FHIR North 2021

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: Obtaining Informed Consent using BPM+, Automation and FHIR Consent Resource

FHIR Academy   Pre-conference   On-Demand

Denis Gagne
CEO & CTO, Trisotech

John Svirbely
CMIO, Trisotech

Informed Consent, also known as Consent for Medical Treatment, is required prior to most medical procedures. It allows the patient to actively participate in decisions about what his or her own care. Informed Consent is therefore an integral part of Patient Centered Care.FHIR defines a Consent resource that is meant to cover four different uses cases: Privacy Consent, Medical Treatment Consent, Research Consent and Advance Care Directives. Currently, only the Privacy Consent use case has been elaborated.In this session we will explore the usage of the FHIR Consent Resource for the purpose of Informed Consent. This process will be captured ...

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: Making Science Computable: Evidence Based Medicine on FHIR

FHIR Academy   Pre-conference   On-Demand

Brian Alper
Chief Executive Officer, Computable Publishing LLC

The EBMonFHIR project has created Citation, Evidence, EvidenceVariable and EvidenceReport Resources to provide a standard for data exchange for scientific knowledge (research results). The Citation Resource supports identification, location, authorship and contributorship of knowledge artifacts, especially those used for scholarly communication. The Evidence Resource supports specification of the evidence variables, the statistics, and the certainty of the findings. The EvidenceVariable Resource supports structured description of the characteristics for each variable. The EvidenceReport Resource supports of composition of evidence-related resources. The Fast Evidence Interoperability Resources (FEvIR) Platform (https://fevir.net) is available for creating, storing, and accessing evidence-related FHIR Resources. Tools to facilitate ...

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: Building SDC Powered Applications

Code Camp   Pre-conference   On-Demand

Ilya Beda
CTO, beda.software

Building forms is a common task for modern healthcare applications. However, the most common way to do it is still programming. FHIR defines Questionnaire resource and Structure Data Capture Implementation Guide which apply no-code approach to form development.I will show open-source tools that implement SDC IG. During live coding session, I will show how to build a form with SDC in a declarative no-code way.The audience will be familiarised with SDC. They will get an overview of existing tools and open source solutions. They will understand how SDC defines the full cycle form workflow. They will get a new vision ...

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: Intro to FHIR search - Using a HealthcareService API

Code Camp   Pre-conference   On-Demand

Syed Ahmed

Searching for resources is fundamental to the mechanics of FHIR - particularly when implementing with a RESTful paradigm. This presentation will provide an introduction and hands-on experience with FHIR search - using an in-production FHIR HealthcareService directory API.You will learn how to use search parameters such as _lastUpdate / _include / _id, learn how to apply operators, learn about how the Bundle resource works with search, and try out some searches.

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: Quality control in your FHIR project with Simplifier

FHIR Academy   Pre-conference   On-Demand

Matthijs van der Wielen
Product Owner, Firely

During this presentation I will show you how you can work together with FSH on Simplifier and continue to use our features available to maintain Quality Control in your FHIR project on Simplifier. This presentation requires basic prior knowledge about FHIR projects on Simplifier, packages and FSH. Here are some links to documentation about the prerequisites if you want to read up on them: Projects on Simplifier: https://docs.fire.ly/projects/Simplifier/ simplifierProjects.html The FHIR package standard: https://confluence.hl7.org/display/FHIR/ NPM+Package+Specification FSH: http://hl7.org/fhir/uv/shorthand/ During this presentation we will focus on the following topics: How to use FHIR Short Hand together with Simplifier Quality Control in your FHIR project ...

Tuesday, Oct 12   09:00 AM - 09:00 AM

Pre-Conference Session: FHIR Conformance Testing to Lighten your Compliance Load

FHIR Academy   Pre-conference   On-Demand

Mario Hyland
Senior Vice President, AEGIS.net, Inc

Richard Ettema
Lead Architect, Touchstone, AEGIS.net, Inc.

As the healthcare industry revolutionizes interoperability by implementing FHIR in every aspect of data exchange - how are you keeping up with the FHIR specification and the enormous number of details around FHIR implementation guides? Government agencies across the globe - including Ontario Digital Health - seek to maximize the impact of FHIR by providing guardrails on how your organization implements APIs. While these implementation guides are extremely useful - becoming a specification expert is not at the top of every developer's list of desires. The FHIR Testing Framework that is built into the specification enables test-driven development to maximize ...

Tuesday, Oct 12   **09:00 AM - 09:00 AM**

Pre-Conference Session: OpenHIE on FHIR: Leveraging Global Digital Public Goods to Improve Care Workflows

FHIR Academy   On-Demand

Derek Ritz
Principal Consultant, ecGroup Inc.

This presentation will report on global health projects that leverage the Open Health Information Exchange (OpenHIE) architecture and the family of FHIR-based profiles from IHE that underpin its core workflows. Examples from low and middle-income countries (LMIC) will be used to illustrate how a short list of 10 FHIR-based "building blocks" may be employed to operationalize use cases that can address the key burdens of disease in these countries. These FHIR-based "building blocks" include: (1) Create a new patient demographic record or update an existing one. (2) Fetch an existing patient demographic record, including the patient's health system-wide unique ID. ...

Tuesday, Oct 12   **09:00 AM - 09:00 AM**

Pre-Conference Session: Intro to FHIR

Code Camp   FHIR Academy   On-Demand

James Agnew

Presented by James Agnew, Smile CDR CTO and HAPI FHIR project lead, this equally digestible and thorough Intro to FHIR is a fantastic resource for taking your first steps in this space. Even if you've worked with FHIR before, the approach taken to these introductory topics will likely offer some fresh perspectives.This session is a pre-recorded session provided by SmileCDR and is not exclusive to FHIR North.

Wednesday, Oct 13   **11:00 AM - 12:00 PM**

Opening Keynote: Data Stewardship by Design – Providing Privacy and Value

Code Camp   FHIR Academy

Alison Horton
Vice President Academic, Mohawk College

Eric Sutherland
Executive Director, pan-Canadian Health Data Strategy, Public Health Agency of Canada

James Agnew

Jeffrey McIsaac
Dean, Applied Research, Mohawk College

Privacy by Design was a Canadian invention from the late 1990's that has been adopted globally as the gold standard for legislation. An unfortunate side-effect of the mis-interpretation of privacy by design is that it has led to significant data fragmentation, impairing our ability to generate meaningful insights for the public good. As Canadians, we have an opportunity to take an approach centred on data stewardship that both protects individuals' privacy and the value of their data in a way that fosters trust and impact on the system.

Wednesday, Oct 13

12:00 PM - 12:30 PM

Networking Break

Denis Gagne
CEO & CTO, Trisotech

John Svirbely
CMIO, Trisotech

Wednesday, Oct 13

12:00 PM - 12:15 PM

FHIR Fly-over: An Introduction to core FHIR Concepts

FHIR Academy   Pre-recorded with live Q & A

Lloyd McKenzie
Senior Consultant, Gevity (part of Accenture)

What is this FHIR thing? What makes it different? How do I learn more?A super-quick overview of HL7's newest exchange standard.

Wednesday, Oct 13

12:30 PM - 01:00 PM

Pan Canadian Virtual Care Interoperability Program

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Abhinav Kalra
Vice President, Portfolio Mgmt - Virtual care programs, Canada Health Infoway

Andrea MacLean

The COVID-19 pandemic has granted considerable momentum to the deployment of virtual care, with unprecedented collaboration and shared work across the health care sector. The crisis has created a perfect storm of need, capability and cooperation; it is imperative to act now to sustain the significant progress made over last few months. By leveraging relationships across the health care sector and building on past success in digital health, we can utilize this opportunity for health care improvement to its full potential. A thorough consultation process was conducted under an accelerated timeframe to further explore priorities, needs and challenges across all ...

Wednesday, Oct 13   **01:00 PM - 02:00 PM**

If FHIR is so easy, then why is it so hard?

Code Camp

Doug Ward
General Manager, MEDIC at Mohawk College

Duane Bender
Senior Consultant, Digital Health Partners

Lloyd McKenzie
Senior Consultant, Gevity (part of Accenture)

Marc Dumontier
Development Director, Data, Telus Health

If FHIR is so easy, why is it so hard? MEDIC's General Manager Doug Ward will host a panel discussion with experts from Telus, Gevity and Sante Suite. The discussion will explore if FHIR is as easy to implement as it seems and, if so, what are the challenges preventing it from being implemented everywhere? Based at Mohawk College, the mHealth and eHealth Development and Innovation Centre (MEDIC) knows firsthand how easy FHIR appears to be to use. MEDIC trains the next generation of software developers through the college's co-op program and recently had two co-op students spin up two ...

Wednesday, Oct 13   **01:00 PM - 01:45 PM**

Ontario Ministry of Health's Digital First for Health Strategy update, role of FHIR and DHIEX

FHIR Academy

Christine Sham
Director, Information Management Strategy and Policy Branch- Digital Health Division, Ministry of Health

Dragana Lojpur
Sr. Information Management Advisor, Standards-Digital Health Division, Ministry of Health

Sue Schneider
Director, Digital Health Standards, Ontario Health

The Ministry of Health is committed to transforming Ontario's health system into one that is world-leading, data-driven, and digitally integrated. This presentation includes proposals for a consultation approach to identify the requirements of this system, a shift from provider to patient oriented data architecture and a new model to enhance data governance. A key success factor in achieving this is data stewardship that will strengthen health data accountability and increase data sharing and reuse. Interoperability standards and data stewardship are important enablers for meaningful representation and trustworthy health data. Ontario has enacted privacy legislation to increase the use of interoperability ...

Wednesday, Oct 13   **01:45 PM - 02:30 PM**

Panel Discussion | Patient Summary

FHIR Academy

Attila Farkas
Sr. Director Solution Management and Advisory Services, Canada Health Infoway

Colin King
Senior Architect, Digital Health Strategy Office, PHSA

Gavin Tong

Sue Schneider
Director, Digital Health Standards, Ontario Health

Wednesday, Oct 13   **02:00 PM - 03:30 PM**

Building FHIR with TypeScript

Code Camp   Pre-recorded with live Q & A

Joshua Kelly

TypeScript has all of the same features of JavaScript with one important addition: a type system. Building on FHIR with TypeScript is a relatively new possibility enabled by recent FHIR community contributions. In this 30 minute talk we'll walk through getting a React + TypeScript project up and running with a FHIR data source. TypeScript bridges the developer popularity of JavaScript with helpful type safety provided by FHIR and related HL7 projects.This is a pre-recorded session with the speaker available in the chat to answer questions about the session.

Wednesday, Oct 13   **02:30 PM - 03:00 PM**

Networking Break

Wednesday, Oct 13   **03:00 PM - 04:00 PM**

St. Joseph's Healthcare Hamilton Streamlines Referrals Management Into Epic

Code Camp   FHIR Academy

Anubha Sant

David Walther
Business Applications and Integration Manager, St. Joseph's Healthcare Hamilton

Michael Savage
Business Analyst - EMR Validation, OntarioMD

YARON DERMAN
Director, Product Management, CognisantMD

St. Joseph's Healthcare Hamilton and CognisantMD will provide insight into designing workflows to support integration between EPIC and the Ocean eReferral Network: utilizing the SMART on FHIR standard to launch the Ocean platform from within EPIC, and utilizing the SMART on FHIR standard to enable streamlined creation of eReferrals using patient data from EPIC This integration is the first in Canada between a large Hospital Information System (EPIC) and the Ocean eReferral Network, supported by a standardized approach to technology integration, designed to digitize the referral experience for both referring and consulting physicians, while supporting operational efficiencies.

Wednesday, Oct 13   **04:00 PM - 04:30 PM**

How to build an interoperable FHIR iGuide ... that will get adopted

FHIR Academy

Joel Francis

Tim Berezny
CTO, Caredove

The FHIR landscape is littered with well-intentioned iGuides that get built ... but don't reach broad adoption. Ideally, a well-designed FHIR iGuide is the foundation for an ecosystem of systems to be as interoperable as phones or faxes - for a given process. In reality, this is rarely the case. Learn about the essential tactics needed to build a well-adopted iGuide, based on the success of building the Canadian FHIR eReferral iGuide.

Wednesday, Oct 13   **04:00 PM - 05:00 PM**

Developing a Successful SMART on FHIR Implementation: From Concept to Launch

Code Camp

Doug Kavanagh
Medical Director and Co-Founder, CognisantMD

Learn in-depth how the CognisantMD Ocean team implemented SMART on FHIR with EHRs to support single-sign-on (SSO) and patient contextual launch to enable clinicians to effortlessly send Ocean eReferrals within their current system. We'll describe our journey from a conceptual design to an initial prototype and finally a successful production launch at a leading Canadian hospital using Epic Health Information Systems. We'll contrast SMART with other proprietary EMR launch technologies we've built in the past to highlight the advantages for both the app and the launching system. Next, we'll take a deeper dive into the supporting technologies such as OAuth, ...

Wednesday, Oct 13   04:30 PM - 05:00 PM

Smart Guidelines: Leveraging an Open Source Stack to add CCG-processing to Legacy Solutions

FHIR Academy

Alexander Goel
PuraJuniper

Derek Ritz
Principal Consultant, ecGroup Inc.

Fergus McKee
Manager, Digital Health Projects, MEDIC at Mohawk College

This presentation will introduce a new, standards-conformant, open source SMART on FHIR application that adds computable care guidelines (CCG) processing to any EMR or HIS that supports SMART on FHIR. The application has arisen from prototyping and development efforts that have supported the WHO's Smart Guideline initiative, HL7's CPG on FHIR IG, and the IHE CCG Profile work. The presenters will provide an overview of architectural innovations that enable the app to operate as a façade that adds native CCG-processing capability to legacy applications such as EPIC, Cerner, and others that support the SMART on FHIR specification. A brief demonstration ...

Wednesday, Oct 13   05:00 PM - 05:15 PM

Day 1 | Wrap Up

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Thursday, Oct 14   11:00 AM - 12:00 PM

The Value of Social Determinants of Health (SDOH) Standards

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Andrew Pinto

Dana Riley
Program Lead, Canadian Institute for Health Information

Francis Lau
Professor, University of Victoria

Marcy Antonio
Post Doctoral Fellow, University of Michigan - School of Information

Marni Panas
Program Manager Diversity and Inclusion, Alberta Health Services

Russell Buchanan
Gevity

The COVID-19 pandemic has shone a light on the structural health inequities within Canada. While social determinants of health (SDOH) are known to have major health and social impacts, our current digital health systems are willfully inadequate in capturing and sharing the data needed to evaluate equitable access to quality care and outcomes. Emerging Canadian SDOH data standards that include race and ethnicity, and sex and gender are starting to make their way into our digital health systems where they provide healthcare providers and researchers the ability to see, understand and respond to the needs of people who are often ...

Thursday, Oct 14   **12:00 PM - 12:30 PM**

Accelerating the Adoption of Healthcare Data Interoperability Standards

Code Camp

Joel Francis

Mohamed Nofal
Google

The objective will be to provide the audience an overview of building a cloud native secondary aggregated clinical data repository. Stage 1 includes the integration of raw data from data silos, stage 2 dives into the harmonization process to map/transform into the FHIR interoperability standard. Stage 3 - with the harmonization phase complete, how can we accelerate the adoption of common data models from the open source community and finally empower researchers with a rich ecosystem of tools for data explorations and ML model build.

Thursday, Oct 14   **12:00 PM - 12:30 PM**

Canadian FHIR Baseline Profiles – How and When Can I Start Using Them?

FHIR Academy

Carl Berthelot
Event Specialist, Smile CDR

Michael Savage
Business Analyst - EMR Validation, OntarioMD

Sheridan Cook

Canada's emerging set of FHIR Baseline Profiles are maturing at a good pace. In short order, these Baseline Profiles will be the optimal starting point for Canadian FHIR Implementation Guides; their minimum constraints will help facilitate the use of common constraints, terminologies, and value sets across jurisdictions and use cases, ultimately moving us further along the interoperability roadmap. This session offers an opportunity for FHIR implementers and FHIR implementation guide authors to hear from the work effort's co-leads on the following:1. A brief overview of the Canadian FHIR Baseline Profiles, and the benefits of their usage as a starting point ...

Thursday, Oct 14   **12:30 PM - 01:30 PM**

FHIR as an EMR Import/Export Standard

FHIR Academy

Anne Belford
Telus

Gavin Tong

James Kavanagh
Medical Director, TELUS Health

TELUS supplies EMRs for over 25,000 clinicians across Canada. In order to address the sharing of Patient Chart data externally we have been actively working with FHIR experts to define methods of importing and exporting Patient Chart data using FHIR. We would like to share specific use cases and review FHIR profiles in order to ensure our work aligns with the broader community of EMR vendors and provincial standards bodies.One of the key goals of FHIR is to ensure interoperability of healthcare information. If we all interpret FHIR differently then the overall time, effort and cost increase to no benefit. ...

Thursday, Oct 14   **12:30 PM - 01:30 PM**

Situational Awareness and FHIR: A SANER Approach

Code Camp

David Pyke
Interoperability Subject Matter Expert, AUDACIOUS INQUIRY

Fergus McKee
Manager, Digital Health Projects, MEDIC at Mohawk College

Healthcare resources were strained to the maximum by SARS-CoV-2. Knowing where beds, PPE and other resources were and where they needed to be became imperative. the Situational Awareness for Novel Epidemic Response FHIR IG was created to improve speed and efficiency of reporting using the FHIR Measure and MeasureReport resources. Currently being piloted in the US, this IG can bring better and faster reporting of Situational Awareness measures to organizational, regional, provincial and national groups and organizations to help prepare for this and future emergencies.The Situational Awareness for Novel Epidemic Response Implementation Guide enables transmission of situational awareness information from ...

Thursday, Oct 14   **01:30 PM - 02:00 PM**

Networking Break

Thursday, Oct 14   **02:30 PM - 03:00 PM**

ONC FHIR at Scale Taskforce (FAST)

Code Camp   FHIR Academy

Michael Savage
Business Analyst - EMR Validation, OntarioMD

Patrick Murta
Chief Interoperability Architect & Fellow | Health Care Services Interoperability Solutions, Humana

Thursday, Oct 14   **02:30 PM - 03:30 PM**

Optimizing SMART on FHIR Apps

Code Camp

Omar Hoblso

Sheridan Cook

In this presentation, we'll be going over the basics of SMART App development, how to better utilize FHIR's search specification for more optimized queries, GraphQL, and general tips & tricks for SMART on FHIR application development. In addition, we'll cover questions that the presenter has frequently seen when working with app developers who are just starting with FHIR & SMART.

Thursday, Oct 14

03:00 PM - 04:00 PM

clinFHIR: a learning and designing tool for FHIR

FHIR Academy

Andrea MacLean

david hay
Dr, HealthcareInterop

The clinFHIR product suite is a free, web-based tool that grew out of a need to help non-technical users (specifically the clinicians in the HL7 working groups) understand FHIR, and contribute to its development. It has become widely used in the community as a training aide and as a design tool. In this presentation, we'll give a brief review of the key FHIR concepts (Resources, references, terminology and profiling) then review some of the more commonly used clinFHIR components.The modules that will be covered include: Patient Viewer - visualize resources in a graphical format Graph Builder - build resource graphs ...

Thursday, Oct 14

04:00 PM - 05:00 PM

10 year systems review: Is FHIR having a healthy outcome?

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Doug Ward
General Manager, MEDIC at Mohawk College

Grahame Grieve
Product Director, HL7 International

It's ten years since we started working on FHIR. What were we trying to achieve, and what have we achieved? Where to now? And what's interesting or surprising lessons have we learnt along the way? And what kind of healthcare system can we and should we dream about?