



## The Financial Impact of Readmissions

*A STAAR Initiative Webinar*

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### Agenda

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- Discuss: Why do this analysis?
- Describe the approach of the “roadmap”
- Present key findings from 16 analyses
- Ask you to test the roadmap & share learning on 5/26/10 webinar



## Why do this analysis?

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- Myths and back of the envelope calculations
  - “We stand to lose millions...” when Medicare stops paying....
  - “Readmissions are already a financial loser for hospitals...”
  - “Medicare doesn’t pay for readmissions...”
  - “Hospitals will be able to replace low acuity readmissions with higher acuity admissions...”

*Add data and dollar signs to conventional wisdom*



## Why do this analysis?

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- Cautionary tales from successful efforts in the past
  - Research efforts stopped after grant funding expired
  - Pilot programs ceased after start up funds spent
  - Cost-effective hospital based programs discontinued due to financial impact on hospital bottom-line
    - Both the invested human resources invested to provide better service AND
    - Reduced volume
- We work in an uncertain economic climate
  - A CFO noted that “when we hit our next financial rough spot, I know what FTEs I’ll be looking to reduce.”



## Why do this analysis?

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### **The challenge:**

“But even when hospitals find ways to greatly reduce the return trips, saving money for Medicare and other insurers, their efforts go unrewarded. In fact, because insurers typically pay hospitals to treat patients — not to keep them away by keeping them healthy — hospitals can actually lose money by providing better care. **Empty beds mean lost revenue.** “

(Abelson, R. “Hospitals Pay for Reducing Costly Readmissions”, *NYT*, May 9, 2009.)



## Why do this analysis?

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### **The challenge:**

“Berkshire Medical Center has successfully reduced heart failure readmissions. Regular clinic visitors had a 30-day readmission rate of about 3 percent in 2008, compared to a national average of 24.5 percent among heart failure patients. **However, financially, the hospital lost about 30 heart failure admissions in 2008—or about \$225,000 in revenue**”

(Winslow, R. and Goldstein, J., “Cutting Repeat Hospital Trips—Simple Idea, Hard to Pull Off,” *WSJ*, July 28, 2009.)



## Why do this analysis?

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*Forewarned is forearmed*

- Use your data as the starting point for an informed clinical and financial plan to support successful efforts to reduce avoidable readmissions
- We present this information to support and inform your hospital's efforts to improve the quality, safety, and patient experience of individuals



## Approach

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1. Asked voluntary hospital finance leaders if they had performed this analysis and if it would be informative for them
2. Hospital finance leader partnered with a clinical leader to look at one patient's story in detail
  - Personal, clinical and financial story
3. Financial leader analyzed revenue, expenses, and margin associated with the entire experience
  - Identified unique factors for the hospital – payment types, capacity constraints, allocation of overhead, efforts to lower overhead, readmissions initiatives, etc.
4. Conducted 1-2 interviews to:
  1. Understand the process used
  2. Hear the lessons learned
  3. Test questions and challenges to the analysis until participants were confident in their process and findings; use it with their colleagues
5. STAAR faculty compiled lessons into case studies and drafted the roadmap tool



## Interview Questions

- What percentage of your daily inpatient census is 30 day all cause readmissions?
- What types of patients are in observation status?
- What financial variables do you look at when examining the impact of readmissions?
  - Revenue, expenses, direct and indirect costs, variable and fixed costs, etc?
- What is the average **direct** and **total** margin per patient?
- How does your organization allocate indirect costs?
- If your hospital were to reduce readmissions (30%, 50%), which costs could be influenced and which would remain fixed?
- Is there excess demand in your hospital service area? Would your organization be able to backfill these beds if readmits were reduced?



### STAAR Financial Impact Analysis Roadmap

1. Calculate the all-cause 30 day readmission rate for the hospital and the percentage of the average daily census due to readmitted patients.
2. Partner Financial Lead with Clinical Lead and review the personal, clinical, and financial story of one (or more) recently readmitted patient(s).
  - Calculate revenue, expenses, and margin.
  - Analyze clinical/operational insights from this story.
3. Conduct a financial analysis on a sample set of readmissions for a select time period (1 month, 12 months, etc).
  - Analyze characteristics of this sample set (payer mix, LOS, conditions, outliers, etc)
  - What is the average direct and total margin per readmitted patient in this sample?
4. What financial variables does your hospital consider when examining the impact of readmissions?
  - Revenue, expenses, direct costs, indirect costs, variable costs, fixed costs, etc.
  - How does your organization define direct, indirect, fixed and variable costs?
  - How does your organization allocate indirect costs?
5. How do readmissions to your hospital, *today*, influence your hospital's bottom line?
6. If you were to successfully reduce readmissions by 10%, 30%, 50%, which costs would be influenced and which costs would remain fixed?
7. What is your hospital's ability to influence (reduce) fixed costs? In the near and long term?
8. Is there latent demand in your hospital service area? Would you expect to keep volume stable if readmissions decreased? What would happen to ED visits? Observation stays?
9. What there anything that surprised you about this analysis?
10. Is there anything that your hospital will do differently as a result of this analysis?

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**BOOST ROI Calculator** © Society of Hospital Medicine 2010

The goal of Project BOOST (Better Outcomes for Older Adults through Side Transitions) is to improve the care of patients as they transition from the hospital to home. By improving the discharge process, Project BOOST aims to reduce 30-day readmission rates for general medicine patients. This BOOST Return On Investment (ROI) calculator will help you understand the financial impact of reducing readmissions on your hospital. Enter information specific to your hospital in the open colored cells below to immediately see the potential impact of reducing readmissions through BOOST implementation at your hospital.

BOOST Data		Yes
Number of general medicine discharges on target BOOST units	2000	The number is reported to be tracked by the BOOST implementation due to a number of reasons.
Average net revenue per discharge on target BOOST unit (\$)	\$250	Average net revenue (charge minus non-charge) - Cost. The net per discharge from your Revenue Department.
Conversion of 30-day readmissions (%) on target BOOST unit	25%	30-day readmissions rates are tracked from ICD9.
Reduction in 30-day readmissions (as opposed to expected after BOOST implementation) (%)	33%	Number of (30-day) readmissions with BOOST implementation. The right side of this row is based on your hospital's average 30-day readmission rate & discharge process.
Is the target unit(s) operating at capacity?	Yes	Under the flow and is operating at capacity.
Number of readmissions with 30-day readmission rate. The number of this category is just reported to BOOST with your patients. (%)	100%	30-day readmission rates are tracked from ICD9.
Enter the expected or actual charge net revenue per readmission patient	\$150	It is possible that the hospital and unit have a different charge net revenue. If so, please use the net revenue reported to the charge master and not the standard charge. Your Revenue Department can help identify the value.
BOOST Data		
Estimated Annual Cost of BOOST GI Patients	\$102,000	The right side of this row is based on the number of readmissions reported to BOOST. If you have a different number of readmissions, please use that number.
BOOST Data		
Annual number of GI GI	20000	
Charge net revenue per GI GI (\$)	\$150	Mark hospital use between \$1500.
Average net revenue per patient admission from GI GI (\$)	\$1,000	Use net revenue per discharge from your Revenue Department.
Conversion of 30-day readmissions from GI GI to hospital bed occupancy. Identify using patients to home without being readmitted	Yes	If the revenue reported to the charge master is the target readmission rate, please use the net revenue reported to the charge master. If not, please use the net revenue reported to the charge master.
If you track the number of patients leaving without being readmitted from your GI GI (%)	4%	If you measured the above.
Equivalent reduction in 30-day readmission rate to improve in patient flow from 30-day readmission (%)	10%	Number of readmissions in a hospital capacity of multiple readmissions. If you are currently reporting a readmission rate from the hospital, please use that number.
BOOST Data		
Does your hospital report 30-day readmission?	Yes	Reporting hospital data can be a positive impact on the number of patient readmissions.
Total annual operating revenue (\$)	\$90,000,000	Readmissions from readmissions, which may be reduced by BOOST.
Percentage of operating revenue of 30-day readmissions (as reported to hospital) of your	0.11%	Estimated 0.11%. Check with your Revenue Department.
<b>Total Revenue Gain or Loss after implementation of BOOST</b>	<b>\$144,000</b>	<b>Per a 1000 hospital with readmission 30-day readmission</b>
Your ROI Highlights (Cost)		
Is your hospital part of a ACO (Accountable Care Organization)?	Yes	If your hospital is an ACO, reducing readmissions also has a positive impact on the revenue (due to ACO shared).
Cost per readmission patient after discharge from BOOST unit(s)	\$2,000	Typical revenue for a readmission patient.
<b>Total Revenue Gain or Loss after implementation of BOOST</b>	<b>\$319,000</b>	<b>Per an ACO hospital only</b>

BOOST ROI Calculator built for Society of Hospital Medicine by  
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[http://www.hospitalmedicine.org/ResourceRoomRedesign/RR\\_CareTransitions/PDFs/BOOST\\_ROI\\_Calculator.pdf](http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/PDFs/BOOST_ROI_Calculator.pdf)

## Example Findings

- One-year 30d readmissions to System A:
  - 49% of (non-OB) admissions to medicine
  - 82% readmissions to medicine
  - 71% discharged to home
  - 62% readmissions Medicare patients
  
- System B:
  - 73% all payer non-OB readmissions were Medicare
  - 86% “unplanned” (as opposed to “elective”)

## Example Findings

- Hospital A:
  - Average daily inpatient (non-OB) census = 80 patients
  - 12 of 80 were patients who had been readmitted
  
- Hospital B:
  - Numbers of patients readmitted to/from observation stays within 30 days were high; he wanted to account for total patient utilization of ED, observation beds, and inpatient beds in analysis



## Hospital A: Financial Findings

Expense		\$ readmits	\$ all pts
Average readmitted patient revenue	=	\$ 12, 200	
- Average direct costs (fixed and variable)		\$ 7, 800	
- Average indirect variable costs		\$ 1, 000	
Average contribution margin	=	\$ 3, 400	\$ 5, 500
- Average indirect fixed costs		\$ 3, 400	
Average total margin per readmitted patient	=	\$ 0	\$ 1, 600



## System A : Financial Findings

75% readmitted patients had positive contribution margin		\$ readmits	\$ system wide
Average contribution margin	=	\$ 2,300	
- Average indirect fixed costs and - indirect cost assessment for system			
Average total margin per readmitted patient	=	\$ (900)	\$ (3,000,000)



## Hospital B: Financial Findings

### 2009 30-day All-Payer Readmissions Financial Variables

Expected Payments	\$8,049,988
Direct Costs	\$5,844,682
Direct Margin	\$2,205,306
Total Costs	\$8,883,059
Total Margin	-\$833,071

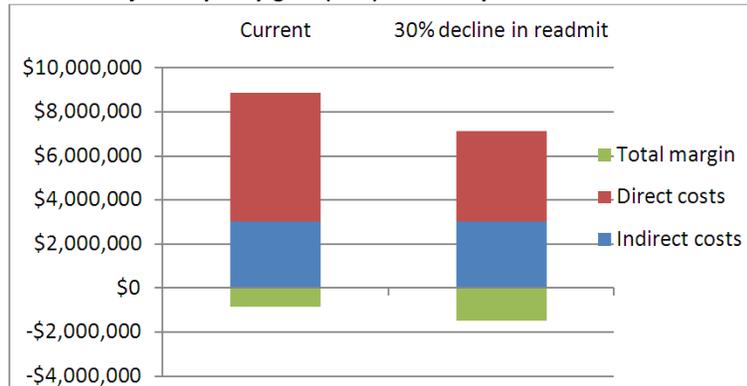
### Yearly financial projections assuming 30% decline in readmissions

	Current state	30% decline in readmissions
Indirect costs	\$3,038,377	\$3,038,377
Direct (variable) costs	\$5,844,681.63	\$4,091,277.14
Total margin	(\$833,071)	(1,494,663)



## Hospital B: Financial Findings

Table 5. Projected yearly gain (loss) for 30 day readmissions



## Key Observations

- Financial partners found this exercise to be valuable and highly illuminating; surprising
- CFO – Clinical Leader partnering provided powerful joint learning
- CFOs offer a novel system-perspective to QI work
- Reimbursements for readmissions are greater than direct costs
  - Readmissions generate revenue, especially when hospitals do not operate at capacity
  - Readmissions lead to a reduction in hospital volume (at least in the short term)



## Key Observations

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- Most costs associated with readmissions are fixed
- Hospitals have high fixed-cost structures
- Reducing readmissions require re-thinking fixed cost reductions
- Reducing readmissions requires incorporating this quality goal into longer term financial and strategic planning discussions
- This analysis can help inform payment and policy conversations



## Framing the issue

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- Most rehospitalizations are defects in care
- Reducing readmissions is possible
- Better care transitions is the right thing to do
- We need to understand the short-and-long term financial implications of reducing readmissions to support planning for success and avoid clashing priorities
- These insights can stimulate innovation in building the bridge to the future of high value, coordinated healthcare



## Next Steps

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- Volunteer to use the Roadmap and share learning
- Next call:
  - May 26, 2010
  - 1-2p ET
  - Agenda: Insights from hospitals who have tested the Roadmap

*Note: this webinar is recorded, please encourage your colleagues to access this material if they are interested*



*Discussion*