CLINICAL VIGNETTE

Implementing the Discharge Pilot Program at UCLA

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The road to cost containment and value-based health care in the United States is well underway. An annual trillion dollar bill for health care is not sustainable and there is clear evidence that our health outcomes are the same or worse than many of our first world industrialized peer's whose net health budget expenditure is significantly lower[1]. A key focus of quality and cost containment is reducing readmissions back to the hospital particularly for our vulnerable and medically complex patients[2]. This demographic is fairly typical of the population we serve at both Ronald Reagan UCLA Medical Center and UCLA Santa Monica Medical Center and Orthopedic Hospital. In this clinical commentary we outline a program that has contributed to reducing readmissions by improving both the dissemination and timeliness of critical medical information at care transition from inpatient to outpatient settings.

The Discharge Pilot Program was an initiative designed to improve communication between Hospitalists (both residents and attendings) and Outpatient Physicians in an effort to significantly improve the quality of care we deliver to our patients. The goals of the program are to[1]: Complete discharge summaries by 24 hours of the patient's discharge (goal > 92%)[2], Fax the discharge summaries to all physicians involved in the patient's follow-up care by 2 business days (goal > 80%), and[3] Improve the content of the discharge summaries, specifically involving pending studies, needed outpatient workup, and medication changes[3].

Background

We recently published *The Spotlight on Readmissions—Communication at the Transition of Care*[4], which reviews the need for a national refocus on readmissions. The Discharge Pilot Program targeted one of the important pillars of improving readmissions: timely, accurate communication during transitions of care from the hospital.

Timely and accurate communication at this transition may improve readmission rates. Patients are often discharged with pending blood culture[6] and other tests[7], of which a substantial number are not followed-up. Finally, discharge summaries are often missing key information (Box 2)[8] and are not received by primary care physicians in a clinically relevant timeframe.

Methods

To test the feasibility of the project initially, attending physicians caring for patients without house staff at Santa Monica UCLA and Orthopedic Hospital were asked to participate. The pilot was to initially demonstrate compliance by attending physicians, which could then be used to encourage the resident physicians to achieve these same goals. A lecture was provided to all Hospitalists explaining the nature of the project, as well as a laminated note card with the necessary discharge summary components. Weekly lunchtime meetings were held at Santa Monica UCLA Medical Center and Orthopedic Hospital for the Hospitalist physicians to discuss the project, receive feedback, and incorporate new ideas. The meetings also allowed open discussion of hospital-specific issues, possible solutions to these issues, and information dissemination. All patients on the non-teaching Hospitalist service at Santa Monica UCLA Medical Center and Orthopedic Hospital were included. Patients were excluded if they were on a teaching service or if there were no follow-up physicians listed on their discharge summary. On the day of discharge, the patient's billing card was submitted to support staff indicating that a discharge had occurred. The Hospitalist administrative support staff collected the billing cards and faxed the completed discharge summaries and feedback form to all physicians listed in the follow-up section. The date of discharge and the date/time of the completed and signed discharge summary were tracked. Weekend discharges included all patients discharged on a Friday, Saturday, or Sunday, and thus the support staff had until Tuesday to complete the faxing to follow up providers.

Results

For the time period of 1/16/2010 to 4/11/2010, 141 patients were included. The average time from

patient discharge to completion of the discharge summary was 0.19 days. The average time from completion to faxing of the discharge summary was 1.18 days. The average time from patient discharge to faxing the discharge summary was 1.37 days. 97% of discharge summaries were completed within 24 hours of discharge, with 82% of discharge summaries being faxed within 48 hours of discharge (86% within 2 business days of discharge).

We received feedback from 39 follow-up providers, as shown in Table 1.

This proof of concept analysis showed that nearly all discharge summaries were completed and faxed to the physicians providing follow-up care in a timely manner. All initial goals were exceeded. Feedback from the physicians providing follow-up care was overwhelmingly positive. Hospitalist participation in the pilot was excellent, with a 97% 24-hour discharge summary completion rate.

Discharge Pilot Program Expansion

Given the success of the pilot, the project was expanded to include all patients discharged from the Hospitalist service at Santa Monica UCLA and Orthopedic Hospital. This meant that patients cared for by house staff would be included, and house staff would be responsible for the timely completion of discharge summaries. The expansion also significantly increased work for the Hospitalist support staff.

An incentive program for the house staff was also initiated, which provided $50 gift cards to the house staff team with the fastest discharge summary completion time (Incentive Structure #1). There were 3 housestaff teams, each with 2 residents. Since the residents cross-covered for each other when they had days off, this provided incentive to complete the discharge summaries for any patients discharged during the off days.

The pilot expanded to include house staff patients on July 1, 2010. House staff received the same lecture and laminated note card as the attendings. House staff also received reminder emails at the start of their rotation explaining the pilot and incentive program, and emails with the results of the pilot for each 4-week rotation. Additional hospitalist administrative support staff was added to handle the new load, and continued to collect the data on the completion times. Discharge summaries continued to be faxed to all follow-up providers listed on the discharge summary, but the time to fax was no longer a recorded measure as the support staff was extremely successful with this.

On January 2011, the incentive structure was changed (Incentive Structure #2) to account for resident teams not always being together for the full 4-week rotation. Thus, the top two performing residents would receive the $50 incentive, regardless of which team they were on. Given the continued success of the program, the incentive was increased (Incentive Structure #3) on September 2011. Now all residents could receive the $50 gift card if by the end of their 4-week rotation, their percent of discharge summaries completed within 24 hours of discharge was 92% or greater. The results of the discharge pilot program expansion at Santa Monica UCLA and Orthopedic Hospital is highlighted in table 2.

The discharge pilot program was expanded to include all patients discharged from the medicine wards teams at Ronald Reagan UCLA Medical Center. Additional support staff was added and now included both interns and residents. Monthly emails were sent to the entire house staff explaining the program and identifying the house staff that received the incentive. The Chief Residents also described the program during the pre-rotation orientation sessions. For Ronald Reagan Hospital, the incentive was given to each team completing 92% of discharge summaries within 24 hours of discharge. Each of the 6 teams was composed of a resident (the primary physician responsible for the completion of the discharge summaries) and two interns. Often, discharges that occurred on the resident's day off were completed late. With the new structure, it incentivized the interns to complete discharge summaries to help the team achieve the goal. The trend over the first few months of the expansion showed significant improvement in the time to completion of the discharge summaries as seen in graph 1. Table 3 illustrates the average results of the expansion.

In addition, primary care physician tracking was instituted with the program at both sites (as part of the eDischarge Program used to create house staff discharge summaries). Patients without primary care physicians were identified, contacted, and, where appropriate, assigned a primary care physician at UCLA (table 4).

Conclusion

The discharge summary time to completion significantly improved with the implementation of the discharge pilot program. House staff was eager to improve their completion times, which is probably due in combination to the monetary incentive and recurring education on why timely communication is important. The expansion of the program to Ronald Reagan UCLA Hospital was successful, with a solid trend towards improving discharge summary times. We also found that the ability to identify patients without PCPs and actively assign them new UCLA PCPs was another major achievement of the program, which led to increased patient retention rates and improved quality of care.

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As a brief recap, readmissions result in waste and unfavorable outcomes for patients, as described in Box 1.

Box 1: Issues with Readmissions[5]	
Frequent:	17.6% readmission rate in 30 days
Expensive:	$15 billion in cost
Variable:	Readmission rates vary considerably by hospital, even when adjusted for DRG and severity class
Avoidable:	A large number of readmissions are preventable
Fixable:	Enacting quality initiatives aimed at inpatient and transitional care

Box 2: Categories Missing for Discharge Summaries[8]
Diagnostic test results: 33-63%
Treatment/Hospital course: 7-22%
Discharge medications: 2-40%
Pending test results: 65%
Patient/family counseling: 90-92%
Follow-up plans: 2-43%

We received feedback from 39 follow-up providers, as shown in Table 1.

Table 1: Results of Questionnaires Sent to Follow-Up Providers			
Question	**Mean**	**SD**	**95% CI**
With this discharge summary, I feel informed about the events leading up to my patient's hospitalization and the hospital course.	4.7	0.50	4.59-4.90
With this discharge summary, I feel informed about any outstanding laboratory tests and studies that will need to be followed up.	4.6	0.63	4.44-4.84
With this discharge summary, I feel informed about any additions or changes to the patient's outpatient medication list.	4.8	0.43	4.64-4.90
I received this discharge summary in a timely manner.	4.7	0.52	4.53-4.86
This process improves communication between inpatient and outpatient physicians.	4.8	0.48	4.62-4.92

Feedback was solicited on a 5-point Likert scale, with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

Table 2: Results of the Discharge Pilot Program Expansion to House Staff at Santa Monica UCLA and Orthopedic Hospital				
	Incentive Structure #1	Incentive Structure #2	Incentive Structure #3	Overall
Dates	7/2010-1/2011	1/2011-9/2011	9/2011-6/2012	7/2010-6/2012
Discharge summaries completed within 24 hours of discharge	88%	91%	89%	90%
Average days to completion of discharge summaries	0.58	0.40	0.86	0.65

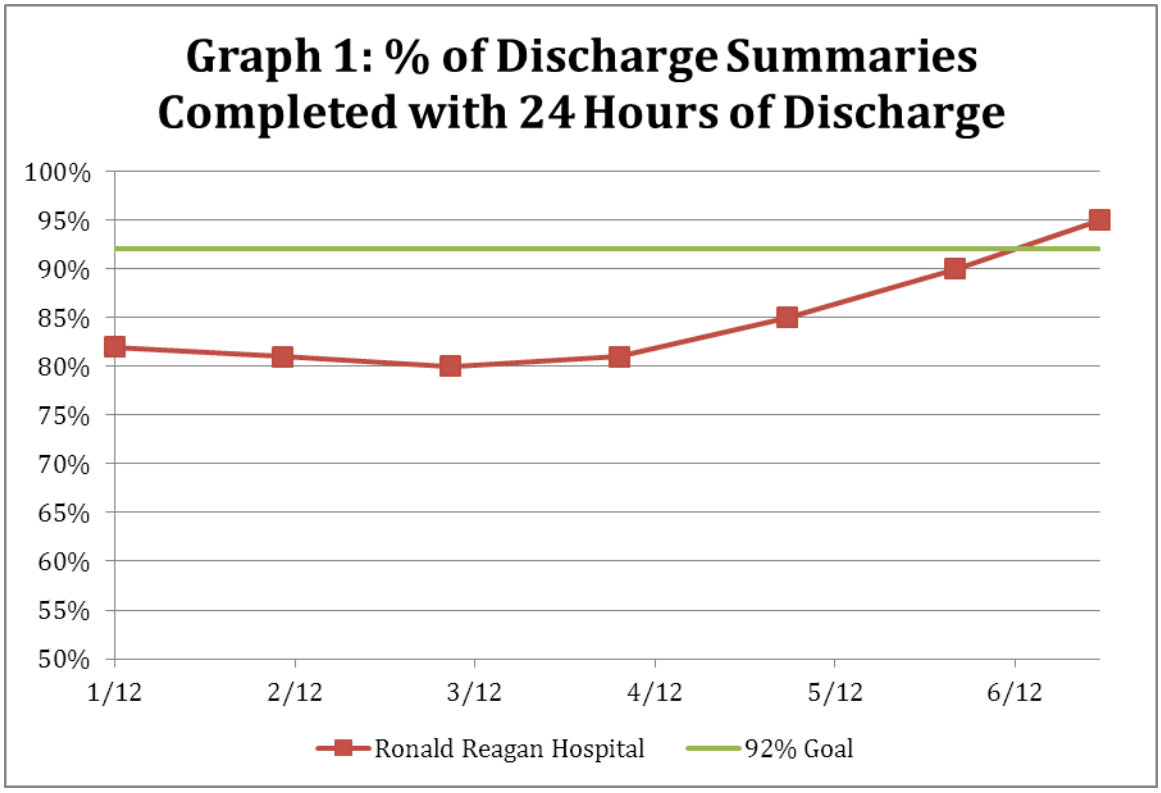

Table 3: Results of the Discharge Pilot Program Expansion to House Staff at Ronald Reagan UCLA Hospital (1/2012-6/2012)	
Discharge summaries completed within 24 hours of discharge	85%
Average days to completion of discharge summaries	1.2

Table 4: Primary Care Physician Tracking (2/2012-6/2012)	
	Both Sites
Number of patients identified without PCPs	237
Number of patients assigned new UCLA PCPs	107