A Comparison of How Four Countries Use Health IT to Support Care for People with Chronic Conditions

Synopsis

A comparative analysis of how four high-income nations—Australia, Canada, Denmark, and the United States—are using health information and communications technologies (ICTs) to manage care for chronically ill patients identified four key themes: 1) national strategies are implemented and adapted on a regional level; 2) each country struggles to ensure that patients' clinical information is transmitted from one care setting to the next; 3) telehealth approaches are not widely used or well-integrated with other ICT efforts; and 4) clinical data are being made available to patients, but are not being used to engage patients in managing their own care. All countries could benefit from opportunities for shared learning in these areas.

The Issue

Across the globe, the number of chronically ill patients is growing, and their care is becoming more complex and expensive. Many national health systems are looking to health ICTs—including electronic health records (EHRs), health information exchange, telehealth technologies, and self-management tools—to improve coordination of care for the chronically ill and help patients manage their conditions. In this comparative analysis, Commonwealth Fund–supported researchers compare how Australia, Canada, Denmark, and the United States are using ICT to improve chronic care.

Key Findings

- All four countries are experimenting with ICT at the regional level to allow for customized approaches that take into account cultural and structural factors. Some regions are more advanced than others and can serve as models for the deployment of ICT tools to support effective chronic care.

- Each country is emphasizing one of two strategies to ensure that personal clinical data follow patients as they move from care setting to care setting (for example, from primary to specialist care): creating a single repository that can be accessed by all providers (Canada and Australia), or ensuring that data can be shared from point to point (Denmark and the United States). The authors note that the optimal solution may be a blend of the repository and point-to-point approaches.

- The use of telehealth—for example, to enable home monitoring of patients or virtual office visits—is not widespread, even though its potential benefits are clear. Even when telehealth is used, it is not integrated with EHRs, leading to information fragmentation and missed opportunities for learning.

- Efforts are under way in the four countries to engage patients through ICT, for example, by making their clinical information more accessible, providing electronic educational resources, and offering online appointment scheduling, prescription filling, and secure messaging with providers. There have been limited efforts to deploy technology that uses clinical information from EHRs to actively engage patients in managing their conditions.

The Big Picture

Given these nations' shared challenges, the authors conclude there is substantial opportunity to promote cross-national learning about effective ways to use ICT to improve chronic care. This learning could be facilitated by efforts to catalogue health ICT strategies, implementation approaches, and impact on chronic care outcomes; such efforts could build on initiatives now being led by the World Health Organization, the European Commission, and the Organization for Economic Cooperation and Development. Existing forums that bring together leaders in health ICT, such as the International Medical Informatics Association, should be leveraged to promote learning.

> **"Simply making data available to patients without a broader strategy to help them use the information effectively will not harness the power of [information and communication technologies] and is unlikely to have a substantial impact on behavior change among chronically ill patients."**

About the Study

Australia, Canada, Denmark, and the United States were selected for study to ensure variation in the scale, scope, and maturity of ICT strategies. The researchers examined the countries' overall approaches, as well as specific initiatives, drawing on peer-reviewed and gray literature published between 2008 and 2013, during which time these nations made great advances in the development and use of ICT.

The Bottom Line

High-income nations face common challenges in using information and communications technologies to improve chronic care. Cross-national learning could help leverage new technologies to improve care coordination and engage patients in managing their own conditions.

J. Adler-Milstein, N. Sarma, L. R. Woskie et al., "A Comparison of How Four Countries Use Health IT to Support Care for People with Chronic Conditions," *Health Affairs*, Sept. 2014 33(9):1559–66.

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