



# In the Literature

Highlights from Commonwealth Fund-Supported Studies in Professional Journals

## Financial Incentives, Quality Improvement Programs, and the Adoption of Clinical Information Technology

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**An abstract is available at:** [http://journals.lww.com/lww-medicalcare/Abstract/2009/04000/Financial\\_Incentives\\_Quality\\_Improvement.6.aspx](http://journals.lww.com/lww-medicalcare/Abstract/2009/04000/Financial_Incentives_Quality_Improvement.6.aspx)

### Synopsis

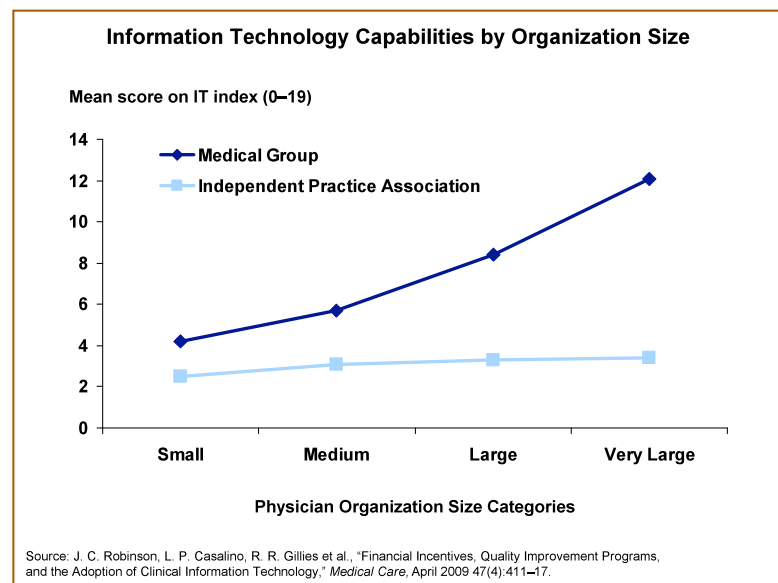
A national survey of large medical groups and independent practice associations found that these organizations adopted clinical information technology at higher rates when they participated in quality improvement initiatives and when they were evaluated for pay-for-performance and public-reporting purposes.

### The Issue

Clinical information technology is critical for improving the quality, safety, and efficiency of health care services. Yet adoption of IT has lagged behind expectations. There is considerable debate surrounding the role that direct or indirect financial incentives play in fostering the adoption and use of clinical IT by physicians. The researchers involved in this study tested the hypothesis that physician organizations' adoption of such technology would be more extensive when faced with direct external incentives (e.g., pay-for-performance programs) or when participating in quality improvement initiatives, which require data collection and analysis for success.

### Key Findings

- Of the 19 clinical IT capabilities examined in the study, medical groups have, on average, acquired nearly twice as many CIT capabilities as have independent practice associations (IPAs) (6.8 vs. 3.5).



- Nearly half of medical groups have electronic access to radiology and laboratory test results; more than a third have access to automated alerts for potential drug interactions and abnormal test results; and more than 40 percent report that most of their physicians have e-prescribing capabilities.
- Physicians in IPAs are less likely to have clinical IT capabilities than those employed by medical groups. Adoption is lowest in IPAs for forms of IT that must be integrated into the private practices of participating physicians, but higher for electronic disease registries (e.g. diabetes, asthma, heart failure), e-prescribing capabilities, and physician-to-patient e-mail—capabilities that can be hosted by the IPA.
- Large medical groups and IPAs are heavily involved in programs that evaluate the use of IT for pay-for-performance and public reporting purposes. About half participate in a quality improvement program sponsored by a regional insurance plan or a national program. Such medical groups and IPAs adopt more electronic capabilities—an average of 1.9 more such capabilities—compared with other similarly sized organizations not subject to evaluation.

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### Addressing the Problem

Although a minority of physician organizations in the United States possess all the components of an electronic medical record, many have adopted selected capabilities. These organizations seem to be postponing full adoption while using those functions most relevant to their immediate needs. Empirical data on the sequence of adoption of IT functions may help guide initiatives seeking to expand providers' electronic capabilities. In addition, incentives, such as pay-for-performance programs, and participation in quality improvement efforts could accelerate adoption by physicians.

**"Our national results are consistent with the Massachusetts and California experiences in suggesting that direct rewards for information technology adoption provide a meaningful transition incentive on the road to quality-based reward programs."**

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### About the Study

The authors use data from the second round of the National Study of Physician Organizations and other resources to identify and survey all U.S. medical groups and independent practice associations with 20 or more physicians in 2006 and 2007. The response rate was 60.3 percent, representing a total of 338 medical groups and 200 IPAs. Use of 19 clinical information technologies was measured. Multivariate statistical analysis was performed to identify financial and organizational factors associated with adoption and use of clinical IT.

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### The Bottom Line

External incentives and participation in quality improvement initiatives are associated with greater use of clinical information technologies by large physician practices.

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### Citation

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