

# The Axis and Nexus of e-Health Alliances in 2020

Denis H.J. Caro, PhD, MBA, MHA, CHE

## ABSTRACT

Strategic partnerships between the health care and Information Communication Technology (ICT) sectors are the wave of the future, as e-health systems are implemented. Divergent perspectives between ICT and health care executives impose central challenges in forging productive strategic alliances. Bridging these perceptual differences requires strong leadership and vision, financial resources, and care provider support. Together these form the axis upon which tomorrow's e-health alliances will rest. The growth of e-health systems is inexorable. The strength of governance leadership continues to influence its rate of growth and positive impact on health care systems. The extent to which strategic partnerships with the ICT sector will evolve into dynamic e-health alliances is directly related to the quality of national and regional governance leadership – the ultimate nexus of evolving e-health systems of 2020.

**MeSH terms:** Integrated advanced information management systems; integrated health care systems; health care technology; leadership

Reproduced with permission of the Canadian Public Health Association.

*La traduction du résumé se trouve à la fin de l'article.*

Professor, MHA Program, School of Management, Vanier Hall, 136 Jean-Jacques Lussier Private, University of Ottawa, Ottawa, ON K1N 6N5, Tel: 613-562-5800, ext. 4742, Fax: 613-564-5164, E-mail: drcaro@uottawa.ca

By 2020, Information and Communication Technologies (ICT) systems in health care will be ubiquitous and integrated; all with the promise of less regional duplication, lower health care costs and greater quality care in the face of looming provider shortages. ICT products and services – including application systems, data warehousing, systems development and training, outsourcing options and managed security services – continue to transform health care systems management through strategic partnerships globally.<sup>1</sup> The upcoming generation of health care consumers and providers instinctively understand the transformational power of technology and will encourage the continuing growth of partnerships with the ICT sector.<sup>1</sup> Strategic partnerships are those that have been established for more than two years, are financially sound, mutually beneficial and driven through long-term plans. Strategic inter-sectoral partnerships play a critical role in fostering economic efficiencies and providing opportunities for organizational thinking and learning beyond institutional walls.<sup>2</sup> The literature points to key factors that form the basis for effective strategic partnerships.<sup>3-6</sup> These include:

- Strong leadership with vision, backed with solid strategic and operational planning;
- Mutual understanding of motivations, priorities, resource strengths and limitations;
- Mutual trust and good faith in an atmosphere of open collaboration;
- Congruent goals and objectives that explicitly detail mutual responsibilities and accountabilities;
- Stable, dedicated and multi-year financing; and
- Well-formulated written contractual agreements with realistic timelines and specific performance measurements and targets.

The literature does not specifically report on whether these critical success factors apply to strategic partnerships between ICT and health care. This commentary highlights key strategic partnership issues through the perceptions and experiences of 53 ICT and health care executives from 45 organizations in Canada, Germany, Sweden and the United Kingdom – all technologically advanced nations with a tradition of publicly funded health care services.

## The clash of ICT and health care paradigms

Parties to strategic partnerships need to invest time, energy and effort to understanding each other's Weltanschauung (view of the world), or paradigms. Table I summarizes the salient differences between the two paradigms in the ICT and health care sectors. International ICT and health care executives hold divergent perceptions, values and motivations that parties need to understand in the interests of promoting mutually beneficial and productive strategic partnerships. These differences do not prevent the parties from engaging in dialogue, but do appear to lengthen the time for strategic partnership negotiations. Health care professionals faced with changing priorities and operational demands have very different mind-sets from their ICT counterparts. Constant restructuring and realignment in health care creates great uncertainty, confusion and instability that undermine and destabilize ICT initiatives. This instability remains a substantive contributing factor to ongoing significant costs and low returns on investment in the short term. ICT professionals view the health care world as a high-risk and low-return one, which initially acts as a disincentive to forming solid strategic partnerships. They often perceive health care decision-making as diffuse, bureaucratic, slow and highly politically motivated. Moreover, from the ICT perspective, health care executives are far more focussed on privacy, confidentiality and patient ethical issues than on the substantive issues of effective information management. Parties to strategic partnerships need to explicitly define their respective parameters, roles and responsibilities, involvements and expectations. In essence, parties must actively work towards win-win strategic partnership agreements, where there is mutual assistance and trust, financial stability, mutual satisfaction, compromises and lower-cost services and innovative solutions. Despite the challenges, strategic partnerships between the ICT and health care worlds promise profound opportunities for adaptive learning, innovation and organizational self-actualization.

### The health care leadership axis

Effective executive leadership is paramount in creating shared visions and is the crucial

**TABLE I**  
**ICT and Health Care Sector Paradigms**

Characteristics	ICT Sector	Health Care Sector
Strategic Goals Perspectives	Long-term profitability Client satisfaction Market growth Effectiveness Efficiency	Health outcome-driven prevention strategies Health promotion goals Population health outcomes Public health outcomes Public welfare outcomes Cost-effective operations Patient/Provider satisfaction
Time Perspectives	Web time reaction Long-term perspective	Bureaucratic time reaction Short-term perspective
Power Focus	Private governance Shareholder power Centralized in corporate boards	Public governance Diffuse political power Centralized in governance bodies
Ethical Focus	Business ethics Utilitarianism Security	Medical ethics Health service ethics Privacy and confidentiality
Culture	Proactive Innovative Competitive Growth orientation Fluid	Legislative compliance Conservative Professional dominance Reactive Ideological

ingredient to effective strategic partnerships. Health care leadership and vision is a *sine qua non* to synergistic and constructive long-term relationships with the ICT sector. Effective leadership inspires mutual trust and confidence and fosters harmonious and constructive interchanges with the ICT world. Health care executives must drive ICT initiatives and be ready to accept full accountability and responsibility for its effective implementation. They need to build core competencies and express proactive interests in ICT issues and initiatives. As leaders, health care executives cannot afford to assume roles as passive monitoring agents to assure privacy legislative compliance, for example. They must also assume lead roles in the recruitment and retention of core competencies in ICT at competitive rates and create productive work environments in which the promise of ICT comes to fruition.

Stable capital and operational financial resources are critically important to developing and sustaining strategic partnerships. Financial resource limitations in health care are a significant hindrance to the formation and growth of such partnerships with the ICT sector. A minimum investment of five per cent of health care budgets over at least three years would significantly reduce overall health care costs, waiting lists and times, clinical workloads and ultimately enhance quality care. Upfront investments in ICT pose real dilemmas in the health care arena, however. Despite the political rhetoric, investments into ICT still lurk in the shadows of health care pri-

orities. Too often health care decision-makers regard ICT as extraneous and supplemental, not as long-term investment opportunities to lower health care costs and promulgate higher levels of quality care. Chronic budget deficits compound the management challenges and pose further limitations to the growth of strategic partnerships with the ICT sector.

Effective strategic partnerships are ones where health care executives successfully co-opt care providers into active participation in ICT endeavours. Care providers and clinicians support ICT initiatives, if they are convinced of its demonstrable and direct benefit to patient care and are directly involved in all partnership discussions. Such was the case in Sweden, where ICT executives at Alleto AB successfully engaged the active support and participation of clinicians at the Huddinge and the Karolinska Hospitals in Stockholm in ICT partnerships that fostered leading-edge clinical research, promoted evidence-based medicine, and enhanced patient care with fewer resources.

### The governance nexus

The most productive and mutually beneficial strategic partnerships are the ones where ICT and health care executives collaborate directly and closely with governance authorities at the highest levels. Without overt and direct government involvement, prospects for viable dynamic strategic partnerships between the two sectors remain limited. Co-opting government support, involvement and participa-

tion in strategic planning endeavours are all important. Ideally, governments should be on the cutting edge of ICT and proactive in assuring access to adequate financial resources for ICT initiatives and applications. Ultimately, effective strategic partnerships must be with and through governments that are best positioned to finance ICT implementation. They also have the greatest responsibility to effect essential structural and process changes through health care systems, using advanced ICT developments.

Ministries of health, in particular, need to be more proactively engaged in setting the strategic ICT directions within their health care jurisdictions. The responsibility to initiate fundamental ICT changes rests with government leaders in health care. Providing financial incentives that encourage innovative restructuring and re-engineering of health care systems for the public benefit remains an important governance responsibility. ICT has enormous transformational power and promise for increased health care efficiencies and higher levels of care. Providing solid financial support to visible system prototypes creates systemic ripple effects that reverberate across political jurisdictions, regions and nations. Government legislation and regulations in the area of financing, technological standards, bidding processes, information management, privacy and security, all have a paramount place in the positive transformation of health care through ICT partnerships. Nor is it simply a question of vision or political courage. Stable and adequate financing is key to the growth and vitality of strategic partnerships. The promise of long-term significant cost

reductions from ICT remains stymied at governance levels, which often rely on accounting practices and budgetary systems that are obsolete for emerging 21<sup>st</sup> century demands.

### Towards 2020 e-health alliances

By 2020, ICT systems in health care will be ubiquitous, anonymous and seamlessly integrated.<sup>7</sup> New upcoming generations of consumers and providers will expect and demand ICT deployment in all aspects of health care, including outcome-driven systems such as population health, prevention, health evaluation and health promotion.<sup>8</sup> With these imminent socio-cultural changes, partnerships between the health care and ICT sectors will become more commonplace. Strategic partnerships will continue to require strategic leadership. The question remains: who will lead? It is almost axiomatic that where the ultimate financial control rests, there lies the ultimate leadership base. Whether in Canada, Germany, Sweden or the United Kingdom, it is the governance agencies and particularly the leaders of Ministries of Health who ultimately drive ICT strategic directions and financing. Ministry leaders are in the best strategic position to reorient long-term health care systems priorities and effect the necessary systemic changes

through the transformational power of ICT. Today's strategic partnerships will ultimately evolve into triad strategic e-health alliances between the ICT, health care and governance sectors by 2020. The strength and quality of governance leadership is the ultimate nexus of tomorrow's e-health alliances of 2020.

### REFERENCES

1. Pearson ID. What's next? *BT Technol J* 2001;19(4):98-106.
2. Robinson DF, Savage GT, Campbell KS. Organizational learning, diffusion and international collaboration in telemedicine. *Health Care Management Rev* 2003;28(1):68-78.
3. Das TK, Teng BS. Trust, control and risk in strategic alliances: Integrated framework. *Organization Studies* 2001;22(2):251-84.
4. Dyer JH, Prashant K, Singh H. How to make strategic partnerships work. *MIT Sloan Management Rev* 2001;42(4):37-44.
5. Judge WQ, Ryman JA. The shared leadership challenge in strategic alliances: Lessons from the U.S. health care industry. *The Academy of Management Executive* 2001;15(2):71-79.
6. Whipple JM, Frankel R. Strategic alliance success factors. *J Supply Chain Management* 2000;36(3):21-29.
7. Godet M. *Creating Futures: Scenario Planning as a Strategic Management Tool*. Oxford: Blackwell Publishers, 2001.
8. Weick KE, Sutcliffe KM. *Managing the Unexpected*. San Francisco, CA: Jossey-Bass, 2001.

Received: March 30, 2004

Accepted: February 28, 2005

### RÉSUMÉ

Les partenariats stratégiques entre les secteurs des services de soins de santé et les technologies de l'information et des communications (TIC) ont un avenir prometteur. Néanmoins, les perspectives des gestionnaires de ces deux secteurs imposent des défis en forgeant des alliances productives. Ces différences nécessitent un leadership inspiré d'une vision cohérente, des ressources financières et la participation active des professionnels dans le domaine de la santé. L'épanouissement des systèmes de e-santé est inexorable. Le rôle de gouvernance continue d'influencer le taux de croissance et l'impact positif sur les systèmes de soins de santé. Ces partenariats stratégiques évoluent en concertation active et positive de leadership aux niveaux de gouvernance national et régional.