Health care reform: the effect of a vertically integrated health system on emergency medicine

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Undergoing radical transformation around the globe, The 1980s and 90s were a time of "horizontal" integration, with the introduction of hospital mergers and regional health boards. In Canada, this has produced disruption and confusion, with little evidence of improved quality or reduced costs. In fact, horizontal integration has a limited ability to reduce cost and has not improved integration of care, except perhaps within some of the merged institutions as they mature. The next wave of reform will likely involve "vertical" integration of health care institutions and primary care systems.

The purpose of this paper is to explore the concept of a vertically integrated health system (VIHS) and to discuss its impact on emergency medicine.

What is a vertically integrated health system?

Devers and colleagues² defined a VIHS as "a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined community, and is held clinically and fiscally accountable for the outcomes and health status of those served." A VIHS is broad-based and provides a full range of services, including ambulatory, acute and non-acute institutional and residential care. It should be geographically located to serve the needs of a defined population and reduce the gaps now present in the health care system. It has become clear, however, that there are two very different perspectives on the elements of a VIHS. The institutional view focuses on clinical services and sees the institution as the centre of the system. The community view supports a wellness model that reflects community priorities and needs, in which access to appropriate care is an important issue.

Key features of a VIHS

Integration of care

To achieve this key goal, there must be a shared philosophy and vision throughout the organization. This mandates the involvement of health care providers and patients during the strategic planning and development phase. There must be effective and accepted indicators to monitor both the process and outcome of care. It is important to measure consumer satisfaction, access to care, quality of care and clinical outcomes.³ A key strategy is the development of multidisciplinary care, facilitated by decision support tools like care maps and clinical guidelines.

Information

Providers require electronic access to timely, accurate and comprehensive information about health status, costs, quality, utilization, workload, outcomes and consumer satisfaction. An electronic patient record, including both primary and institutional care data, is central to the success of an integrated system.

The current fragmented and incomplete information systems are a major barrier to change.

Funding

If a VIHS is to be responsible for health care delivery, population-based funding must be allocated to the system and not controlled exclusively by government. To match health care resources to population health needs, the VIHS must control all funding, including pharmacare, mental health and physician services. This requires that physicians move from fee-for-service to a capitation model, which is a natural evolution for emergency medicine but represents a philosophic shift for many specialists.

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Governance and management

The governance model should be a single board with decentralized management. Support and corporate functions should be delivered in a consistent manner across the system, but clinical services should be encouraged to innovate within the common goals of the organization. There is no ideal management structure, but management should be organized by programs and systems of care matched to the health needs of the community.⁴ An academic health sciences centre can continue to operate within such a model, but fostering community linkages is a particular challenge.

Strategies to position emergency medicine within a VIHS

Emergency departments (EDs) have been the hospital's window to the community and, more recently, the health care system's "safety net." With the current confusion in health care reform, emergency medicine has a critical stabilizing and integrating role. To ensure that our legitimate concerns are considered and that the system doesn't evolve without our input, emergency physicians must participate actively in health care reform. Consider the following strategies.⁵

Leadership

Emergency medicine gives us broad perspective, teaches us process analysis, and forces us to be "system thinkers." We have unique skills and understand the community and institutional concerns that must be balanced in the development of a VIHS. These attributes will help us become leaders in health care reform. Emergency medicine is already a key player in several critical VIHS "interface components," including prehospital care, trauma systems, poison information centres, chest pain (and other rapid assessment) units, home care and telemedicine.

Information systems

A common minimal data set for all EDs will enable comparisons between departments and facilitate rational decisions with respect to consolidation of regional EDs. Internationally validated 5-level triage systems will be important in the development of emergency medicine process indicators. Real time information systems will facilitate the use of care maps and maintain the continuum of care between the community and the health care institutions. Currently, ED information systems lag far behind hospital systems; leadership is required to move this important initiative forward.

Continuum of care

This is a critical issue in VIHS development and is also an important area for new developments in emergency medicine. Prehospital care systems are evolving into emergency

health services systems and are beginning to take on a public health role. Emergency physicians need to maintain their leadership role in this area and ensure that emergency health services are integrated with the ED. This integration will be a natural building block for a VIHS.

Education and research

Emergency physicians have long worked in multidisciplinary teams and taught other students and residents to do the same. Our skills will be valuable in any VIHS, and the ED will enhance its role as a teaching centre. In addition, the ED is the link between community and hospital, and with the development of better ED information systems, emergency medicine will become an important focus for health system research.

Program management

It is becoming apparent that some type of decentralized management structure will be necessary to manage a complex VIHS. Most EDs already operate in a program management model, with the physician head and nursing manager working closely to manage department resources. Emergency medicine should develop and gain experience with program management models so that we can move into a leadership position as new governance models evolve.

Conclusion

The development of the VIHS represents an exciting opportunity for emergency medicine to contribute to health care reform. Program management, new reimbursement models, multi-disciplinary collaboration, electronically integrated information systems and improved outcomes measurement will be important features of the future system. A VIHS may have fewer EDs, but will have a well positioned emergency program as a key component of the system.

References

- Conrad DA. Coordinating patient care services in regional health systems: the challenge of integration. Hosp Health Serv Admin 1993;38:491-508.
- Devers KJ, Shortell SM, Anderson DA, Mitchell JB, Morgan KL. Implementing organized delivery systems: an integration scorecard. Health Care Manag Rev 1994;19:7-20.
- 3. Moscovice I, Christianson JB, Wellever A. Measuring and evaluating the performance of vertically integrated rural health networks. J Rural Health 1995;11:9-21.
- 4. Conrad DA, Shortell SM. Integrated health systems: promise and performance. Front Health Serv Manage 1996;13:3-39.
- Elders J. Public health, health care reform, and emergency medicine. Acad Emerg Med 1994;1:203.

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