SCIENCE- IN-BRIEF

TURNING SCIENCE INTO ACTION

Community Outreach and Cardiovascular Health (COACH) Trial

The following is a synopsis of the article "Community Outreach and Cardiovascular Health (COACH) Trial: A Randomized, Controlled Trial of Nurse Practitioner/Community Health Worker Cardiovascular Disease Risk Reduction in Urban Community Health Centers," published in the September 25, 2011, issue of *Circulation: Cardiovascular Quality Outcomes*.



What is already known on this topic?

Heart disease, stroke, and diabetes contribute to approximately 831,000 deaths in the United States each year. Although guidelines for managing these diseases are well publicized, implementation of risk reduction practices remains inadequate. Several chronic disease case management models-specifically nurse management models that include community health workers (CHWs)-address increasing health care costs and concerns about the quality of care. Studies suggest that the nurse case management model results in reduced low-density lipoprotein cholesterol (LDL-C), reduced hypertension, improved diabetes control in clinical settings, greater patient satisfaction, and increased use of health care services. In addition, having a CHW as a member of the nurse-led management team not only lowers communication barriers between health care providers and patients, but also reduces health care costs and improves overall patient satisfaction and quality of care.

What is added by this document?

The Community Outreach and Cardiovascular Health (COACH) trial engaged 525 patients in urban community health centers to evaluate the effectiveness of a cardiovascular disease (CVD) risk reducttion intervention. Participants were randomly assigned to an intervention group or a control group. The intervention group received intensive CVD risk factor case management from teams of nurse practitioners (NPs) and CHWs focused on improving cholesterol, blood pressure, and glycated hemoglobin (HbA1c) levels. The control group received enhanced usual care to manage the same risk factors. After 12 months, patients in the intervention group showed significant overall improvements in all of the risk factors measured and demonstrated a more positive perception of the quality of care they received. Study results suggest that underserved populations can benefit from a NP/CHW intervention focused on managing uncontrolled CVD risk factors.

What are the implications for public health practice?

The NP/CHW team enhanced patient self-management by:

- Encouraging self-monitoring.
- ▶ Establishing mutual goal-setting and decision-making.
- Addressing existing barriers to medication adherence and appointment keeping.
- Assessing patients' progress through consistent and proactive contact.

The activities in this intervention match those described in the self-management component of the Chronic Care Model, which has been shown to improve health care system performance.

What are the applications for these findings?

The study findings support the possibility of using nurseled patient-centered medical homes to improve the care of vulnerable populations, especially those with chronic diseases. Evidence also suggests that the inclusion of CHWs on a nurse-led medical team is an effective model of care. To ensure CHWs are integrated into the health care system, policies for supporting and sustaining the work of CHWs must be established.

Resources

National Committee for Quality Assurance Recognizing Nurse Led Practices for Patient-Centered Medical Home www.acnpweb.org/files/public/PPC-PCMH%20Nurse%20Led%20Practices%20Fact%20Sheet.pdfm

The Joint Commission *Primary Care Medical Home* www.jointcommission.org/accreditation/pchi.aspx

Robert Wood Johnson Foundation Health Affairs Health Policy Brief on Patient-Centered Medical Homes www.rwjf.org/files/research/68929.pdfg

Centers for Disease Control and Prevention *Addressing Chronic Disease through Community Health Workers: A Policy and Systems-Level Approach* www.cdc.gov/dhdsp/docs/chw_brief.pdf

Citation

Allen JK, Dennison-Himmelfarb CR, Szanton SL, et al. Community Outreach and Cardiovascular Health (COACH) Trial: A randomized, controlled trial of nurse practitioner/community health worker cardiovascular disease risk reduction in urban community health centers. Circ Cardiovasc Qual Outcomes. 2011;4:1–8.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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