Quality Improvement Project: Patient and Provider Satisfaction Differences Between Live and iPad Interpretation Services in an Outpatient Office Setting

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Background

- Adequate interpretation services pose a large barrier to quality health care access.
- Title VI of the Civil Rights Act mandates that interpreter services be provided for patients with limited English proficiency[1].
- Language barriers have led to less use of preventative care resources, leading to poor health outcomes[2].
- Studies demonstrate that variety in interpretation or lack of interpretation has led to decreased communication, with live interpretation as a subset that is effective at conveying medical information and nonverbal cues[3,4,5].

Problem Statement

Appropriate interpretation services play an important role in outcomes and use of health resources, which we aim to measure by both patient and provider satisfaction scores of interpretation methods offered at our hospital to target interventions.

Methods

- At Lehigh Valley Hospital Physician Specialty Practice (LVPP Specialty) there are three options for medical interpretation
  1. live certified medical interpreter
  2. iPad Stratus Video remote interpreting (VRI) program
  3. ad hoc interpreters when patients refuse available options.
- A pilot study was implemented at the Rheumatology fellow's clinic to demonstrate patient and provider satisfaction comparing VRI to live interpretation services.
- Surveys were provided to assess satisfaction scores for both the patient and the provider. A Likert scale for response categories was utilized with 4 indicating "very dissatisfied" and 1 being "very satisfied".

Results

<u>Survey Data</u>

- 51 total visits for both patient and provider surveys for each visit were included
  - 10 live interpreter surveys
  - 41 iPad interpreter surveys
- Live visits included were often completed following failed VRI technology, adding to the length of the visit.
- No statistical significance was found for length of visit between the two interpretation services using the Independent Samples T-Test.
  - Type of patient encounter was not included in length of visit analysis, for example new patient visit vs. return patient visit
  - Mean length of visit for live interpretation was 71.7 minutes and mean length of visit for iPad interpretation was 65.3 minutes.
- Likert scale responses to survey questions were analyzed using the Mann-Whitney Test.
- There was a **statistically significant difference** in provider satisfaction for both Question 1 and Question 2 between iPad vs. live interpretation services ($p<0.0005$).
- There was **no statistical difference** found for Patient Question 1 between iPad and live interpretation services ($p=0.133$) .

<u>Meaningful Comments</u>

- Provider comments:
  - "could have seen another patient in the time it took to translate over the iPad"
  - "live interpreters are needed especially in clinics where patients have complicated diseases and treatments"
- Patient Comments:
  - "feel the iPad interpreter didn't understand neither Dr or patient and feels the interpreter didn't explain well"

Discussion

- Our results indicate that live interpretation leads to greater satisfaction for patient communication on behalf of the provider.
- Pilot results also demonstrate the need to edit questions for future implementation of surveys to ensure patient's understanding of satisfaction ratings solely on interpretation services.
- Future expansion currently underway in the Gastroenterology and Cardiology Departments, as well more to other outpatient specialty clinics will hopefully support the need for access to appropriate, live interpretation services.
- Comments are evidence that there is a need to increase the availability of the live interpreters so that body language cues and subtle nuances otherwise lost over iPad's can be communicated in the visit.

Conclusions

- Ensuring clear communication directly translates to better understanding of disease, adherence to physician recommendations, and prevention of adverse events.
- The results were presented at a budget meeting in January 2020 advocating for the expansion of medical interpreters. The result of this presentation was the approved proposal of an additional trained medical interpreter for 16 hours a week for the specialty office.

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