

Published in final edited form as:

*Acad Med.* 2014 August ; 89(8 0): S112–S113. doi:10.1097/ACM.0000000000000337.

## Graduate Tracking Systems for the Medical Schools in Africa: Processes for Developing an Implementation Framework

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### Background

Human resources for health are critical for effective health systems. In Africa the number of doctors and nurses required to provide essential health services will be deficient by an estimated 800,000 in 2015.<sup>1</sup> Numerous interventions have been implemented to mitigate these shortages, including educational reforms aimed at retaining medical graduates in areas of need by both increasing the number of graduates and by adapting training to match the needs of local populations.<sup>2</sup> Tracking graduates from African universities is critical to determine whether interventions are effective. However, most African medical schools do not track their graduates; only 18% of Sub-Saharan African medical schools reported having a graduate tracking system in 2012<sup>3</sup> and the data obtained from these systems are generally inadequate<sup>4, 5</sup>

### Intervention

Based on a community of practice theory, a Graduate Tracking Technical Working Group (GT-TWG) was established within the Medical Education Partnership Initiative (MEPI) network comprised of representatives from MEPI schools and the MEPI Coordinating Center. The GT-TWG, with Capacity-Plus, a USAID-funded health workforce strengthening project, developed graduate tracking requirements for MEPI institutions and countries through a collaborative process, including structured interviews of 12 key individuals from 11 MEPI schools. Interviewees included deans, physician leaders, and monitoring and evaluation program officers identified by their schools as being central to graduate tracking.

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*Other disclosures:* None reported.

*Ethical approval:* Reported as not applicable.

*Disclaimers:* Any views expressed in this article are solely those of the authors and do not represent HHS or the State Department.

The GT-TWG also convened a workshop in October 2013 where representatives from 10 MEPI schools and from various country ministries of health, education, and health professional councils explored the MEPI landscape for tracking.

## Outcomes

Tracking systems varied widely among schools and countries. Most were paper-based, although five schools reported having tracking systems in electronic formats or using electronic resources such as e-mail or social networking for communication and data gathering from graduates. No country among the MEPI-sponsored network had a single collaborative tracking system that involved all key stakeholders. The workshop allowed participants to validate findings and define a way forward to develop systems. Underlying principles included: 1) clear goals and objectives to ensure that systems and data elements match the needs of schools and health systems; 2) medical school systems should be integrated with other health professional tracking systems when possible to enhance cooperation and information sharing; 3) early and meaningful stakeholder engagement is needed to define goals and objectives, establish integrated systems, and ensure sustainability; and 4) tracking systems should be sufficiently flexible to match data collection to local contexts and available resources.

Participants designed a framework to guide the establishment of graduate tracking systems consisting of seven core processes or elements: 1) general requirements; 2) locate graduates; 3) collect/update information; 4) search and view information; 5) create tracking survey tools; 6) manage tracking survey response data; and 7) generate reports. Objectives, business rules, triggers, and other elements were developed for each core process.

## Comment

The framework and its requirements may provide a tool for institutions developing graduating tracking systems of their own and highlight opportunities for partnerships nationally and globally to establish sustainable systems.

## Acknowledgments

*Funding/support:* The work described in this report was supported through funding by PEPFAR, HRSA, NIH, and USAID.

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