantly female adult individuals with diabetes and chronic pain. The peer-delivered intervention improved function and pain subscales of Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) by 10 points, which represents

a meaningful improvement in patient symptoms.¹¹ Self-reported physical activity also improved. Due to the short duration of the trial, likely, there was no improvement noted in physiologic measures.

The Andreae et al study's peer health coaches were adults affected by diabetes with previous training and experience in providing diabetes self-management support. They received an additional 30 hours of training in CBT components and activities. The intervention components are highly feasible for scaling up in a variety of rural settings as the use of a portable DVD player and telephone circumvents challenges of varying broadband and wireless connectivity in rural locations.¹²

Willard-Grace et al report secondary outcomes of medication adherence for the Aides in Respiration (AIR) health coaching study, a multisite randomized controlled trial of people living with COPD.¹³ Lay health coaches accompanied individuals with moderate to severe COPD from 7 urban county clinics serving low-income populations to primary care and specialist visits along with intermittent individual meetings and phone calls. Health coaches in Willard-Grace et al had a bachelor's degree and received 100 hours of training. At 9 months, health coaching intervention participants had a greater number of days of adherence to controller inhalers, increased likelihood of taking all medications as prescribed, and were 3 times as likely to demonstrate the perfect technique of all inhaler use. There was a significantly higher dropout rate in the intervention group compared to the usual care group (29% vs 14%), which may indicate a high intervention burden on participants.

Inhaler use technique was assessed in Willard-Grace et al by using standardized checklists where the patients were asked to demonstrate the use of inhalers.¹⁴ The teach-back technique requires approximately 5 minutes for Diskus devices and 8 minutes for metered-dose inhalers.¹⁵ Lay health coaches can be a valuable resource for teach-back techniques to improve self-management, self-monitoring, and medication adherence.¹⁶

In addition to assisting with the care navigation and patient education, lay health coaches can assist

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disparate populations by taking into account an individual's social context and focus on patient preferences for monitoring and self-management.^{3,17,18} The sustainability of lay health coach interventions in community settings beyond grant funding, however, is challenged by the lack of widespread reimbursements for these programs.¹⁹ Community coalitions targeting population health outcomes have been successful in promoting health equity by implementing policy and structural changes in deprived neighborhoods.²⁰ There is a need for research that supports policy and payment models that integrate lay health coach programs to mitigate individual and familial social risks that impact chronic disease outcomes into primary care settings in socially deprived areas.^{21,22} Empowering primary care teams with advanced support in clinics is showing promise for improving patient and clinician satisfaction.²⁴ Lay health coaches can potentially "share-the-care" in communities, by assisting with the "work of being a patient" with chronic disease, to supplement primary-care visits in low-resource settings where "no moment is wasted."²⁵⁻²⁷

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