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obtaining an appropriate interpreter. Many of the adult participants preferred an internet-based video interpreting service over in-person interpreters because of increased dialect options, as well as shorter wait times. Although traditional medicines and healing techniques were used in refugee camps and occasionally in Indianapolis, most Burmese place trust with western medicine and report valuing and complying with physician recommendations. Many have a basic understanding of good health practices and the causes of illness. This is seen most consistently in the adolescent groups.

Interpretation: Overall, Burmese Chin have adapted to their new home. Although they experience common frustrations with the healthcare system, these frustrations were exacerbated by long waits for an interpreter. Resources, such as a phone or video-based interpreter, are available in most health care facilities and preferred by the Burmese. More research is needed to better understand the challenges of the Burmese population residing in the United States.

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## Household and individual risk factors for anemia in children in East Africa

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Background: Anemia affects 45% of preschool children worldwide, with an even higher prevalence in low and middle-income countries, despite nutritional interventions and iron supplementation. The contribution of household factors to anemia is less well described. To further evaluate the effect of household and individual risk factors for anemia, we analyzed data from the four East African countries that performed hemoglobin testing during the most recent administration of the Demographic and Health Surveys (DHS 2010-2011).

Methods: We analyzed data from 14,718 children age 6 to 59 months in Tanzania, Rwanda, Uganda, and Burundi. A household survey was administered to an adult respondent, and anthropometry and hemoglobin testing were conducted on children after parental consent. We performed univariate analyses and multivariate logistic regression using survey procedures in SAS 9.4. We grouped risk factors as follows: demographic (age, sex), socioeconomic (wealth index, maternal education level, number of household members), water/sanitation (use of shared toilet facilities, unimproved toilets, lack of clean drinking water, unsafe stool disposal), nutritional (height-for-age [HAZ], weight-for-age [WAZ], a low iron-diet, premature intake of cows' milk), recent illnesses (diarrhea, bloody diarrhea, or fever in the past 2 weeks), and prophylactic measures (iron supplementation in the last week, deworming in the last 6 months, bednet usage). We constructed multivariate models within each risk factor category to identify factors that were most predictive of anemia, and then included these factors in our final model.

**Findings:** The mean hemoglobin among tested children was 11.2 (SD 1.8); 60% of children had at least mild anemia (Hb < 11) and 19% at least moderate anemia (Hb < 10). Significant protective factors in the final multivariate model included older age (OR 0.97 per month [95% CI 0.96, 0.97]), female sex (OR 0.82 [0.75, 0.91]), and deworming treatment (OR 0.82 [0.73, 0.90]). Factors that increased risk of moderate/severe anemia included the lowest wealth quintile (OR 1.24 [1.04, 1.48]), number of household members (OR 1.05 per person [1.03, 1.06]), unimproved toilets (OR 1.49 [1.31, 1.69]), unsafe stool disposal (OR 1.17 [1.03, 1.33]), and fever in the past 2 weeks (OR 1.52

[1.37, 1.70]). Use of mosquito net was paradoxically associated with anemia (OR 1.38 [1.24, 1.53]), perhaps related to a higher prevalence of malaria in areas where bednets are used.

Interpretation: Together with personal characteristics, household, environmental, socioeconomic, and prophylactic factors are associated with anemia among young children in East Africa. Given the effects of anemia on development and on the outcomes of childhood infections, programs that focus on economic development, improved sanitation, treatment for worms, and prevention of malaria are urgently needed.

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## Impacts and challenges of Community Health Planning Services (CHPS) facilities in rural Ghana

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Background: In 2012 and 2013, the University of Utah School of Medicine and the Barekuma Collaborative Community Development Program (BCCDP) built three Community Health Planning Services (CHPS) compounds in the villages of Barekuma, Worapong, and Abira. The CHPS facilities were built to help redirect the need for basic health services from regional facilities and bring basic preventive and curative care to communities, as well as improve health equity by removing financial and geographic difficulties to primary healthcare. In order to assess the impacts and challenges of the CHPS compounds in these communities, we conducted a cross-sectional qualitative study to explore demographic composition of and the attitudes and opinions of CHPS utilizers.

Methods: Members of the community who had and had not accessed the CHPS compound were interviewed in either English or Twi using a structured questionnaire with open- and close-ended questions. Interviews were audio recorded and transcribed and analyzed using standard qualitative techniques. Written or verbal consent was obtained by participants. The interview time averaged 5 minutes; time spent in each community averaged 3 hours; and 339 interviews were conducted in this manner. The study was approved by the IRBs of the University of Utah and Kwame Nkrumah University of Science and Technology.

Findings: Compared to participants that have not accessed the CHPS compounds, participants that have accessed the CHPS were more likely to be female, are older, and have more children. They are less likely to have attended high school, and more likely to have received no education. Users of the CHPS compound have an average of 2.31 visits per user, and have been going to the CHPS compound for an average of 6.22 months. The most common services sought by users were "healthcare", "pediatrics", and "general sickness". The most common services users wanted added were "admissions", "electricity or improved lighting", "increased medications", and "more nurses". Over half of participants identified malaria as their biggest healthcare concern, while 9.64% of participants identified fevers and gastrointestinal problems as concerns and a quarter of participants did not indicate any healthcare concerns.