

was not seen in the data analyzed. We believe this is due to, in part, the small sample size ( $n = 27$ ). Other confounding factors may have included clinical differences among the patients such as history of prior transplant, differences in induction therapy, infections within the six month period before renal transplantation, and number of rejections post-transplant. The lack of significant change between C3 and C4 complement levels pre- and post-transplant suggests that immunosuppressive therapy, which targets B and T cells, has no effect on complement.

**Funding:** Travel funding was provided by the International Health Program of NYU School of Medicine, in collaboration with Santander Bank.

**Abstract #:** 1.002\_TEC

### Building human capacity for optimal use of an electronic medical record system in Kenya: Results of a pilot evaluation of two elearning modules

Jennifer Antilla<sup>1</sup>, Leslie Wall<sup>2</sup>, Charles Atelu<sup>3</sup>, Veronica Muthee<sup>3</sup>, Nzisa Liku<sup>3</sup>, Nancy Puttkammer<sup>1</sup>; <sup>1</sup>International Training and Education Center for Health (I-TECH), University of Washington, Seattle, WA, USA, <sup>2</sup>Department of Global Health, University of Washington, Seattle, WA, USA, <sup>3</sup>I-TECH Kenya, Nairobi

**Background:** From 2012–15, the Kenyan Ministry of Health, its funders, and partners supported implementation of electronic medical record systems (EMRs) in more than 600 public-sector health facilities. Successful, sustained use of EMR data depends upon knowledge and skills of front-line health care workers to use such systems. High turnover of health workers and new EMR system features result in an ongoing need for and access to EMR training. In response to this need, the International Training and Education Center for Health (I-TECH) developed and piloted two interactive eLearning modules covering EMR data quality and using EMR data for decision-making.

**Method:** I-TECH disseminated two asynchronous, offline modules to 6 facilities in Western Kenya via EMR system workstations. Facility management and on-site EMR mentors were oriented to the initiative; mentors supported other health workers to complete the modules. After 3 weeks, I-TECH collected questionnaires and conducted qualitative interviews on technical challenges when using the modules, relevance of the content, recommendations for dissemination, and suggestions for future topics.

**Results:** Thirty seven health workers participated in small-group qualitative interviews and 28 completed questionnaires. Key findings include:

- Participants were highly motivated to complete the modules and obtain a certificate.
- Modules took longer than expected to complete; 75% of respondents described the time required to complete each module as adequate.
- Over 60% of participants strongly agreed that their motivation to action and confidence to use EMR data and improve data quality increased.

- Over half of those interviewed recommended informal learning groups to discuss the modules.
- Over 50% of participants indicated that content, organization, and navigation of the modules was good.

Recommendations include:

- Provide certificates or continuing education credits for learners who pass the post-test;
- Integrate content on using EMR systems and clinical best practices
- Strengthen the role of facility management in the orientations to the modules.

**Discussion and Conclusion:** Facility staff were motivated to use EMR eLearning modules and apply what they learned. Participants found the content relevant to their jobs and cited an interest in additional scenarios and modules. Self-paced eLearning modules are a viable solution for standardizing sustainable training on EMR systems.

**Abstract #:** 1.003\_TEC

### Establishing a process for the use of hydroxyurea in pediatric sickle cell patients in Angola

R. Beaty<sup>1</sup>, G. Airewele<sup>2,3</sup>, D. Nirenberg<sup>2,3</sup>, M.P. Noli<sup>3,4</sup>, S. Kaban<sup>3,4</sup>, E. Ishigami<sup>2</sup>, M. Cubbage<sup>2</sup>, W. Zhang<sup>2</sup>, K. Wilson-Lewis<sup>2</sup>; <sup>1</sup>Department of Pharmacy, Texas Children's Hospital, <sup>2</sup>Texas Children's Cancer and Hematology Centers, <sup>3</sup>Baylor College of Medicine, <sup>4</sup>Baylor International Pediatrics Aids Initiative

**Program and Project Abstracts:** Texas Children's Cancer and Hematology Centers and Baylor College of Medicine International Pediatric Aids Initiative (BIPAI) has partnered with Chevron to assist in the treatment of patients with Sickle Cell Disease (SCD) in Angola. The program called the Angolan Sickle Cell Initiative (ASCI), received a generous donation of the medication hydroxyurea (Hydrea®) from AmeriCares in partnership with Bristol-Myers Squibb. Hydroxyurea has been proven to be an important and effective treatment for individuals with SCD; it can minimize many of the significant symptoms patients develop, reduce the incidence of strokes, a major complication in patients with SCD, and can improve overall quality of life. Unfortunately, it is only available in the private healthcare sector and not yet available to the majority of the children affected by SCD treated in the public healthcare system.

**Structure/Method/Design:** The goal of this project was 1- to develop a process for storing, dispensing, and tracking hydroxyurea that complies with local legislation and donor requirements, 2- to ensure maintenance of supply chain integrity, 3- to track distribution and usage of hydroxyurea down to the patient level, and 4- to create a Standard Operating Procedure (SOP) adapted to this middle-income country that mirrors other SOPs at Texas Children's Hospital in order to provide a consistent standard of care.

**Outcome & Evaluation:** We successfully implemented an electronic procedure for tracking, storing, handling, and dispensing hydroxyurea in Angola. We also designed a paper version that can be used as a back-up tracking method during power outages. We