Surgery is an essential part of any health system, crucial in meeting emergency needs. Often perceived as a service accessible only by the wealthiest, surgery has become a cost-effective intervention – like vaccination or bednets – that can dramatically improve the health of people across sub-Saharan Africa, even in its poorest countries. By improving access for caesarean sections, burns, acute eye conditions, road traffic injuries and other traumas, surgery can prevent death and disability. With increased provision of basic equipment, and if non-surgeons are trained to deliver surgical services, African countries can make significant strides in strengthening their health systems and achieving the Millennium Development Goals of reduced child mortality and improved maternal health.

Inadequate facilities and a shortage of specialist surgeons and anaesthesiologists are often cited as the major barriers to the provision of effective surgical services. Many rural facilities are unable to provide even basic surgical services because resources are typically directed towards other preventive health programmes. The virtual absence of a surgical response for emergencies in many district hospitals increases unacceptable health outcomes and reduces the credibility of health services.

Recent experience from several African countries illustrates that high-quality and cost-effective surgery can be provided in district hospitals. With resources and commitment, doctors, medical officers and clinical officers can all acquire the needed surgical skills quickly, comprehensively, and at minimal cost. A dynamic mix of surgical specialists and these “other” providers has transformed district hospitals into quality providers of basic surgical care, thereby increasing life expectancy, reversing debilitating conditions, and introducing the important “ripple effect” of upgrading the hospital overall.

The Bellagio Essential Surgery Group
In collaboration with the World Health Organization’s Global Initiative for Emergency and Essential Surgical Care (GIEESC), the Bellagio Essential Surgery Group (BESG) calls for national and international commitment to improve access to essential surgical services. The BESG is a forum of top surgeons and public health specialists that has met in Bellagio, Italy and Kampala, Uganda. BESG members have discussed these alternative approaches, and have become pre-eminent advocates of surgery’s role in strengthening health systems and in achieving MDGs 4 and 5.
**The road ahead**
Investments must be made to improve and expand infrastructure and equipment. Staff must be trained and retained, particularly at the district level. National health strategies and plans must reflect this commitment, and ensure that the basic package of services includes access to essential surgical services.

A one-size-fits-all model of improving surgical services may not be ideal. Careful thought must be given to local priorities, context and concerns. Each country must analyze its current surgical infrastructure, needs and abilities: *who is doing the surgery, with what frequency and with what resources?* Dialogue among stakeholders from the Ministry of Health, hospitals, clinics, civil society, and various research, academic and professional bodies is crucial to achieving tailored solutions that fit locally-identified needs.

The GIEESC and the BESG will then assist countries in developing realistic options and innovations, from improving the competence and motivation of doctors in district hospitals to strengthening the surgical capacities of other staff. The BESG actively encourages educational reforms (where practical surgical skills become an integral aspect of basic medical training), developing a blueprint for systems-level investments in infrastructure and equipment, and designing strategies to attract, train and retain skilled health workers.

Experiences from **Niger** and **Zimbabwe** show that general-practice doctors can acquire strong surgical competencies through short, structured training programmes complemented by peer or specialist training. **Burkina Faso** has been officially, systematically and consistently implementing district surgery with great success for many years, including training district health officers to perform emergency surgical and obstetric care at district hospitals. In **Malawi**, on-the-job surgical training of clinical officers has enabled them to practice specific skills in general surgery, orthopaedics, obstetrics and gynaecology, anaesthesia and pathology. The BESG has initiated a collaborative research study in **Mozambique**, **Uganda** and **Tanzania** to describe the extent of surgical activities in district hospitals (including staffing levels, surgical capacity and human resource constraints). Preliminary results show that decision-makers must attend to the human-resource needs of providing surgery, to the overall volume of surgical care, and to the general operating costs of essential surgical services.

**Further Resources**

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