El Camino Hospital initially used ALOS as a measure but found it to be too high-level, generic, and delayed to be useful. Team members needed a different metric and wanted the data to show it in a consumable way. Their solution was to create a new, customized way to conceptualize LOS, which they called “days stayed.” This measure looks at total days consumed or used, then focuses on the high-utilization patients responsible for long stays (Figure 2).

"Days stayed" - All payers, Inpatients on units 2C, 3AC, 3AP, 3B, 3C, 4A, 4B
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Pivot Table (3)

	Patient Count	Sum of Patient Days Used	Average LOS
LOS			
Grand Total	117	639	5
LOS 20 + days	6	183	31
LOS 7 to 19 days	23	230	10
LOS < 7 days	88	226	3

Figure 2. Sample “Days stayed” summary report

This new way of understanding and visualizing data via “Days stayed” enabled El Camino Hospital to track patients who were deemed dischargeable but who were still in the hospital. They then moved these patients into a virtual SNF (VSNF), which allowed them to track two LOS measurements: one with all patients and another with the VSNF patients excluded. This separation enabled the team to focus LOS improvement efforts to specific patient sets. For example, the data revealed that patients staying longer than 19 days accounted for 42 percent of the total “Days stayed.” Focusing on those more complex patients and their specific barriers to discharge allowed the team to make a significant impact on overall LOS.

3. Operational Patient-Centered Efforts

El Camino Hospital created and followed a thoughtful and thorough action plan as it strove to implement a patient-centered initiative for optimizing LOS. The key actions and systemic process changes that contributed to the success of the LOS reduction program (summarized in Figure 3) included:

- **Making the right resources available.** Ensuring that patients were discharged from the hospital in a safe and timely manner hinged on addressing their clinical, social, and financial needs. El Camino Hospital leveraged data to increase awareness and

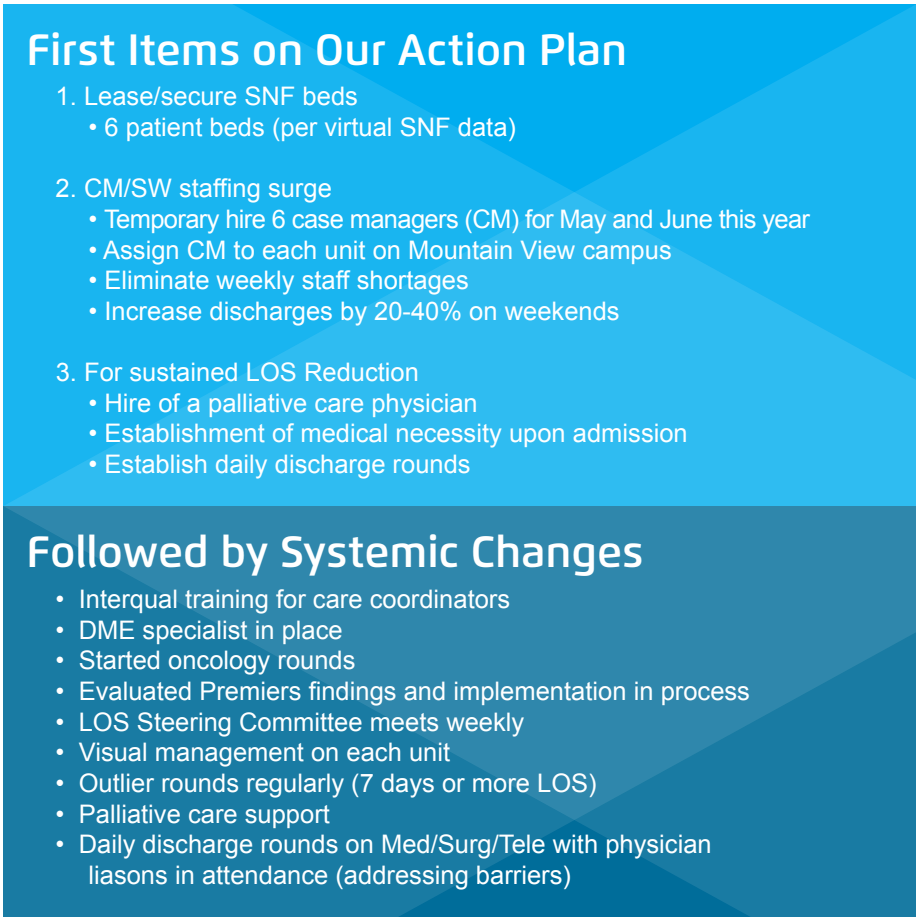

Figure 3. LOS reduction initiative key actions and systemic process changes

to procure funding for additional resources, including expanded nurse care coordinator coverage and additional case managers in the emergency department (ED). The increased coverage of shifts in the acute units to handle late discharges helped to get patients home without having to stay an extra night. The extra resources also allowed for medical necessity reviews on every patient, every day, something which had not occurred previously.

El Camino Hospital also expanded its social work discharge planning support and added clerks to arrange for durable medical equipment (DME) and placement support. The clerks act on orders received from the care coordinator RNs, saving time and effort for the coordinators. This increased efficiency has translated to more time spent with patients addressing their discharge needs, including end-of-life conversations and help with advanced directives, and involving the patient and family in planning and decision-making.

> An effective multi-disciplinary care team is required to support and manage patients post-discharge in order to prevent readmission.
>
> Margaret Wilmer
> Director of Integrated Care
> ECH

- **Starting discharge planning at admission.** El Camino Hospital recognized that LOS could only be managed by addressing the patient's journey through the system from admission to discharge into the community. The hospital developed pathways of care that include the inpatient care process, the discharge plan process, and establishing an estimated date of discharge as early as possible. Follow-up with the patient after discharge is now standard.

  El Camino Hospital tapped into its process improvement and Lean experts to support the effort of developing and implementing standard processes and work and to understand and optimize the patient flow up to and including discharge. These experts helped develop standardized processes and workflows for each member of the discharge rounds team.

- **Implementing multidisciplinary care coordination rounds.** El Camino Hospital implemented daily multidisciplinary care coordination rounds on six initial units, with a focus on Medicare and oncology patients. Patients identified as high risk of a prolonged LOS were further assessed during twice-weekly "outlier rounds" by a multidisciplinary team to address each patient's barriers to discharge and unique support needs after discharge. The daily and weekly "outlier rounds" required multidisciplinary coordination and included project nurse leadership as well as the nurse managing the unit and the patient's nurse, care coordinator, pharmacist, social worker, and attending physician.

  Three physicians (each a hospitalist) also supported the LOS team in these efforts, taking a collaborative approach to working with the attending physicians. Rather than trying to tell attending physicians how to care for their patients, their primary goal was to assist attending physicians in realizing the best possible outcome for each individual patient by asking what they could do to help and what could be delegated to them.

  Physician-to-physician communication and collaboration were key to changes in practice. Physicians were educated about the initiative and its purpose during weekly grand rounds. In these rounds, common discharge problems were identified, and the solutions and approaches that had worked for other physicians were shared.

- **Communicating and coordinating across the continuum of care to prevent readmissions.** El Camino Hospital recognized that communication is key to success and necessary across internal teams to ensure care transitions are

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> Medical Director
> Utilization Management
> ECH

smooth and complete across the continuum. It is also critical between provider and patients and their families for the most effective outpatient care adherence. Under the new initiative, an integrative clinical care team follows up after discharge with patients who are at high risk for readmission whether they go to a SNF, ECF, or their own home.

INNOVATIVE INITIATIVE REDUCES ALOS, DECREASES COSTS, AND EVEN REDUCES READMISSIONS

Not only did El Camino Hospital exceed its ALOS reduction target, but it also achieved reductions in readmissions and demonstrated that reducing unnecessary days in the hospital is directly correlated with reducing HACs and patient safety indicators (PSIs). These improvements in quality and outcomes also resulted in significant cost savings. In addition, El Camino Hospital has improved bed capacity and throughput as a result of the initiative and is better managing expenses such as supplies and staffing.

Improvements in key metrics have included:

- 7.8 percent reduction in ALOS
  - ALOS improved from a baseline of 5.24 days to 4.83 days
- 14.8 percent reduction in readmissions
  - Readmissions declined from a baseline of 12.2 percent to 10.4 percent
- 55 percent reduction in HACs
  - HACs improved from 11 during the baseline measurement period to 5 during the improvement measurement period.
- 32 percent reduction in incidence of AHRQ PSIs
  - Potential adverse events fell from 2.08 per thousand during the baseline measurement period to 1.41 per thousand during the improvement measurement period (using the AHRQ PSI methodology).
- $2.2 million projected annual cost savings
  - Savings realized from reduction in LOS, HACs, hospitalizations, and ED visits

El Camino Hospital is proud of the teamwork and collaboration that drove these improved patient, financial, and operational outcomes. Leaders emphasize the importance of focusing on a patient-centered approach for a better patient experience. They attribute

> You cannot understand a patient's real needs without entering their hospital room and carefully assessing them. This direct assessment is essential.
>
> Michelle Pezzani, MD
> Medical Director
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the initiative's success to aligned goals, to access to actionable data—and particularly to the dedicated work of a cross-functional, multidisciplinary team that engaged the staff, the patients, families, and the community in its work.

WHAT'S NEXT

The groundwork of the initial LOS reduction program has set the stage for future enhancements, including:

- Incorporating palliative care services
- Adding geriatric psychiatry into the program to address emotional and social needs and aid in making decisions about end-of-life care and quality of life
- Exploring new technology to better monitor patients at home

The LOS reduction team will remain in place so that the initiative remains a leadership priority. The team continuously monitors processes and measures to sustain the progress they have made. Meanwhile, their focus on expanding access to timely and reliable data continues.

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