Creciendo Sanos (“Growing Up Healthy”): An early childhood health and development program in southwest Guatemala

G.J. Domek1, M. Cunningham1, C. Luna-Asturias1, M. Abdel-Maksoud2, D. Dunn3, S. Berman1; 1University of Colorado School of Medicine, Aurora, CO/US, 2Colorado School of Public Health, Aurora, CO/US, 3Center for Global Health, Colorado School of Public Health, Aurora, CO/US

Program/Project Purpose: The first three years of a child’s life are a critical period for brain growth and development with significant consequences for long-term future functioning. The importance of integrated interventions to improve early childhood health and development is widely recognized at an international level with the potential to enhance a child’s physical growth, socio-emotional and cognitive development, and the overall economic productivity of a society. Creciendo Sanos (“Growing Up Healthy”) is an integrated Early Childhood Health and Development Program that was specifically designed for use in southwest Guatemala since 2013. The program combines a series of neonatal home visits, mother-child interactive care groups, and community education sessions to enhance the health and development of children from 0-3 years of age.

Structure/Method/Design: The Trifinio area is an impoverished region with a population of approximately 25,000 inhabitants in the coastal lowlands of southwestern Guatemala. Creciendo Sanos participants include workers and the families of workers of a local private sector agricultural corporation. The program has three components: (1) Three Neonatal Home Visits made by community health workers (CHWs) to examine neonates and screen for maternal depression; (2) A series of four Group Health Visits (at 6, 12, 24, and 36 months of age) given by CHWs to educate caregivers on age-appropriate anticipatory guidance and perform growth monitoring/promotion and developmental screening; (3) Monthly mother-child interactive Care Groups from 2 months — 3 years of age that use participatory learning to promote responsive parenting techniques, provide peer support for mothers, reinforce caregiver knowledge of health topics, and perform growth monitoring/promotion.

Outcomes & Evaluation: Creciendo Sanos utilizes a mobile phone data collection system using the platform Open Data Kit (ODK). Information is collected by CHWs and then transmitted electronically through the ODK database and imported into a SAS statistical database for analysis. This system will facilitate an overall program evaluation with targeted and timely programmatic responses and rapid cycle feedback. The program evaluation will rely on time series comparisons of registry data from baseline when the program begins to changes in child health outcomes at regular intervals. We will assess program inputs, i.e. Neonatal Home Visits and participation in both Group Health Visits and Care Groups. Developmental screening tools (ASQ, MacArthur Communicative Development Inventory) will be included as indicators for child development, and parent behavior scores (HOME Inventory) will be used to assess exposure to development-promoting behaviors.

Going Forward: Creciendo Sanos is in an early implementation phase. We currently have ~150 children enrolled. Ongoing challenges include turnover and training of CHWs and designing a cluster randomized pragmatic effectiveness trial.

Funding: Seed funding has been provided by the Jose F. Bolaños Foundation in Guatemala City for a five year period.

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72hr patient follow-up as a metric for measuring outcomes and quality of emergency care provided in resource-limited settings: An outcomes study from a rural Ugandan district hospital’s emergency department

B. Dreifuss1, U. Periyayanayagam1, S. Chamberlain1, S.W. Nelson1, H. Hammerstedt1, J. Kamugisha6, M. Bisanzo1; 1University of Arizona

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