Prairie Heart Institute (PHI) is the largest cardiac center in Illinois and the flagship institute for Hospital Sisters Health System, a 15-hospital system serving patients in Illinois and Wisconsin. PHI identified several challenges in its transition to value based care, including variability in protocols, gaps in patient education materials, lack of real-time monitoring for patient compliance, and increased cost due to higher than expected length of stay, readmissions and discharge to skilled nursing facilities (SNF).

**Key Results:**

- **45% Readmissions**
- **64% Discharge to SNF**
- **1 Day Length of Stay**
- Epic EHR integration
- Rollout to Cardiac Surgery & Cardiac Electrophysiology

"SeamlessMD has been an incredible partner in helping us leverage digital patient engagement technology to deliver Cardiac ERAS, improve the patient experience, reduce length of stay and lower readmissions. Their seamless Epic integration also made it easy to fit in our clinical workflow."

Amy Durako
Nurse Practitioner,
Prairie Cardiovascular
Cardiothoracic Surgery
Prairie Heart Institute

PHI partnered with SeamlessMD to create a Virtual, Cardiac Surgical Home that would standardize care delivery, improve outcomes and lower costs.

Cardiac surgery patients accessed SeamlessMD on their smartphones, tablets or computers, providing them with:

- Cardiac Enhanced Recovery After Surgery (ERAS) reminders, tasks and education
- Interactive pre- and post-op surveys to track symptoms and protocol compliance
- Intelligent algorithms to flag patient issues and automatically provide feedback on how to self-manage care

**A Technology-Driven Solution Adopted by the Entire Interdisciplinary Care Team**
SeamlessMD Enables Care Team to Reduce LOS, Readmissions & SNF Use

Through SeamlessMD dashboards, the nursing team received alerts and patient responses so they could rapidly intervene for patients with low protocol compliance (e.g. patients not performing incentive spirometry). This accelerated patient recovery and helped to **reduce length of stay**.

After patient discharge, the nursing team continued to monitor alerts and patient responses through SeamlessMD, enabling them to monitor symptoms (e.g. pain scores, incision photos) and reach out to patients to **prevent readmissions**.

Furthermore, when they learned they could stay connected with the PHI care team through SeamlessMD at home, patients had more confidence being discharged to their homes instead of a skilled nursing facility (SNF).

An evaluation of the program demonstrated reductions in LOS, readmissions and discharge to SNF:

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>SeamlessMD</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>118</td>
<td>115</td>
<td>--</td>
</tr>
<tr>
<td>Length of stay (days)</td>
<td>7.8</td>
<td>6.8</td>
<td>↓13%</td>
</tr>
<tr>
<td>30-day readmission rate</td>
<td>11%</td>
<td>6%</td>
<td>↓45%</td>
</tr>
<tr>
<td>Discharge to Skilled Nursing Facility (SNF)</td>
<td>28%</td>
<td>10%</td>
<td>↓64%</td>
</tr>
</tbody>
</table>

**Epic EHR integration**

To streamline the workflow for providers, the IT department at Hospital Sisters Health System (HSHS) integrated SeamlessMD with its Epic EHR using the new SMART® on FHIR® protocol. This was a simple and straightforward process for HSHS IT as SeamlessMD was already approved by Epic as an integration partner and available on Epic’s App Orchard.

**Expansion to Cardiac Electrophysiology**

Given the success in using SeamlessMD for Cardiac Surgery, PHI then implemented SeamlessMD for its Cardiac Electrophysiology (EP) program (e.g. pacemakers, ICDs, etc.). The Cardiac EP implementation has been very successful, with 84% of device patients successfully sending incision photos to providers via SeamlessMD, thereby reducing unnecessary in-person follow up visits.