**Population Health Global Community Partnership**

The UMass Medical School has partnered with the Good Samaritan Mission Organization in La Romana, Dominican Republic, for the last nine years, to participate in a medical mission collaborative that includes an annual spring trip with nursing and medical students. The intent of this population health clerkship focuses on addressing previously collected data and the formulation of an approach for meeting the local needs of the community through more sustainable systems and interventions.

**Project Goals**

- Conduct a survey and key informant interview with current partners and past participants about roles, missions and sustainability with the target population
- Analyze data collected from household surveys conducted in the adopted batey communities
- Creation of a toolkit for future community engagement assessments

**Learning Objectives**

- Understand social determinants of health and identify specific examples relevant to the community
- Learn how to engage community partners in the assessment of sustainability for the medical mission collaboration for this population
- Develop a step-wise evidence-based approach to community assessment in the Dominican Republic

**Relevant Factors for Population of Focus**

**Discussion of Various Dominican Batey Partners**

- UMass Students & Preceptors, Good Samaritan Mission partners, batey community
- Epidemiology
  - Communicable diseases: Chikera, Chikungunya, Hepatitis, HIV, TB, STIs, URTIs
  - Non-communicable diseases: diabetes, hypertension, fever, maternal-child health, infant mortality, skin infections, stomach pain
- Social Determinants
  - Citizenship status, location, insurance, occupational environment, racial/cultural bias, gender (male vs. female)
- Societal Manifestations & Implications
  - Short-term medical mission trips: “Duffle Bag” Medicine vs. sustainable batey community

**Key Advocacy Organizations for Interprofessional Collaboration**

- Peace Care: Dominican Republic-a partnership between Peace Corps, DR, the community of Guaymate and two US universities to build local health capacity
- Hospital de Buen Samaritano: established to help batey workers; hires and trains health promoters in the bateys
- Hospital Municipal de Guaymate: Serves approximately 33,000 patients a year with a budget of US$7,000/month; 3% of these services are Haitian batey workers with documentation issues
- SBG Grader: A Spanish NGO that works with small community enterprises, the JMODs youth group and Hospital Guaymate
- Central Romana, Hospital Salud Publico, Hospital Seguro Social

**Population Health Clerkship 2015, Dominican Republic Team**

**Past Participant and Key Informant Needs**

**Literature Search**

- Standardized tools and surveys used for the evaluation of short-term medical mission trips were reviewed with items modified to fit our specific population.
- Items included questions related to the experience involving roles, goals, motivation, expectations, and impact from the pre-trip preparation, medical mission week, and post trip to find common trends.
- Survey items were also brainstormed with faculty and student leaders to create questions aligned with the survey goal.

**Methodology**

- The survey and key informant interview needs assessment included previous participants (students, preceptors, partners) from U Mass Dominican Republic communities.
- Survey items were converted into a variety of question forms using the software Survey Monkey and were sent to preceptors and students N=172 using saved participant lists from previous years.
- As an incentive for taking the survey, a $25 gift certificate raffle entry was relevant to this community.
- Analysis of data included use of the Survey Monkey software with open ended responses coded using content analysis.

**Preliminary Findings:**

- Post Participant Survey (n=33 respondents)
  - “Changes to make the trip more impactful?”
    - Majority Response: Sustainability/Continuity of Care
  - “Changes to increase involvement in future trips?”
    - Reduced Cost/Travel Barriers
  - “Most valued aspect of the trip?”
    - Learning/Development of Clinical Skills

**Additional Findings:**

- (> 7 respondents, Theme & Subthemes)
  - Collaboration
  - Goals
  - Needs Recognition
  - in-depth focus on identified problems for future trips
  - Modification and improvement of Survey Tools
  - Needs Recognition and in-depth focus on identified problems for future trips
  - Additional mission trips with modified and improved tool kits

**Household Survey Data**

**Methods**

- Surveys were conducted on three different bateyes to determine basic health needs.
  - 1/3 of the houses on each batey were randomly chosen and surveyed
  - Surveys were conducted with a medical and nursing student interviewer and interpreter
  - Data was collected and analyzed to understand the legal status of all individuals on the batey

**Preliminary Findings**

- 47 surveys, including 146 individuals were conducted
  - Patient data analyzed including gender, age, and legal status
  - Legal status was recorded as: no papers, Haitian passport or Haitian birth certificate, Dominican birth certificate, Cedula, other and unknown.
  - Over 50% of the individuals did not have legal papers. Approximately 25% had only a Haitian passport or birth certificate (which does not grant them legal status as a worker).
  - Males and females had similar data results.
  - More children (44.6%) had Dominican birth certificates compared to adults (20.4%).
  - Many of the children (33.6%) had no papers.

**Guiding Principles of Short Term International Health Trips**

**Creation of a mission statement**

- Partnership and collaboration with NGOs, government agency, or other local organization
- Education for ourselves, the community, and our peers
- Service through data collection, targeted interventions, and implementation of sustainable clinical care
- Teamwork through the involvement of a diverse variety of specialists
- Sustainability through a demonstrated commitment to an ongoing relationship while working within existing systems of care

**Summary of Future Directions**

**Past Participant Surveys and Key Informant Interviews**

- Continue to collect past participant surveys and utilize survey results to guide key informant interviews
- Broaden our key informant interview population to include our partners at Buen Samaritano in the La Romana area
- Encourage our partners to include in their reports
- Encourage our partners to include in their reports
- Develop a five year plan using the identified areas of strengths and weaknesses

**Community Assessment**

- Implementation of Survey Questionnaire during future DR mission trips (March 2016)
- Analyze basic health needs through collected data
- Understand next steps going forward to address the needs of the bateys
- Address limitations in data collection including cultural and resource barriers
- Reflect on quality of questions and significance of data
- Modification and improvement of Survey Tools
- Needs Recognition and in-depth focus on identified problems for future trips
- Additional mission trips with modified and improved tool kits

**Data Management**

- Previous survey assessments have emphasized the need for increased usability for data collection and better standardization and rigor for data retrieval and analysis. Future solutions include:
  - Implementing more selectable answers for interview questions (i.e. drop down bars or radio buttons)
  - Lightweight software that can be used on mobile devices and increase accessibility
  - Data storage in a format that is readily accessible for analysis

**References**

7. U.S. Centers for Disease Control and Prevention. *Community Health Assessment for Population Health Improvement: Resource of Most Frequently Recommended Health Outcomes and Determinants, Atlanta, GA: Office of Surveillance, Epidemiology, and Laboratory Services, 2013.*

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