IFIC Canada Virtual Community

Digital Health & Technology in Integrated Care

November 20, 2019 - 12pm EST
Please use the chat box to introduce yourselves, ask questions, and contribute throughout the session.

CLICK the raise hand icon if you need support.

Please send chat messages to all panellists and attendees so everyone can see.

If you are replying in the chat box to someone else, please start your comment with @[theirname].

Share your thoughts on social media using the hashtags: #IFICCanada #NACIC2020
WHERE ARE YOU JOINING US FROM?
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.
We’d like to know…

IS THIS YOUR FIRST TIME JOINING THE INTEGRATED CARE VIRTUAL COMMUNITY?

46% Yes
54% No
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
Global Tour of Integrated Care and What it Means for Us

Dr Nick Goodwin
CEO
IFIC

Dr Toni Dedeu
Director of Programmes
IFIC

Walter Wodchis
Professor
University of Toronto

Ross Baker
Professor
University of Toronto

Zal Press
Founding Co-Chair
Beryl Institute Global Patient and Family Advisory Board

Tuesday, May 14th, 2019
The Importance of Co-Design to Realize the Full Potential of Integrated Care

Dr Damara Gutnick
Medical Director
Montefiore Hudson Valley Collaborative

Carole Ann Alloway
Co-founder
Family Caregivers Voice

Cathy Fooks
President & CEO
The Change Foundation

Wednesday, July 3rd, 2019
Previous Sessions

Primary Care’s Role within Integrated Care

Wednesday, September 11, 2019

Jocelyn Charles
Sunnybrook Hospital

Pauline Pariser
Taddle Creek Family Health Team

Bradford S. Volk
Kaiser Permanente

Frank Hanson
Patient Partner

Walter Wodchis
@wwodchis
University of Toronto

#IFICCanada
#NACIC2020
Previous Sessions

You can find ALL of our previous sessions at
https://integratedcarefoundation.org/ific-canada

#IFICCanada

#NACIC2020
Digital Health & Technology in Integrated Care
Meet today’s team!

Today’s Speakers

Convener

Jodeme Goldhar
@JodemeGoldhar
The Change Foundation

Carolyn Steele Gray
@Dr_SteeleGray
Sinai Health System

Alies Maybee
@amaybee
Patient Partner

Lisa Dolovich
@LisaDolovich
University of Toronto
McMaster University

Julie Datta
@healthtapestry
Health TAPESTRY
McMaster University

Anna Serra Martínez
Departament de Salut
Generalitat de Catalunya

#IFICCanada
#NACIC2020
Making it all happen
Goal for today’s session

- Highlight the role digital health solutions can play to enable integrated care, discussing opportunities and potential of new and existing technology
- Overview patient and family expectations on how we should approach the use of their data - reflections from the Patient Advisory Network
- Present exemplar cases to show how digital health solutions are supporting integrated care models as a means to meet patient and family needs
- Discuss where we are now, and where we need to go when adopting digital health solutions to drive positive transformation going forward.
Poll #2

How knowledgeable are you about the role of digital technology within an integrated system?

- Not knowledgeable at all
- Somewhat knowledgeable
- Very knowledgeable
Poll #3

Are you using digital health?

- Yes: 83%
- No: 10%
- Not sure: 7%

#IFICCanada #NACIC2020
Poll #4

In what capacity have you interacted with digital health tools?

- Purchaser
- Developer
- Provider user
- Manager user
- Patient/Caregiver user
- Research & Evaluation

#IFICCanada #NACIC2020
Defining Digital Health in Integrated Care
IFIC Special Interest Group (SIG)
Digital Health Enabling Integrated Care

SIG Leads

Carolyn Steele Gray
Scientist
Bridgepoint Collaboratory for Research and Innovation
Canada

Leo Lewis
Senior Fellow
International Foundation for Integrated Care
Defining Digital Health Enabling Integrated Care

Vision for digital solutions as being both the “grease” and the “glue” of integrated models of care.

**Grease:** “allowing integrated care systems to operate smoothly”

**Glue:** “binds care systems together… to help influence the behaviours and motivations that drive high quality person-centred and coordinated care”

Goodwin, N. Tomorrow’s World: Is Digital Health the Disruptive Innovation that will Drive the Adoption of Integrated Care Systems? IJIC, 2018; 18(4):14.
Formative **and** normative components of integrated care matter

The use of digital health technologies to achieve the aims of an integrated model of care by enabling and supporting functional activities and processes, as well as normative values and culture.
My conversation with Alies

Proposed a model for how we can adopt technology in a way that is truly person-centred

Start with some key questions:
How do they want to access?
What kind of relationship do you want to have with your providers if any?
Therefore what are the doorways you need to build?
What are your expectations?
Methodology is key

Workflow has to be derived from the patient and caregiver point of view - how they want to experience care, and how can we do that in the best way to help providers do their jobs well?

“To figure out workflow we need to start with patient life-flow.”
Person Generated Health Data (PGHD) Principles:
Through the Patients and Caregivers Lens

A collaboration with BeACCoN and PAN

Alies Maybee, PAN
Samira Chandani, PAN
Acknowledgement

A collaboration between BeACCoN and PAN

The Patient Advisors Network (PAN) would like to thank our sponsors, funders and partners, the Better Access and Care for Complex Needs (BeACCoN) Team. Their strong support has been invaluable and encouraging.

BeACCoN Team

• Geoff Anderson, Research Lead, BeACCoN; Professor, Institute of Health Policy, Management and Evaluation, University of Toronto; Adjunct Scientist, Institute for Clinical Evaluative Sciences (ICES); Adjunct Scientist Women’s College Hospital Research Institute
• Ivy Wong, Network Director, BeACCoN
• Simone Shahid, Network Manager, BeACCoN; Research Assistant, Women’s College Hospital Institute for Health System Solutions and Virtual Care (WIHV)
Introduction

**PURPOSE**

- to inform and guide changes in policy, practice and PGHD tool design to protect against misuse and support beneficial use

**AUDIENCE**

- Patients and caregivers
- Developers and innovators
- Healthcare practitioners
- Policy makers
- Researchers.
ABOUT PGHD

“Person Generated Health Data” vs “Patient Generated Health Data”

PAN’s definition of PGHD

“PGHD is personal health or wellness-related data that is systematically created, recorded, gathered or inferred by or from patients or caregivers to help manage, maintain and/or improve health and wellness.”
7 Principles

1. PATIENTS/CAREGIVERS AS PARTNERS: Diverse patients/caregivers are partners in all aspects of PGHD.

2. PURPOSE: Collection, sharing and use of PGHD is driven by purpose and governed by ethics.

3. ACCESS: Patients have immediate and equitable access to their PGHD and see who has accessed it.

4. CONSENT: Patients/caregivers have the right to knowledgeably consent, remove consent to their PGHD and understand accountability for misuse without compromising care.
7 Principles

5. TRANSPARENCY: Information about the vendor and the PGHD tool is available, accurate and presented in a clear and understandable manner.

6. HARM PREVENTION and TRUST: PGHD policies, safeguards, tool design and data quality are in place and create trust for patients and users.

7. UTILITY: PGHD data and tools are shared and designed to be useful.
What is the most important/helpful digital health tech for patients/caregivers? Why? (e.g., e-mail, portal, etc.)

Let us know via the chat box
Email – Ease of use and access, can distribute information to patients about new developments, and initiatives. GPs can provide patients and caregivers with results and answers to questions quickly (versus waiting on the phone or missing calls)

Text — Easy, simple, quick, and can share links. One nurse said that there is a Virtual Care app that allows asynchronous texting which had good feedback as well.

No more fax – Electronic prescriptions, booking appointments online, and having a way for patients to track referrals online.

Patient access to all EHRs/EMRs, doctors notes, lab and imaging results, etc.

Connected EHRs/EMRs – Allows for compatibility across IT systems of various hospitals and clinics. Helps to avoid patients and their caregivers having to tell their stories over and over again to update each system/provider.

Portals – Patients and caregivers can receive up-to-date medical information to enhance self-management and better understand their health conditions. They also have a more robust ability to deliver complex information for complex patients.

Caveats: Differences based on the group (i.e., age, type of care, etc.) e.g., new mom would use technologies differently than an elderly person with limited eyesight and who is not comfortable with a smart phone. Therefore, digital health technologies need to be patient-user friendly.
Discussion

What is the most important/helpful digital health tech for providers? Why?
(e.g., e-mail, portal, etc.)

Let us know via the chat box
Discussion

Connected EHRs/EMRs & Portals – Immediate access to specialist consult notes, appointment dates/times, blood work and diagnostic imaging test results all in one place. One provider has access to such a portal at one hospital but would love to access info from across the healthcare system. Helps reduce treatment delays.

E-Consults – Ability to connect to a care team (e.g., with specialists, etc.) or secure communication (hypercare) between providers.

Text — via the Virtual Care app through which providers can text with patients regarding health education and care coordination

Caveats: Email is not secure – Although patients consent to email, it puts their personal health info on the internet forever. Secure messaging is better.
A novel platform for community engaged team-based primary care
An example of digital health and technology in integrated care

Funding for different phases of Health TAPESTRY provided by Health Canada, Government of Ontario (MOHLTC), McMaster University, and David Braley.

Lisa Dolovich and Julie Datta
On behalf of the Health TAPESTRY program
Health TAPESTRY Approach

To help people stay healthier for longer in the places where they live, using trained volunteers, the interprofessional primary health care team, links to community resources with the support of technology.
The Approach

1. Trained volunteers visit the client at home.

2. The volunteers get to know the client. They ask questions about their life, health goals and health needs. The client’s answers are recorded digitally.

3. These answers are sent to the client’s health care team.

4. The health care team creates a care plan, to help the client with any health needs and support them in their health goals.

5. The health care team and volunteers follow this plan with the client to help them reach their health goals and address their health needs.

6. With help from volunteers and the health care team, the client may be connected to community resources that will support their health.
Benefits to Clients and the Health Care System

Less hospitalizations

More primary care visits

More time walking and less time sitting

Health TAPESTRY did not improve the primary outcome of goal attainment but showed signals of shifting care from reactive to active preventive care.

Alerts generated

Clinicians are learning about their patients from volunteer efforts
(from 318 reports reviewed by the clinical team)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28%</td>
<td>Had a fall in the last year</td>
</tr>
<tr>
<td>39%</td>
<td>Use 5 or more prescription meds</td>
</tr>
<tr>
<td>36%</td>
<td>Have urinary incontinence</td>
</tr>
<tr>
<td>45%</td>
<td>Are at high nutritional risk</td>
</tr>
<tr>
<td>87%</td>
<td>Have suboptimal physical activity</td>
</tr>
<tr>
<td>58%</td>
<td>Want to talk about end of life planning with their doctor</td>
</tr>
</tbody>
</table>

All those patients self-identify as "healthy"

Health TAPESTRY helps identify care gaps enabling primary care team members to intervene
Benefits to the primary care team

- Focus on prevention
- Improving teamwork and collaboration
- Enhancing patient-focused care
- Coordination of health and community services
Getting to know the person
Goals and Needs

Average time to complete surveys is 80 minutes over approximately 2 home visits.
Reviewing all the Information

Health TAPESTRY Report: Janina Martell (1944-02-18)

Patient: Janina Martell
Address: 300 First Ave., Hamilton
MRP: Dr. Singh
Date of last visit: 2017-12-17

What Matters Most to Me
What Matters Most To Me: Family, spending time with grandkids, independence, being able to sing in her church choir.
GOAL 1: Keep attending choir rehearsals
GOAL 2: Try to get more exercise to improve fitness level
GOAL 3: See children and grandchildren every week

Key Information
- Has fallen in the last year
- Severe pain or discomfort or extreme pain or discomfort
- Uses 5+ prescription medications
- Moderate/vigorous physical activity vital sign = [60] minutes per week
- Hours sitting in one typical day = [7] hours
- Preclinical or minor or major limitation in walking 2.0km
- Preclinical or minor or major limitation in climbing stairs

Social Context
Janina is a 72 year old woman. She has 4 children and 3 grandchildren. She is retired. She lives with her partner Sam. The three most important things that I observed about her are:
1) mobility issues
2) positive mood, likes to laugh
3) has good support from family

Daily Life Activities
1) Tell me a little about what your typical day looks like: Wakes up, has breakfast — usually toast and tea, reads a little bit, and then usually meets with her friend from down the street for coffee and card games. She makes lunch for her and her partner Sam, then sometimes works on crochet projects for her grandkids. She watches TV in the evening and sometimes her daughter will visit with the 3 grandkids. She doesn’t get out of the house every day, but has a car and can drive, although Sam does most of the driving.
The Huddle Dashboard

Health TAPESTRY Report: Patient: Ruby White (1933-05-18)

READ THIS MESSAGE FIRST

Dear MRP or Resident: After review, please comment with relevant background information or a suggested course of action. The allied health team will review and discuss this report and will contact you for any next steps.

Patient: Ruby White
Address: 100 Main Street Hamilton ON A1A 1A1
MRP: Dr. Doctor
Date of last visit: 2019-05-02

What Matters Most to Me

Family, friends and my health
GOAL 1: See family more
GOAL 2: Plan a vacation
GOAL 3: Walk 10km a week

Key Information

- Social isolation risk
- Loss of a partner
- I have extreme pain or discomfort
- I am extremely anxious or depressed

Plan of Action

Please record a summary of information that was reviewed and the planned corresponding actions.

Save Actions to Report

- Learn more about their interests and connect to community programs and services.
- Facilitate connection to a specific community program.
- Accompany the client to a community program or service.
- Review care plan instructions with client in.

Start Date: May 2, 2019

## Engaging Volunteers in the Plan of Care

<table>
<thead>
<tr>
<th>Client</th>
<th>Follow-up Time</th>
<th>Action</th>
<th>Details</th>
<th>Status</th>
<th>Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olmo, Edwin</td>
<td>November 14, 2019</td>
<td>Refer to Canadian Red Cross transportation services (Not Available in Dufferin, Windsor or Harrow)</td>
<td></td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
<td>Jones, Nick</td>
<td>November 14, 2019</td>
<td>Learn more about their interests and connect to community programs and services.</td>
<td></td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
<td>Jones, Nick</td>
<td>November 14, 2019</td>
<td>Facilitate connection to a specific community program.</td>
<td>YMCA Woodworking Class</td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
<td>Smith, Jen</td>
<td>November 14, 2019</td>
<td>Check-in on their progress toward life/health goals.</td>
<td>While they’re checking in on the language program, check-in to see how she is doing on the meal plan that was discussed with the dietitian. Let her know about the Eat 4 Life group at the clinic if she needs further support.</td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
<td>White, Ruby</td>
<td>November 14, 2019</td>
<td>Facilitate connection to a specific community program.</td>
<td>Meet with Ruby again to let her know about the fall prevention program at the Tansley Woods recreation centre.</td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
<td>White, Ruby</td>
<td>November 14, 2019</td>
<td>Accompany the client to a community program or service.</td>
<td>See if Ruby would be more comfortable attending the first exercise class if a volunteer were to accompany her.</td>
<td>Ready</td>
<td>November 14, 2019</td>
</tr>
<tr>
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<td>Ready</td>
<td>November 14, 2019</td>
</tr>
</tbody>
</table>
Closing the loop with the client

Health TAPESTRY Report: Jane Addams (1947-03-18)

Patient name: Jane Addams
Address: 100 First Ave., Hamilton, ON
Family Doctor: Dr. Singh
Date of last visit: 02/17/2018

Thank you for taking the time to read through your Health TAPESTRY Report. After the Health TAPESTRY volunteers visited your home and completed the surveys with you, the information was shared with your health care team. Your health care team reviewed all of this health information, and developed a plan. We are sharing this with you to provide you with more information about your health care.

**What Matters Most To You**
The goals listed below were developed by you, when the Health TAPESTRY volunteers visited your home. The volunteers asked you for the top three health and life goals that you wanted to work on over the next 6 months.

**What Matters Most To Me:** I want to get back on my feet and work on my strength and stamina. I feel that I need to take care of myself and be more mobile to sustain my health.

**GOAL 1:** Improve walking stamina
**GOAL 2:** Get help with my sleeping issues
**GOAL 3:** Trying a new hobby

**Health Care Team Summary of Review and Plan of Action**
After reviewing the information you provided the volunteers, your health care team developed a plan. The action points of this plan are listed below.

The health care team has reviewed your Health TAPESTRY report. We will book an appointment for you to see the occupational therapist so that you are better able to meet your goal of getting dressed every day. The RN will contact you as soon as we have more information for you about registering for the Happy Feet program. The pharmacist would like to meet with you to review your medication list, and the social worker will meet with you on the same day to discuss sleep issues. Volunteers will visit you again after 1 month to help you get connected with a walking club and some other programs where you can learn a new hobby.
The Volunteer Program
Volunteers

- Are recruited, trained and coordinated by a community organization
- Go with a fellow volunteer to visit clients where they live
- Gather information using technology
- Can help client set-up a PHR
- Help motivate client to reach health goals
- Connect client to community resources
Volunteer Learning Centre

Learning Modules

- Effective communication
- Health & safety
- Cultural sensitivity
- Privacy & confidentiality
- How to use an iPad
- Facilitating connections to community programs
Questions?
Q: Volunteers play a significant role in TAP program. Was this adapted from other programs or ground up? A: The role of the volunteer evolved quite a bit over the years, and our partnerships with lead volunteer organizations had a lot to do with the shaping of the role (e.g. Red Cross, Hospice of Windsor and Essex County). Some of our team members had experience working with integrating volunteers into community and hospital based health programs (such as the Cardiovascular Health Awareness Program) so we built on that as well as other research, expertise from colleagues in the UK.

Q: Do patients get to download the app to always have access to their care plan? A: There currently isn’t a patient-specific interface on the TAP-App. The technology is accessed by three different users: (1) volunteers (2) a coordinator of volunteers and (3) the health care team. The care plan is created and documented using the health care team's EMR, and there is a template available for health care teams to share a copy of the care plan with participants. We have done some pilot work for a patient facing component but have not yet build that for wide use.
Q: How does the role of the volunteer differ from/doesn't duplicate the role of a care coordinator? A: We are continuously working to develop the role of the volunteer in a way that does not duplicate existing roles within health care teams, but instead complements and/or broadens the reach (e.g. volunteers engage in conversation and collect information and report back, but do not assess or perform any tasks that would require clinical judgement).

Q: Does the recent publication on Health TAPESTRY include cost/benefit analysis? A: In terms of Health TAPESTRY and a cost-benefit analysis, we have conducted an analysis which showed favourable results, especially with sensitivity analysis and increasing numbers of clients who are part of the program.
Discussion

**Q:** How is the Health TAPESTRY app connected/integrated to coordinated care plans (CCPs)?

**A:** In the last five years, in Ontario, there have been multiple iterations of CCPs. The TAP care plan is sometimes used as a CCP in the Ontario health system. For example, in the past, Ontario had the Health Links initiative which also has CCPs for its patients. TAP’s CCP isn’t meant to be separate; the idea is that TAP is a tool that can be used in Health Links in the same manner as well.

**Q:** I like how this system ties into previous IFIC Canada virtual community sessions where Dr. Damara talked about the “What matters to you” campaign. TAPESTRY shows another method of how to use it in digital technology.

**A:** It has been really important for us to start with the “What matters to you?” and “What are your goal and needs?” perspective and then let that drive the next care processes.
From information repository to a strategic tool in the integrated care model

Anna Serra Martínez
Functional Analyst in Catalonia Heath Department
Ministry of Health of Catalunya
Generalitat de Catalunya

osolansf@gencat.cat
1. Public Catalan IT Health System

2. Integrate Care experience in Catalonia

3. Next Steps
1. Public Catalan Health System

• Population **7,550,830** (2017)
• Life expectancy **83** years (2016)
• Birth rate **9.2** (2016)
• Infant mortality **2.47** (2016).
• **70 Hospitals.**
• **421 Primary Care** centres.
• **240 Mental Health** centres.
• **140 Social & Health** centres.

**Healthcare Model features**

• Funded by taxes, co-payment in pharmaceutical products
• Universal coverage, free access
• Very wide range of publicly covered services
• Services provided mainly in public facilities
• **Multi-provider model** (>160 providers) integrated into a single public network
1. Current situation of ICT in Health

- **2009**: Patient portal (PHR)
  - HC3 EMR

- **2007**: HC3-Ecap (2020-2022)
  - Image
  - e Prescription

- **2017-2018**: Non face to face Health model
  - Data mining model

- **2014**: i-S3.Cat Care Process platform

- **Primary Care**
  - eCAP
  - OMI y otros

- **Specialized Care (>27IS)**
  - SAP ARGOS
  - SAP
  - HP
  - SAVAC
  - Others

**CatSalut**

**Generalitat de Catalunya**

**Departament de Salut**
1. Current situation of ICT in Health
1. Catalan health and social information network (SMR, PHR and IS3)

These platforms interact with all IS of different health and social* centers and create the clinical information network in Catalonia.
1. HC3 Available information

HC3 Available information includes:
- Clinical reports
- Diagnosis
- Immunization program
- Spirometry
- Integrated appointment schedule
- Professional notes
- Medication plan
- Living wills
- Pathological anatomy report

HC3 is supported by:
- Lab
- Plan for management of chronic disease (PILC)
- Healthcare complex label (PCC – MACA)
- Pre report SEM
- Relació Assistencial
- Digital imaging
- Registry digital imaging
- Clinical variables
- Population risk assessment CRG
- DGAIA

HC3 is integrated with Social Services information.

Sources:
- CatSalut
- Generalitat de Catalunya Department de Salut
1. Shared Medical Record in Catalonia (HC3) and Personal Health Record (LMS)
2. Information exchange strategy between the Health Department and the Social Department in Catalonia
2. Integrate Care experience in Catalonia

HC3: evolution in the process of chronicity and integrated care
2. Integrate Care experience in Catalonia

Proposal for exchanging data between Health and Social systems

Share information between central repository of the Departments of Health and Social

<table>
<thead>
<tr>
<th>Health Department</th>
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<tbody>
<tr>
<td>RCA, RVA, SIRE, RUMI, CMBD, etc</td>
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<tr>
<th>Social Department</th>
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<tbody>
<tr>
<td>Dependency Disability condition, etc</td>
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<table>
<thead>
<tr>
<th>HC3 Shared Clinical and SOCIAL Record of Catalonia</th>
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<tbody>
<tr>
<td>Primary Care</td>
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<tr>
<td>Specialized Care</td>
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<tr>
<td>Mental Health</td>
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<tr>
<td>Long term care</td>
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<tr>
<td>Rehabilitation</td>
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<tr>
<td>Dialysis Centers</td>
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<tr>
<th>Basic Social Services (local government) (SIAS,Hestia, GESS...)</th>
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<table>
<thead>
<tr>
<th>Specialised Social Services (regional Responsability) Nursing homes, residencial Care...</th>
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2. Integrate Care experience in Catalonia

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Percentage</th>
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<td>Centres AP BCN Ciutat ICS (ECAP)</td>
<td>42</td>
<td>70.00%</td>
</tr>
<tr>
<td>Centres AP BCN Ciutat No ICS (ECAP)</td>
<td>9</td>
<td>15.00%</td>
</tr>
<tr>
<td>Centres AP BCN Ciutat No ECAP</td>
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<td>15.00%</td>
</tr>
<tr>
<td>Total Centres BCN Ciutat</td>
<td>60</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Integrated care project in BCN city
Integration HC3-SIAS

Catalan Health Department with HCCC (Catalan Electronic Medical records)

City Hall of Barcelona with SIAS (Social Services information system)

HC3

61 Primary Care Centers

City Hall of Barcelona- Primary social services with SIAS

41 Social Centers

Heath Care Services

Catalan Health Department
A **Web Service** is a method of communication between two electronic devices over a network. This will be the way to share information between **HCCC** (Shared Medical History of Catalonia) and **SIAS** (Social Service Information System of Barcelona).

<table>
<thead>
<tr>
<th>Security</th>
<th>Common repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>→ Informed consent will be signed by the citizen.</td>
<td>→ Informed consent will be custody in a common repository.</td>
</tr>
<tr>
<td>→ The health or social professional will send the document to the common repository.</td>
<td>→ It will be validated by both systems.</td>
</tr>
<tr>
<td>→ Each professional can check if the citizen has signed this consent.</td>
<td>→ It will do periodic checks.</td>
</tr>
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Model Exchange factors

**Legal framework**

- Framework agreement between Heath Department and City Council of Barcelona concerning the Exchange information.
- Informed consent to ask the citizen authorization to share their social and Health information.
- Unique identification number has established as a common identifier for both Systems.

**Health and social information sharing**

- Definition by a group of professionals of the concepts to share.
- Standardization of concepts in SNOMED CT.

**ICT infrastructure**

- Framework agreement between Heath Department and City Council of Barcelona concerning the Exchange information through HC3.
Evolució acumulada

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SISCAT Information Systems Masterplan

Building together a digital health strategy for Catalonia

15 May 2018
Executive programme: set of actions

- RCDS build-up
- HES: integration of HC3 and ECAP
- Clinical workstation for hospitals: certification and design of a new module in HES
- Innovation management
- Governance
Thanks!!

Oscar Solans: osolansf@gencat.cat
Anna Serra: anna.serra_ext@gencat.cat
Oficina tècnica: oficina.esalut@gencat.cat
Q: How did you deal with fears of big data and government having access to too much personal information? A: It is more of a concern for providers regarding the types of information they are sharing. Here, the information belongs to the patient, not the providers’, and the patient needs to have access to this information. In Catalonia, it is something quite natural.
Poll #5

As a result of today’s virtual collaborative discussion, how knowledgeable are you about the role of digital technology within an integrated system?

Not knowledgeable at all

Somewhat knowledgeable

Very knowledgeable

#IFICCanada

#NACIC2020
Crowdsourcing Resources

Other examples or resources on digital health:

- Infoway is conducting a healthy dialogue with Canadians. They want to hear about Canadians’ hopes and concerns for the health care system. Tell them what's important to you, as a Canadian, and how you think technology can help. Please go to www.ahealthydialoague.ca to participate.

- OTN Virtual Visits https://otn.ca/patients/evisit/
What’s next?

Join us again for the next virtual community session on JAN 22ND AT 12PM EST !

#IFICCanada #NACIC2020
What’s next?

Check it out at:
https://integratedcarefoundation.org/events/nacic1-1st-north-american-conference-on-integrated-care-toronto-canada
Digital Health SIG Vision

The SIG on **Digital Health Enabling Integrated Care** aims to develop a clear understanding of the role digital solutions play in the delivery of integrated care.

Webinar Series
Newsletter
Online engagement
ICIC/NACIC Conference sessions

**December 5th, 2019- 9:00am-10:00am EST**

Addressing the Interoperability Challenge
SNOWBALL: In one word, describe what was your experience today being part of the community?