

Luddite or Luminary?

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Electronic health records are one of the keys to modernizing Canada's health system and improving access and outcomes for Canadians.
(Romanow 2002: 77)

The Electronic Health Record (EHR) charge is on across the country, with increasing investments in systems infrastructure, the adoption of standards and the integration of health information systems within regions and across sectors of care. In the near term, whether they are institution- or community-based, all nurses will need to use the various functional components of EHRs. Infoway has set a direction for Canada to reach the goal of having an EHR for 50% of Canadians by 2010 (Canada Health Infoway 2007). As an investment partner, Infoway is working within all provincial and territorial jurisdictions to deploy the foundations of the Canadian EHR. Client and provider registries, laboratory, diagnostic imaging and drug information systems, public health surveillance and telehealth applications are among the key functional components. Additionally, funding is being directed to innovative technological approaches, including investments to facilitate clients' access to care, and information and support for cancer care, mental health and primary care.

Many nurses will already have used computerized applications, most commonly the tools that capture client-specific nursing workload. Since the initial introduction of online versions of these tools in the 1980s and '90s, technological advances have much improved the systems' usability. Notwithstanding such improvements, completing the electronic data – in addition to other elements of requisite and, usually, duplicate clinical documentation – continues to consume nursing time.

Although many organizations have made use of the data outputs of these systems (either in the management of staffing, for which they were intended, or as a proxy to cost nursing services, for which they were not intended), the perceived value for the time invested in utilizing these tools has not been apparent to most nurses. Hence we find ourselves in the midst of an eHealth transformation agenda, trying to convince an already overextended workforce that “this time it will be different” because the emerging systems will bring value to clinical care.

So what is the evidence – the value proposition – the compelling reasons for nurses to embrace and integrate information technology solutions? Unfortunately, the outcomes evidence for using fully integrated EHRs is limited in this country. Furthermore, the tools to support clinical decision-making and the capture of nursing care have been deployed in few Canadian healthcare organizations to date. What we do know is that a paper-bound health system doesn’t cut it anymore. There is far too much information to gather, manage, remember, protect and apply in order to ensure safe, high-quality, timely – not to mention cost-effective – care delivery.

Theoretically, the integrated EHR of the future holds promise for

- efficiencies related to the one-time collection of data for use by many – nurses spend, on average, 25% to 35% of their time documenting patient care (Gugerty et al. 2007);
- immediate access to clinical decision support and best practices;
- improved accuracy and security of health records;
- integrated access to clinical decision support tools;
- safer care, with access to the right information at the right time;
- cost savings related to reduced redundancies in diagnostic testing;
- cost savings related to reduced adverse events that extend or necessitate inpatient admissions;
- improved capacity for chronic disease management and aging in the home setting;
- aggregated data to support research, health surveillance and population health;
- active engagement of Canadians in the management of their healthcare; and
- better overall management of clinical care over time and across the continuum of care.

Although the vendors of clinical information systems might argue to the contrary, the perfect system for healthcare does not yet exist. Getting the functional and technological configuration right will require many more years of development, evaluation and fine-tuning in the field, with input from clinicians. Nevertheless,

we must get on with the efforts to move away from our inefficient, information-poor, paperbound processes. Efficiencies may not be immediately evident, and system inadequacies will be realized and improved upon only through clinician use. Focus should be directed to technologies and functions that improve upon the safety and quality of care and bring tangible value to the users.

The term “Luddite” originated in the 19th century with workers who opposed technological change during the industrial revolution (Merriam-Webster 2008). Although some today might suggest that clinicians, including nurses, who resist adopting new technology are “neo-Luddites” (Roszak 1994), increasing numbers are quietly waiting for the vision of EHRs to be realized. These numbers will only increase in the years ahead because new graduates will expect their workplace to be technology enabled. Indeed, access to such tools may well be a deciding factor for new graduates choosing an employer.

“Luminary” can be used to describe a person of prominence or brilliant achievement. Interestingly, the term also means “lamp” (Merriam-Webster 2008), suggesting a guiding light. What we need right now in nursing are more luminaries to guide this transformational agenda within every work setting. In particular, we need leaders to advocate for

- appropriate technological solutions;
- the engagement of nurses in EHR initiatives;
- adequate support during and post-implementation;
- multi-moded education and training, and adequate time for same;
- rethinking of workflow processes;
- nursing workload as a by-product of clinical documentation rather than a separate application;
- advancement of documentation standards; and
- the visibility of nursing’s contributions in the EHRs of the future.

That it will ever come into general use, notwithstanding its value, is extremely doubtful because its beneficial application requires much time and gives a good bit of trouble, both to the patient and to the practitioner because its hue and character are foreign and opposed to all our habits and associations. (*The London Times* 1834; cited in Choong 2003)

This quotation might well be applied to some clinicians’ perception of EHRs today – but who would have guessed that anyone ever held such views about the stethoscope! Neo-Luddite or luminary – it’s your choice.

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2. Demonstrated commitment to the nursing profession based upon interest and involvement in associations or groups to promote high standards of client care or projects to promote "best practices" in client care.
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