On-demand virtual coverage: The Providence Telehospitalist program

Providence St. Joseph Health (PSJH) is a national Catholic not-for-profit health system comprised of 119,000 caregivers, offering a comprehensive range of services across Alaska, California, Montana, New Mexico, Oregon, Texas, and Washington in their 51 hospitals, extensive network of clinics, and in the communities they serve.

PSJH has a long history of pioneering innovation and are now in a new frontier — a changing healthcare landscape in which success will be characterized by new models of care delivery, partnerships, and the ability to reach beyond geographic limitations.

In support of this new healthcare frontier, PSJH views telehealth technology as essential to treating patients across an expanding landscape where new locations and modes of care are becoming the norm. The PSJH Telehealth vision is to make phenomenal care simple, accessible, and affordable for everyone in the U.S.

THE CHALLENGE

Many hospitals have traditionally used one of two staffing models to manage their inpatients and new admissions at night:

1. Coverage by an on-call physician from home, either admitting the patient unseen or making an overnight trip to the hospital

2. In-house coverage by a nocturnist physician

These staffing models can be inefficient and are often not cost-effective. Care can be variable based on whether the physician makes a diagnosis by phone, comes into the hospital, or puts the patient on holding orders until morning. On-call models can result in delayed treatment and contribute to clinician burnout, as well as financial losses in first day revenue by the facility.

Nighttime coverage is vital to patient outcomes, nursing satisfaction, and the financial performance of the organization. Many hospitals see more than 60% of ED patients between the hours of 7:00pm and midnight. Even when a hospitalist is physically present in-house at night, hospitals can often struggle to match their staffing to fluctuations in demand and prevent a backlog of admissions waiting for the daytime team.

“When you wake up an on-call doctor in the middle of the night you may get some backlash. But the Telehospitalists are great - you know they are there and awake.”

- MSN, NP, Telehospitalist Partner Site
PSJH designed the Telehospitalist program to ensure quality care, patient safety, and to meet the needs of local care teams. A key part of this design is the use of nurse Telepresenters, who act as an essential part of the Telehospitalist service by facilitating (not interpreting) the encounter, helping to ensure patient comprehension and consent if needed, and acting as the remote physician's "hands on the patient."

PSJH offers Telepresenter training and certification for local nursing staff as part of the service. This training not only supports the Telehospitalist service, but enhances local staff's skills, experience, and job satisfaction. The PSJH Telehospitalist program also utilizes a bi-directional portal to assist with triage, communication, and workflow. To further drive quality assurance, PSJH established a Quality Committee and provider case reviews specific to the program.

PSJH feels strongly that the connecting technology should be the least of a clinician’s worries when providing patient care. To support the Telehospitalist program, PSJH needed a technology solution with:

- Network reliability
- Bi-directional audio/video to see the patient and build the relationship between provider and local care team
- Compatibility with peripherals
- Ease of use for clinicians on both ends

Coverage by a Telehospitalist effectively and efficiently provides real-time inpatient admissions, consultations, and cross coverage overnight, partnering closely with local teams to care for patients. The program helps to remove stress for nurses in determining whether to call and potentially wake up a local physician for questions or minor interventions throughout the night. Telehospitalists provide patient management, orders, and documentation directly in the site’s EMR.

“The Telehospitalist provider who was on call did everything I would have done. Now I can stay in the ED.”

- MD, Telehospitalist Partner Site

PSJH chose InTouch Health due to the strength of its network, familiarity and proven experience using InTouch Health solutions in other service lines, and scalable cost structure across multiple service lines.

THE SOLUTION

PSJH created a nighttime 7:00pm–7:00am Telehospitalist program in 2014, which now covers 6 facilities across three states. PSJH found Telehospitalist coverage addresses these challenges, assessing and treating patients quickly, consistently, and improving patient and organizational outcomes.

Local care providers leverage telehealth technology to better inform remote providers and assist treatment.
THE RESULTS

PSJH’s Telehospitalist program sites had positive outcomes for all Key Performance Indicators (KPIs):

| Access                      | • Increase timeliness of care  
|                            | • Keep patients within local community when appropriate |
| Quality                    | • Equivalent or improved outcomes as onsite care |
| Experience                 | • Support onsite clinical teams, reduce burnout  
|                            | • Increase patient and staff satisfaction |
| Cost of Care               | • Match staffing to demand, reduce locums use  
|                            | • Increase first day of service revenue capture |

Access and Timeliness of Care:

<table>
<thead>
<tr>
<th></th>
<th>Pre-Launch (Local Providers)</th>
<th>Post-Launch (Telehospitalist Providers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients presenting 15:00-23:00 who were admitted before 12am</td>
<td>Average time to see patient</td>
<td>Patients presenting 15:00-23:00 who were admitted before 12am</td>
</tr>
</tbody>
</table>
| **Partner 1**  
CAH, MT               | 21%                          | 10:13                                 | 84%                          | 0:52 |
| **Partner 2**  
CAH, OR               | 90%                          | 6:06                                  | 94%                          | 1:08 |
| **Partner 3**  
CAH, OR               | 51%                          | 7:06                                  | 88%                          | 2:12 |

In a study over two years at a single partner site assessing pre-launch baseline against results after implementation of Telehospitalist coverage, PSJH found:

- Substantial increase in inpatient census and CMI
- Increase in ADC, total acute days, CMI, and average net inpatient revenue per acute day
- Comparable readmission rate, O/E mortality, and patient experience scores, despite increased inpatient CMI
- Significant increase in same-day admissions and first day revenue capture
- 84% pre-midnight admission rate (among patients arriving in ED prior to midnight), a 59% improvement in patients admitted prior to midnight vs. pre-launch
- Increase in pre-midnight admissions is associated with an additional ~$547K improvement in first-day revenue capture

Telehospitalist coverage has the ability to evolve into additional use cases and applications in supporting quality and timely care, throughput, staff satisfaction, and reduced locums use across a variety of care settings.

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