Advancing Integrated Care with Digital Health Innovation

March 28, 2023 from 12:00 – 1:30 PM EST
IFIC Canada Co-Founders

Jodeme Goldhar
@JodemeGoldhar

Walter Wodchis
@WWodchis

Today’s Co-Host

Carolyn Steele-Gray
@Dr_SteeleGray
Who Was At the Session?

Over 250 Participants Joined Us from 10 Countries Around the World

Canada
United States
Spain
Greece
Portugal
United Kingdom
Ireland
Italy
Austria
Turkey
WELCOME!
How to Take Part in the Virtual Community

Please use the chat box to introduce yourselves, ask questions and contribute throughout the session.

Share your thoughts on social media using the hashtags: #IFICCanada

Please send chat messages to all participants and attendees so everyone can see. If you are replying in the chat box to someone else, please start your comment with @[theirname]
Land Acknowledgement

We acknowledge the land on which we are hosting this meeting is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples. We also acknowledge that Toronto is covered by Treaty 13 with the Mississaugas of the Credit.

We acknowledge that Canada is home to many diverse First Nations, Inuit and Métis peoples, and that each of you are joining us from one of those many traditional and treaty territories.

We are grateful to be able to come together in this way.
Poll Results: We’d Like to Know…

Is This Your First Time Joining the Virtual Community?

- Yes: 64%
- No: 36%
Making It All Happen

Trisha Martin
@DebGollo

Deb Gollo
@DebGollo

Yinka Macaulay
@YinkaMacaulay

Niamh Daly Day

Fiona Lyne
@spiderslips

Ingryd Ventura
@VenturalIngryd

HSPN Health System Performance Network
IFIC Canada International Foundation for Integrated Care
IFIC International Foundation for Integrated Care
Hennick Bridgepoint Hospital Sinai Health
What is the Virtual Community about?

OUR PRINCIPLES

• Connect those with an interest in Integrated Care
• Provide opportunities to learn from leaders in healthcare: including clinicians, policy makers, academics, patients and caregivers
• Develop the skills and capabilities to produce better, people-centred, co-designed integrated care
• Celebrate current integrated care practices throughout North America
• Identify global best practices and how they can be adapted to the context of North America
• Identify the learning needs of the community, and create learning opportunities with these needs in mind

Find out more at: https://integratedcarefoundation.org/ific-canada
Previous Sessions

You can find ALL of our previous sessions at https://integratedcarefoundation.org/events/ific-canada-virtual-community-webinar-series
Access the inaugural North American Conference on Integrated Care

Access Session Recordings and Conference Abstracts on our website

CLICK HERE
Today’s Session:
Advancing Integrated Care with Digital Health Innovation
Poll Results: Your Knowledge About Today’s Topic

How knowledgeable are you about the role that digital health innovation plays in advancing integrated care?

1- Not Knowledgeable At All 1%
2 2%
3 5%
4 2%
5 7%
6- Somewhat Knowledeable 34%
7 21%
8 19%
9 4%
10- Very Knowledgeable 5%
Digital Services and Data Enabling Integrated Care
Special Interest Group

SIG contact: Meena.Ramachandran@sinaihealth.ca
Access the journal

https://www.emerald.com/insight/publication/issn/1476-9018/vol/30/iss/4
Today’s Topics

1. Co-creating a human-centered integrated care pathway for a digital, user-centric health information solution.

2. Adopting technology-enabled integrated care education to address the micro-, meso-, and macro-dimensions of integrated care.

3. Evaluating the effectiveness of a digitally enabled integrated care program for post-acute care of stroke patients.

4. Discussing how this learning can help us keep the patient at the centre when adopting technology into models of integrated care.
Meet Today’s Speakers!

Gerard Carot-Sans
Researcher, Department of Information System, Catalan Health Service, Barcelona, Spain

Eva Turk
Senior Researcher, previously University of Oslo, Centre for Digital Health and Social Innovation, University of Applied Sciences St. Pölten, Austria; Associate Professor, Science Centre Health and Technology, University of South-Eastern Norway

Viola Wontor
Director, Research & Development Lead, International Labeling Group, Global Regulatory Sciences, Global Product Development, Pfizer, UK

Jane Zhao
Research Associate, Toronto Rehabilitation Institute, University Health Network, Toronto, Canada

Maria Mylopoulos
Scientist & Associate Director, The Wilson Centre and Associate Professor, Department of Paediatrics, Curriculum Scientist,

Hilary Horlock
Patient Partner; Senior Enterprise Architect, Manager Business Architect, Digital Health and Strategy Office, Provincial Health Services Authority
Digital, user-centric health information solutions

A Human-Centred approach to tackling complex challenges through cross-sector collaboration and co-creation

Eva Turk
Senior Researcher, previously University of Oslo, Centre for Digital Health and Social Innovation, University of Applied Sciences St. Pölten, Austria and Associate Professor, Science Centre Health and Technology, University of South-Eastern Norway

Viola Wontor
Director, Research & Development Lead, International Labeling Group, Global Regulatory Sciences, Global Product Development, Pfizer, UK
Digital, user-centric health information solutions

A Human-Centered approach to tackling complex challenges through cross-sector collaboration and co-creation

Eva Turk – previously University of Oslo (UiO)
Viola Wontor – Pfizer, R&D lead
Gravitate-Health Public-Private Partnership

An integrated digital health information platform

Empowering and equipping Europeans with health information for active personal health management and adherence to treatment

How can we apply an open-access digital platform with trusted Digital Health Information to transform the way patients access and understand health information, and apply this in personal health for adherence to treatment, risk minimization and quality of life?
The Gravitate-Health Consortium in a nutshell

40 partners in Europe and USA

20 Members of User Advisory Group

60 months 11/20 – 10/25

18.5 mill €

European start Global Outreach
Our approach
Steps towards co-creating a digital solution

1. Co-creation
   - Everyone contributes

2. Collaboration
   - Diverse input and feedback

3. Focus on outcomes
   - Shared vision and goals

4. Iterative Progress
   - Small increments and iterations
Human-Centered Design Toolkit
Methods, frameworks and mindsets

- Research
- Design Thinking
- Technical Architecture
- Competitive Analysis
- Patient Journeys
- Service Design Blueprint
- Key Performance Indicators
- Personas
- Agile Development
- Visual, UX/UI Design
Maximizing Patient and cross-sector collaboration

Framing and planning
Research & Assessment
- Challenge framing
- Hypothesis evaluation
- Landscape assessment
- Research and Delphi prioritization
- Measurement + metrics

OUTPUT
- Data synthesis and consensus
- Testing Scenarios
- KPIs + Requirements
- Alignment on outcomes

Exploration and co-creation
Defining Experiences
- Experience definition
- Experience metrics
- Identify nuances and patterns in needs and behaviors across patient journeys within persona vectors
- Sketch + assess opportunities

OUTPUT
- Personas, Patient Journeys, Service Design Blueprint
- Draft solution architecture

Co-design and evaluation
Evaluation and Feedback
- Feature Development and Prioritization
- Concept Visualization
- Co-design
- Evaluation and testing
- Iterative development

OBJECTIVE
- High-level roadmap
- MVP Prototype
- Backlog and development schedule
- Activation and engagement plan

Mindful solution
Continuous Improvement
- Measure effectiveness
- Post-launch optimization
- Monitor metrics + KPIs
- Refine solution based on findings
- Identify opportunities for the iterations
- Prioritize roadmap items for scaled release.
The Gravitate Health project has received funding from the Innovative Medicines Initiative Joint Undertaking under grant agreement No 945334.

Thank You

contact@gravitatehealth.eu
www.gravitatehealth.eu
@gravitatehealth

Get our newsletter ▶

The Gravitate-Health project has received funding from the Innovative Medicines Initiative Joint Undertaking under grant agreement No 945334.
What role can education play integrated care?
Lessons from the ECHO (Extensions for Community Health Outcomes) Concussion program

Jane Zhao
Research Associate, Toronto Rehabilitation Institute, University Health Network, Toronto, Canada

Maria Mylopoulos
Scientist & Associate Director, The Wilson Centre and Associate Professor, Department of Paediatrics, Curriculum Scientist, Medical Education, Temerty Faculty of Medicine, University of Toronto, Canada
What Role Can Education Play in Integrated Care?
Lessons from the ECHO (Extensions for Community Health Outcomes) Concussion program

International Foundation for Integrated Care (IFIC) Canada
Mar. 28, 2023

Q. Jane Zhao, MSc
Research Associate, ECHO at UHN

Maria Mylopoulos, PhD
Scientist & Associate Director of Training Programs - The Wilson Centre
Associate Professor, Department of Paediatrics, University of Toronto
“The ECHO model is a novel digital health solution that uses technology-enabled learning to facilitate, support, and model integrated care education...

...To expand and contribute to the ECHO literature by creating a link between the ECHO model and integrated care.”
What is ECHO?
Rainbow Model of Integrated Care

**System integration**: Approach to “enhance efficiency, quality of life and care, and satisfaction through vertical and horizontal integration”

**Organizational integration**: the extent that services are produced and delivered in a linked-up fashion

**Professional integration**: Development of interprofessional partnerships based on shared competences, roles, responsibilities, and accountability to deliver a comprehensive continuum of care to a defined population

**Clinical integration**: A person-focused perspective to improve someone’s overall well-being and not focus on a particular condition

Valentijn et al. 2013
## ECHO and Integrated Care

<table>
<thead>
<tr>
<th>Integrated care level</th>
<th>ECHO Concussion program examples</th>
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| **Micro-level:** Clinical integration     | • Case-based learning  
• Development of adaptive expertise                                                                  |
| **Meso-level:** Professional integration  | • Development of professional networks between clinics  
• Development of empathy                                                                     |
| **Meso-level:** Organizational integration| • Development of the “specialist generalist” and stronger interprofessional networks within their own clinic |
| **Macro-level:** System integration       | • Education of providers across sectors, from primary to quaternary care  
• Establishment of a lateral peer-based network with a focus on population-level health            |
Key Concepts

- **Integrated care education**: meaningful learning that purposefully supports collaboration and the development of adaptive expertise in integrated care.

- **Adaptive expertise**: framework for conceptualizing how expertise develops as both *procedural knowledge* (knowing what to do) and *conceptual understanding* (knowing why you’re doing it).
  - Productive struggle
  - Emphasis on “whys” and “what-ifs”
Thank you for your attention!

Q. Jane Zhao, MSc
Research Associate, ECHO at UHN
jane.zhao@uhn.ca

Maria Mylopoulos, PhD
Scientist & Associate Director of Training Programs - The Wilson Centre
Associate Professor, Department of Paediatrics, University of Toronto
maria.Mylopoulos@utoronto.ca

For more information, visit:
https://www.echoontario.ca/Join-an-ECHO/Programs
Effectiveness of an integrated care program for stroke

Gerard Carot-Sans
Researcher, Department of Information System, Catalan Health Service, Barcelona, Spain
Effectiveness of an integrated care program for stroke

Catalan Health Service
Digitalization for the Sustainability of the Healthcare System (DS3)
Stroke integrated care program: Why

Learning Health Systems

Continued rehabilitation and support after discharge reduces the risk of deterioration in function and improves activities of daily living (ADL)

Stroke integrated care program: Why

Admission

Prescription of social services
Social care needs assessment
Social risk detection

Discharge

Personal support (e.g., housekeeping service)
Meal delivery
Technical support at home
Stroke integrated care program: What

Admission
- Prescription of social services
- Social care needs assessment
- Social risk detection

72h

48h

Discharge

- Personal support (e.g., housekeeping service)
- Meal delivery
- Technical support at home
Stroke integrated care program: Assessment

13,473 Hospitalizations due to stroke

1,401 Candidates for pairing

368 paired controls

Participants in the pilot deployment of the IC program

Age
Sex
Comorbidity burden
Type of stroke
Stroke integrated care program: Result

DOMICILIARY CARE

TELECARE

AT-HOME REHABILITATION
Stroke integrated care program: Result

**Mortality**

![Mortality Graph](image1)

- **A**
  - Days: 0, 90, 180, 270, 360, 450, 540, 630, 720, 810, 900, 990, 1080
  - Y-axis: 0.0% to 50.0%
  - P-value: 0.1

- **B**
  - Days: 0, 90, 180, 270, 360, 450, 540, 630, 720, 810, 900, 990, 1080
  - Y-axis: 0.0% to 20.0%
  - P-value: 0.006

**Admission to a Nursing Home**

![Admission Graph](image2)

- **A**
  - Days: 0, 90, 180, 270, 360, 450, 540, 630, 720, 810, 900, 990, 1080
  - Y-axis: 0.0% to 5.0%

- **B**
  - Days: 0, 90, 180, 270, 360, 450, 540, 630, 720, 810, 900, 990, 1080
  - Y-axis: 0.0% to 20.0%

Legend:
- **Intervention**
- **Control**
Thank you!
Hilary Horlock
Patient Partner; Senior Enterprise Architect, Manager Business Architect, Digital Health and Strategy Office, Provincial Health Services Authority
Discussion

Please share your thoughts using the chat box.
Perspectives shared on enablers to integrated care:

- An enabler to integrated care is how we create and enable trust across all partners and participants.
- It is important to create an integrated sight line to understand what others are doing and being able to connect.
- Currently in many efforts, administrators are only part of the advisory group, however that is not quite enough. It is important for patients, caregivers, providers, administrators and policy makers as part of the conversations.
- It is critical that we’re all learning together and we’re making connections together.
- **It has to be done in a relational way.**
Summary

Perspectives shared on human centered design:

- Traditional problem-solving approaches may not be effective in complex ecosystems and matrix organizations.
- Human centered design puts people, empathy, and curiosity at the center of the problem-solving process.
- Clear articulation of the problem is crucial before finding solutions.
- The double diamond process focuses on two questions: how to solve the right problem and how to solve the problem right.
- This process ensures the right opportunities are addressed in a way that meets the needs of all stakeholders.
- Achieving shared vision and goals was through iterative progress and iterations.
- The co-creation process has helped refine the design and clarify requirements for the user experience and platform architecture.
Summary

Perspectives shared on sustainability:

- It is important to understand and appreciate every partner, will have different needs and different circumstances and these must be taken into consideration in the sustainability model.

- We need to consider aspects such as what is the vision? What will the solution look like? How do we build it? How do we structure it?

- There is benefit in developing solutions that are modular. This will allow for the solution to be transferred and used across partners, though still be able to hold its integrity.

- By building solutions that are modular, they can account for the account individual requirements of each market and context.

- Different markets have different levels of maturity and sophistication in their digital health ecosystem. Solutions will take shape differently in different ecosystems and with different partners.

- It is important to build and test solutions across the different ecosystems and breadth of partners.

- We must ensure all partners and stakeholders are engaged as part of the development of solutions.
Summary

Perspectives shared on evaluation:

- Digital health is playing an interesting role in integrated care. It acts as an enabler of sharing information and communicating, and it is also acts as the scaffold and infrastructure.

- We need to ensure we are being clear on what component we are evaluating.

- Evaluation is more around the model and not specific to the technology.

- The ability to have connected information supports evaluation, through being able to identify the target population and determine whether the intervention is resulting in an impact.

- The example shared on the use of digital technologies within an integrated care model, provides us with insight into the future use and function of interoperable integrated systems.
Levers to advancing integrated care

Question: If you had one lever to pull that you think is going to move us in the direction of integrated care, one that maybe you understand, which one would you go for?

- “I would pull a leaf from adaptability. I think we don’t want people to be taking solutions and applying them in different contexts without considering the different ways in which those contexts need adaptive adaptation and flexibility.”

- “The whole purpose of adaptive expertise and thinking about how we train future health care workers is so that they meet the specific needs of the specific communities and people and patients that they’re serving.”

- “An additional level, is considering the adaptability between programs. This is important as it will enable us to think about context and not only a specific solution.”

- “It is important that you view my experience as a patient, from a holistic lens and the end-to-end journey.”
“Human centered design is not just a methodology, but also a mindset that recognizes the importance of creativity in unlocking powerful solutions.”

“Patients and providers are central to the design and understanding the challenges within the health care system. It is important to consider their perspectives and needs when designing solutions.”

“Co-creation creates a sense of ownership and emotional connection to a project, leading to increased investment and support.”

“Success is not only about the end result, but also about the process of developing and implementing the project. Intentional steps will be taken to expand the ecosystem and engage stakeholders to ensure sustainability.”

“Iterative implementation and evaluation are crucial for successful design processes.”
“I’d like to build on why we have to reorient to what is most important and matters most to people and their families. Despite everybody's incredible efforts around integrated care, if clients and families aren't experiencing us as connected up and focused on what's most important, then we really have an opportunity for improvement.”

“I really appreciate linking the model of education to integrated care. This ability for providers and patients to understand each other through this concept of productive struggle is a really powerful idea. As we both design and implement technologies or new models of care across very diverse perspectives and stakeholders, they might have different notions of where we are need to get to. Bringing each other together through the notion of productive struggle is a very powerful view.”

“Digital health is playing two interesting roles in integrated care. It acts as an enabler of the moving parts, in terms of the way we are sharing information and communicating. But it's also a bit of a scaffold and an infrastructure.”

“We need a huge cultural shift and readiness. This will require creating spaces and places that allow us to connect up all the elements and to focus on and understand what's most important to people and families.”
Crowdsourcing Resources

Are there other examples or resources that you have on collaborative governance that you would like to share with the virtual community?

Let us know via the chat box
Crowdsourcing Resources

International Foundation for Integrated Care (IFIC) Canada

- IFIC Canada website: https://integratedcarefoundation.org/ifc_hub/ifc-canada
- All activities including past sessions can be found here: https://integratedcarefoundation.org/ifc_hub/ifc-canada-activities

International Foundation for Integrated Care-Special Interest Group

- Link to the special interest group: https://integratedcarefoundation.org/sig_groups/digital-health-enabling-integrated-care
- Link to the journal: https://www.emerald.com/insight/publication/issn/1476-9018/vol/30/iss/4
Crowdsourcing Resources

**HSPRN**

- HSPN website for information on Ontario Health Teams (OHTs) [https://hspn.ca/evaluation/ontario-health-teams/](https://hspn.ca/evaluation/ontario-health-teams/)

**Supporting Materials from speaker presentations**

- The link for Gravitate Health: [www.gravitatehealth.eu](http://www.gravitatehealth.eu)

**Additional Resources**

- Governance related to collective impact: [https://collectiveimpactforum.org/what-is-collective-impact/](https://collectiveimpactforum.org/what-is-collective-impact/)
- Information on Seamless Care Optimizing Patient Experience (SCOPE): [https://www.uhn.ca/healthcareprofessionals/SCOPE](https://www.uhn.ca/healthcareprofessionals/SCOPE)
Poll Results: Your Knowledge About Today’s Topic

As a result of today’s session, how knowledgeable are you about the role that digital health innovation plays in advancing integrated care?

1- Not Knowledgeable At All  0%  0%  0%  3%  1%  0%  0%  0%  0%  0%  0%
2- 25%  29%  25%  1%  3%  0%  0%
3- 20%
4- 17%
5- 13%
6- Somewhat Knowledgeable
7- 25%  29%  25%
8- 20%
9- 11%
10- Very Knowledgeable  7%
The articles in this Special Issue will be free to access between 28 March and 27 April 2023. All articles can be found at the following link: https://www.emerald.com/insight/publication/issn/1476-9018/vol/30/iss/4

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Leiden University Medical Center, The Netherlands

Access the journal
https://www.emerald.com/insight/publication/issn/1476-9018/vol/30/iss/4
What’s next?

Special Guest Speaker
Nick Zonneveld

Topic- The role of values in the interorganizational network response to care fragmentation: a case study of a pregnancy and childbirth network
IFIC Canada Virtual Community

Stay tuned for the upcoming IFIC Canada Virtual launch event in June 2023

STAY TUNED
The next IFIC Canada Virtual Community is taking place in June
Snowball

In one word, describe your experience being part of the virtual community today.

Let us know via the chat box
One Word to Describe Your Experience Being Part of the Virtual Community Today

- enlightening
- motivating
- hopeful
- grateful

- optimistic community
- informative
- inspired
- insightful
- connectedness

- invigorating
- hope
- encouraged
- interesting
THANK YOU!

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International Foundation for Integrated Care
The Health System Performance Network

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