

● BACKGROUND ●

Multidrug-resistant tuberculosis (MDR-TB), is a deadly form of TB, and is substantially more challenging, expensive, and complicated to manage than non-drug resistant TB.^{1,2} India's national TB control program relies on highly-specialized institutions and practitioners to manage MDR-TB centrally. The National Institute for TB and Respiratory Disease (NITRD), located in New Delhi, India, is one such multi-specialty hospital. NITRD manages >1,000 MDRTB patients annually.³

The ECHO model™ (Extension for Community Healthcare Outcomes) expands capacity to manage complex diseases by sharing knowledge, disseminating best practices, and building communities of practice.⁴ Since November 2016, NITRD provided expert consultation via virtual teleECHO™ sessions⁵ using case-based learning, and didactic presentations about the diagnosis, treatment, and management of complicated MDR patients with local TB officers and program staff. TB ECHO clinics hold promise to decentralize MDR-TB management.

An evaluation framework is needed to monitor project implementation, measure success, and ensure sustainability. The successes and challenges of TB ECHO implementation, and whether provider knowledge improved or were translated into routine practice remains unknown.

● AIMS ●

A 2-day workshop was designed to describe the strengths, challenges, opportunities, and vision for TB ECHO India. Through the perspectives of various stakeholders, we aimed to develop an evaluation framework and establish potential indicators for success (both process and outcome) that could be utilized by new and existing TB ECHO programs worldwide.

● METHODS ●

An appreciative, strengths-based inquiry approach, using a strategic thinking and planning tool — SOAR Framework,⁶ was adapted to assess the strengths, challenges, opportunities, aspirations, and results of the TB ECHO India program.

Government leaders, administrators, state and district medical officers, laboratorians, and field staff were placed in homogenous breakout groups, based on their work within their organizations. Discussion questions and a note taker were assigned to each group (Table). Breakout groups shared a summary of their discussions in large group report outs. Individuals shared reflections on what they learned at the end of each large group report out. A systematic qualitative analysis summarized individual and group reflections.

● RESULTS ●

Table. Questions that facilitated the modified “SOAR” discussion and select responses from participants

Strengths	Challenges	Opportunities	Aspirations	Measurable Results
<p>What is your personal proudest achievement since the start of TB ECHO India?</p> <p>What are you most proud about TB ECHO India? How do these things you are proud about reflect your strengths?</p> <p>What are TB ECHO India's areas of excellence? What can other ECHO programs learn from TB ECHO India? What makes TB ECHO India work well?</p>	<p>What makes TB ECHO India particularly challenging for you?</p> <p>What are the burning issues or challenges TB ECHO India experiences?</p> <p>What has been the biggest challenge associated with TB ECHO India?</p>	<p>Given the challenges outlined in the previous session, what are the top 3 opportunities where we might focus our efforts?</p> <p>Given the strengths outlined earlier, what are the top 3 opportunities where we might focus our efforts?</p> <p>Who are possible new partners we might consider engaging in our work? What are new services, processes, etc. we may consider?</p>	<p>Given discussions from earlier breakout sessions, what does TB ECHO India aspire to become in the long-term?</p> <p>Given our long-term aspirations, what does success look like 2 years from now?</p> <p>Or your vision of success in 5 years from now?</p>	<p>Considering the strengths, challenges, opportunities, and aspirations, what meaningful measures would indicate we are on track to achieve success for TB ECHO India?</p> <p>[measures may be at multiple levels: ECHO implementer, provider, patient outcomes, community outcomes]</p>
<p>“[My] proudest moment is when knowledge is spreading from classes to masses”</p> <p>“Saving time of patients as well as practitioners”</p> <p>“We are proud of the real-time patient care and management”</p> <p>“Modified and real-time treatment, diagnosis, and preventing death of patients”</p>	<p>“[Limited] opportunity in the non-medical sphere, to have IT equipment disseminated to the lowest level”</p> <p>“Improving data quality for program management and data analysis”</p> <p>“Sessions should be more interactive”</p> <p>“Scope of topics – beyond MDR-TB disease, e.g. diabetes, mental health”</p>	<p>“No feedback on recommendations. . . were recommendations followed?”</p> <p>“Did patient outcomes change as a result of recommendations?”</p> <p>“Due to multiple tasks, time management is a huge challenge”</p> <p>“Networking with multiple disciplines takes time”</p>	<p>“Within 1 year, ECHO can help establish relationships between NGOs, medical colleges, private practitioners”</p> <p>“Start ECHO at district level to engage laboratory technicians, Health Volunteers, Directly Observed Therapy providers”</p> <p>“India can be a leader in the region for managing MDR-TB and Bending the Curve of the TB epidemic in the world!”</p>	<p>“Nationally, 100% ECHO Clinic coverage in all states, in all districts this will help us [to reach the] ‘TB Free India’ targets by 2025”</p> <p>“Proportion of ECHO sessions without disruption or disconnections or uninterrupted services”</p> <p>“Proportion of sessions with interactions, [participants] asking questions”</p>

Forty stakeholders attended the workshop on February 6 and 7, 2018. A multitude of perspectives, from hub-level implementers at NITRD, to spoke-level participants – such as District TB Officers and various field staff – shared their strengths, challenges, opportunities, aspirations, and measurable results. The key themes for the development of monitoring and evaluation indicators that emerged related to capacity building, building communities of practice, expanding partnerships, measuring public health impact, saving resources, maintaining funding, ensuring high-quality course content, adaptability and replicability (Figure).

Technological challenges (e.g., poor internet connection), language barriers (e.g., English vs Hindi), logistical issues (e.g., lack of access to a dedicated computer for staff to attend ECHO virtual session), time management, scheduling, and networking burden to recruit content experts were revealed during this workshop.

Figure. Themes and constructs for indicator development



● CONCLUSION AND NEXT STEPS ●

A strengths-based facilitation approach, using an adapted SOAR methodology, encouraged a diverse set of participants to co-create a workshop experience where participants felt comfortable to share unique experiences without restriction. Next steps include: developing a conceptual framework, and logic model incorporating thematic constructs from the workshop; and developing a set of evaluation tools that can be used by TB ECHO programs in India and elsewhere.

● REFERENCES ●

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