Addressing Language Barriers at Hospital Discharge of Non-English Speaking Patients
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Aim of project
The aim of this project is to improve the quality of Internal Medicine hospital discharge instructions that are provided for patients designated as Spanish speaking only, and to assess the influence of language on rates of 30 day readmission and ED visits.

Background of project
The University Hospital provides the majority of high level care for individuals across the state, many of whom only speak Spanish. This demographic offers a unique opportunity to study and improve the management of Spanish speaking patients. There is currently no translation service available to ensure hospital discharge instructions are written in the patients’ native language.

Planned interventions tested
A Spanish discharge instructions template already existed in the Electronic Medical Record of the University Hospital (UNMH), however this was out of date and difficult to understand. In September 2013 the template was updated and reviewed along with the latest English discharge instructions in order to ensure proper instructions were delivered to Spanish speaking patients. Because there is no translation services available, non-Spanish speaking medical staff continue to write discharge instructions in English for Spanish speaking patients.

Prediction of Results &/or Intended Results
We hypothesize that providing patients with the new updated discharge instructions in their preferred language will result in decreased 30 day readmission rates and a better understanding of both medical diagnoses and required medications.

Baseline Data:
Prior to the new discharge instructions template:

- 30% of Spanish-speaking patients were given discharge instructions in Spanish and 70% received English discharge instructions.
- Spanish speaking patients have a nearly 23% readmission rate, compared to a baseline of 9% for all UNMH patients combined.
- Furthermore, Spanish speaking patients are more likely to require re-evaluation in the Emergency Department (ED) (17%).

Results
New data was reevaluated and it was decided to analyze June to December 2013 on Spanish-speaking-only patients to compare before and after the implementation of the new discharge instructions template which was uploaded on September 9, 2013. Prior to this date, 52 encounters were evaluated. It was determined that the 30 day readmission rate was 23% and the 30 day ED visit was 17%. After implementation of the new discharge instructions, there were 0% 30 day readmission rate and 20% 30 day ED visits from 10 total encounters.

<table>
<thead>
<tr>
<th></th>
<th>Prior to new template</th>
<th>After new template</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encounters</td>
<td>52</td>
<td>10</td>
</tr>
<tr>
<td>30 day readmission</td>
<td>12 (23%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>30 day ED visit</td>
<td>9 (17%)</td>
<td>2 (20%)</td>
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</tbody>
</table>
Summary of results

Even though there was a decrease in the percentage of 30 day readmission rates after the implementation of the new discharge instructions, we feel that further data is needed to make this more statistically significant since there were only 10 encounters in Spanish-speaking-only patients available for analysis from the selected months.

Discussion

Improving the quality of discharge materials and addressing language inequity in health care delivery is likely to decrease post-hospitalization ED visits and 30-day readmission rates. The Spanish-speaking population utilizes a significant share of health care resources and has a greater percentage of individuals living below the poverty line compared to English speaking patients. As a result, this population is considerably more likely to be effected by language disparities. By not providing discharge instructions in a patient’s native language, the ability of that individual to manage their own post-hospitalization health care needs is greatly impaired. It is our assertion that expansion of interpretive services to include translation assistance would likely benefit both providers and patients.

Conclusions

Addressing the needs of non-English speakers is a challenge across all health care systems. Inadequate information on medications and diagnoses at the time of discharge can result in misunderstandings, inadequate or inappropriate medication use, and poor follow up. The inevitable result is poor disease management, increased use of the ED and re-admissions to the hospital. All aspects of care should be optimized to minimize these outcomes and to ensure basic understanding of medical information. Because of the small number of Spanish-speaking patients admitted after introduction of the improved Spanish discharge template, further analysis of the data is required. Through this project, it is our hope that, further advances in addressing language barriers will ultimately provide better quality of health to non-English speakers.