

EMBED

Enhanced Measurement-Based Care Effectiveness for Depression

A Canada-China Implementation Project



Principal Investigators

Raymond W. Lam, MD
University of BC

Jun Chen, MD, PhD
Shanghai Mental Health Centre



r.lam@ubc.ca



@DrRaymondLam





Enhanced Measurement-Based care Effectiveness in Depression

EMBED: A Canada-China Implementation Project

Study Aims

- Identify barriers and facilitators to measurement-based care (MBC) in China
- Adapt a Canadian enhanced MBC (eMBC) program for the Chinese health care setting
- Compare the effectiveness of eMBC vs. standard MBC for physician implementation and clinical outcomes
- Build knowledge and capacity for scale up in China and beyond

Canada	<ul style="list-style-type: none"> • University of British Columbia • University of Alberta • University of Toronto • Queen's University
China	<ul style="list-style-type: none"> • Shanghai Mental Health Centre • Peking University
International	<ul style="list-style-type: none"> • University of Melbourne • University of Michigan • University of California, Davis • Boston University
Organizations	<ul style="list-style-type: none"> • Mood Disorders Society of Canada • APEC Digital Hub for Mental Health • CANMAT • CAN-BIND

Affiliated with



Digital Hub for
Mental Health

mentalhealth.apec.org





Enhanced Measurement-Based care Effectiveness in Depression

EMBED: A Canada-China Implementation Project

Enhanced measurement-based care (eMBC)

- Online and mobile apps to empower patients to track their own outcomes
- Reminder systems for follow up (in-app notifications, email, WeChat)
- Online- and computer-assisted self-management
- Telephone and WeChat coaching of self-management (Bounce Back)





Enhanced Measurement-Based care Effectiveness in Depression

EMBED: A Canada-China Implementation Project

Phase 1 (1.5 years, 2018-2019)

- Set up a Chinese Project Action Group
- Conduct a comprehensive Situational Analysis
- Identify barriers and enablers to eMBC at patient, physician, clinic and system levels
- Create and pilot the eMBC tools
- Create and pilot the eMBC implementation program

Phase 2 (3.5 years, 2019-2022)

- Finalize the implementation, clinical and economic outcome measures
- Conduct an adaptive, cluster-randomized trial of eMBC implementation
- Involve 12 centres, 240 physicians, 1200 patients
- EMR-, telephone- and internet-rated outcomes at 0, 6 and 12 months
- Qualitative outcomes





Enhanced Measurement-Based care Effectiveness in Depression

EMBED: A Canada-China Implementation Project

Phase 1 – Overarching Goals



- Create a project platform to exchange knowledge and build capacity
- Conduct **Situational Analysis** to understand barriers and enablers of effective implementation of eMBC
- Adapt and create the eMBC program, design training programs, refine outcome metrics

*“A **situation analysis** is an assessment of the current health situation and is fundamental to designing and updating national policies, strategies and plans.”*

- World Health Organization

Situational analysis:

- Provides an in-depth understanding of the current context for implementation
- Identifies barriers and drivers to successful implementation at multiple levels of a health system
- Enables design of acceptable, appropriate and feasible interventions
- Allows better planning, intervention design, and engagement
- Informs planning for sustainability and preparation for scale-up





Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

Phase 1 – Milestones

- **April 2018** – Held core investigators meeting in Shanghai, visited 3 study sites: Shanghai Mental Health Centre, Hongkou Mental Health Centre, and Feng Xien Mental Health Centre.

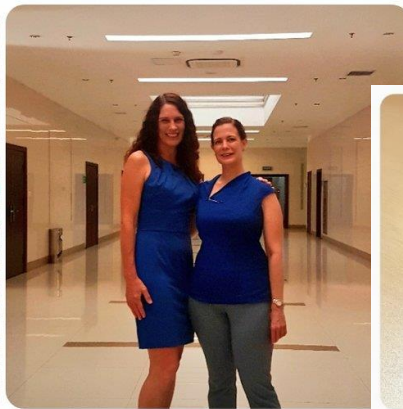




Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

Phase 1 – Milestones

- **April 2018** – Held core investigators meeting in Shanghai, visited 3 study sites: Shanghai Mental Health Centre, Hongkou Mental Health Centre, and Feng Xien Mental Health Centre.
- **July & September 2018 and February 2019** – Held training workshops in Shanghai to train staff in qualitative methodologies and validate data collection instruments.





Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

Phase 1 – Milestones

- **April 2018** – Held core investigators meeting in Shanghai, visited 3 study sites: Shanghai Mental Health Centre, Hongkou Mental Health Centre, and Feng Xien Mental Health Centre.
- **July and September 2018** – Held training workshops in Shanghai to train staff in qualitative methodologies and validate data collection instruments.
- **September 2018** – Submitted first joint manuscript.
- **October 2018** – Submitted Phase 1 ethics application.



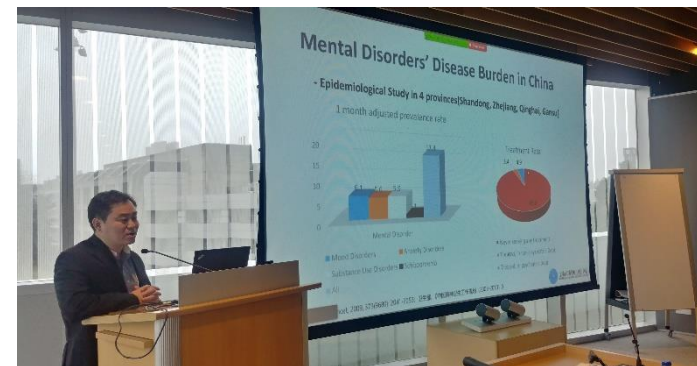
Methodological approaches to situational analysis in global mental health: A scoping review

Jill Murphy, Erin E. Michalak, Heather Colquhoun, Cindy Woo, Chee H. Ng, Sagar V. Parikh, Jun Chen, Larry Culpepper, Carolyn S. Dewa, Andrew J. Greenshaw, Yanling He, Sidney H. Kennedy, Xin-Min Li, Tian Li Liu, Claudio N. Soares, Zuowei Wang, Yifeng Xu, Raymond W. Lam



Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

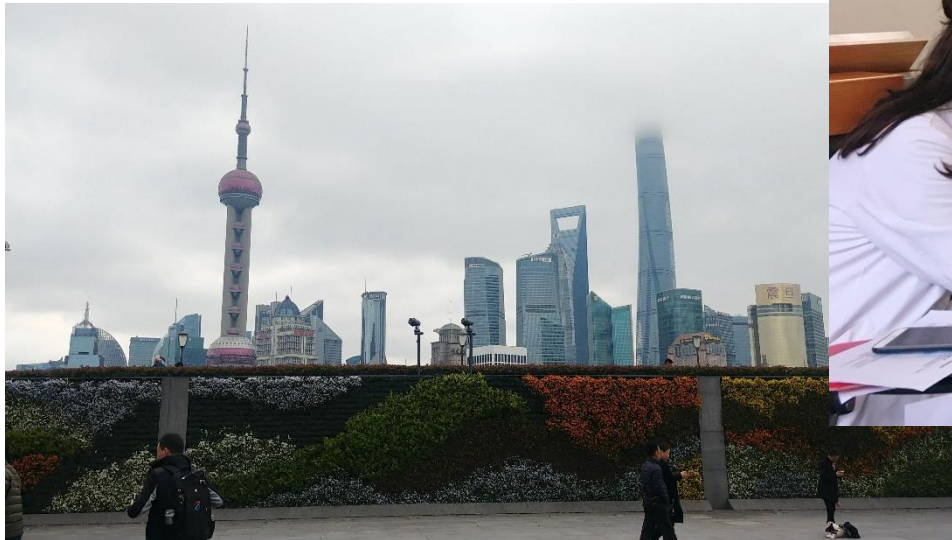
- **April 2018** – Held core investigators meeting in Shanghai, visited 3 study sites: Shanghai Mental Health Centre, Hongkou Mental Health Centre, and Feng Xien Mental Health Centre.
- **July and September 2018** – Held training workshops in Shanghai to train staff in qualitative methodologies and validate data collection instruments.
- **September 2018** – Submitted first joint manuscript.
- **October 2018** – Submitted Phase 1 ethics application.
- **January 2019**- Held Core Investigators Meeting in Vancouver





Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

- **April 2018** – Held core investigators meeting in Shanghai, visited 3 study sites: Shanghai Mental Health Centre, Hongkou Mental Health Centre, and Feng Xien Mental Health Centre.
- **July and September 2018** – Held training workshops in Shanghai to train staff in qualitative methodologies and validate data collection instruments.
- **September 2018** – Submitted first joint manuscript.
- **October 2018** – Submitted Phase 1 ethics application.
- **January 2019**- Held Core Investigators Meeting in Vancouver
- **July 2019**: Held implementation science outcome working meeting in Vancouver
- **September 2019**: Completed data collection for Phase 1 Situational Analysis





Enhanced **M**easurement-**B**ased care **E**ffectiveness in **D**epression **EMBED**: A Canada-China Implementation Project

Phase 1 – Challenges and Successes

- Timeline delays related to time for translation, cultural adaptation of materials and licensing processes
- Administrative challenges for travel between countries
- Successful team-building for investigators, staff and students
- Excellent engagement on Phase 1 data collection





Enhanced Measurement-Based care Effectiveness in Depression EMBED: A Canada-China Implementation Project

Policy Engagement

- Presentation on MBC at the Chinese Society of Psychiatrists annual conference in Chengdu in August, 2019
- Discussion, presentations and signing of MOUs for research collaborations with Shanghai Mental Health Centre (Dr. Yifeng Xu), Beijing Anding Hospital (Dr. Wang Gang) and Mental Health Institute of Central South University in Changsha (Dr. Zhou Zhiguang).
- EMBED introduced via the APEC Digital Hub for Mental Health and the 3rd APEC Senior Officials meeting in Puerto Varas, Chile in August 2019

