

# Report

## Best Practices for Rural eMental Health

Sereen Aboukarr, Michele LeBlanc, Samuel Petrie, Dean B Carson, Saambavi Paskaran, & Paul A Peters

DOI: <http://dx.doi.org/10.22215/sdhlab/2019.2>

### *What is known?*

- Mental health services and rates of mental health illness increase with rurality
- eHealth has proven to be difficult to implement successfully in rural communities

### *What does this study add?*

- After identifying key barriers and enablers to successful eHealth implementation, the transition to eHealth for rural communities can be facilitated by mitigating barriers and amplifying enablers
- Early identification of potential barriers and concrete steps to facilitate successful service provision are shared

JULY 12, 2019

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## BACKGROUND

A review of recent literature related to eHealth technologies in Canada and Australia was conducted to better understand specific barriers and enablers for the uptake, acceptability, and success of eMental health programs.

It has been shown that the more “rural” or “remote” a community, the access to mental health services decreases. By mitigating barriers and promoting enablers, successful eMental health integration can increase access to mental health services for rural residents.

eMental health aims to bridge the gap between rural and urban mental health services by introducing electronic methods such as teleconferencing or videoconferencing for psychological services, virtual referral to psychiatrists, and sharing of electronic records. Successful integration of the technology remains a challenging task, with key actors, enablers, and barriers all influencing its success.

## KEY FINDINGS

### ENABLERS



#### **eMental health improves quality**

Numerous studies demonstrated that patients experienced improved quality of mental health services, particularly by allowing for continuity with one provider.



#### **eMental health improves access**

Patients and providers reported improved convenience of accessing services within their home communities. Importantly, it also provided anonymity for clients.



#### **Providers were more supported**

Providers, particularly rural physicians, noted improvements in knowledge gained from remote consultation and referral to specialists.

### BARRIERS

#### **Technical structures must be improved**

For example, switching to higher-speed videoconferencing and using large digital computer screens improved quality of audio and imaging.



#### **A range of support must be available**

Presentations, information sheets, and how-to videos, in addition to technical support and help desks, enable its uptake.



#### **Projects should be community-driven**

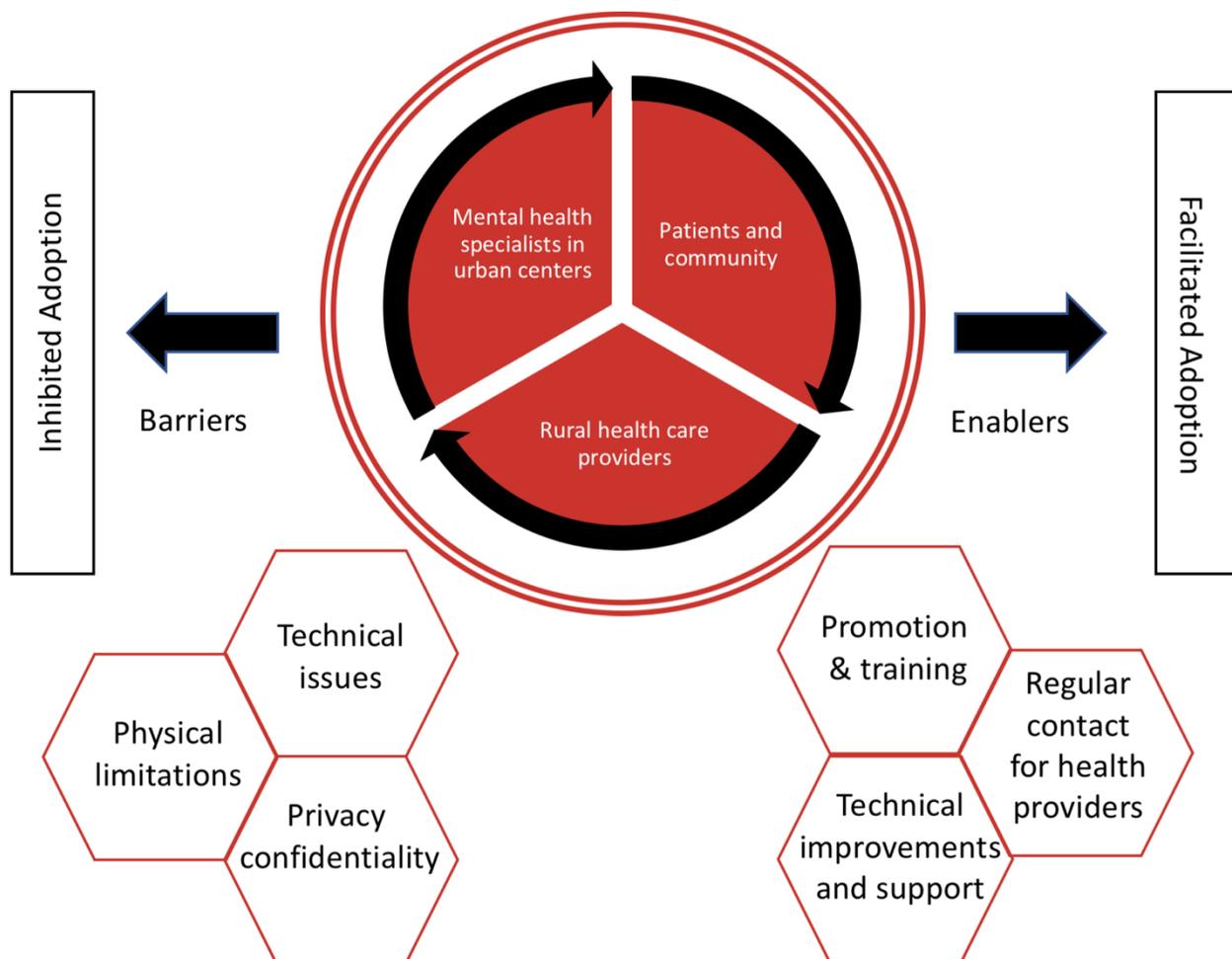
eMental health programs should be community-driven and community-led to increase the level of engagement with community and local practitioners.



## OPTIMIZING THE SYSTEM

Rural patients and health care providers identify advantages and disadvantages in using eMental health. Health system users report increased access to care, decreased travel time, increased support, decreased hospital transfers, and stronger interpersonal relationships as advantages. Disadvantages include technical problems, privacy and confidentiality concerns, physical limitations, administrative difficulties, and inadequate health care provision.

Although patients and providers note these benefits or drawbacks based on their personal experiences, the success of an eMental health program may need to be reviewed on a larger scale. There is an association between modifiable systemic barriers and satisfaction levels, based on feedback from patients and providers. By focusing on the larger-scale enablers and barriers that underly the frustrations and successes that patients and providers experience using eMental health, disadvantages can be mitigated, and advantages can be amplified.



Primary systemic barriers to the success of telemedicine include inadequate technical equipment, funding/resource constraints, and resistance from health care providers, patients, and families. Enablers of the system include pre-established environment and care procedures, program promotion and training, regular contact among health care providers, technical improvements and support, organized administration, and planning procedures.

Technological issues often impede the successful uptake of eMental health in communities. Patients and providers report frustration with technology, including delayed speech and movement, sound echoes, and inadequate internet access. Rural areas that experience more technical problems report lower levels of utilization merely due to technological issues. If the infrastructure in which the technology operates is optimized, then the level of acceptance and integration of telemedicine into mental health services can be improved.

## **KEY ACTORS**

In rural health care, three primary groups play an integral role in the success of the system: rural health care providers, specialists in metropolitan-based centres, and rural communities, including friends and family of the patients. In order for health care services to be effective, all of these key actors must effectively engage with one another, particularly when implementing a new form of technology into service provision. Regular meetings, particularly when successes and challenges of telemedicine programs are shared, increase the uptake of telemedicine. Cohesion, collegial relationships, and mutual respect among health care providers at each site contribute to successful program implementation. Improved interpersonal relationships between staff, both rural and remote, mitigate some disadvantages of telemedicine, such as resistance from health care providers and administrative difficulties.

## **METHODS**

A structured scoping review was undertaken to identify and categorize literature regarding implemented rural eHealth interventions in Canada, Australia, and Sweden. Searches were conducted in Scopus, Web of Science, and PubMed. Key words included a combination of telemedicine, eHealth, rural, electronic health, and telehealth. Results were limited from 2000 to 2018, inclusive. The articles underwent a step-wise screening process, following the framework developed by Arksey and O'Malley. The stages were as follows: identifying the research question, identifying relevant studies, study selection, data charging, and gathering, reporting, and analyzing results. The broad-based scoping review produced a database of 171 articles. The results were then narrowed to literature that included eMental health interventions. The eMental health scoping review produced a database of 31 studies. Using thematic analysis, categories based on location, study design, and target population were identified. Advantages and disadvantages of the interventions were noted.

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## ACKNOWLEDGEMENTS

This report was prepared as part of the *Free Range International Knowledge Partnership* program, funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). The report summarises the findings from the Senior Honours Thesis paper, *Best Practices to Increase Adoption and Use of eMental Health in Rural Canada and Australia: A Scoping Review* by Sereen Aboukarr as part the requirement for a Bachelor of Public Affairs and Policy Management degree, conferred in June 2019.