Video-recording of clinical visits:

Impact on the Patient Experience & HCAHPS Scores

E-Poster #: 1627

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DISCLOSURES

• Dr. Randall W. Porter is the Founder of The Medical Memory, the Video-Recording platform used in this study.
INTRODUCTION

• Patient experience and outcomes are all dependent on patient recall, health literacy, and compliance. Breakdowns and barriers can worsen patient experience and outcomes.

• Anxiety inducing clinical visits create difficulty in understanding and processing information, leading to poor compliance.

• Video-Recording of Clinical visits (VRoC) can enhance the patient experience with improved physician-patient communication.

• Videos allow patients to review and process medical information and share with caregivers, family, and friends.

• This study evaluates the impact of outpatient VRoC on the patient experience using Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey top box percentile rankings.
METHODS: VRoC

• **Video-Recording of Clinic Visits (VRoC)**
  • Adopted by four neurosurgeons
  • HIPAA compliant and secure
  • Tablets in each clinic room with video-recording platform installed
  • Healthcare provider can hit record and begin the visit as usual
    • Capture conversation, and record different aspects of the visit: imaging, lab reports, demonstrations
  • Patients access the videos from a patient portal.
  • Share video links to family, friends, and caregivers
METHODS: HCAHPS & Patient Experience

• HCAHPS reports by physician obtained from Press Ganey for each year from June 2016 – May 2019.
  • “Communication with Doctors” is the composite category composed of 3 questions
    • Physician-patient relationship and communication
    • “About You” questions for patient demographics information
  • Top Box Percentile Rank for each question, composite category, and overall HCAHPS survey determined by percentage of patients who answer “Always.”
METHODS: Neurosurgeon Participation

• Neurosurgeons from a single clinical group, operating at this hospital
  • Greater than ten HCAHPS surveys per year

• 2 cohorts:
  • VRoC Users: physicians utilizing VRoC for at least 40% of completed appointments in Year 3 (June 2018-May 2019)
  • Non-Users: infrequent or no VRoC use

• VRoC determined from video reports from video-recording platform and number of completed appointments for each neurosurgeon

18 Neurosurgeons
Single Clinic and Hospital

6 VRoC Users
1 in 2008
3 joined in 2014
1 joined in 2016
1 joined in 2017

12 Non-Users
11 in 2016
2 joined in 2017
1 retired in 2017
RESULTS: VRoC Use

- Mean appointment load was not significantly different between VRoC-users and Non-users ($P = 0.12, 0.15, 0.12$ for each year)
- VRoC-users saw 42% of all appointments

<table>
<thead>
<tr>
<th>June 2016 – May 2019</th>
<th>VRoC Videos</th>
<th>Appointments</th>
<th>%</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (n = 18)</td>
<td>14,956</td>
<td>53,967</td>
<td>27.7</td>
<td></td>
</tr>
<tr>
<td>VRoC Users (n = 6)</td>
<td>14,512</td>
<td>22,759</td>
<td>63.8</td>
<td>19% - 100%</td>
</tr>
<tr>
<td>Non-Users (n = 12)</td>
<td>444</td>
<td>31,208</td>
<td>1.4</td>
<td>0% - 13%</td>
</tr>
</tbody>
</table>

- Patients viewed over 37% ($\pm 6\%$) of their VRoC videos over 3 years
  - Likely preoperative appointments with surgery-related information
  - Preoperative appointments accounted for 10% to 43% of appointments for all studied neurosurgeons
- Videos are viewed on average over 8.1x
- Patients shared over 46% and watched 1.7x
# RESULTS: VRoC & HCAHPS Scores

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<tr>
<td><strong>Total</strong></td>
<td>2,897</td>
<td></td>
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<tr>
<td><strong>Non-Users (N = 12)</strong></td>
<td>1,631 (56.3%)</td>
<td>59&lt;sup&gt;th&lt;/sup&gt;</td>
<td>62&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>63&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>9&lt;sup&gt;th&lt;/sup&gt; – 99&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>VRoC Users (N = 6)</strong></td>
<td>1,266 (43.7%)</td>
<td>85&lt;sup&gt;th&lt;/sup&gt;</td>
<td>73&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>89&lt;sup&gt;th&lt;/sup&gt;</td>
<td>33&lt;sup&gt;rd&lt;/sup&gt; – 99&lt;sup&gt;th&lt;/sup&gt;</td>
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DISCUSSION

• Increased use of VRoC associated with consistently higher HCAHPS top box percentile ranks
  • Patients of VRoC-users perceived communication with their doctors to be a better experience
• 10-43% of scheduled appointments have surgery, an important factor in reviewing clinic videos
  • 37% of watched videos likely had important preoperative information and answers to patients’ important questions
    • Evident in the average of 8.1 times those videos are re-watched, with 46% shared with family and caregivers
• 6 VRoC Users make up 1/3 of entire study group, but account for over 42% of all appointments and almost half of total HCAHPS surveys
  • Better patient experience leads to better business performance and patient outcomes
  • Patients return to the physicians they trust and who treat them with empathy
  • VRoC offers patient and family engagement, education, and shared decision-making
  • Revisit and clarify information and review treatment goals so that patient can be an equal partner in their healthcare
SUMMARY POINTS

• Promoting success in physician-patient relationships and communication will continue to be a challenge for generations

• Use of VRoC shows a consistently improving and higher group HCAHPS Top Box Percentile Ranks compared to Non-Users

• By understanding the patterns of care, and the differences seen in medical admissions versus admission for elective surgeries, we can better understand the patient experience and use it to show the impact of VRoC use in a neurosurgery clinic where most other factors affecting HCAHPS scores remain constant.

• Patients and family have the opportunity to better understand their personal health care

• Enhancing the patient and family experience with VRoC can improve patient health outcomes