The SCOPE Program: Improving the Care of Children With Special Healthcare Needs Through Medical Education

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BACKGROUND
Through medical advances in pediatrics there is an increasing population of children with special healthcare needs (CSHCN). These children are estimated to account for 15% of the pediatric population and 70% of healthcare expenditures. Challenges in their care include lack of physician training, continuity, and high health care costs. All contribute to low patient and family satisfaction. The Stanford Care Optimization for Patients and Education (SCOPE) Program was designed to improve these key areas.

SPECIFIC AIMS
This study creates, implements and analyzes the effectiveness and impact of a curricular innovation in Graduate Medical Education that targets CSHCN. The aims of the SCOPE Program are both learner-centered and patient-centered:

- To determine the feasibility and acceptance of an innovative pilot on pediatric complex care
- To improve pre/post intervention survey scores on resident attitudes, knowledge, and behaviors with regard to CSHCN by 20% and in comparison to controls.
- To improve participating patient and family pre/post intervention satisfaction scores about their care by 20%

PROGRAM DESIGN AND METHODS

Study Design: Prospective randomized clinical trial conducted between March 2012-June 2012.

Study Population: Pediatric residents at LPCH from all PGY levels can opt-in to the SCOPE program. Recruitment consists of an interactive hour-long presentation and weekly email reminders encouraging participation in the program.

Patient Inclusion Criteria:
- Age between 0-18 years
- Care provided by 2 or more pediatric or surgical specialists
- One ICU admission and/or 2 hospitalizations in the past 12 months
- Complicated psychosocial situation
- Reliance on durable medical equipment

Patient Exclusion Criteria:
- Living outside of San Francisco, San Mateo, or Santa Clara Counties
- Family unwilling to give consent, meet contractual obligations or complete surveys

Randomization: Residents are grouped according to PGY level and then randomized to either early or late intervention groups. The early group will participate in the curriculum (n=10) and the late group (n=10) will serve as controls and participate in the curriculum in the following round.

OUTCOMES

SCOPE Toolkit and Survey Analysis
Curricular Centered Aims
Patient Centered Aims
Learner Centered Aims
Feasibility and Acceptance
Satisfaction
Attitudes, Knowledge and Behaviors

- Pre/post intervention anonymous surveys will be distributed to residents and patient’s families
- Results will be analyzed by student paired T-test

BENEFITS

- Introduces an innovative strategy to improve graduate medical education on chronic disease
- Studies an educational pilot in a rigorous way looking at curricular, learner and patient centered outcomes
- Provides evidence-based results on how best to educate adult learners on complex care
- Enables learners and patients to benefit from continuity throughout their healthcare transitions
- Provides a model for education across the healthcare continuum to include medical students, community practice physicians and advance practice nurses

FUTURE DIRECTIONS

The SCOPE Program will be expanded at LPCH to include:

Participants:
- Increased number of residents and families benefiting from the program
- Expansion to include mentors from pediatric subspecialties

Curriculum:
- Learning objectives for participating families
- Resident research projects
- Community resource listings
- Program quality improvements