

# Chapter 14

## Improving Quality Improvement Collaboratives: Mixing Communication Media to Attain Multiple Measures of Success

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### **ABSTRACT**

*For several decades, researchers have studied the comparative effects of face-to-face and electronic communication. Some have claimed that electronic communication is detrimental to outcomes while others have emphasized its advantages. For members of healthcare quality improvement (QI) collaboratives, a mix of both of types of communication is often used, due to geographical dispersion. This chapter examines the outcomes of a specific QI collaborative, the Empira Falls Prevention project in Minnesota, USA. Levels of electronic communication between collaborative members were found to be associated with a positive patient outcome, specifically a reduction in falls. Electronic and face-to-face communication differed in their association with success measures for the collaborative. The findings suggest that the two modes of communication can be leverage to attain maximum benefits from participating in a quality improvement collaborative.*

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## INTRODUCTION

Despite the prevalence of electronic communication in the workplace researchers continue to debate the effectiveness of electronic media for getting work done in teams. Some have stated that electronic interaction is a poor replacement for face-to-face and can lead to misunderstandings and damaged personal relationships (Hinds & Bailey, 2003; Nardi & Whittaker, 2002). Others argue that despite the drawbacks, electronic communication is essential, particularly when work involves group members that are physically or temporally dispersed (Olson & Olson, 2000). Recently research has begun to suggest that the use a mix of communication modes enhances outcomes (Caughlin & Sharabis, 2013; Malhotra & Majchrzak, 2014). In health care settings using both electronic and face-to-face communication is commonplace. Shift work and multi-disciplinary patient care mean that caregivers are at times together at the same place at the same time, but also often work physically and temporally apart. In addition the increasing complexity of and drive to improve the quality of healthcare has given rise to one type of healthcare group, comprised of members from dispersed organizations, the *quality improvement collaborative*.

Members of quality improvement (QI) collaboratives share knowledge and act as resources for each other, with the goal of improving implementations of evidence-based practices (Newton, Davidson, Halcomb, Denniss, & Westgarth, 2006). A key purpose of a collaborative is to provide a formal structure that can be used by individuals to build networks of support and gain access to expertise in implementation areas. Many collaboratives hold scheduled conferences where members learn about problem-solving techniques and evidence-based practices, and individuals have the opportunity to meet in person. Members also share experiences during collaborative meetings. Other tools used in collaboratives can include site visits, written reports and sharing of data via electronic methods (Nembhard, 2009). Multiple studies have reported collaborative successes in improving processes, including studies in the areas of colorectal, perinatal, and diabetes care (Gould, 2010; Hicks et al., 2010; Jackson et al., 2010). Others, however, have suggested that collaboratives have only modest effects on outcomes and have concluded that little is known about the specific components that affect a collaborative's effectiveness (Schouten, Hulscher, van Everdingen, Huijsman, & Grol, 2008). In addition few studies have assessed or found a positive effect on patient outcomes (Nadeem, Olin, Hill, Hoagwood, & Horwitz, 2013). Therefore there is a need for research on the behaviors of collaborative participants and the effect on outcomes (Lindenauer, 2008; Nadeem et al, 2013).

This chapter seeks to better understand how a mix of electronic and face-to-face communication employed by individual participants in a collaborative can affect measurable, objective outcomes in health care. To do so, the authors present a study of a fall prevention project carried out by Empira, a quality improvement collaborative of Minnesota nursing homes.

## BACKGROUND

### Quality Improvement Collaboratives and Communication

In quality improvement collaboratives, members from multiple organizations work together to share information on effective interventions and ways to overcome barriers to implementations (Cretin, Shortell, & Keeler, 2004; Kilo, 1998). A central premise underlying success for collaboratives is that members learn and benefit from each other. The collaborative also offers access to experts via a variety of com-

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