



WHO and Essential Surgical Care

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The world's burden of surgical diseases is increasing, and there are enormous gaps in access to life saving and disability preventing surgical care both between and within countries, especially at the primary referral level (district hospital or equivalent) in low and middle income countries (LMICs). Basic surgical care has been neglected as a population-based health strategy in LMICs, despite evidence suggesting that surgical conditions account for approximately 11% of the world's disease burden, and basic surgical services may be cost effective even at the district hospital level.

Less than 5% of the world's surgical procedures are performed in countries ranked in the lowest third in terms of per capita health expenditure, and barriers to the delivery of safe and timely surgery and anesthesia include deficiencies in *capacity* (infrastructure, physical resources, human resources) and *quality* (training and experience of caregivers). Considerable attention has focused on the global shortage of health workers; "brain drain" has been an enormous problem, with health workers migrating both between and within (rural to urban) countries.

Reasons for dissatisfaction among health workers include inadequate training and salary, a lack of supplies, lack of supervision, poor working conditions, inadequate living conditions, and inadequate professional recognition. While little attention has been directed to deficiencies in capacity, several recent studies have documented glaring shortages of

essential equipment and supplies, as well as lack of running water and electricity, at district level facilities in LMICs. Even if a health worker can be trained, how can they be retained if deficiencies in infrastructure or a lack of supplies and equipment interfere with their ability to utilize their skill set?

The World Health Organization recognizes these challenges, and in 2004 established the Clinical Procedures Unit within the Department of Essential Health Technologies (2004). This unit was charged with ensuring “efficacy, safety and equity in the provision of clinical procedures in surgery, anesthetics, obstetrics, and orthopaedics, particularly at the district hospital level.” The [Emergency and Essential Surgical Care Project](#) (EESC) employs a horizontal, integrated approach to strengthening district level surgical services, calling upon collaboration between the WHO, Ministries of Health, and both local and international partners. Training materials include the [Integrated Management of Emergency and Essential Surgical Care](#) toolkit and a reference manual entitled [Surgical Care at the District Hospital](#). The IMEESC represents a flexible template which may be adapted to the local needs. The materials may be integrated into existing training initiatives (medical colleges, NGOs, CME). [A Global Initiative for Emergency and Essential Surgical Care \(GIEESC\)](#) was established in December 2005, with the goal of stimulating collaboration between stakeholders to raise the profile of surgery and promote educational programs involving training in essential surgery at primary health facilities.

As such, the question is not whether to, but rather *how* to strengthen the delivery of district level surgical services in LMICs. The focus must be on achieving universal access to “essential” surgical services, which are highly effective, appropriate to the local disease burden, and can be offered within the financial constraints faced by economically underdeveloped nations. This goal may only be realized through a multidisciplinary, multisectoral effort aimed at health system strengthening.

Recently, there has been a resurgence of interest in primary health care as a means to strengthen health systems, and integration of essential surgical care within the context of these primary health care reforms will undoubtedly strengthen health systems. This will require commitment from multiple stakeholders, including governments and their ministries of health, funding agencies, non-governmental organizations such as Health Volunteers Overseas, academic institutions, organizations outside the health sector, as well as community leaders and individuals. Strengthening the delivery of essential surgical services will improve not only the capacity to deliver other health services, but also to achieve several of the [Millennium Development Goals](#).

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