Background

- Patients with Limited English Proficiency often get suboptimal medical care, and have worse health outcomes than their English speaking counterparts. Specifically, they have been shown to have:
  - Worse understanding of their illness, discharge appointments, medications, and instructions 1-3
  - Decreased satisfaction with quality of discharge instructions 4
  - Longer hospital lengths of stay and higher readmission rates 5
- In New York City, there is a robust legal framework (local, state, and national) for providing care in a patient’s preferred language
- However, while access to interpreters has improved, utilization has remained inconsistent

Problem: At Montefiore Medical Center (a large urban academic medical center in the Bronx, NY), there is a disparity in 30-day HF readmission rates between patients whose preferred language is Spanish vs English (21.6% vs 18.5%, respectively, from 2016-2017).

Smart Aim

To utilize in-person interpreting services at the time of hospital discharge to reduce the HF 30-day all-cause readmission rate by 25% for Spanish speaking patients with HF, from 26.4% (11/2017-4/2018) to 19.8% (11/2018-4/2019).

Project Plan

- Stakeholder focus group convened to design workflow bringing interpreters to bedside at time of discharge
  - Stakeholder identification
    - HF readmissions reduction program
  - Hospital leadership support and commitment
  - Spanish (+ interpreter)
  - Spanish
  - Nov-18
  - Cardiology
  - Stakeholder identification
  - HF readmissions reduction program
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  - Spanish
  - Nov-18
  - Cardiology

Results

Outcomes

Fig 1: 30 Day Heart Failure readmission rates, November-April, 2017-2019

- Pre-intervention
- Post-intervention
- Nov-17-Dec-17
- Jan-18-Feb-18
- Mar-18-Apr-18
- Nov-18-Dec-18
- Jan-19-Feb-19
- Mar-19-Apr-19

Fig 2: 30-day readmission rate for Spanish speaking patients with HF, 11/2018-4/2019

- In-person interpreter used
- In-person interpreter not used
- English
- Spanish

Fig 3: 30-day readmission rate for Spanish speaking patients with HF, 11/2018-4/2019

- In-person interpreter used
- In-person interpreter not used
- English
- Spanish

Fig 4: Post-discharge appointment attendance

- In-person interpreter used
- In-person interpreter not used
- English
- Spanish
- Spanish (+ interpreter)

Discussion

- Readmission rates decreased for Spanish speaking patients during our intervention period
- We found no difference in readmission rates for Spanish-speaking patients that were and were not provided services of in-person interpreter
- This difference was possibly due to emphasis placed on language disparity (via emails/presentations), creating a ‘Hawthorne effect’, with potentially increased usage of in-person interpreters to bedside at time of discharge to patients with heart failure

Limitations and Lessons Learned

- Preferred language and in-person interpreter services documentation in EMR is imperfect
- Potential for latent confounding from other social factors (housing/food insecurity, social isolation, etc)
- Follow-up appointments outside of hospital network unable to be tracked
- Aligning stakeholder interests is critical for success for interdisciplinary teams

References