Systematic Review of Hospital Language Service Delivery  
PI: Melody Schiaffino, PhD, MPH  
Proposal for Student Trainee

Background and Methods

The U.S. population that speaks a language other than English continues to grow significantly. Approximately 1 in every 5 people, or 21% of the population over 5 years old speaks another language in addition to English according to a 2011 estimate. According to the same analysis, 42% of this group speak English less than very well, the definition of limited English proficiency or LEP. This language diversity is beneficial in many ways, but can be a barrier when capacity to speak English is limited. In particular, LEP persons seeking health services can experience exacerbated health disparities attributable to being a minority.

Evidence supports the idea that language services can help mitigate these disparities and contribute to improved quality and outcomes for LEP patients as well as facilitate cost-savings for hospitals by reducing preventable errors and utilization. In addition, though 2001 law mandated the provision of language services to hospital patients, the response by hospitals has been fragmented and disorganized for patients seeking care in a language they understand. National estimates indicate that fewer than 2 of every 3 hospitals in the U.S. offer language services in any capacity and that quality is widely distributed.

One of the reasons for poor quality is the lack of a conclusive definition of language services. While some basic assumptions are made for research in terms of written and verbal language services, they are not consistently applied. This systematic review aims to use an evidence-based approach to systematically review the literature and propose a definition of language services that can help improve measurement and provision of language services as well as the current state of delivery. A systematic review is not just a common literature review, it can be considered a quantitative, systematic approach to analyzing and synergizing research evidence using established methods to obtain a definitive understanding of the state of a research area.

This project is relevant to a wider research area related to understanding the role of hospital structures and processes of care in the quality of care among vulnerable populations, specifically populations that experience language barriers.

Training Program

The proposed trainees would undergo methods training in systematic reviews as well as database management and logic modelling. Using iterative methods to search for and review literature, the trainee will understand the critical evaluation of literature using gold-standard approaches used by the Cochrane Library of systematic reviews as well as the Critical Appraisal Skills Programme (CASP) methodology for systematic reviews.
Knowledge, skills, and abilities to be improved include systematic literature reviews, writing, and poster presentation and preparation in addition to public speaking and research networking. Additional support in finding additional fellowship opportunities to support promising research scholarship would be a part of mentorship.

In addition to the training they will receive in systematic literature review students will learn basic data management and analysis using existing survey data from a hospital survey related to organizational leadership and cultural competence. Each student will develop their own project and research questions based on their review of the literature and either focus on one of two areas: either organizational cultural competence, or cultural competence and patient outcomes.

**Budget**

<table>
<thead>
<tr>
<th>Item and Justification</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Mplus and EndNote Software (student license)</td>
<td>300.00</td>
</tr>
<tr>
<td>Books and evaluation materials</td>
<td>500.00</td>
</tr>
<tr>
<td>Printing and office support (paper, other materials for student to conduct review)</td>
<td>200.00</td>
</tr>
<tr>
<td>Travel/Registration/Poster</td>
<td>1000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2000.00</strong></td>
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</tbody>
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**Dissemination**

The trainees have submitted abstracts for a poster for presentation at the SDSU Student Research Symposium. Additional opportunities to present in lectures to benefit and improve trainee’s colleague’s skills would be considered. Travel to a conference will be sought so that students can attend and potentially present at an additional research conference.

**Additional materials requested 10/26/2015**

Photos attached, Kiana Spencer is the female student and William Spears is male.

Blurb:

I selected Williams Spears and Kiana Spencer as my research assistants in the Fall of 2014 with no prior research experience. William was in the public health program and Kiana was a Kinesiology/Psychology dual major. With the URP funds I was able to provide both students with an introduction to research methodology including the design and conduct of a systematic review of the literature as well as descriptive data methodology to describe a sample of data. Through the systematic literature review they learned how to identify and analyze valuable literature as it relates to a stated research question. They learned how to use Boolean terms to aid their searches and developed quantitative decision-analysis charts to categorize their searches. In the descriptive analysis they learned how to create tables and frequencies to understand the distribution of their data and how a survey becomes information that we can turn into knowledge. Both William and Kiana presented the findings of their respective analyses at the Student Research Symposium held at SDSU in the spring of 2015 thanks to URP support. With the URP funds, Kiana was also able to attend a conference in northern California to learn more about graduate programs.
William’s hard work supported his efforts to graduate, which he did successfully in May 2015. He is currently an analyst at the Food and Drug Administration in Washington, D.C.