E-Mental Health in Canada and Abroad
Transforming the Mental Health System Using Technology

Presented to IKEN-MH
November 4, 2014
4:00 PM ET
Welcome

The International Knowledge Exchange Network for Mental Health (IKEN-MH)

• Jointly envisioned in 2012 by the Mental Health Commission of Canada (MHCC) and the International Initiative for Mental Health Leadership (IIMHL).
• Reduce of the time from innovation to implementation and to improve population mental health on a global level.

The IKEN-MH Webinar Series

• Showcase best and promising practices over the next 12 months.
• International perspectives and hosts
• Encourage feedback and completion of post-evaluation.
e-Mental Health in Canada & Abroad: Transforming the Mental Health Landscape using Technology

Meg Schellenberg
Knowledge Broker, Mental Health Commission of Canada
Agenda

- Introductions
- E-Mental Health in Canada
  - Mental Health Commission of Canada
  - Key Considerations & Recommendations
- International Perspectives
- Case Study 1 – BreathingRoom™
- Case Study 2 – Strongest Families Institute
- Vision moving forward
- Q&A
Important! Send your questions/comments to: ‘All Participants’
Today’s Presenters

**Anil Thapliyal, M.Ed (Couns), B.Sc., MNZAC, JP**
Chief Executive Officer, Health TRx

**Dr. Patricia Pottie,**
President & COO, Strongest Families Institute
Assistant Professor, Dalhousie University
Scientist, IWK Health Centre
Patricia Paccagnan, RN, BN
Communications & Project Manager, Canadian Institute of Natural & Integrative Medicine

Dr. Badri G. Rickhi, MB, BS, FRCP (C)
Research Chair & Founding Member, Canadian Institute of Natural & Integrative Medicine
Background

Mental Health Commission of Canada

*Changing Directions, Changing Lives: The Mental Health Strategy of Canada* highlights the importance of “...new technology in promoting mental health and preventing mental health problems”
Background (con’t…)

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<th>Strategic Direction</th>
<th>E-Mental Health Potential</th>
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<td>1. Promotion &amp; Prevention</td>
<td>Promote ‘healthy thinking’</td>
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<td>2. Recovery &amp; Rights</td>
<td>Chronic illness management</td>
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<td>3. Access to Services</td>
<td>Improve access in time &amp; geography</td>
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<td>4. Disparities and Diversity</td>
<td>Personalized health care and tailor &amp; support for different communities</td>
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<td>5. First Nations, Inuit &amp; Metis (Indigenous Populations)</td>
<td>Remote services; culturally acceptable interventions</td>
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<td>6. Leadership &amp; Collaboration</td>
<td>Whole gov’t approach needed to manage how technology is used in mental health care</td>
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Definition

Mental health services and information delivered or enhanced through the Internet and related technologies*

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Do computer-guided treatments work?

Richards & Richardson (2012)

Cohen’s $d$ interpretation

$d = 0.2$  $0.5$  $0.8$

31 studies of 18 computerized depression tx’s

Mean $d = 1.35$ if therapist-supported

Mean $d = 0.95$ if administrative support

Mean $d = 0.78$ if no support
Treatment from a computer?

Will they stick?

Richards & Richardson (2012)

Dropout

28% with therapist support

38.4% with administrative support

74% with no support

(Face to face therapy = 30% to 60% dropout)

Piper et al., 1999; Reis & Brown, 1999
E-Mental Health Sector Development by Design

2011: E-Mental Health File at MHCC
Established + Engagement of the best national and international experts leading implementation of E-Mental Health + extending support to provincial e-Mental Health Strategy Initiatives e.g. Newfoundland and Labrador

2012: E-Mental Health Think Tank + Partnership with the International Initiative for Mental Health Leaders

2013: E-Mental Health National Steering Group + Project Commissioned + Regular Monthly Meetings

June 2014
E-Mental Health Briefing paper for Canada

Nov 2014: Webinar to showcase e-Mental Health Leadership + Supporting Provincial initiatives

Nov 2014: Best Brains Exchange in Partnership with CIHR and GBF, Montreal
Transforming the System

1. **Patient empowerment**
   - Improved choice and control
   - Increased knowledge about own health needs
Transforming the system (con’t)

2. Scope of technologies
Key Considerations

1. Internet use in Canada
2. Engagement with clinicians
3. Cost and cost-effectiveness
4. Ethics, confidentiality
5. Regulation
6. Integration of technology into existing services
7. Diverse populations
8. Evaluation and research
Key Consideration: Integration with Existing System

- Convenient
- Tailored services
- Avoid stigma
- Decrease workload
- Decrease wait times
- Stepped-care model

Patient Satisfaction

Provider Workload
Key Consideration: Diverse populations

Youth

Rural and Remote

First Nations/Inuit/Métis
Key Consideration: Research and Evaluation

• As effective as face-to-face services for some mental health problems/illnesses;
• Implemented with high fidelity;
• Personalized for the user;
• Gaps exist; identifies need for evaluation hubs & research strategy for e-Health and e-Mental health
Recommendations

- Person-centered care
- Scalability
- Research
- Knowledge translation & exchange
- Quality assurance
- Integration with larger framework(s)
- Integration with existing health services
- Sustainability
- Privacy and security
“E-MENTAL HEALTH PROGRAMMES BETTER THAN PROZAC”

1.5m in First 2 Years

Inaugural Public Sector Award

NZ Innovators Award

Improvements in 83% of people

10 Marketing Awards
Policy, Strategy & Governance context....

1. Canada
   - E-Mental Health Briefing Paper, Mental Health Commission of Canada
   - Online Mental Health Strategy, Department of Health, Newfoundland and Labrador.

2. Australia
   - E-Mental Health Strategy for Australia (2010), Department of Health and Ageing, Canberra

3. New Zealand
   - Joint Ministry of Health and Health Promotion Agency Governance oversight via an advisory council

4. England
   - E-Mental Health: What’s all the fuss about?, NHS Confederation

5. USA
   - Nonbinding recommendations/guidance by FDA on mobile medical applications (September, 2013)

6. IIMHL
   - E-Mental Health Discussion paper & E-Mental Health Working Group
Dr. Badri Rickhi, Research Chair & Founder

Patti Paccagnan, Communications & Project Manager

Canadian Institute of Natural and Integrative Medicine
Calgary, Alberta

Formally called the
Canadian Institute of Natural and Integrative Medicine

Transforming lives through revolutionary mental health programs

Registered Charity - Founded in 2002
Overview

1. Program Overview
2. Evidence of Effectiveness
3. Learnings
Innovative e-Mental health program that empowers youth (aged 13-24+) with **new perspectives** and **practical strategies** to better manage life’s challenges

Revolutionary care model that synthesizes current therapies and science

Powerful, barrier-reduced adjunct to conventional care
Engaging, relatable and relevant to youth
Highly experiential, dynamic and non-linear approach
Culturally relevant and accommodates multiple learning styles
Immediately applicable
Based on spirituality/big picture perspective
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<td>Breaking Through: Uncovering the REAL You</td>
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<td>Enjoying Again: Reconnecting with Life</td>
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<td>Moving On: Responding to Setbacks</td>
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<td>Celebration</td>
<td>Celebrating Possibilities: Moving Forward</td>
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Breaking Through

We often get caught up in comparing ourselves to others and trying to live up to everyone else's expectations. You know... when your mind keeps focusing on how you messed up or what a dumb thing you did or said. Breaking Through offers new ways of dealing with negative thoughts and provides you with tools to help see yourself as you are: A unique person with incredible abilities.

1. Launch Pad
2. Let's Get Started
3. Mastermind Sessions
4. Life Stories
5. Try It
6. Wrapping Up

“While we are postponing, life speeds by.”
— Lucius Annaeus Seneca
Go ahead and get started by watching the videos on the left. Also start the Try it exercises and try them daily, or at least three times a week. Melanie explains more in Segment 5.

You may be familiar with these thoughts: “Everything I do is wrong. No one really likes me. What’s the point in trying—I’m a loser, I’ll never get it together.” If you’ve struggled with these thoughts you may also have had people say, “Come on, cheer up, what’s there to be blue about?” A perfectly normal reaction to this would be to scream: “Shut up!” because the person is obviously not getting what’s up with you. What you’re dealing with isn’t something you can just shake off.

You’re not alone. Our program host, Melanie, has been there. Check out what Melanie has to say about her experience. Feeling understood is a need we all have. One viewer said listening to music gave her the comfort that other people understand. “When I was at my lowest, music really kept me sane and alive. It almost felt like music was supporting me to keep going.” Here are some of the music picks from our volunteers (two videos under Melanie’s video and more in the extras).
Try It: Abdominal Breathing Exercise

To prepare yourself for this relaxation exercise, find a quiet place where you won’t be disturbed. Get comfortable in your chair or on the floor and then you will be ready to start this visualization.

Focusing on your breathing may not seem like much, but when you get the hang of it, all of your mental chatter really starts to quiet down.

This practice is a great way to start being in the moment, which can help you to see things a lot more clearly.

During the week, you can listen to both recordings. Notice if the different voices change the way the visualization feels.
Sponsors & Partners

RBC Foundation
RBC Fondation

The Calgary Foundation
For Calgary Forever

Private Donors

ALBERTA LOTTERY FUND

Blakes

Over 100 Youth Volunteers

INNOWEAVE
Practical Tools for Social Innovation

Mount Royal University

Dr. Rogers Prize
For excellence in Complementary & Alternative Medicine

SickKids Foundation

Alberta Health Services

University of Calgary
2014 True Imagination Award
Evidence

Foundational principles supported by literature

Tested with 2 adult populations

**RTC**: 62 youth, 13-24 years old, Dx major depressive disorder

- **Depression Severity Outcome Measures**:
  - Children’s Depression Rating Scale – Revised (ages 13-18)
  - Hamilton Depression Rating Scale (ages 19-24)
Results:

Pilot of an Online Depression Treatment Program

Significant reduction depression severity

Improved quality of life, continued over time

Well accepted and recognized in community

Presents possible adjunct to conventional approaches

Youth more likely to seek help after the program
Impact

How they see

What they do

How they feel
Real Life Implementation

Mount Royal University, Calgary

Nov 2013 to June 2014

• >350 enrolled
• Strong support from staff & faculty
• Integrated into course curricula

Funding secured 2014-15 academic year
Learnings

1. Significant **support** is required
   - Financial
   - Key stakeholders, program partners, and “champions”
   - Visionaries, collaborators and **passionate doers**
   - Development, production and IT
   - Legal
   - Marketing & sales
   - **Youth** and volunteers
Learnings

2. Involve target audience *early* (youth and young adults)

3. Charging for the program poses a barrier
   - Struggling youth unlikely to purchase; used to free apps
   - Organizations have funding constraints and expectations

4. Difficult to find comparable programs (presents innovation in health care delivery)
Learnings

5. Challenging to sustain operations through program sales
   • Social enterprise verses capital enterprise

6. Must be a dynamic, non-linear, fluid process
   • No model to follow, breaking new ground
   • Had to let go of preconceived ideas and constantly adapt with emerging experience
Learnings

7. New resource with numerous implementation opportunities:

• **Integration into existing services** *(community organizations, hospitals - in/out pt care, educational institutions, workplace wellness, insurance companies, penal system, etc.)*

• **Adjunct to existing services** *(bridge wait times to access services, integration into curriculum, etc.)*

• **Resource to populations who lack services** *(remote and rural communities, etc.)*
Current Availability

Mobile App

• Available in Canada and USA
• Individual sales

Online Program  [BreathingRoom.me](http://BreathingRoom.me)

• Access at MRU for 2014-15 academic year
• Potential bulk sales for group access
For Additional Information

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Canadian Institute of Natural and Integrative Medicine (CINIM)
Calgary, Alberta  www.cinim.org  www.breathingroom.me
Strongest Families: Fast access to evidence-based services

Dr. Patricia Lingley-Pottie
President & COO, Strongest Families Institute
Assistant Professor, Dalhousie University
Scientist, IWK Health Centre
Objectives

• Background: Pediatric Mental Health & Issues
• Introduce Strongest Families Institute
  o Review delivery model
  o Review program modules
  o Present case examples & Outcomes
  o Use of technology overview
• Conclusion
What we know about pediatric mental health?

Prevalence rates similar world-wide
- Approx. 20% diagnosable disorder (Offord et al., 1987; Centre for Disease Control, 2013; WHO, 2001)

Early symptom onset- behavior & anxiety (Institute f medicine, 2009)

Environmental influences negatively impact child
- Parenting quality (low warmth, rejection) & Style (punitive, aggressive)
  - linked to behavior and anxiety (Elgar et al., 2007; Wood et al., 2002; Stormshak et al., 2002)
- Marital conflict linked to conduct issues (Waschbush et al., 2011)
- Maternal depression linked to behavior/emotional issues (Elgar et al, 2004)

Untreated conditions exacerbate overtime (Costello et al., 2005; Kessler et al., 2005)
- More difficult to manage and track into adulthood
Why do conditions go untreated?

System barriers lead to long waitlists
• Limited availability of evidence-based, early intervention services
• Limited number of qualified staff
• Limited resources

Barriers families encounter leads to high attrition rates
• Day time appointments for 16 weeks can be difficult to commit to
  o Travel burden inconvenient
  o Financial burden with travel or time off work, especially rural
• Time child misses from school affects academic progress
• Child resistance can be unbearable
• Stigma associated with receiving mental health services
Think outside of the box

Find new ways to deliver timely services
...Access solution (Not-for-profit)

- Psychologically informed, Distance Education Model
  - Evidence-based programs, proven in clinical trials \((McGrath \textit{et al.}, 2011)\)
  - Design informed by Integrated Knowledge Translation \((McGrath \textit{et al.}, 2009)\)
    - Skill-based curricula (written, media, telephone coaching)
    - Program fidelity monitored - quality maintained
    - Outcomes measured & reported (incl. client satisfaction) \((Cunningham \textit{et al.}, 2005)\)

- Bridges system access gaps - Delivered to families at home
  - Early intervention focus (Mild- Moderate severity)
    - Targets specific problems ADHD, ODD, Anxiety, Nocturnal Enuresis
  - Delivered by trained telephone para-professional coaches
    - Cost-effective, plentiful supply of qualified staff
    - Scalable system of care

\textbf{Goal:} Intervene early before problems get worse
Implications for families

- Designed to remove barriers-to-care: ‘Family-centred’
  - Coach telephone calls at convenient times (up to 0200)
    - Strong therapeutic alliance (Lingley-Pottie & McGrath, 2006; 2007; 2008)
  - No need to travel or miss work or school
    - No financial burden
    - No child resistance
  - Visual anonymity minimizes or eliminates stigma (Lingley-Pottie & McGrath, 2007; 2011)
  - Provides outreach to remote/rural communities

- Increased access for marginalized populations

**Goal:** Get help to families when & where they need it
How does it work?

• **Self-help design with coach facilitation**
  - One skill-based telephone coach session per week (11-12 skills)
    - Total 16 sessions (Intake, Consent, 12 sessions, Exit, booster)
    - 1:1 coaching or group-based delivery (1 coach & 10-12 parents)
  - Parent and/or child reviews material, completes exercises
    - Handbooks & videos or smart website interface
  - Practices implementation of skill daily to overcome problems

• **Telephone “Coaches”**
  - Perform protocolized telephone skill session training
    - Highly trained, monitored & evaluated
    - Calls digitally recorded for quality assurance
      - Competency evaluation on 2-5% calls
    - Customize the intervention to meet family needs
    - Highly productive -100 to 180 cases/year/coach
  - Weekly caseload review by coach supervisor
Behaviour: Parenting the Active Child (3-12)

Positive Parenting
Skill & strength-based sessions
(Written, videos, audios, coach)
Increase pro-social/Decrease antisocial
Strengthen family relationship
Anxiety (6-12 yo)
Parent & Child component
11 coaching sessions
- Relaxation skills
- Changing thoughts
- Imagery
- Gradual exposure
Service Evaluation Results

Service results consistently evaluated:
- 85% success resolving child presenting issues
- < 10% attrition rate
- High client satisfaction
  - 94% rate overall quality of service as Excellent or Very Good (n=1025)
- Strong effects on Informant Depression scores & Family Functioning

Other Results:
- Significant impact on academic progress/school participation
- 70% success overcoming bullying issues (311/442)
- 65% success rate on victimization concerns (275/425)
- Income level:
  - 8% on social assistance; 14% < $15k and 32% < $30k
• Information management system: Secure Smart Web-site
  ○ Uses a variety of ‘dashboards’ to organize data on one screen
    □ Client interface- Home page shows progress & customized responses
      ○ Example screen shots to follow
    □ Staff interface- report generation; caseload management
  ○ Real-time data entry
  ○ Automated event triggers, flags & automated alerts (IRIS & email)
Personalized:
- Child Name “Jane”
- Sex “Female”

Client answers questions.

Responses feed into session
- Customized text/audio examples

Example: Jane likes to:
- Draw pictures
- Play games

Skill sections
- Personalized & Customized.
Skill Section

Audio customization

Content Personalized

Side panel for quick & easy site navigation

Customized skill demo audios

Jane: likes to play games

Things You Can SAY to Notice the Good

Name It

Say what Jane is playing with or what she is doing.

This will show her that you are paying attention to her behaviour.

Press Play to Hear "Name It"
Continued Innovation through Research

- Finnish RCT- Population-based trial (high risk 4 yr)
  - Parenting program translated to Finnish
  - Dr. Andre Sourander, Psychiatrist Turku Univ
  - Planning for service integration post-trial

- Current development (Parenting- FASD; Autism; Phone apps)
Providing outreach to families- Services available in

- Canada
  - Nova Scotia, Newfoundland (Military Family Services), Alberta, British Columbia and parts of Ontario
- Other interests (Dubai, Singapore, USA, UK)
- Goal is to expand internationally

June 8, 2009
www.strongestfamilies.com

- Ernest C. Manning Encana Principal Innovation Award, 2013
  Video link: http://www.manningawards.ca/dr-patricia-lingley-pottie-dr-Patrick-mcgrath/

- Mental Health Commission of Canada (MHCC):
  - Social Innovation Award, 2012
    Video link: http://m.utube.com/watch?v=dWk8dGjM-_g&feature=youtu.be

- Progress Magazine:
  - Health Innovation Award, 2012
Evidence-based ehealth system

- Proven effective, delivery mode highly accepted with low attrition
- Informed by many stakeholders (Integrated KT)
- Continued innovation via ongoing research

Cost-effective access solution

- Family-Centred
- Quality assurance: Program fidelity monitored
  - Coach competency graded; Committed to outcome evaluation
- Scalable & easily integrated widely (compliments existing services; fills gaps)
  - Quick ramp-up; quickly alleviates wait lists
- Sustainable (KT strategy/data: key components of success)


Thank You!

www.strongestfamilies.com

@SFI_info

Strongest Families Institute

pottie@strongestfamilies.com
Vision

- Demand for mental health services is growing
- Investing in e-Mental health is cost-effective
- Some e-Mental health services have proven to be as effective as those delivered face-to-face
- Transformational paradigm shift

The MHCC and its partners are working to bring increased attention, investment, and credibility to the area of e-Mental health, and to identify additional opportunities to further develop this promising field of service and resource delivery.
Thank you

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