Project Objective

- The objective of the inter-regional (Kaiser Permanente Southern California and Northwest) HomePal study is to conduct a pragmatic, cluster, randomized comparative effectiveness trial of two home-based palliative care (HBPC) models (standard vs. tech-supported) for patients with serious illness (n~10,000) and their caregivers (n~5000) with the following primary outcomes: patient symptom management, days at home and caregiver preparedness.

- We hypothesize that tech-supported HBPC will demonstrate similar outcomes as standard HBPC. The HomePal study directly contributes to Kaiser Permanente’s Shared Agenda and Dignified Journeys priority.

Purpose

- The purpose of this abstract is to describe early learnings from implementation of video consults in HBPC.

Process

- The standard HBPC model includes routine home visits by registered nurses (RNs) and prescribing clinicians (MDs, DOs and NPs) whereas the tech-supported model aims to optimize timely inter-professional team coordination, efficiency, access, and care experience by using video consultation with the prescribing clinician while the RN is in the patient’s home.

- This approach obviates the need for patients/family caregivers to have access to technology and enhances care equity.

- RNs who were randomized to tech-supported HBPC were trained with prescribing clinicians on how to use the enterprise-wide, secure video tools for the 4-way communication (patients/family/caregiver-RN-clinician).

- HBPC teams determine the appropriateness and timing of video consults based on patients’ clinical needs.

Results

- The HomePal study launched on January 2019 after a full year of preparatory work. The two critical aspects of implementation for this non-inferiority trial are that of maintaining fidelity to treatment arms and maintaining equipoise.

- Ensuring that HBPC teams are reliably completing video consultations has been a challenge. A common reason is variable readiness and comfort across team members with using video technology in patient care, coordination and scheduling of video consults between RNs and clinicians, and multiple challenges with RN staffing including cross-coverage, attrition, and leaves of absence.

- Maintaining equipoise between the two study arms has also been challenging, as early clinician adopters of video consultations recognize the potential efficiencies of utilizing video visits with their growing caseloads and are eager to expand use of video visits beyond the tech-supported RNs.

Key HomePal Implementation Challenges

- **Achieve Enrollment Targets:** Patient and caregiver completion of ESAS and preparedness surveys

- **Maintain Equipoise:** while encouraging teams to make liberal use of video visits with tech-supported HBPC

- **Maintain Fidelity:** Minimize cross-contamination, reliable implementation of video visits

HomePal Study & Operational Success

- **Scheduling-coordination**
- **RN capacity**
- **MD capacity**
- **MD readiness**
- **RN readiness**
- **Slow start-up**
- **Lack of understanding of project goals**
- **Signal quality**
- **Audio (hard of hearing)**
- **Phone screen too small**

Video Visits Implementation Barriers

<table>
<thead>
<tr>
<th>Reasons</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling-coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>RN capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD readiness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN readiness</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow start-up</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of understanding</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signal quality</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio (hard of hearing)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone screen too small</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Video Visits Implementation: Mitigation Efforts

- **Scheduling-coordination**
  - Research RNs looped in on new admissions
  - Workforce refinement for 5 sites
  - Proactive planning with site leadership for medical leave coverage when RNs
  - Weekly staffing assessments to mitigate impact
  - Rapid training of new/replacement RNs

- **MD capacity**
  - Working with physician chiefs to strategize on MD schedules/availability
  - Educating on project goals and flexibility: encourage use at all visits to balance workload

- **RN/MD Readiness**
  - Video visits counted in productivity metrics
  - Public audit and feedback reports at site level

- **Slow start-up**
  - Re-education/onsite on goals of HomePal
  - Research RNs doing joint home visits to help troubleshoot challenges w/video visits

- **Signal quality**
  - Pilot KP2Go device to add strong wifi
  - Trained RNs to only use if at least 3 bars to reduce frustrating failed attempts

“Did my first video visit today!! Wow. I am in love with the technology even though it is not perfect yet!!” – Doctor

“It is comforting to see the doctor’s face” – Family caregiver

“I love it. I love seeing your beautiful face doctor, but please come visit me again.” – Patient

Maintaining Equipoise

- **Internal Health System**
  - Importance of addressing technology to reassure care quality or is it a given that future is all about technology integration?
  - CMMI will pay for measure patient encounters to foster health agencies adoption of telemedicine

- **Market Pressures**
  - Greater efficiencies expected of all providers given projected lower revenues from Medicare in future

- **Regulatory/Payment**
  - Policy and practice could get ahead of the evidence
  - What helpful insights can study provide?

Conclusions

- Optimizing collaboration between the HBPC program leaders and care teams, in combination with a shared understanding of the need to conduct a rigorous evaluation of video consults are critical factors in implementing multiple mitigation strategies to help maintain fidelity and equipoise over the next 2.5 years.