Clinical capacity

Clinical capacity refers to the ability of a healthcare system, facility, or provider to deliver medical services and care to patients. It encompasses several key elements:

Physical resources:

Number of hospital beds

Medical equipment availability

Treatment rooms and operating theaters

Human resources:

Number of healthcare professionals (doctors, nurses, specialists)

Staff skills and expertise

Availability of support staff

Time:

Appointment slots

Operating hours

Emergency response capabilities

Operational efficiency:

Patient flow management

Resource allocation

Scheduling systems

Specialized services:

Diagnostic capabilities

Treatment options

Ability to handle complex cases

Clinical capacity is crucial for healthcare organizations to meet patient demand, provide timely care, and maintain quality standards. It's often assessed and managed to optimize healthcare delivery and improve patient outcomes.

Global neurosurgery seeks to provide quality neurosurgical health care worldwide and faces

challenges because of historical, socioeconomic, and political factors. To address the shortfall of essential neurosurgical procedures worldwide, dyads between established neurosurgical and developing centers have been established. Concerns have been raised about their effectiveness and ability to sustain capacity development. Successful partnerships involve multiple stakeholders, extended timelines, and twinning programs.

Lippa et al. outlines initiatives and challenges within the neurosurgical community. The narrative review aims to provide a practical tool for colleagues embarking on clinical partnerships, the Engagements and assets, Capacity, Operative autonomy, Sustainability, and scalability (ECOSystem) of care. To create the ECOSystem of care in global neurosurgery, the authors had multiple online discussions regarding important points in the practical tool. All developed tiers were expanded based on logistics, clinical, and educational aspects. An online search was performed from August to November 2023 to highlight global neurosurgery partnerships and link them to tiers of the ECOSystem. The ECOSystem of care involves 5 tiers: Tiers 0 (foundation), 1 (essential), 2 (complexity), 3 (autonomy), and 4 (final). A nonexhaustive list of 16 neurosurgical partnerships was created and serves as a reference for using the ECOSystem. Personal experiences from the authors through their partnerships were also captured. They propose a tiered approach for capacity building that provides structured guidance for establishing neurosurgical partnerships with the ECOSystem of care. Clinical partnerships in global neurosurgery aim to build autonomy, enabling independent provision of quality healthcare services [1)]

1)

Lippa L, Cadieux M, Barthélemy EJ, Baticulon RE, Ghotme KA, Shlobin NA, Piquer J, Härtl R, Lafuente J, Uche E, Young PH, Copeland WR 3rd, Henderson F Jr, Sims-Williams HP, Garcia RM, Rosseau G, Qureshi MM. Clinical Capacity Building Through Partnerships: Boots on the Ground in Global Neurosurgery. Neurosurgery. 2024 Aug 26. doi: 10.1227/neu.0000000000003129. Epub ahead of print. PMID: 39185894.