

# Cedars-Sinai Health System

A Hospital Partnering with Skilled Nursing Facilities & Home Health Agencies to Prevent Hospital Readmissions

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## Our Results

By engaging in robust performance improvement, Cedars-Sinai Health System identified interventions that reduced 30-day readmissions for SNF & Home Health patients by more than 50%.

	Discharged to SNF	Home with Home Health
<b>Baseline</b> 30-day readmission rate	<b>25%</b>	<b>14%</b>
<b>Pilot Period</b> 30-day readmission rate	<b>11%</b>	<b>7%</b>



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## Objectives

- Describe how rigorous home health services can prevent readmissions for patients discharged home.
- Explain the methodology utilized by a nurse practitioner to partner with private physicians to reduce readmissions for patients discharged to local skilled nursing facilities.
- Discuss the challenges for implementing a nurse practitioner-driven program across various facilities.

## Cedars-Sinai Health System



Largest private, not-for-profit medical center in the Western United States, with 923 beds

- 10,000 employees
- 2,000 physicians on its medical staff
- Consistently named one of America's Best Hospitals by *U.S. News & World Report*, with 12 specialties nationally ranked in 2012
- Cedars-Sinai Medical Group repeatedly ranked one of California's top performing physician organizations for highest overall quality by the Integrated Healthcare Association



## Los Angeles market for SNFs & Home Health Agencies



There are over 60 independently owned Skilled Nursing Facilities & over 700 Home Health Agencies that operate within Cedars-Sinai's Primary Service Area.

## The Problem


The Cedars-Sinai 30-day all-cause readmissions rate for SNF & Home Health patients was higher than the average for all UHC hospitals.

All-Cause 30-day readmission rate  
July 2010 – June 2011

	Discharged to SNF	Home with Home Health
Cedars-Sinai	20.2%	18.3%
All UHC Hospitals (Average)	17.8%	17.1%

## Project Charge

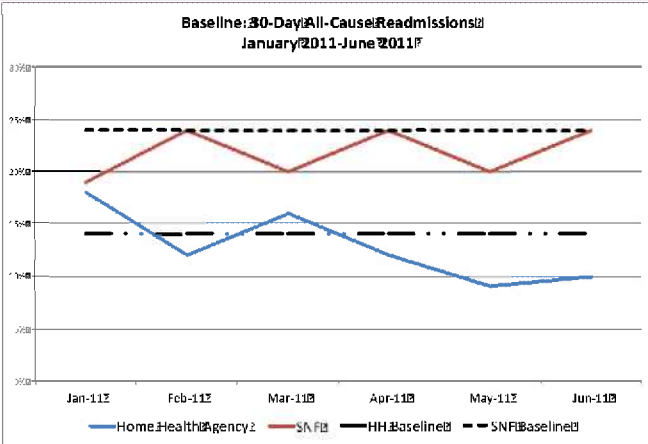
<b>Focus</b>	SNF Patients and Home Health Patients
<b>Metric</b>	30-day all-cause readmissions to CSMC
<b>Target</b>	50% reduction
<b>By When</b>	June 2012


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## Understanding our Baseline

Six months of facility/agency specific data was analyzed to capture a baseline readmissions rate.

**Baseline: 30-Day All-Cause Readmissions**  
January 2011-June 2011



Month	Home Health Agency 2 (Solid Blue)	SNF (Solid Red)	HH Baseline (Dotted Black)	SNF Baseline (Dashed Black)
Jan-11	~1800	~2000	~1400	~2400
Feb-11	~1300	~2500	~1400	~2400
Mar-11	~1600	~2000	~1400	~2400
Apr-11	~1400	~2400	~1400	~2400
May-11	~1100	~2000	~1400	~2400
Jun-11	~1200	~2400	~1400	~2400


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## Root Causes for SNF Readmissions

A chart review of 150 SNF patients revealed recurring factors that likely contributed to preventable readmission within 30 days.

- Infrequent visits by a physician or advanced practice nurse
- Patient not seen by physician within first week of discharge
- SNF nursing staff unable to communicate with physician when needed
- Patient/Family not communicating Red Flags to SNF staff
- Lack of clinical oversight on weekends
- Medication Management/Reconciliation between hospital and SNF
- Patients at end of life without an Advance Directive/POLST completed

## SNF Intervention: Enhanced Care Program



Pilot 1: October/November 2011

Pilot 2: January/February 2012

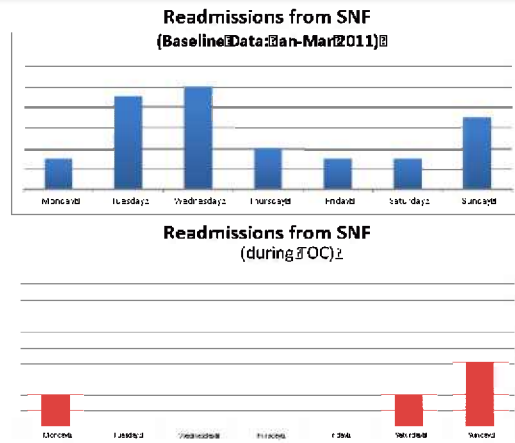
A Nurse Practitioner followed 115 CSMC patients in the SNF.

- They saw the patient in the hospital
- They saw the patient in the SNF 24 hours after discharge
- They saw the patient 1-2 times per week in the SNF
- When they saw something, they said something...  
(to the patient's MD, the SNF staff & to the family)



## Cycle I: October/November 2011

The first pilot demonstrated a 60% reduction in 30-day readmissions. During these two months, readmissions occurred mostly on weekends, when Nurse Practitioners were not working.



## Cycle II: January/February 2012

The second pilot, in which NP coverage was extended to include weekends, yielded a 50% reduction in 30-day readmissions. During this iteration, the NPs prevented 13 likely readmissions.

### 13 Potential readmissions **averted** by Nurse Practitioner

- Duplicate Medication Administration averted (Warfarin)
- Patient's family's concerns alleviated (2 different patients)
- Patient's medication concerns addressed
- Weekend contact with MD with lab results & Rx dosage issues
- Patient code status changed to DNR/DNI, patient expired in SNF
- POLST form completed in SNF- patient expired in SNF

## Results

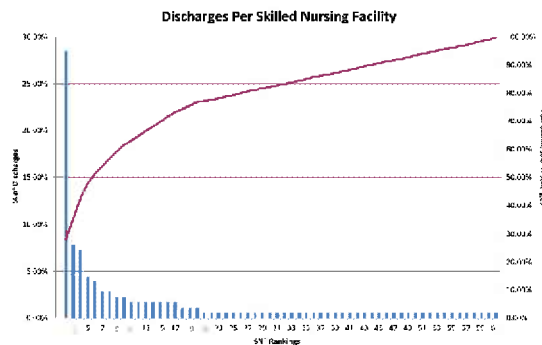
This intervention, tested twice, has demonstrated a statistically significant reduction in 30-day all-cause readmissions.

	n	30-day All-Cause Readmission Rate
<b>Baseline Data:</b> (Jan- Mar 2011)	<b>150</b>	<b>25%</b>
<b>Test of Change I</b> (Oct-Nov 2011)	<b>48</b>	<b>10%</b>
<b>Test of Change II</b> (Jan-Feb 2012)	<b>67</b>	<b>12%</b>

## Spreading Intervention to other SNFs

During the next year, Cedars-Sinai is spreading this intervention to six Skilled Nursing Facilities that see over 50% of SNF discharges.

# of SNFs	6	10	15	20	25	30	45
% Volume	52%	62%	70%	77%			



## Root Causes for Home Health Readmissions

A chart review of 45 Home Health patients revealed recurring factors that likely contributed to preventable readmission within 30 days.

- Patients & families often turn away Home Health agencies after hospital discharge
- Inconsistency in frequency of home visits post-discharge
- 45% of readmissions occurred on a Saturday or Sunday
- Patient/Family not communicating Red Flags to Home Health agency
- Medication Management/Reconciliation
- Physicians not responsive when Home Health Agencies have questions/concerns

## Cycle I: Enhanced Home Health



<b>WHO</b>	All CSMC Discharges to a high volume Home Health agency
<b>WHAT</b>	In-hospital visit by nurse + 6 touch-points after discharge <ul style="list-style-type: none"> <li>• Home visit within 48 hours of discharge</li> <li>• Friday "Tuck-in" Phone call</li> <li>• Weekend Visits</li> <li>• Medication Reconciliation</li> <li>• 24-hour call number staffed by a nurse</li> </ul>
<b>WHEN</b>	November 1 – 30, 2011
<b>WHY</b>	To determine if more rigorous home health services can prevent readmissions. (Baseline = 19% readmit rate)



## Enhanced Home Health

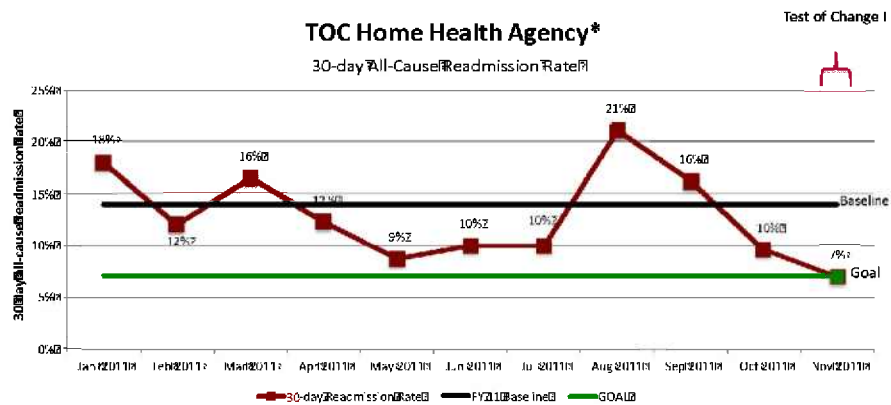
Only 6.8% of the 59 TOC patients were readmitted within 30 days of discharge. This rate is less than 50% of the baseline rate observed during FY 2011.

Patient Population	Time Frame	% Readmitted (All-Cause)
CSMC discharges home with Home Health (any agency)	Jul 2010 -Jun 2011	19%
CSMC discharges home with TOC Home Health Agency*	Jul 2010 -Jun 2011	14%
<b>Test of Change (n=59 patients)</b>	November 2011	<b>6.8%</b>

\* The agency selected for the Test of Change had the highest proportion of Home Health referrals from Cedars-Sinai Medical Center .

## Trends: 30-day Readmissions

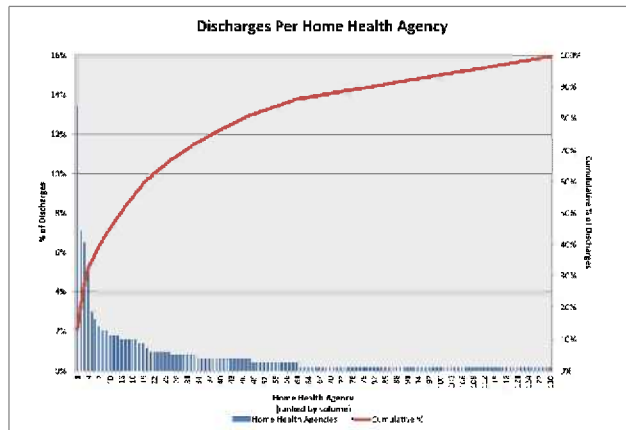
The 30-day readmission rate during the TOC (6.8%) was 50% less than the FY 2011 baseline rate (14%).



\* The agency selected for the Test of Change had the highest proportion of Home Health referrals from Cedars-Sinai Medical Center .

## Spreading Intervention to other Home Health Agencies

Cedars-Sinai spread this intervention to three additional high-volume Home Health Agencies to determine if it would be successful when spread.



## Enhanced Home Health Pilot

**Four** high volume Home Health agencies tested the 'Enhanced Home Health' bundle during a 6-week period in February & March 2012.  
**A total of 396 patients** were enrolled.

Home Health Agency	BASELINE % 30-day Readmissions Feb 2011- Jan 2012	TEST OF CHANGE % 30-day Readmissions Feb 15- Mar 31 2012	# enrolled in TOC Feb 15- Mar 31 2012
Agency I	12.7%	10.3%	121
Agency II	12.1%	7.8%	103
Agency III	14.7%	11.8%	110
Agency IV	17.3%	6.4%	62

**35%  
Reduction**



## Conclusions

- Readmissions can be prevented when hospitals take the lead to collaborate with partner agencies in the community.
- Intervening during the 14 days following hospital discharge is crucial for preventing avoidable readmissions.
- Clinical resources in the community (SNF, Home Health) need to be bolstered on weekends.
- Involvement & leadership from Primary MD are key in executing improvements related to readmissions.