

## North American Medical Informatics (NAMI)

### Health Informatics in Canada

#### COACH: Canada's Health Informatics Association

Founded in 1975, COACH: Canada's Health Informatics Association is the organization focused on advancing health informatics (HI) practices and professionalism in Canada. Representing more than 1,300 members, COACH is committed to a vision of taking health informatics mainstream. The association's mandate is to promote the understanding and adoption of HI within the Canadian health system through leadership, professional development, advocacy and a strong, diverse membership. COACH focuses on fulfilling this mandate through a number of key initiatives in addition to the continued enhancement of member services in the areas of networking, information and knowledge sharing, conferences, education, alliances and thought leadership and advocacy. Completing its 32nd year as the national association for HI, COACH continues to develop significant and exciting initiatives to provide leadership in the evolution of HI as a profession in Canada. COACH continues, in conjunction with the Canadian Institute for Health Information (CIHI), to host the largest annual e-Health conference in Canada. COACH and the Canadian Healthcare Information Technology Trade Association (CHITTA) also co-host the annual Canadian Health Informatics Awards program that recognizes achievement and contribution in the HI community through a growing number of personal, project and company-based awards.

#### Professionalism

Targeting the growth and responsible development of the profession of HI,

COACH is addressing the need for professional credentialing through development of a HI definition, competency profiles and ethical principles. *Health Informatics Professional Core Competencies*, a copyrighted document of COACH, contains a concise, overarching definition of HI, as well as a set of knowledge, skills and capabilities, or "core competencies", that multidisciplinary HI professionals need to share in order to work together effectively. The document is posted on the COACH website at [www.coachorg.com](http://www.coachorg.com). This document is a critical foundational step for developing HI as a profession and will evolve over time to remain current and relevant. The following definition is a key element of it:

*Health informatics is the intersection of clinical, IM/IT and management practices to achieve better health.*

The HIP Competency Framework diagram is another important feature and reflects the three source practices that intersect to form the HI core body of knowledge, the seven more specialized bodies of knowledge and their advanced competencies and the core competencies that are achieved when the three source disciplines intersect. *Core Competencies* and the ethical principles, published as an appendix in the document and on the website, are the cornerstones of the COACH Health Informatics Professionalism (HIP) Program. Both projects are the result of a series of COACH research and discussion papers and expert contribution from across Canada.

Employers, COACH members, students and newcomers to the field are expected to apply *Core Competencies* to foster professional and career development, identify the HI skills required into the future and increase the visibility of and understanding about HI.

The Canadian HI academic community is one key stakeholder group that is

actively involved in this and related capacity-building initiatives. An increasing number of HI undergraduate and graduate programs can be found at universities, colleges and technical schools across Canada. Excellent work began in 2007 with the Canadian Society of Telehealth (CST). COACH formed an alliance with CST to further advance the integration of telehealth with the full e-health and EHR capability that is being rolled out across Canada. The evidence of the effectiveness of this alliance can be seen in the quoted results of a joint COACH, CST and Canada Health Infoway, Inc workshop on the convergence of telehealth and e-records.

#### Privacy Guidelines

COACH has long contributed to the development of standards for the protection of health information in Canada. The *COACH Guidelines for the Protection of Health Information* was originally published in 1995 and revised in 2001. The first online edition was published in 2004 and updated for the 2006 edition. The latest version, published in 2007, continues to be a key resource for the HI community across Canada. COACH also offers a program to provide assistance to provincial and territorial jurisdictions across Canada charged with the implementation of privacy legislation. The Guidelines provide a "best practices" approach beyond legislation which link to ISO standards and provide strategies for implementation. This resource provides HI professionals with the framework needed to minimize risk, maximize integrity and protect privacy for all personal health information. The 2007 version of the Guidelines continues to reflect the realities and evolving requirements of our industry as Canada continues major initiatives and implementations that increase use of Electronic Health Records

(EHR). The jurisdiction program provides for the purchase of a "licence" by a jurisdiction to use the content of the Guidelines for the implementation of its own program through the development of policies, controls, resource information and training programs for all those responsible in that jurisdiction - employees, contractors, physicians, pharmacists, etc.

### **e-Health Conference**

One of COACH's most successful programs is the annual e-Health Conference, held in partnership with CIHI, which attracts over 1,500 members of the HI community. e-Health 2007: Paths to Transformation, was held May 27-29 in beautiful Québec City, Québec. The 2008 e-Health conference, planned for May 4-7 in Vancouver, will be centred on Extending the Reach. A larger than ever conference exhibition and trade show, along with an expanded eight-track program will be part of this event. Tracks include: Operating the Electronic Health Record (EHR), Privacy, Security and Risk Management, Human Factors and Change Management, Innovation and Sustainability, School of Hard Knocks, Measuring Progress and Harvesting the Benefits of the EHR, Decision support: From Patient Care to System Management and Engaging the Public.

In addition to this most highly valued national conference, COACH added the first of its Executive Forum Series conferences in the fall of 2007, with the well-organized and attended Recruiting and Retaining Health Informatics Professionals: What You Need to Know and Do event. A follow-up event will be held on Global Issues and Global Opportunities in conjunction with e-Health 2008.

### **Standards**

COACH continues to be an active participant in the development and imple-

mentation of international standards for health information as the key to EHR initiatives in Canada and worldwide. Many COACH members are actively involved as volunteers including, in several cases, chairing key groups of the Infoway Standards Collaborative of Canada (ISC), such as ISC working groups and strategic, coordinating, technical and clinical committees. ISC is a fully harmonized standards group covering all HI-related standards development organizations (SDO), including ISO Technical Committee 215 on Health Informatics (ISO/TC215), Health Level 7 (HL7), International Health Terminology (IHT) and DICOM.

Internationally, COACH members and staff participate on the Canadian Advisory Committee ISO/TC215 and also attend, lead or develop standards with ISO/TC215, HL7 and IHT SDOs. Don Newsham, COACH CEO and Past President, Kathryn Hannah, Dr. Marion Lyver, Andrew Grant, Julie Richards, Dennis Goikas and Grant Gillis, are just a few of the COACH participants. COACH, a primary source of experts contributing to standards development, appoints, in conjunction with the Canadian Health Information Management Association (CHIMA), representatives to ISC strategic, coordinating and clinical committees. COACH is a strong expert source, advocate and partner in advancing HI standards in Canada.

### **Growth**

The organizational capacity of COACH is also growing. In 2007, Alison Gardner joined the organization in the new position of Program Director. Alison will plan, develop and help launch new and enhanced programs and services for COACH. Alison and Don work with the strong association management firm, Base Consulting, including Executive Director Renee Levine

and her staff. This additional capacity is fully focused on advancing the HI practices and professionalism through enhanced services to members, a defined and understood profession, a well communicated and valued program, a growing thought leadership capability and an effective, sustainable organization.

### **Related Organizations**

Canada Health Infoway

[www.infoway-inforoute.ca](http://www.infoway-inforoute.ca)

Canadian Institute for Health Information (CIHI)

[www.cihi.ca](http://www.cihi.ca)

Canadian Healthcare Information Technology Trade Association (CHITTA)

[www.chitta.ca](http://www.chitta.ca)

Canadian Nursing Informatics Association (CNIA)

[www.cnia.ca](http://www.cnia.ca)

Canadian Society of Telehealth (CST)

[www.cst-sct.org](http://www.cst-sct.org)

Canadian Health Information Management Association (CHIMA)

[www.echima.ca](http://www.echima.ca)

Canadian Medical Association

[www.cma.ca](http://www.cma.ca)

Canadian Healthcare Association

[www.cha.ca](http://www.cha.ca)

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## Biomedical and Health Informatics Activities in the United States

### Leaders Shaping the Future of Biomedical and Health Informatics

AMIA is the premier professional organization in the United States dedicated to the development and application of informatics in the support of patient care, public health, teaching, research, administration, and related policy. AMIA incorporated 20 years ago as the American Medical Informatics Association through the merger of three existing informatics groups, the Symposium on Computer Applications in Medical Care (SCAMC), the American Association for Medical Systems and Informatics (AAMSI), and the American College of Medical Informatics (ACMI).

AMIA has nearly 4,000 members from over 55 countries worldwide. Members include informatics professionals, students, institutions, and corporations and together, they represent all basic, applied, and clinical interests in informatics. AMIA is governed by a Board of Directors and calls upon its members to serve in volunteer roles on task forces, committees, and working groups. The AMIA office is led by the President and CEO who works with a professional staff to manage AMIA's programs and services.

AMIA is the trusted source of knowledge about effective use of informatics to transform health care within three domains: clinical informatics (including healthcare, research and personal health management), public health and population informatics, and translational bioinformatics. AMIA is frequently called upon as a source of informed, unbiased opinions on policy issues relating to the national health in-

formation infrastructure, uses and protection of personal health information, and public health considerations. AMIA publishes a scholarly journal, the Journal of the American Medical Informatics Association, proceedings of its meetings, a monthly electronic newsletter and weekly digest of syndicated news within the field, Medical Informatics News Bytes, distributed to AMIA members.

In 2005, the Board of Directors, members and AMIA staff undertook a strategic planning exercise to re-define the vision, mission and goals of the association. Now, three years later, AMIA has cemented its standing in the healthcare community as the professional home for biomedical and health informatics. AMIA continues to work on new projects to advance health care with the development of educational offerings and programs, public policy and advocacy initiatives, scientific meetings and symposia, white papers and reports, and ongoing membership activities.

AMIA holds three meetings per year – the Summit on Translational Bioinformatics in March, the Spring Congress in May, and the Annual Symposium in the fall. Summit programming includes informatics methods for the analysis of molecular and clinical measurements; relating and representing phenotypes and disease; dissecting disease through the study of organisms, evolution, and taxonomy; and computational approaches to finding molecular mechanisms and therapies for disease. The congress program engages attendees to develop a common view of the opportunities and challenges facing informatics. Congress topics have included the development of effective electronic health records and the evaluation of their impact on care delivery; the in-

cremental definition of personal health records and the new challenges associated with emerging approaches to PHR development and use; the technologies, policies, research, and social structures required to create a stronger public health informatics infrastructure; and the opportunities and challenges associated with accelerating the field of clinical research informatics.

AMIA's Annual Symposium is the premier scientific meeting for new research and development in biomedical and health informatics. It is the place to hear about leading edge scientific work, to learn about evolving standards and policies for management of biomedical information, and to understand how cutting-edge technologies can best be developed and deployed. The symposium provides a wide range of formats for education and discussion and includes half-day tutorials, expert panels, papers, posters, and invited talks. Over 2,000 biomedical and health informatics professional attend this signature event each year.

AMIA's education, training and academic related opportunities are unmatched and we continue to strive to develop new programs and services. Our 10x10 program to train 10,000 health care professionals in applied health and medical informatics by the year 2010 continues to grow. In 2007, AMIA launched a 5-year cooperative agreement with the Centers for Disease Control and Prevention. The purpose of the program is to strengthen the breadth and depth of the public health workforce by providing training in public health informatics and encourage new explorations of innovations at the intersection of public health and health informatics. AMIA also continues to support nursing informatics through the Alliance for Nursing Informatics, the

TIGER initiative and our own educational endeavors. AMIA received the exciting news in 2007 that it was selected to host NI2012, the eleventh triennial Congress on Nursing Informatics. This is the premier IMIA meeting for nurses and informatics experts working with informatics applications in nursing care, administration, research and education and will bring together thought leaders of the nursing informatics community.

This past year, AMIA launched the Academic Forum. The Forum provides a unique platform for surveying and analyzing activities in academic units dedicated to biomedical and health informatics and for recommending best practices related to education, scholarship, faculty development, faculty retention, and essentially all issues relating to the academic enterprise.

In 2008, one of AMIA's focuses is to develop an international distance learning continuing education program in

biomedical and health informatics entitled "20.20", a perfect vision for improving basic clinical informatics skills. The program is envisioned to apply distance learning approaches and educational technologies to train 20,000 health workers by 2020. The aim is to create globally appropriate, sound educational offerings through a network of professional health informaticians.

The recently adopted International Medical Informatics Association (IMIA) strategic plan calls for a focus on education as one of the six dimensions of emphasis: "IMIA will support the development of education, training and continuing professional development for everyone involved in, or touched by, biomedical informatics by working towards the development of the best content, exemplary pedagogical practice and processes, and contributing to the exploration and integration of appropriate educational technologies." (IMIA, 2007)

AMIA is working closely with IMIA since the project will serve conjointly the needs of IMIA and its strategic plan. The 20.20 program will draw on the lessons and success of the AMIA 10x10 program, through formal linkage, utilizing AMIA's abilities in education program design and operations and IMIA's capacity to reach and influence informatics training programs around the world through its member societies. It is anticipated that the typical 20.20 course or offerings will be less time-consuming and on occasion less rigorous, yet of high quality. Virtually all offerings will be Web-based or, if not, capable of being fully Web-based.

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