Background

- Medical Interpretation Services (MIS) is the evidence-based gold standard recommendation for communication with patients with limited English proficiency (LEP).
- Literature shows that when MIS is utilized, there is an increase in preventive measures; patient adherence with medication & management plans; patient understanding of disease processes; patient perception of autonomy; and increased dignity within their health journey.
- Supreme Court of Canada mandates American Sign Language (ASL) used for any patients who are hearing impaired.
- Currently, in-person interpreters are utilized, ranging from trained medical professionals to ad-hoc interpreters, such as family members, bystanders and children. Ad-hoc interpreters increase risk of adverse outcomes by failing to interpret accurately, violating patient confidentiality and triggering trauma. ASL is typically not available through ad-hoc interpretation.
- Trained in-person interpreters are costly & pose availability concerns; however, remote MIS via digital platforms, such as video and phone, are available on-demand and significantly more affordable (Figure 3).
- Cost of remote MIS is covered by the provincial health authority, Alberta Health Services, however it is not consistently utilized across the province. Phone Remote Interpretation (PRI) is the AHS recommendation for most clinical situations due to availability and cost, followed by Video Remote Interpretation (VRI) and lastly, in-person interpretation (PI). PRI was banned as the COVID-19 pandemic began, leaving only remote MIS tools as viable options for interpretation.

Method

- The Model for Improvement provided the quality improvement framework to support our project.
- The Donabedian conceptual evaluation framework guided the development of the study measurement approach to determine intervention effect.
- This project estimates the enactment of multiple PDSA (Plan, Do, Study, Act) cycles once the MIS activation process is initiated.

Preliminary Results

- Table 1: Identified Gaps

<table>
<thead>
<tr>
<th>Technology Asset</th>
<th>Emergency/Department</th>
<th>Urgent General Internal Medicine</th>
<th>Internal Medicine Ambulatory Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Asset 1</td>
<td>Limited access to video-based MIS</td>
<td>Limited access to telephone based clinical assessment</td>
<td>Limited access to video-based MIS</td>
</tr>
<tr>
<td>Technology Asset 2</td>
<td>Limited access to telephone based clinical assessment</td>
<td>Limited access to video-based MIS</td>
<td>Limited access to telephone based clinical assessment</td>
</tr>
<tr>
<td>Technology Asset 3</td>
<td>Limited access to video-based MIS</td>
<td>Limited access to telephone based clinical assessment</td>
<td>Limited access to video-based MIS</td>
</tr>
</tbody>
</table>

- Table 2: Proposed Future State

<table>
<thead>
<tr>
<th>Technology Asset</th>
<th>Emergency/Department</th>
<th>Urgent General Internal Medicine</th>
<th>Internal Medicine Ambulatory Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Asset 1</td>
<td>Full video-based MIS</td>
<td>Video-based telephone clinician</td>
<td>Video-based telephone clinician</td>
</tr>
<tr>
<td>Technology Asset 2</td>
<td>Video-based telephone clinician</td>
<td>Video-based telephone clinician</td>
<td>Video-based telephone clinician</td>
</tr>
<tr>
<td>Technology Asset 3</td>
<td>Video-based telephone clinician</td>
<td>Video-based telephone clinician</td>
<td>Video-based telephone clinician</td>
</tr>
</tbody>
</table>

- Figure 4: MIS Usage in ED from March to September 2020

- Figure 5: MIS Usage in ED from March to September 2020

- Figure 6: MIS Usage in ED from March to September 2020

- Figure 7: Top 10 Languages in ED

- Table 3: MIS Usage in ED

- Figure 8: Top 10 Languages in ED

Multi-Faceted QI Interventions

PDSA 1

- Introduction of Interpreter-on-Whel (IOW) at ED: March 25, 2020

PDSA 2

- MIS Educational Sessions: June 30, 2020

PDSA 3

- GIM Clinic: November 1, 2020

References