When Nursing Takes Ownership Of Financial Outcomes: Achieving Exceptional Financial Performance Through Leadership, Strategy, and Execution

EXECUTIVE SUMMARY

- With nurses and unlicensed supportive personnel composing the greatest percentage of the workforce at any hospital, it is not surprising nursing leadership plays an increasing role in the attainment of financial goals.
- The nursing leadership team at one academic medical center reduced costs by more than \$10 million over 4 years while outperforming national benchmarks on nurse-sensitive quality indicators.
- The most critical success factor in attaining exceptional financial performance is a personal and collective accountability to achieving outcomes.
- Whether it is financial improvement, advancing patient safety, or ensuring a highly engaged workforce, success will not be attained without thoughtful, focused leadership.
- The accountability model ensures there is a culture built around financial performance where nurses and leaders think and act, on a daily basis, in a manner necessary to understand opportunities, find answers, and overcome obstacles.
- While structures, processes, and tools may serve as the means to achieve a target, it is leadership's responsibility to set the right goal and motivate others.

ITH THE UNCERTAINTY OF health care reform and the United States slowly recovering from the most severe recession in more than a generation, the financial health of hospitals is a top concern for leaders nationwide. In the 2010 American College of Healthcare Executives annual survey of top issues confronting hospital leaders, financial challenges ranked first on the list of hospital chief executive officers' top concerns. With nurses and unlicensed supportive personnel composing the greatest percentage of

the workforce at any hospital, it is not surprising nursing leadership plays an increasing role in the attainment of financial goals. The success of a nursing leadership team at one academic medical center, which reduced costs by more than \$10 million over the past 4 years while outperforming national benchmarks on nurse-sensitive quality indicators, is described (see Figure 1).

A Focus on Quality and Financial Outcomes

Northwestern Memorial Hospital (NMH), an 854-bed academic medi-

Figure 1.
Summary of Financial and Quality Improvements
Over the Past 4 Years

Metric	Improvement from FY2006 - FY2010
Dollars saved	> \$10 million
Central-line associated blood stream infections	79% reduction
Hospital-acquired pressure ulcers	66% reduction
Patient falls	23% reduction

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cal center in Chicago, IL, is an organization of caregivers who aspire to consistently high standards of quality, cost effectiveness, and patient satisfaction. Attainment of the NMH mission comes through tireless focus on quality and financial outcomes. This pursuit of excellence resulted in national recognition by numerous organizations. NMH has been named one of the top 15 hospitals for Quality and Accountability by the University HealthSystem Consortium. The Leapfrog Group, Becker's Hospital Review, and Thomson Reuters have all ranked NMH a "Top Hospital." In 2010 the National Research Corporation (NRC) named NMH the "Most Preferred" hospital in Chicago for the 16th consecutive year. Financially, Northwestern Memorial is one of only four hospitals in the country to have attained Aa/AA bond rating for more than 25 vears.

Nursing at NMH attains similar accolades through an intense focus on outcomes. First recognized as a Magnet® organization in 2006 and re-designated in 2010, nursing practice and shared leadership at the hospital are the cornerstones of quality care. Patients at NMH experience fewer falls, pressure ulcers, and central line and urinary tract infections than other academic medical centers that have attained Magnet status. Furthermore, nurses at NMH are more educated (78% BSN rate), certified (50% of eligible RNs are certified in their specialty), and engaged (74% report high engagement) versus national benchmarks. During a time of severe nursing shortages, this highly skilled workforce had a quarterly voluntary turnover rate of only 2%, which has reduced turnover costs by \$7.6 million since 2008. While achieving exceptional patient outcomes and building an outstanding workforce, nursing has improved productivity 7.6% since 2005 and 4.3% since 2009. These productivity improvements have resulted in \$4.9 million in savings in the past 2 years. While we hold our improvements in patient safety and quality in the highest regard, NMH has also implemented a culture of financial excellence.

The Art and Science of Attaining Financial Targets

Accountability and ownership for attaining financial outcomes in nursing begins with senior leadership. A key success factor in achieving financial targets is the alignment of the chief nurse executive (CNE) and chief financial officer (CFO). Often the nursing budget at a hospital is viewed with disparate perspectives with the CNE focusing on quality, patient safety, models of care, and staff recruitment and development while the CFO's primary agenda is productivity, cost-reduction strategies, and bottom-line performance. At Northwestern, the nursing budget is created through a partnership with the CFO where productivity improvement and patient safety are both viewed as top priorities and targets are mutually agreed upon through rigorous data analysis and financial modeling.

A second key success factor at NMH is the shared language and terminology between nursing leadership and the finance department. Because skill sets in these departments are traditionally very different, the nursing and finance departments have fostered a twoway partnership focused on mutual understanding and education. For example, the nursing and finance teams have spent several years collaborating on budget methodologies and primary indicators of success. Together, the two teams defined the following key metrics as determinant of successful financial performance:

- Actual vs. Budgeted Hours Per Patient Day (direct and indirect hours worked)
- Actual vs. Budgeted Flex Net Expense (a methodology used

to adjust the nursing budget based on monthly volume fluctuations)

A crucial component of the nurse/finance partnership is the inclusion of financial experts on the leadership team. By having a non-nurse financial expert on the leadership team, NMH nursing ensures budget projections are sound, goals are aligned with the finance department, and nurse managers and directors understand financial targets and have the structures and tools to achieve agreed upon goals. Despite this deep partnership, nursing assumes ultimate responsibility for identifying, developing, and implementing initiatives to attain year-to-year productivity targets.

The final and most critical success factor in attaining exceptional financial performance is a personal and collective accountability to achieving outcomes. Nursing assumes primary ownership of budget targets through the use of an accountability model created by Connors and Smith (2009). This model includes creating specific expectations of performance, communicating and aligning these expectations with direct caregivers, and thoroughly and repeatedly inspecting expectations through transparently posting outcomes for all to see. Finally, the accountability model also addresses situations when performance expectations are not met.

Attaining financial goals is a baseline measure of performance for all nurse leaders, rather than an annual goal tied to incentive compensation. Once expectations are set, they are communicated rigorously and redundantly to all managers and staff. Communication is focused primarily on the importance of nursing's contribution to the financial success of the hospital and how nursing practice at the bedside has an impact on bottom-line results. Nurses must understand their role in delivering higher-quality care more efficiently to increase value to patients and families. Through repeated communication and collaboration, nursing leadership creates alignment with direct caregivers so everyone knows and agrees with the expectations and is committed to achieving the result. To create true alignment, all stakeholders must understand the meaning (the "Why") behind performance expectations before specific targets are communicated (the "What"). When done correctly, caregivers, managers, and directors commit their "hearts and minds" to achieving financial targets.

The final step in the accountability model to achieving financial targets is the daily practice of inspecting the expectations that all are committed to. For example, every afternoon, the actual vs. budgeted hours per patient day (HPPD) and orientation hours for every unit are sent to all managers and directors. Any areas outside of budget thresholds are asked to develop action plans to ensure their unit is within budget by the end of the week. This daily focus ensures everyone has a real-time understanding of financial performance. At the end of each week, all budget variances are known and managers and directors develop action plans to stay on target. Finally, at the end of each month budget targets are reviewed for every area and units identified as "at risk" (defined as units with a large variance or an unfavorable trend) are coached by the nursing directors to ensure success.

While these steps have provided a roadmap for success, there continues to be circumstances where individual units do not meet performance expectations. When this occurs, nursing directors conduct a root cause analysis to understand the vulnerabilities in the areas of training, motivation, accountability, and/or culture. Once understood, the nursing director and unit manager develop detailed work plans to

address the root causes. The accountability model is once again implemented to ensure expectations for financial performance are attained. The accountability model ensures there is a culture built around financial performance where nurses and leaders think and act, on a daily basis, in a manner necessary to understand opportunities, find answers, and overcome obstacles.

Building the Structures Of an Evidenced-Based Budget

While a thorough accountability model to achieve outcomes is a critical step, a series of principles, processes, and tools to ensure the achievement of financial targets is imperative to accomplish measurable results. The first process is the creation of an evidence-based budget. Nursing leaders at NMH use six guiding principles when building the annual budget:

Qualitative

- The budget should build consistency across "like" units.
- The process should foster inclusive and open dialogue.
- The budget will embrace transparency across the organization.

Quantitative

- The budget will be built on internal and external benchmarks.
- The budget will continuously focus on productivity improvement.
- The budget will be formula driven.

The first qualitative principle highlighted variability of nurse HPPD on units with similar patient populations. As a result, a standard HPPD was implemented to support the model of care. To foster the inclusion of direct care providers in the annual budget process, managers on every unit conduct formal meetings with caregivers to solicit ideas for productivity improvement, waste

reduction, and other ways to reduce costs of practice. Additionally, the nursing finance committee, part of the NMH nursing shared leadership structure, develops and recommends financial improvements as a part of their annual goal-setting process. These ideas are then vetted by the nursing leadership team and incorporated into the budget process. This process creates a feedback mechanism where bedside nurses have a significant input on financial operations. Finally, once the nursing budget is complete, it is made available for all to see. Budget targets for HPPD, on-boarding, education, and supplies are posted for every unit and each manager reviews these goals with the nursing staff.

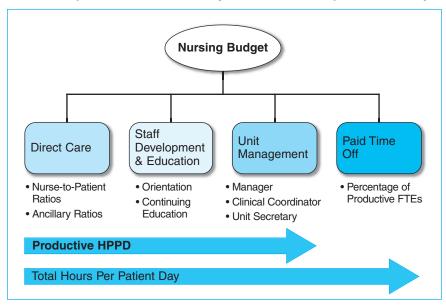
While the qualitative guiding principles standardize processes and make budget development inclusive and transparent, the quantitative principles ensure financial targets are data driven. Staffing and productivity benchmarks from The National Database for Nursing Quality Indicators, the Labor Management Institute's Annual Survey of Hours, and the Thomson Reuters ACTION-OI database are used to ensure nursing HPPD are comparable to other academic medical centers. The use of external benchmarks validates staffing hours and facilitates the formation of an evidencebased budget.

In most organizations, the overwhelming majority of the nursing budget is comprised of staff salaries. Therefore, monitoring, measuring, and improving productivity is the largest driver of success for attaining financial targets (see Figure 2).

However, rather than analyzing on HPPD as a whole, the nursing leadership team budgets for, monitors, and quantifies trends for each component of productivity. By focusing on the following elements of productivity, nursing can create a comprehensive formulabased budget that sets clear per-

Figure 2.

The Components of Productivity and Total Hours per Patient Day



formance expectations.

- Direct, scheduled time (time nurses are scheduled to provide direct patient care; e.g., nurses working a scheduled shift).
- Direct, unscheduled time (time nurses spend delivering direct care outside of their schedule; e.g., nurses staying past their shift to document).
- Indirect, scheduled time (time nurses are scheduled to work, but are not delivering patient care; e.g., orientation time).
- Indirect, unscheduled time (time nurses stay past their scheduled time, but are not delivering patient care; (e.g., nurses staying past their shift to attend staff meetings).
- Unit management (hours for

- nurse manager, clinical coordinator, and unit secretary).
- Paid time off (sick time and vacation).

The Processes and Tools To Achieve Financial Targets

By creating budget targets for these subsets of productivity, the leadership team can monitor performance and develop action plans when variability is identified. For example, in September 2010, NMH uncovered great variability in the time required to orient newly hired nurses. While the orientation time for new nurses was budgeted at 280 hours for medical-surgical nurses, some units were using 50% more hours to complete the full onboarding process. Further, new nurses

reported the orientation process was unproductive and largely a review of practices taught during nursing school. Therefore, a thorough overhaul of the new hire onboarding process was completed resulting in a 25% reduction in orientation hours for medical-surgical nurses and a savings of \$300,000. To ensure success of the new process, a weekly monitoring tool was implemented to ensure all units can view their performance to targets (see Figures 3 & 4).

Once the qualitative and quantitative assessments are complete, nurse managers are provided tools to create their annual budget. The most valuable tool is the "Managers' Budget Workbook" (see Figure 5). This tool, developed by nursing leadership, allows managers to combine their unit-specific data such as average daily census, occupancy, and projected volume growth, with standard, formula-based calculations for nurse-to-patient workload, budgeted productivity statistics, education and orientation time, and paid time off. When the managers enter their data, the tool converts the information to the needed full-time equivalents (FTEs) for the unit. This tool also allows managers to see their data-driven, evidence-based, staff scheduling needs as well as needed staff positions for every job code on the unit. This tool hardwires the guiding principles and standardizes the budgeting process across nursing units.

Valuable tools to ensure units are attaining budget targets are performance scorecards and monthly income and expense (I&E)

Figure 3.
The Formula Used at NMH to Calculate Onboarding Hours



Figure 4.

Monitoring Tool: New Nurse Onboarding Hours Allows Managers to Track Performance to Budget Each Week

Unit Onboardin	ng Tra	cking To	ol								
No. 15 a No.		Actual Onboarding	Variance to Budget per	0/0/11	0/40/44	0/00/44	0/07/44	4/0/44	4/40/44	4/47/44	4/04/44
New Hire Name	FTE	Hours Used	New Hire	3/6/11	3/13/11	3/20/11	3/27/11	4/3/11	4/10/11	4/17/11	4/24/11
Shelly Smith	0.9	242	6	20	30		36	36	36	36	12
Mike Jones	0.9	252	-4	63	36	36	40	36	36	20	12
Sam Craig	0.9	244	4	40	40	36	36	36	36	20	0
		YTDTotal	S	3/6/11	3/13/11	3/20/11	3/27/11	4/3/11	4/10/11	4/17/11	4/24/11
Total RN FTE Hired		2.7									
Onboarding Hours Budgeted		1668									
Onboarding Hours Used		6604.45		96	106	108	112	108	108	76	24
Onboarding Hours Accrued				866.1	898.2	930.2	962.3	994.4	1026.5	1058.5	1010.6
Variance (Hours Accrued - Hours Used)				770.1	696.2	620.2	540.3	464.4	388.5	344.5	272.6
%Total Budgetd Hours Used				5.8%	12.1%	18.6%	25.3%	31.8%	38.2%	42.8%	44.2%
Onboarding Hours Remaining				1572	1466	1358	1246	1138	1030	954	930

reports (see Figure 6). Each unit receives a monthly scorecard describing performance related to productive and direct hours per patient day, medical supply expense per patient day, and the unit's total actual expense variance compared to budget. Nurse managers use the scorecard to review the financial performance with staff. The I&E statements allow a process for drilling down to uncover the root cause of variance and drive process improvement as appropriate. The use of the scorecard summary and I&E detail create a data-driven process to ensure success

While monthly feedback is important, critical to the success of achieving exceptional financial outcomes is creating a sense of urgency through the use of realtime data and continuous feedback (Kotter, 2008). Two examples of processes and tools used to provide real-time feedback are the daily productivity reports and action plan template for managers when performance is not meeting budget expectations (see Figures 7 & 8). The former tool allows nursing leadership to monitor productivity on a daily, monthly, and year-to-date basis, while the later tool creates a standard template for managers and the nurse finance team to track and monitor

actions to improve performance for units above targets. These tools create a standard process and common language across units to monitor performance and ensure financial targets are attained

Testing Budget Myths And Challenging the "Untouchables"

As the structures, processes, and tools to attain financial success become embedded, the nursing leadership team fosters a culture of data-driven decision making. This is most apparent in approaches that challenge budget "myths." For example, a longstanding assumption was that budgets and staffing plans should be built around the average daily census taken at midnight. However, an analysis revealed wide variability in actual midnight census between days of the week (see Figure 9). Subsequent data also revealed wide variability within units throughout the day. These findings led to the conclusion that static midnight census was not an accurate snapshot of volume or staffing needs. This finding helped create a staff flexing process that assesses patient volume every 4 hours rather than once per shift. This model resulted in a more dynamic and accurate approach to staff flexing.

Another budget myth is the

assumption that the need for 1:1 sitter cases is a major driver of variance in the nursing budget. Like any hospital, NMH uses 1:1 sitters for patients requiring 24/7 direct observation to ensure their safety (i.e., suicidal ideation). When a unit's salary expense is over budget, a typical response by the manager was to explain that the large number of unanticipated sitter cases was the main culprit and corrective action was outside of her/his control. However, an analysis by the nursing finance team revealed only 13% of salary variances in patient care was a result of sitter cases and that a much larger portion of the variance, 42%, was a result of nurses staying over their scheduled shifts to complete documentation or attend staff meetings. These findings re-focused nurse managers' attention to what mattered most; ensuring staff have the ability to clock out on time. Using data to challenge the most basic assumptions of nursing care is an important approach to continuously improve productivity.

Challenging long-existing staffing and salary programs, referred to as "untouchables," is another approach Northwestern uses to attain financial success. An example is the 2010 elimination of the Baylor program. For decades

Figure 5. The Managers Budget Workbook

Date:	
Cost Center #	
Unit Name	

		Daily Sta	Daily Staffing Planner	er					General A	General Assumptions
	(the Avg. ADC w	ill calculate as	(the Avg. ADC will calculate as you enter these daily ADCs)	daily ADCs)				Avg ADC	ď	Patient Days:
ADC	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	Budgeted D	Budgeted Daily Census
	Σ		M			ဟ	တ	Total	Non-Prod	Non-Productive Time
Days CC*	1.0	1.0	1.0	1.0	1.0	0.5	0.5	00.9	Weeks	Weeks/Fiscal Year
7:30 AM - 4:00 PM RN	6.95	6.95	6.95	6.95	6.95	6.95	6.95	48.65	Days in	Days in Fiscal Year
PCT/NA	4.0	4.0	4.0	4.0	4.0	4.0	4.0	28.00	P	Hours per FTE
SN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	7.00		
PMs1 CC*	1.0	1.0	1.0	1.0	1.0	0.5	0.5	3.00	Summary Worksheet	it Rep
3:30 - 8 PM RN	5.56	5.56	5.56	5.56	5.56	5.56	5.56	19.46	Direct Staffing:	Direct
PMs2 CC*								00.00	Total RN	25.30
7:30 PM - 12 MN RN	5.56	5.56	5.56	5.56	5.56	5.56	5.56	19.46	Total PCT/NA	12.60
PMs PCT/NA	3.0	3.0	3.0	3.0	3.0	3.0	3.0	21.00	Total US	2.80
3:30 PM - 12 MN US	1.0	1.0	1.0	1.0	1.0	1.0	1.0	7.00	Overall Total:	40.70
Nights CC*								00.00	Indirect Staffing:	Indirect
11:30 PM - 8 AM RN	5.56	5.56	5.56	5.56	5.56	5.56	5.56	38.92	CC (out of staffing)	1.80
PCT/NA	2.0	2.0	2.0	2.0	2.0	2.0	2.0	14.00	SE (out of staffing)	0.44
TOTAL CC*	1.50	1.50	1.50	1.50	1.50	0.75	0.75	00.6	PCC (out of staffing)	
RN	18.07	18.07	18.07	18.07	18.07	18.07	18.07	126.49	Manager	0.88
PCT/NA	9.00	9.00	9.00	9.00	9.00	9.00	9.00	63.00	1:1 Caregivers	3.15
SN	2.00	2.00	2.00	2.00	2.00	2.00	2.00	14.00	Other	00.00
Patients/Nurse	:se:									0.00
8 Hrs Days	4.0	4.0	4.0	4.0	4.0	4.0	4.0		Overall Indirect	6.27
4 Hrs PMs Front	5.0	2.0	2.0	2.0	2.0	2.0	5.0		Total FTEs:	
4 Hrs PMs Back	5.0	2.0	2.0	2.0	2.0	2.0	5.0			
8 Hrs Nights	5.0	2.0	2.0	2.0	2.0	2.0	5.0			
									Job Code	Title
RN Core Schedule (w/o CC out of staffing) for the Electronic Schedule (Shiftmaker)	ule (w/o CC or	ut of staffi	ng) for the El	ectronic :	Schedule	(Shiftma	ker)		Varies	Varies Manager
	W		W		4	S	S	т т	22 0686	20
_	7	7	7	7	7	9	9	47	9486	9486 CC WE Days
НРРО		9	9	9	9	9	9	21	9487	9487 CC WE PMs
5.10 PMs2		9	9	9	9	9	9	21	9488	9488 CC WE Nights
Nights		5	2	2	2	5	5	35	9391	9391 Staff Ed.
TOTAL	24	24	24	24	24	23	23	124	9263 PCC	PCC
								l		

																					\mathcal{L}	١
Total	6.43	3.43	0.65	0.21	11.11	Total	FTE	29.74	14.50	3.15	47.40		2.02	0.50	00'0	1.00	3.15	00.00	0.00	6.67	54.07	
Prod	5.90	3.30	0.58	0.18	96.6	PTO	FTE	3.26	1.59	0.35	5.19		0.22	90.0	00.00	0.12	00.00	00.00	00.00	0.40	5.59	
Indirect	0.70	0.71	00:00	0.18	1.60	Productive	FTE	26.48	12.92	2.81	42.20		1.80	0.44	00:0	0.88	3.15	00'0	00'0	6.27	48.47	
Direct	5.20	2.59	0.58	00.0	8.37															0.00		
	BN	Clin Asst	Clerical	Admin	Total	TEs due to:	Orient	0.94	0.27											1.21		
10147	27.8	12.3%	52.14	365	2085.7	Replacement FTEs due to:	Cont Ed	0.24	0.05	0.01										0:30		
Patient Days:	Budgeted Daily Census	Non-Productive Time	Weeks/Fiscal Year	Days in Fiscal Year	Hours per FTE	it	Direct	25.30	12.60	2.80	40.70	Indirect	1.80	0.44		0.88	3.15	00.00	00.0	6.27		
Д	Budgeted D	Non-Proc	Weeks	Days ir	Н	Summary Worksheet	Direct Staffing:	Total RN	Total PCT/NA	Total US	Overall Total:	Indirect Staffing:	CC (out of staffing)	SE (out of staffing)	PCC (out of staffing)	Manager	1:1 Caregivers	Other		Overall Indirect	Total FTEs:	

)			Clinical Coordinator FTE	Total FTEs: 5.6				number of CC FTEs you have/will hire.					advisor.		Other Job Codes:	9470 grandfathered PCT	6849 C N A	1280 Primary Nurse, Psychiatry	
	3reakdown	Total	1.00	5.00	09:0	00.00	00:00	1.00	00.00	20.86	1.80	00:0	2.40	14.51	3.15	3.15	09:0		54 07
	ob Code E	Variable		2.98	09.0			0.50		20.86	1.80		2.40	14.51	3.15		09.0		47 40
	Position Detail - Job Code Breakdown	Fixed	1.00	2.02				0.50	00:00							3.15			6.67
	Posi		-E		Days	PMs	Nights	_		Irse	SI	S	hts			egivers	RN		Total
		Title	Varies Manager	330 OEE6	9486 CC WE Days	9487 CC WE PMs	9488 CC WE Nights	9391 Staff Ed.	9263 PCC	7825 Staff Nurse	4790 WE Davs	4825 WE PMs	4826 WE Nights	9696 PCT	6858 US	1:1 Caregivers	Agency RN		
		Job Code	Vari	88	94	94	94	93	926	78%	47	48%	48%	396	89				
		_	_	_		_			_	_	_	_		_	_		_	_	

NOTE: Total FTEs on the Summary Worksheet and Position Detail need to match.

Employees % Orientees # Orientees Hrs per Orientee

PCT/CNA US Total

Figure 6.
An Example of the Financial Portion of a Unit Scorecard

Financial Indicator	Goal	Current Period: April	FY11 Q1	FY11 Q2	FY11 Q3
Productive HPPD	9.10	8.74	10.12	9.63	9.37
Direct HPPD	8.31	8.07	8.1	8.12	8.16
Medical Supply Expense per Patient Day	N/A	37.67		40.38	37.92
Flex Net Expense Variance	0	-\$13,474	-\$13,706	-\$27,940	-\$13,474

Figure 7.
The HPPD Tracking Tool

1	2	3	4	5	6	7	8	9	10	16	17			
Cost	Unit Description	FY11 Budget	10-Sep	10-Oct	10-Nov	10-Dec	11-Jan	11-Feb	11-Mar	MTD 4/1/11 - 4/20/11	YTD 9/1/10 - 4/20/11	Previous Report MTD Data	Change from Previous MTD	DHPPD 4/20/11
	Medicine													
1417	MICU	17.06	16.51	16.20	16.56	16.65	16.45	16.09	15.86	15.88	16.28	15.81	0.07	14.96
1418	08 NE (CCU)	16.54	15.31	16.09	16.02	15.11	16.03	15.42	16.06	15.02	15.64	14.98	0.04	17.60
1466	13 E (Medicine)	8.24	8.03	7.97	8.24	8.25	7.97	7.91	8.17	8.17	8.06	8.17	0.00	8.16
1469	16W (General Med)	8.28	7.32	7.34	7.53	7.72	7.47	7.60	7.52	7.59	7.50	7.54	0.05	8.15
1470	14 E (Medicine)	8.22	7.86	7.99	8.07	8.05	8.08	7.61	7.90	8.02	7.95	8.09	-0.08	7.91
1471	15E (Med/Tele)	8.24	7.98	7.97	8.26	8.01	7.94	7.91	8.21	8.13	8.05	8.09	0.04	8.49
1475	13 W (Medicine)	8.22	7.96	7.78	7.84	7.99	7.79	7.80	7.93	8.04	7.86	8.00	0.03	8.85
1755	16 E (Med Tele/VIP)	8.38	8.20	8.29	8.35	8.09	7.97	8.02	8.20	8.58	8.19	8.47	0.11	10.26
1756	15 W (Heart Failure/Pulmonary)	8.24	7.68	7.71	7.78	7.86	7.82	7.71	7.76	7.76	7.77	7.79	-0.03	7.52

Figure 8.
Action Plan Template

Variance Action	Plan Worksheet
Unit	Sample
Manager	
Date	3/17/2011
Cause(s) of Variance	Plan of Action
We continue to have nurses staying past their shifts to finish tasks and attend meetings.	 No longer conduct staff meetings immediately after shift change. Conduct Q4 hour huddles to discuss nurse workload planning to ensure tasks are completed within the scheduled shift. Set expectations at daily safety huddle around the importance of timely clock out at the end of shifts (except in emergencies). Manager to conduct shift change "inspection" 3x per week to ensure staff are leaving on time.

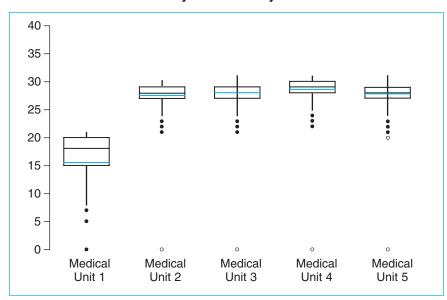
NMH utilized a Baylor program for weekend staffing. It was a longstanding assumption Baylor nurses only wanted to work part time, and that this was the only way to ensure adequate and stable staffing on weekends. However, this program was expensive to operate, made implementation of quality and productivity improvements more difficult to sustain, and provided challenges in engaging with weekend staff. In 2010, NMH ended the long-standing Baylor

program, saving \$3.5 million per year. During this conversion, it was discovered many of the Baylor nurses worked second jobs during the week, contributing to increased worker fatigue and potential patient safety issues. Contrary to initial assumptions, the overwhelming percentage of Baylor nurses chose to convert to full-time status when given the opportunity. In addition to the Baylor program, NMH also restructured the supplemental pay program, a premium salary program that superseded the use of overtime time pay for additional shifts. This resulted in annual savings of \$1.08 million.

Another example of an "untouchable" was the use of unit-based staff educators to disseminate new knowledge regarding practice changes. It was assumed this was the best model to ensure bedside nurses remained competent in their specialty. However, at NMH this model required many FTEs and staff educators often found themselves disseminating identical information among the

Figure 9.

A Box Plot of Midnight Census on Five Medicine Units Revealed
Wide Variability Between Days of the Week



many like units. In 2009 the staff educator role was replaced by a newly developed education coordinator position. Different from the staff educator, the education coordinator was not dedicated to a unit, but became service based (medicine, surgery, oncology, etc.). This allowed for thorough nurse education in specialized areas without the redundancy of overlapping messages. Further, the role was changed to an 8 hour per day, 5 day a week position, rather than the traditional 12 hour shift, 3 day a week rotation. This change resulted in increased consistency of staff and made the education coordinator a true partner in process improvement implementation on the units. This change required fewer FTEs and resulted in a savings of \$380,000. However, the most significant impact was the change in perception of the new role. Education coordinators are viewed as leaders and are most often successors to managers when positions become available.

Currently, Northwestern is reconfiguring the clinical coordinator and charge nurse roles at the hospital. NMH anticipates saving an additional \$2.8 million through the refinement and standardization of roles. By continuing to look at everything as an opportunity for refinement, Northwestern has realized multi-million dollar savings while increasing quality outcomes and staff engagement without impacting turnover. This was accomplished by maintaining a strategic focus on improvement initiatives and carefully considering, planning, and executing operational change.

Next Steps: Increasing Value In Care Delivery

Value in health care is defined as quality divided by cost (Porter, 2010). Therefore, value increases when outcomes improve and costs are reduced. Unfortunately, there is overwhelming evidence the current health care system does not provide optimal value with up to 98,000 patients dying every year due to medical errors and health care spending increasing 300% in the past 18 years (Centers for Medicare & Medicaid Services, 2010; Kohn, Corrigan, & Donaldson, 2000). While nursing at NMH has made significant pro-

Figure 10.
The Value Equation

ductivity improvements and improved patient care outcomes, the mandate of health care reform will make it imperative for hospitals to significantly change operations by increasing focus on value. NMH has set out to accomplish two ambitious goals: Eliminate all avoidable adverse events by 2020 while reducing costs by 25% by 2017. Nursing's contribution to these outcomes will be accomplished through focusing on the value equation (see Figure 10).

Value increases when outcomes improve and costs are reduced. In 2010 the nursing leadership team created the "Value Portfolio." The Value Portfolio is a series of improvement projects with two aims: attain top decile performance on all nurse-sensitive quality indicators (falls, pressure ulcers, ventilator-associated pneumonia, and central line and urinary tract infections) while improving productivity by 3%-5% each year for the next 5 years (see Figures 11 & 12). Examples of new projects launched in fiscal year 2011 addressing the numerator (quality) include:

- Increase involvement of patients and families in care planning.
- Enhance multidisciplinary quality improvement at the unit level through training of all frontline care providers in process-improvement methodologies.
- Increase value-added time of nurses by removing wasted movement.
- Reduce "missed care" defined as basic nursing care that should be delivered but is not.
- Expand the NMH patient-cen-

Figure 11.
Structure of the NMH Value Portfolio Focused on Quality Improvement

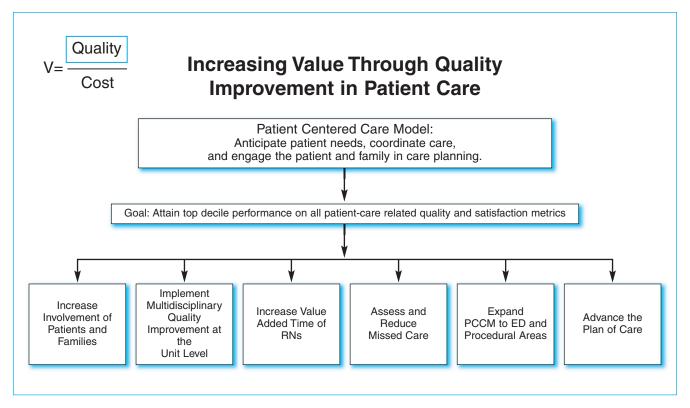
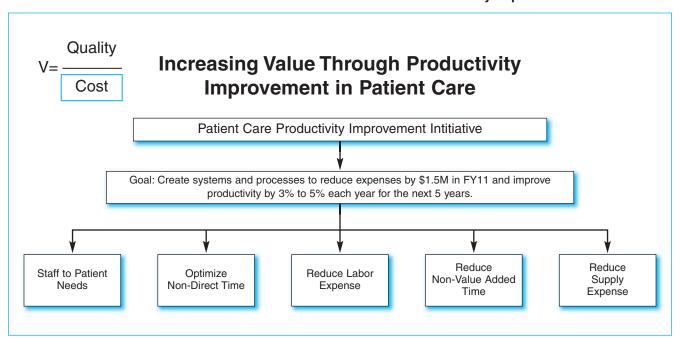


Figure 12.
Structure of the NMH Value Portfolio Focused on Productivity Improvement



- tered care model of care to the emergency department and procedural areas.
- Create a single plan of care used by all providers (nursing, physicians, case management, etc).

The list of projects focused on the denominator (cost) include:

- Develop and implement a realtime patient intensity of care tool to assess and staff to the patients' care needs (defined in minutes) rather than the assigned acuity level.
- Optimize non-direct time to ensure nurses receive appropriate and efficient orientation and continuing education.
- Reduce labor expense by standardizing roles and optimizing skill mix.
- Increase value-added time of nurses by removing wasted movement (also included in the list of quality improvement projects).
- Reduce supply expense through changes in nursing practice and utilization.

Through the utilization of a portfolio of improvement projects addressing both aspects of the value equation, pressure ulcers have been reduced by 66%, patient falls have reached all-time lows, and central-line infections are approaching top decile performance. Productivity is on target to exceed the 5% improvement goal in FY2011 resulting in \$4.6 million in annualized savings.

Conclusion

As the nursing team at Northwestern Memorial Hospital reflects on the past and contemplates the changing landscape of hospital operations in the next decade, we realize leadership, above all else, is the cornerstone of success. Leadership sets the culture, creates the strategy, and drives the business. Whether it is financial improvement, advancing patient safety, or ensuring a highly engaged workforce, success will not be attained without thoughtful, focused leadership. As the novelist John Gardner said: "Leaders conceive and articulate goals that lift people out of their preoccupations and unite them in pursuit of objectives worthy of their best efforts."

While the structures, processes, and tools discussed in this article may serve as the means to achieve a target, it is leadership's responsibility to set the right goal and motivate others. \$

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