

Chapter 17

Academic Family Health Teams: Collaborative Lessons from the Far Flung North

David Topps

Northern Ontario School of Medicine, Canada

ABSTRACT

Working collaboratively, in widely distributed settings, poses unique challenges. The Academic Family Health Team, affiliated with the Northern Ontario School of Medicine, has had to adopt a wide variety of information sharing practices and collaborative software tools, in order to function effectively in such roles as clinicians, educators and researchers. Based on an ongoing action research model, this chapter describes approaches taken and lessons learned while developing the informatics infrastructure to support interprofessional practice. The author describes how common procedures and software tools can benefit from a Web 2.0 approach, comparing commercial and open-source aspects of possible solutions. Ubiquitous data access for point of care decision making is supported by integrating web services, mobile devices and multi-stream communications. Resource discovery is enabled by integrating information streams into the medical record, into wireless device interfaces and via clinical dashboards. Effective team collaboration is highly enhanced through such infrastructure support.

INTRODUCTION

Coming from a practice environment and an educational environment that has some unique features of Northern Ontario, our Academic Family Health Team is faced with the challenges of providing health care, teaching and learning in a highly distributed fashion. Because these activities are

inherently spread across many locations and with many different groups, there is an even greater need than usual to work in a collaborative fashion, with a strong emphasis on effective and open information sharing. Prior to Web 2.0, this would have been extremely difficult, if not impossible. The author shares some of his team's experiences with such information systems and collaborative workflow tools, both from a practical and an action research perspective.

DOI: 10.4018/978-1-61520-777-0.ch017

As primary health care and medical education both become more complex, it is likely that the majority of practitioners in this field will face these increasing challenges and the necessity of working effectively and collaboratively, both online and in person, with access to information at the point of care wherever it may be – ubiquitous health care. This chapter will lay out why such collaborative activities have been so important to the success of the team and provide examples of tools and approaches that we have found useful. While specific tools are mentioned as examples, it is more important for readers to look at the underlying principles and apply them to the rapidly changing world that they will encounter.

BACKGROUND

The importance of teamwork and collaboration in primary health care in today's increasingly complex health care systems cannot be over emphasized. The days of the solo general practitioner are dwindling. Many factors are driving this trend: the current fee structures and payment mechanisms are making solo practice increasingly less financially attractive; but the biggest driver is the overall increase in complexity in the health care system as a whole. Patients themselves are more complex – with an aging demographic and the increasing predominance of chronic disease and cancer care, each patient on average poses an increased range of problems to the practitioner. While it is wonderful that modern medicine provides a much broader and more sophisticated armamentarium of diagnostic and therapeutic tools from which the practitioner can select, the interplay of information and clinical choices again presents the practitioner with an increasingly complex scenario of options. Overriding all of this, spiraling healthcare costs and increasing fiscal pressures on the health care system as a whole drive a philosophy of “do more with less”. There is less capacity within the system at any given

time. As is distressingly evident from the long wait times encountered by any unfortunate who has visited a hospital emergency room, the system is being driven closer to the point of breakdown, and beyond, much of the time.

Governments in many jurisdictions are increasingly turning towards integrated health services with a strong emphasis on interprofessional teams. This is seen across Canada, with some interesting initiatives in the provinces of Alberta and Ontario. The province of Québec has already engaged with the concept of multidisciplinary health teams – their long experience with community health centers represents similar attempts at such health service rationalization. Other governments around the world have also generated some groundbreaking initiatives in the area of primary health care reform. In particular the United Kingdom, with several reforms and iterations of change in how the National Health Service is structured, has attempted to integrate and rationalize the provision of care by various bodies and organizations within the healthcare system. (Mohan, 1995)

In Ontario, the provincial government has also been through several iterations of primary health care teams with the formation of Family Health Networks, Family Health Groups, Family Health Teams, and latterly Family Health Organizations. The distinctions between these are mostly subtle to outsiders but the underlying payment and organizational structure of each arrangement can have profound effects on the overall nature of team collaboration. The fact that there have been so many iterations in such a short time suggests that the solution to finding an optimum collaborative team structure is not a simple one.

What is increasingly clear is that any effective solution is highly dependent on the development of efficient, effective and practical means of information exchange between teams, groups and individuals at all levels within the system (Bellamy & Connelly, 2009). Much has been written on this need for effective informatics support (Reid & Wagner, 2008). This chapter will focus on the

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/academic-family-health-teams-collaborative/42941

Related Content

Detection of Rarefaction of Capillaries and Avascular Region in Nailfold Capillary Images

Suma K. V. and Bheemsain Rao (2016). *International Journal of Biomedical and Clinical Engineering* (pp. 73-86).

www.irma-international.org/article/detection-of-rarefaction-of-capillaries-and-avascular-region-in-nailfold-capillary-images/170463

A Framework for the Design of Web Service Based Clinical Management Systems to Support Inter and Intra Organizational Patient Journeys

Carolyn McGregor (2009). *Medical Informatics: Concepts, Methodologies, Tools, and Applications* (pp. 411-426).

www.irma-international.org/chapter/framework-design-web-service-based/26233

Development of Portable Medical Electronic Device for Infant Cry Recognition: A Primitive Experimental Study

Natarajan Sriraam, S. Tejaswini and Ankita Arun Chavan (2016). *International Journal of Biomedical and Clinical Engineering* (pp. 53-63).

www.irma-international.org/article/development-of-portable-medical-electronic-device-for-infant-cry-recognition/170461

A Novel Approach to Classify Nailfold Capillary Images in Indian Population Using USB Digital Microscope

Suma K. V., Vishwajit Sasi and Bheemsain Rao (2018). *International Journal of Biomedical and Clinical Engineering* (pp. 25-39).

www.irma-international.org/article/a-novel-approach-to-classify-nailfold-capillary-images-in-indian-population-using-usb-digital-microscope/199094

Breast Cancer Lesion Detection From Cranial-Caudal View of Mammogram Images Using Statistical and Texture Features Extraction

Kavya N, Sriraam N, Usha N, Bharathi Hiremath, Anusha Suresh, Sharath D, Venkatraman Band Menaka M (2020). *International Journal of Biomedical and Clinical Engineering* (pp. 16-32).

www.irma-international.org/article/breast-cancer-lesion-detection-from-cranial-caudal-view-of-mammogram-images-using-statistical-and-texture-features-extraction/240743