

Surgical surveillance in resource-poor settings

We congratulate the African Surgical Outcomes Study team, led by investigators from low-income and middle-income countries, for quantifying the scale of global inequality in surgical care, and for providing measurable goals for future improvement efforts (April 21, p 1589).¹ This work also highlights the poor availability of the detailed information necessary to translate these inequalities into potential solutions.^{2,3} Continuous surveillance systems or registries could provide such information but are notoriously challenging; disparate paper-based systems, inadequate resources, and overburdened staff are seemingly insurmountable problems.^{2,4}

The Network for Improving Critical Care Systems and Training (NICST), which is based in low-income and middle-income countries, is successfully using setting-adapted, electronic mobile platforms to close such gaps in the information available to care for acutely unwell patients. This clinician co-designed platform, which has been distributed in Pakistan and Sri Lanka, has been used in south Asia and has supported routine care for more than 114 785 patients. Real-time dashboards enable clinicians to benefit from surveillance in daily decision making,^{2,5} including management of postoperative complications. Aggregate data from more than 10 907 surgeries provide indicators of quality; these indicators include length of stay, unplanned admissions to intensive care units, and antibiotic use. The feasibility of use of this system is now being evaluated in Sierra Leone and Malawi.

Too often the silent partner, patients are key stakeholders: follow-up telephone surveys by the NICST have reported 30-day outcomes for 3736 patients, highlighting deficits in provision of rehabilitation and outpatient services. Encouragingly this information is informing quality

improvement projects, which are being driven by local clinicians in partnership with University College London's Centre for Perioperative Medicine.

Future research and development should focus on evaluating and delivering surveillance platforms, such as NICST, that enable setting-relevant data to facilitate local and national improvements in surgical care, which the Article by the African Surgical Outcomes Study group¹ has shown is necessary.

We declare no competing interests.

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- 2 De Silva AP, Harischandra PL, Beane A, et al. A data platform to improve rabies prevention, Sri Lanka. *Bull World Health Organ* 2017; **95**: 646–51.
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- 4 Dare AJ, Onajin-Obembe B, Makasa EM. A snapshot of surgical outcomes and needs in Africa. *Lancet* 2018; **391**: 1553–54.
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Healthier lives for all Africans

In their Commission, Irene Agyepong and colleagues (Dec 23, 2017, p 2803)¹ provide a comprehensive report on the pathway to healthier lives for all Africans by 2030. As highlighted in the Commission,

we have been involved in training family physicians in Africa for the past 20 years within the framework of the Primary Care and Family Medicine Education (Primafamed) network, a South–South cooperation that brings together family medicine, primary care, and public health in more than 20 African countries.² The participating departments interact electronically, share educational strategies, develop distance learning, and build educational and research capacity through annual workshops, taking advantage of their *African Journal for Primary Health Care and Family Medicine*. The effects of the network have been documented, both in their development of departments and training programmes³ and regarding their outcomes (namely, better access to and quality of care for local communities).⁴

African family physicians can strengthen interdisciplinary primary health-care teams in primary care facilities and within communities and, when appropriate, are involved as expert generalists in district hospitals.

All African countries are facing the challenge of scaling up availability of family physicians in primary health care to make quality health care accessible, particularly in urban slums and rural and remote areas. This accessibility requires a substantial proportion (40–60%) of graduates from medical schools in Africa to be trained for family medicine.⁵ More integration between primary care and public health services will be needed to combine facility-based and person-centred care with community-level responsiveness to population needs, and to improve health outcomes.⁶

In 2018, there is an urgent need for financial donors to fund interventions that strengthen the African primary health-care system as a priority, rather than just investing in vertical disease-orientated programmes, and to continue contributing to networks such as Primafamed.



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