The Role of Technology in Mental Health Service Delivery for Children, Youth and Families:
Recommendations and Implications for Policy, Practice and Research

ANTONIO PIGNATIELLO
DAVID WILLIS
JOHN TESHIMA
TELELINK MENTAL HEALTH PROGRAM
THE HOSPITAL FOR SICK CHILDREN

This presentation is based on the policy ready paper:
Using technology to deliver mental health services to children and youth in Ontario
Ottawa: ON, Ontario Centre of Excellence for Child and Youth Mental Health.

About the Centre

We bring people and knowledge together to strengthen the quality and effectiveness of mental health services for children, youth and their families and caregivers.

Three strategic goals:
- Learning
- Collaboration
- Leadership

Foster a culture of organizational learning to support agencies in using evidence to improve client outcomes.
Build and develop collaborative partnerships to sustain capacity within mental health services.
Be a true learning organization and lead by example.

Policy-ready papers

- Provide policy makers with reliable information, rooted in current research
- Created in partnership with respected experts
- Tailor content given input from policy makers

Impact

- Respondents disagree
- Saw technology as the solution rather than the problem
- "Virtual services provide a safe, accessible and less stigmatizing forum for young people experiencing mental health issues."

People want this information!

Dissemination activities

- Continuing research and publishing by the authors
- Close the loop with policy makers
- Quarterly newsletter
- EENet Connect (CAMH)
- www.excellenceforchildandyouth.ca
- @CYMH_ON

14/11/2013
Objectives

- Engage with policy and decision-makers
- Review the literature on use of technology to deliver mental health services
- Conduct a scan of child and youth serving mental health organizations’ use of technology
- Provide policy-ready recommendations

Policy and Decision-Maker Consultations

- Input was collected across sectors in Ontario to identify:
  - Relevance, priorities and challenges
  - Experiences in technology-enabled service delivery
  - Critical questions to address
  - Useful recommendations

Policy-maker “Myth busters”

Myth #1: E-health websites that offer direct professional care to clients are causing harm because there is a lack of research establishing the safety or efficacy of their approaches

- Respondents agreed with lack of research
- Confident that there is little evidence of e-health websites causing harm
- More evidence is required

“Government needs to be an enabler for local innovation in the use of technology. They need to support low cost innovation and evaluate those innovations, recognizing that not everything requires a randomized controlled trial.”

Myth #2: Technology will just create another roadblock and make access issues worse

- Respondents disagreed
- Saw technology as the solution rather than the problem

“Virtual services provide a safe, accessible and less stigmatizing forum for young people experiencing mental health issues.”

Myth #3: Service providers don’t have the confidence or skills to use technology. Many think they will lose their jobs because of technology

- Endorsed by just over half of the respondents
- Difficulties with change particularly for older practitioners

“We need to enable older practitioners to increase their comfort with technologies. A solid program of training and education is required for all practitioners.”

Myth #4: Technology is so impersonal; it gets in the way of providing the best care

- Respondents disagreed
- Technology is redefining “personal”
- Can be just as personal, depending on client preference

“We really need a discussion group like today’s session with young people and their parents to talk about their views on the various uses of technology.”
Policy-maker “Myth busters”

Myth #5: Health care professionals are putting themselves at risk because they do not have legal protection for themselves or their clients

- Respondents equally split
- Privacy/documentation issues require legislation
- Legal concerns thwart service provision via new technologies

“We need to know what guidelines currently exist, if any, whether they apply, and ensure that they are properly disseminated and followed.”

Highlights from policy-maker conversations

- Technology
  - enhances access to services
  - eliminates barriers to access
  - reduces stigma
- Concerns about
  - impact on relationships with clients
  - reliability
  - added workload
- Education, training and exposure are critical
  - alleviate fears about negative impacts

Policy-maker perspectives on the use of technology (voting results)

<table>
<thead>
<tr>
<th>Child and Youth Mental Health Area</th>
<th>Disagree/Strongly Disagree (%)</th>
<th>Neutral (%)</th>
<th>Agree/Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>6.7</td>
<td>33.3</td>
<td>60.0</td>
</tr>
<tr>
<td>Early identification</td>
<td>--</td>
<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>Effective intervention</td>
<td>--</td>
<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>Interprofessional communication</td>
<td>--</td>
<td>21.4</td>
<td>78.6</td>
</tr>
<tr>
<td>Integration (mental health &amp; other sectors)</td>
<td>--</td>
<td>15.4</td>
<td>84.6</td>
</tr>
<tr>
<td>Transitions (youth to adult)</td>
<td>--</td>
<td>21.4</td>
<td>78.6</td>
</tr>
</tbody>
</table>

Literature Review

- 125 peer-reviewed articles were reviewed
- Articles were focused on the use of:
  - internet (n=59)
  - videoconferencing (n=42)
  - telephone (n=8)
  - e-mail (n=7)
  - mobile applications (n=5)
  - CD-ROM (n=4)
## Literature Review

Findings were organized into thematic categories:

1. Overall satisfaction & positive outcomes
2. Preferences of young people
3. Technology
4. Cost
5. Barriers
6. Research gaps

## The Internet - Benefits

- Good clinical outcomes for children and youth
- Facilitates community
- Flexible
- Organizes discussion threads into relevant themes
- Reaches individuals at an early stage
- Ease of administration and low cost
- Preferred by young people:
  - Familiar with the internet and computer literate
  - Prefer informal delivery format
  - Find online therapy/assessments and easier than paper-and-pencil

## The Internet - Barriers

- Risk of misinterpretation
- Potentially impersonal
- Lack of evidence-based therapeutic content without professional therapist moderator
- Few training schemes
- Lack of developed standards
- Potential dangers i.e. the possibility of attracting adults who may take advantage of vulnerable adolescents

## Video conferencing - Benefits

- Good clinical outcomes for children and youth
- Practitioners can have positive experiences, saving time, cost and improving service quality
- Improved access to mental health care in general and to specialty care
- ‘Spoken to, rather than at’
- Promotes a sense of power and control
- Technical quality issues have essentially disappeared from the literature
- Reduces travel costs

## Video conferencing - Barriers

- Research reports few disadvantages
- Consultation on difficult cases that does not include follow-up may lead to frustration and potential burn-out
- High quality audio is an important factor

## Email - Benefits

- A viable alternative to face-to-face and telephone encounters for some clients
- Gives clinicians increased frequency and amount of time available for contact with clients
- Young people feel empowered by using e-mail and readily engage in use of this medium
- Recognized as cost-effective
Email - Barriers

- Concerns about potential breach of confidentiality and security issues
- Boundary violations,
- Clinician failure to recognize the urgency of some emails,
- Unwanted disclosure
- Misinterpretation of content
- Slow responses
- Absence of text-based training

Telephone

- Can be effective
- Possible to form a strong therapeutic alliance
- Reduce stigmatization
- Convenient way to access services for families, children and youth

Mobile Apps

- Monitors symptoms in real time
- Personalized early intervention and relapse prevention
- Prompts users to perform specific therapeutic tasks tailored to individual needs
- Suited to early intervention programs
- Immediate, portable, accessible and non-threatening self-monitoring tool

CD ROM

- General acceptability and satisfaction
- Increased confidentiality
- Reduced barriers resulting from stigma
- Cost effectiveness (reduced therapist time)
- Convenience from not needing to use time to travel to services
- Reaching those reluctant to make face-to-face contact
- Broader service availability for rural clients
- Young people:
  - Find the treatment process beneficial
  - Respond positively to the multimedia aspects of CD-ROM service delivery

Research gaps

- Research required to understand:
  - why more young people do not engage with online applications
  - nuances and impact of services delivered
  - follow-up on how effectively recommendations are carried out
  - new theoretical and conceptual frameworks to guide development and evaluation of tele-mental health interventions
  - which service delivery method is best for certain disorders
  - studies on videoconferencing focused on specific diagnostic categories

Service Scan

- **Goal:** To identify existing Ontarian programs/models
- Distributed to 98 child and youth serving mental health organizations in Ontario
- Enablers and barriers to using technology were identified as well as best and promising practices
- Over 50% response rate
- Agencies using a wide variety of technologies in service delivery and support
Services Scan open-ended question results

Survey respondents identified four main benefits to using technology in the delivery of mental health services:
1. increased accessibility,
2. acceptability,
3. preferred by children and youth, and
4. cost saving.

Service Scan open-ended question results

Survey respondents identified four main challenges to using technology in the delivery of mental health services:
1. confidentiality/security/privacy issues,
2. technology and equipment issues,
3. challenges in establishing relationships, and
4. cost.

Conclusions

Technology is growing faster than our ability to properly assess its application
Ontario positioned to lead in development of tele-mental and e-mental health policy
Internet will play major role in future of programs
More discussion on the use of technology needed

Conclusions

Need for:
- Technological delivery of services integrated into mental health policy planning
- Tele-mental health and e-mental health est. as priority areas

The technological delivery of mental health services represents the wave of the future of healthcare, if we really want to reach people who are underserved. It is not whether, but how to apply it securely and safely.

*Policy maker, consultation interview
Implication for practice

Engage in provincial policy development:
- Standards of practice in policy development
- Est. a Provincial Advisory Group
- Develop Guidelines on:
  - ethical principles and liabilities,
  - confidentiality and privacy
  - education and training
  - evaluating the effectiveness of Internet sites.

Implication for practice

Support systematic evaluation and research,
- A review of youth tele-mental and e-mental health services and programs

Ensure access to new technologies.
- Continue to improve access to videoconferencing and Internet technologies
- Specific access strategies for those with mental health symptoms

Implication for practice

Focus on knowledge mobilization,
- Knowledge mobilization campaign to share successes

Develop educational and training requirements,
- Target medical schools, graduate programs and other training programs for mental health service providers
- Educate/encourage practitioners to integrate e-mental health initiatives into their practices
- Credential individuals

A tough race to win

Evidence, guidelines, policies

Evolution and usage of technology

Thank You!

Questions?

This project was supported by:
The Ontario Centre of Excellence for Child and Youth Mental Health