eSafety in Action:
Understanding, Believing, Achieving

Bernard Snell Hall
University of Alberta Hospital
Edmonton, Alberta
Welcome & Opening Remarks

Susan Anderson – Assistant Deputy Minister and Chief Information Officer, Alberta Health
Dr. Peter Jamieson – Chief Medical Information Officer, Alberta Health Services
Mark Casselman – Chief Executive Officer, COACH

Keynote - Understanding eSafety

Moderator: Laurel Taylor - Senior Provincial Director, Performance Improvement, Alberta Health Services
Keynote Speaker: Dr. Farah Magrabi - Associate Professor, Centre for Health Informatics, Australian Institute of Health Innovation, Macquarie University

Dr. Magrabi's presentation will focus on defining "eSafety", how it originated, exploring the underlying fundamentals and principles, and how it is evolving as a growing and important endeavour in contemporary healthcare and health informatics.

Plenary - Advancing our Understanding of eSafety

Patient Safety Initiatives Underway at CIHI
Speaker: Tracy Johnson – Director, Health System Analysis & Emerging Issues, Canadian Institute for Health Information

Ms. Johnson will provide an overview of CIHI initiatives underway that contribute to our understanding of the issues related to patient safety and the provision of safe care. This includes measuring improvements in the safety of care provided, the development and reporting of indicators across the continuum of care, and other quality and patient safety analyses and initiatives.

Digital Health, Patient Safety & Accreditation
Speaker: Linda Tymchuk - Executive Director, Accreditation, Alberta Health Services

Ms. Tymchuk will explore how accrediting bodies are placing greater emphasis on the collection and use of data to guide quality improvement initiatives. Electronic data mining and analytics to identify trends can be valuable tools for improving patient safety and enabling adherence to accreditation standards. Yet few, if any, accrediting bodies have standards specifically related to safety aspects of these electronic systems themselves. This presentation will explore the use of electronic means for adhering to accreditation standards.

Alberta Health Services' Continuity of Care Quality Improvement Project
Speakers: Shelley Bannister - Program Director, ePolicy & Process, Alberta Health Services & Bev Rhodes- Program Director, Informatics Competency and Practice Standards, Alberta Health Services

Ms. Bannister and Ms. Rhodes will profile the Alberta Health Services Continuity of Care Results Reporting project, a multi-stakeholder quality improvement initiative utilizing the AIW (Alberta Healthcare Services Improvement Way), and in particular will describe how the Patient First Strategy and COACH eSafety Guidelines are embedded throughout. Their presentation will cover the engagement approach, use of the quality tools, development of a closed loop tactic, and the method of arriving at recommendations.
11:00-11:20am
Networking Break

11:20-12:30pm

**Plenary- Approaches to eSafety Education & Training**

*Moderator: Jim Mickelson - Executive Regional Director, Western Region, Canada Health Infoway*

**Information Literacy Promotes eSafety: National eHealth Competencies, Curricula and Faculty Development**

*Speaker: Dr. Robert Hayward - University of Alberta, Faculty of Medicine and Dentistry*

Dr. Hayward will profile the collaboration of The Association of Faculties of Medicine of Canada, College of Family Physicians of Canada, Royal College of Physicians and Surgeons of Canada and Canada Health Infoway to identify and characterize the need for health information literacy (eHealth) training at all levels of professional education. Widely endorsed competencies, assessment criteria and accreditation standard recommendations emerged from this work. This year, with Infoway support, faculty development workshops are helping medical schools integrate eHealth learning into their undergraduate medicine programs. One module, focusing on clinical decision management, explicitly addresses eSafety while offering suggestions for clinically authentic experiential learning.

**eSafety through a National Program for Educating Pharmacists in Training**

*Speaker: Dr. Harold Lopatka - Executive Director, Association of Faculties of Pharmacy of Canada*

Dr. Lopatka's presentation will highlight and summarize achievements of the project, which was targeted towards increasing knowledge about informatics and technology in Canadian pharmacists-in-training. In the first phase the AFPC e-resource "Informatics for Pharmacy Students" was developed as an on-line tool for student in Canadian pharmacy faculties. In the second phase, a national pharmacy educator peer leader network was established to facilitate integration of the e-resource into pharmacy faculty curricula. The project was funded through Canada Health Infoway.

**Profile of UVIC's Collaborative Work with Clinical Health Science Academic Faculties**

*Speaker: Dr. Elizabeth Borycki- Associate Professor, School of Health Information Science, University of Victoria*

Dr. Borycki's presentation will focus on educational issues in providing training and education in the area of health information technology safety. The talk will begin with a discussion of the topics key to this area of study including what is a technology-induced error, how such errors can be detected and what health information technology and clinician practitioners need to know about these types of errors and promoting safety.

12:30-1:20pm
Lunch

1:20-2:00pm

**Aspirational Horizons – eSafety - A View from the Trenches of Primary Care**

*Moderator: Dr. Patrick Ceresia- Chief Privacy Officer & Managing Director eHealth, Canadian Medical Protective Association*

*Speaker: Dr. Fraser Armstrong- Meadowlark Family Physicians*

In this presentation, Dr. Armstrong offers a case based approach taken from clinical practice that will outline the strengths of eHealth technology use with respect to quality of care improvement and eSafety as well as identifying areas/challenges that continue to require further development.

2:00-2:40pm

**Keynote- Measuring eSafety - Metrics and Analytics**

*Moderator: Grant Hollett- Manager, Client Affairs Alberta, Canadian Institute for Health Information*

*Keynote Speaker: Dr. Dean Sittig Professor- University of Texas Health School of Biomedical Informatics (SBMI)*

In this session, Dr. Sittig will focus on several conceptual models that his research team has developed over the past 5 years. These models have helped them keep in mind the “big picture” (Continued) when formulating our measurement and monitoring strategies. He will briefly discuss the 8-dimension
A socio-technical model of safe and effective HIT implementation and use, a 3-phase model of HIT-related safety, and their new HIT Safety measurement and monitoring framework. Dr. Sittig will finish with an illustration of how the Safety Assurance Factors for EHR Resilience (SAFER) guides, which build upon these 3 conceptual models, can be used to proactively measure and monitor and organization's HIT-related safety efforts.

2:40 – 3:00 pm
Networking Break

3:00-4:30 pm
Plenary- eSafety in Program & Practice- Results Here & Abroad
Moderator: Elizabeth Keller- Chair, COACH eSafety Council
Speaker: Dr. Farah Magrabi- Associate Professor, Centre for Health Informatics, Australian Institute of Health Innovation, Macquarie University
Dr. Magrabi will open the panel, with a focus on practices for improving eSafety. She will draw upon a comparative review of national and cross-border eSafety initiatives to examine processes for identifying and mitigating hazards as part of system design, implementation and use. She will then examine the role of effective surveillance, investigation and response to minimize harms when technology is routine use, along with clinical safety governance processes to maximize system safety.

Speaker: Dr. Patricia Sengstack- Chief Nursing Informatics Officer for the Bon Secours Health System & Past-President, American Nursing Informatics Association
Dr. Sengstack will cover the history of American efforts on patient safety, walking the audience through a variety of milestones including the 1999 "To Err is Human: Building a Safer Health System" as the USA landmark publication that started things moving, the 2011 publication "Health IT & Patient Safety: Building Safer Systems for Better Care" and the 2013 report "Health IT Patient Safety Action & Surveillance Plan."

Speaker: Dr. Dean Sittig- Professor, University of Texas Health School of Biomedical Informatics
Dr. Sittig will focus on the USA Government's recently released roadmap for creating a National HIT Safety Center. He will discuss ideas for what such a center should do, along with the current, as yet unfunded proposal that the Office of the National Coordinator for HIT (ONC) has released.

Speaker: Gordon Wallace- Managing Director, Safe Medical Care, Canadian Medical Protective Association (CMPA)
Dr. Wallace will close the session with a profile of a series of vignettes of "EMR Pitfalls to Avoid." While electronic patient records support high quality and safe care by making the personal health information of patients readily available, nevertheless pitfalls in the use of EMRs and related liability issues are gradually emerging in Canada. Gordon's presentation will identify several medico-legal risks associated with EMR use and describe strategies to mitigate these risks.

4:30–5:10 pm
Closing Keynote- Achieving eSafety Going Forward- Nursing Views from the USA
Moderator: Susan Anderson- ADM and Chief Information Officer, Alberta Health
Keynote Speaker: Dr. Patricia Sengstack- Chief Nursing Informatics Officer for the Bon Secours Health System & Past-President, American Nursing Informatics Association
In this session, Dr. Sengstack will provide several examples from the front lines of care delivery where eSafety can have an impact. With a nurse/clinician focus, she will discuss how health information technology can improve care delivery that was never before possible with paper charting. This includes the use of clinical decision support reminders and alerts that can reduce infection rates and avoid medication errors. She will also provide core configuration recommendations to reduce errors that can be caused by the technology itself.

5:10–5:15 pm
Closing Remarks
Bev Rhodes- eSafety Summit Program Committee Co-Chair (Alberta Health Services)
Grant Gillis- eSafety Summit Program Committee Co-Chair (COACH)
PROFESSIONAL BIOGRAPHIES

Susan Anderson BSc CPHIMS-CA
Susan has more than forty years’ professional experience, including senior executive experience and special skills in business development, e-Health informatics, governance and strategic planning. Her current role is Assistant Deputy Minister for Health Information Technology and Systems Division and CIO for Alberta Health. Susan has been with the Ministry for the last six years. Previously, she worked in public and private sector organizations concentrating on healthcare informatics for 21 years. Before entering the healthcare sector, Susan worked globally in advanced process automation across multiple industries including the oil and gas, manufacturing, energy and aerospace sectors. Susan has a Bachelor of Science, Mathematics and her CPHIMS-CA credential.

Dr. Fraser Armstrong
MD, CCFP, FCFP, Community Preceptor, Associate Clinical Professor
Fraser has been a Family Physician for the past 25 years. He provides care for those of all ages and is based in a continuing-care practice in suburban Edmonton. He is a clinical professor of Family Medicine at the University of Alberta teaching and providing primary care services to his patients following them across the spectrum of care from acute hospital and community based practice through to long-term and palliative care settings. His “extracurricular” professional interests have been heavily focused on the use of electronic information management tools to improve the level of care provided for patients in Alberta. He has worked extensively with the Alberta Medical Association, the College of Physicians and Surgeons of Alberta, Alberta Health and Alberta Health Services in the area of medical software design and implementation. He has been heavily involved the development of projects such as Alberta Netcare and the Physician Office System Program from their inception.

Shelley Bannister
Program Director - ePolicy and Process within Alberta Health Services CMIO
Shelley is the Program Director – ePolicy and Process within Alberta Health Services CMIO (Chief Medical Information Office). This position provides leadership and expertise in terms of business decisions (policy and other forms of governance) to support advancement of the transformation of healthcare service delivery through the use of clinical systems. Shelley has worked in Alberta, Toronto, and Halifax in various roles related to Nursing Practice, Quality Improvement, and Clinical Informatics. She has worked in acute care, and public health settings, as a staff nurse, educator, manager, practice lead, and subject matter expert. Shelley recently completed her CPHIMS - CA certification from HIMSS, and is currently involved as an Exam Item Writer for HIMSS North America.

Elizabeth Borycki RN, HBScN, MN, PhD
Elizabeth is an Associate Professor with the School of Health Information Science and an Adjunct Associate Professor at the School of Nursing at the University of Victoria in Victoria, British Columbia, Canada. Dr. Borycki was the COACH Academic Representative to the International Medical Informatics Association (IMIA) from 2007-2013 and represented North America as a Vice President on the Board of Directors of IMIA from 2010-2013. She was also a founding chair of the IMIA Working Group focusing on Health Informatics for Patient Safety. Elizabeth has authored and co-authored over 150 articles and book chapters as well as edited several books examining the effects of health information systems upon health professional work processes and patient care outcomes. Dr. Borycki's research interests include health information systems safety, human factors, clinical informatics, electronic health record education for health professionals, telehealth, mobile health, organizational behavior and change management involving health information systems.
Mark Casselman BA MSc PhD
Mark is the CEO of COACH: Canada's Health Informatics Association, and has 15 years of experience working with executives and clinical leaders across multiple sectors and agencies within the Canadian health ecosystem. He has led strategic engagements, product design and development, large-scale transformation initiatives, and has been recognized as an innovator in the field of digital health. Mark has championed innovation in consumer-focused health information products and services across multiple industries. He has broad experience in strategic planning, business development, product development, project management, stakeholder engagement, leading teams, and service delivery transformation. Mark's interests include go-to-market strategy and implementation for disruptive product and service innovations. He is focused on transforming health service delivery and enhancing the consumer experience.

Patrick Ceresia MD
Patrick is the Chief Privacy Officer and Managing Director, eHealth for the CMPA. He is a general practitioner with significant experience in occupational and aviation medicine. Having served as the chief of staff of the Canadian Forces Medical Group prior to joining the CMPA in 1998, he has a long-standing involvement in medical administration. Building on previous system re-engineering experience, he has led the CMPA through an enterprise-wide functional re-engineering, which included a complete information management renewal and implementation of complex leading-edge supporting technology systems. Dr. Ceresia is a respected leader, advisor and educational resource for the CMPA on eHealth issues, including electronic health records, telehealth, and related applied privacy concerns. His knowledge and advice have been valuable to Canadian physicians as they embrace information technology in their practices, and navigate through the challenges associated with health information management and analytics.

Grant Gillis BSc BComm
Grant is the Executive Director, Forums and Practices at COACH: Canada’s Health Informatics Association. He is a recognized leader both domestically and internationally in the health informatics community, with accomplishments in governance and organization, consensus-based development, as well as in quality and conformance solutions using an array of HL7, DICOM and ISO standards. He is a respected subject matter expert, with extensive experience and has earned the reputation of providing both strategic and tactical leadership in numerous major domestic and international e-health standards engagements. He has a proven record of bringing together disparate interests and forging shared success.

Grant Hollett
Grant is a professional health planner with over 25 years of experience in population health and health system analysis, strategic planning, consultation/engagement, and program planning and development. Grant started his career with the district health councils in Ontario in the late 1980’s. In 2006 he joined the Vancouver Island Health Authority as Corporate Director of Planning and Community Engagement and was Acting Vice President of Planning and Improvement before joining CIHI in April 2015 as the Client Affairs Manager for Alberta.

Dr. Robert Hayward
MD, MPH, FRCPC and Professor, University of Alberta - Faculty of Medicine & Dentistry
Robert Hayward is an internist, health informatician, and professor of medicine at the University of Alberta. His interests focus on strategies for bringing best evidence to the bedside for improved decision making. He has extensive experience building community-academic bridges and, as Electronic Medical Record lead with Alberta Health Services, he facilitates quality improvement using workflow-embedded clinical decision supports.
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<td>Peter Jamieson MD CCFP FCFP</td>
<td>Peter is the acting Chief Medical Information Officer for Alberta Health Services, responsible for Health Information Management, Clinical Informatics, and the provincial consolidation of information systems. Dr. Jamieson is a practicing physician in Family Medicine and Hospital Medicine, and is Clinical Associate Professor in the Faculty of Medicine at the University of Calgary. Previously Dr. Jamieson has been Associate Zone Medical Director in Calgary, and Medical Director of the Foothills Medical Centre.</td>
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<tr>
<td>Tracy Johnson</td>
<td>Director, Health System Analysis and Emerging Issues Tracy is the Director, Health System Analysis and Emerging Issues at the Canadian Institute for Health Information (CIHI). Tracy has a broad range of experience in communications, quality and risk, clinical and hospital management gained from working in both the public and private sectors. Tracy has a Master of Business Administration from York University and an undergraduate degree in Physiotherapy from the University of Toronto.</td>
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<td>Elizabeth Keller BA MA PMP CPHIMS-CA</td>
<td>As Vice-President Product Strategy &amp; Delivery for OntarioMD, Elizabeth is responsible for EMR products, specifications, vendor management and provincial deployments to physicians. Elizabeth is presently leading, with her team and stakeholder community, several provincial deployments and working with physicians to improve the functionality and usage of EMRs. As a COACH Board Director and Chair of COACH’s National eSafety Committee – her current focus is building capacity for the next generation of Leaders in Health Informatics here in Canada and spreading the word globally on ensuring safety in our eHealth systems.</td>
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<td>Harold Lopatka</td>
<td>Executive Director of Association of Faculties of Pharmacy of Canada (AFPC) Harold Lopatka is the Executive Director of Association of Faculties of Pharmacy of Canada (AFPC). AFPC is the voice for academic pharmacy in Canada. He is responsible for the AFPC project to develop a pharmacy education e-resource on informatics and communications technology, and a pharmacy educator network for integrating informatics into curricula.</td>
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<td>Farah Magrabi</td>
<td>Associate Professor, Centre for Health Informatics within the Australian Institute of Health Innovation at Macquarie University Dr. Magrabi is Associate Professor at the Centre for Health Informatics within the Australian Institute of Health Innovation at Macquarie University. She leads the Centre’s research program on Patient Safety Informatics, with a strong focus on the safe and effective use of information technology. With a background in Electrical &amp; Biomedical Engineering and a passion for ensuring the safety of information technology in healthcare through good design and the appropriate application of technology, Farah is internationally recognized for her work on the safety of e-health (Health Informatics). Her Australian group initiated, and still leads, the analysis of critical incidents and IT safety, and the work is translating to policy around the world.</td>
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<td>Jim Mickelson BJ MBA</td>
<td>Jim is Executive Director - Western Region for Canada Health Infoway (Infoway). Based in Vancouver, Jim leads Infoway operations in the four western provinces and three territories. Since joining Infoway in 2003, Jim has succeeded in building and strengthening key strategic relationships with partners in both the public sector and private industry in support of Infoway's mission. He works with Infoway's public sector partners to structure high-potential digital health projects for Infoway, resulting in more than $600 million in investment since inception. With senior experience in both the public and private sector, Jim has provided leadership in the delivery of information technology and telecommunications projects throughout Western Canada. Jim has been a board member of COACH – Canada’s Health Informatics Association – since 2012.</td>
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Bev Rhodes  
Program Director - Informatics Competency and Practice Standards within the Alberta Health Services CMIO Department

Bev Rhodes is currently the Program Director - Informatics Competency and Practice Standards within the Alberta Health Services CMIO department. This position provides leadership and expertise to support the advancement of health informatics knowledge and skill within the current and future health providers in Alberta. Bev brings both technical and clinical experience with formal training and experience as computer programmer as well as nursing practice along with a Master of Science in Nursing Informatics. Bev has led a variety of projects involving clinical informatics within the Seniors Health world including implementation of electronic care planning and documentation along with the development of standards across all clinical systems in use to support consistent and standard business processes where possible. Bev has spoken internationally regarding Alberta's work with clinical taxonomies (ie: OMAHA), as well recently published an article around AHS Seniors Health implementation of the OMAHA System in CIN: Computers, Informatics and Nursing. Bev has volunteers within the health informatics field such as an education reviewer for the annual HIMSS international conference for the past four years and is currently involved as an exam item writer with HIMSS North America.

Wendy Robillard BScMH (Mental Health)

For the first 18 years of her career, Wendy worked as a psychiatric nurse, primarily in child and adolescent mental health. For the last 19 years she has been engaged in the area of health informatics having assumed responsibility for the Health Information Act prior to its proclamation in 2000. Her current role at Alberta Health is as Director of the HIA Policy, Privacy and Security Unit.

Patricia Sengstack, DNP, RN-BC, CPHIMS  
Chief Nursing Informatics Officer, Bon Secours Health System

Dr. Sengstack is the Chief Nursing Informatics Officer for the Bon Secours Health System and is the former Deputy CIO and Chief of Clinical Informatics at the National Institutes of Health, Clinical Center in Bethesda, MD. Dr. Sengstack has her DNP from Vanderbilt University and a Master's in Nursing Informatics from the University of Maryland. She is currently serving as the Immediate Past President of the American Nursing Informatics Association. She has multiple informatics publications, and most recently has published a Sigma Theta Tau book titled, “Mastering Informatics: A Healthcare Handbook for Success”. She is currently on the faculty at Vanderbilt University and teaches informatics at the masters and doctoral levels.

Dean Sittig, PhD  
Professor, Professor Biomedical Informatics, Texas Health Science Center

Dr. Sittig's research interests center on design, development, implementation, use and evaluation of clinical information systems. He is working to improve our understanding of both the factors that lead to success, as well as, the unintended consequences associated with computer-based clinical decision support and provider order entry systems. Recently he has focused on developing guidelines for the safe and effective implementation and use of health information technology.

Laurel Taylor, PhD, MBA, BSc (Eng)  
Senior Provincial Director of Performance Improvement, Alberta Health Services

Laurel is the Senior Provincial Director of Performance Improvement, an integrated section providing expertise in patient safety and quality improvement to help improve the care and services provided by AHS. Working together to eliminate preventable harm, Patient Safety focuses on understanding and incorporating the patient’s perspective, building a cultural foundation, fostering meaningful engagement, enhancing continuous learning, and strengthening leadership for patient safety. Process Improvement provides leadership and direction to various stakeholders in understanding, utilizing, and implementing process improvement methodologies under the umbrella of AHS’ Improvement Way (A IW). Laurel is a Canadian Harkness Associate in Healthcare Policy (2006) and has expertise in organizational theory and practice in healthcare.
Linda Tymchuk  
**Executive Director for Accreditation with Alberta Health Services**  
Linda is currently the Executive Director for Accreditation with Alberta Health Services. Previous administrative oversight for Quality, Professional Practice, Infection Control, Staff Education, Policy and Health Professional Regulation departments brings in-depth system level knowledge of evidence based best practice and patient safety perspectives.  
As a respiratory therapist, her experience includes frontline practice with neonatal, pediatric and adult populations in critical care, emergency, operating room, air transport and other settings. Linda also has extensive experience in clinical education for staff and students of all professional backgrounds.

Dr. Gordon Wallace, MD, FRCPC  
**Managing Director of Safe Medical Care for the Canadian Medical Protective Association**  
Dr. Gordon Wallace, is the Managing Director of Safe Medical Care for the Canadian Medical Protective Association (CMPA), and a member of the senior management team. Gord has received numerous awards for excellence in teaching, as well as a peer award for professionalism. He is recognized internationally as a leader in patient safety education with a special interest in disclosure, building a just culture of safety, and promoting quality improvement in healthcare. At the CMPA, Gord leads a large staff of analysts and educators dedicated to improving the safety of the medical system and helping physicians to improve the quality and safety of their practices so that patients receive the best possible care. Safe Medical Care has three departments: Medical Care Analytics, Safe Medical System Strategy and Engagement, and Practice Improvement. The CMPA Good Practices Guide, an open resource for medical trainees and faculty, is available at cmpa-acpm.ca/gpg.

Electronic patient records (EMRs) support high quality and safe care by making the personal health information of patients readily available. Nevertheless pitfalls in the use of EMRs and related liability issues are gradually emerging in Canada. This presentation will identify several medico-legal risks associated with EMR use and describe strategies to mitigate these risks.
On behalf of the 2015 National HI eSafety Summit, COACH, Alberta Health and Alberta Health Services sincerely thank the Steering and Program Committees for their endeavors and contributions in this inaugural eSafety Summit event.

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