model conditional on the crowding out of tobacco was created using quadratic conditional Engel curves. X2 tests for consumer separability were also performed. Additionally, an analysis of tobacco tax progressivity was completed in order to enhance policy recommendations. Kakwani indices were generated and dominance tests conducted.

Findings: Overall, households which consume tobacco spend less on certain commodities compared to households which do not consume tobacco (reduction of expenditure on fruits, vegetables, grains, pulses, education, transportation and fuel are significant at a 5% level). These goods have nutrition and family welfare implications. Generally, trends are more pronounced in urban settings. Also, poorer quintiles tended to spend a greater proportion of their budget on tobacco (3.6% poorest quintile, 2.7% richest quintile). X2 tests led to rejection of the separability between tobacco and most other goods, meaning that tobacco consumers have different preferences and behave differently than non-tobacco consumers. The preliminary conditional demand model confirms many of the trends in the descriptive statistics, namely that vegetable and education spending shares are adversely impacted by tobacco consumption. Initial analysis demonstrates that tobacco taxation is progressive, highlighting potential equity implications to increases of tobacco taxation.

**Interpretation:** There is evidence to suggest that tobacco spending crowds-out the consumption of goods, such as vegetables and education. In particular, poor households and those living in urban areas are most vulnerable. Key policy implications arise regarding the importance of tobacco control measures, such as taxation.

Funding: None.

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## Improving access to education for South African children who attend school with a tracheostomy

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**Program/Project Purpose:** The Greys Hospital Tracheostomy Home Care Service (THCS) in Pietermaritzburg, South Africa was started in 2006 with the aim of allowing children with tracheostomies to be cared for by their families at home. The THCS is only the second such program in South Africa and has discharged over 40 children to trained parents and/or care-givers. As children within the THCS program continue to do well outside of the hospital setting they have begun to attend school. This study, which took place between June and August 2014, is the first study in South Africa to document the school experience of children with tracheostomies and determine whether mainstream public schools are able to accommodate them and how the schools could be made safer and more accessible.

Structure/Method/Design: The four patients that are currently attending school with a tracheostomy were identified from the patient records of a tertiary hospital with a pediatric tracheostomy home based care service. With the aid of a Zulu language translator, the mothers and classroom teachers completed an interview and questionnaire in their home and school respectively.

**Outcomes & Evaluation:** The key teacher identified barriers to enrollment were: teacher unfamiliarity with tracheostomies and uncertainty about the school's liability and the response of other children. The safety barriers identified were: the children have limited vocalization ability yet attend schools with greater than 60 children per classroom, pit latrines are separate from the school, and sandy classrooms can block the tracheostomy. Identified needs for successful school placement include providing tracheostomy tubes and suctioning equipment, and training teachers in how to identify respiratory distress, and perform emergency tracheostomy changes and CPR.

**Going Forward:** Children with tracheostomies can and are currently attending South African mainstream public schools but a training program for teachers is needed. As a first step, an introductory booklet for teachers that explains tracheostomies and provides educational.

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## Pilot program of newborn screening for sickle cell disease in angola- Angola Sickle Cell Initiative (ASCI)

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**Program/Project Purpose:** Why the program/project is in place, in one or two sentences: To reduce morbidity and mortality of children with sickle cell anemia in Angola Aim: to collaborate on a comprehensive sickle cell initiative to provide screening, diagnosis, care, treatment, health professional training, research, and community mobilization in order to contribute to improved care of children with sickle cell disease in Angola.

Structure/Method/Design: Program/Project Goals, Desired Outcomes - The program trained Angolan laboratory personnel and set up screening laboratories in Luanda (2011) and Cabinda (2012) provinces. We have enrolled 16 birth and health centers in Cabinda and Luanda provinces to collect samples from newborns for testing using isoelectric focusing (IEF). A plan for universal screening of newborns in a small province will be developed. Participants and Stakeholders: How were they selected, recruited? An estimated 12,000 babies are born annually with Sickle Cell Disease (SCD) in Angola alone. Without treatment, most of these babies die before five years of age. Early diagnosis through newborn screening followed by care and treatment including daily penicillin reduces mortality. In March 2011, the Republic of Angola entered into a public-private partnership with Chevron Corporation and Texas Children's Hospital/Baylor College of Medicine to pilot a comprehensive newborn screening and treatment program (Angola Sickle Cell Initiative). Capacity Building / Sustainability: What is the plan, structure in place to encourage viability? Gradual transfer of financial responsibility to public health service, engagement of the Angolan population, and establishment of a formal training programs for health care providers.

Outcomes & Evaluation: To date, what are the successes and outcomes achieved? The program has screened more 85,000 newborns. Of these, 1488 (1.7%) were diagnosed with SCD. An earlier evaluation showed that only 54 percent of affected babies could be located and enrolled in treatment. ASCI has also trained hundred of health care providers. Monitoring & Evaluation Results (if conducted).

Going Forward: What are the ongoing challenges? Failure to locate a significant number of babies affected by sickle cell anemia, limited Ministry of health resources due to competing health priorities. Are there any unmet goals? We have not achieved full transition to Ministry of Health control or diversified our funding source. How are/may future program activities change as a result? Establishment of Advisory group consisting of all stakeholders including affected