



# **The Journey to Becoming More Affordable**

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Can you Transform Your Health Care System to Survive (or Thrive) at Medicare Rates?

# Lessons Learned...

- “The last time the federal budget was balanced, in the Balanced Budget Act of 1997, it was done on the backs of the hospital industry.”
- “Learn to run on regular gas! You cannot expect to shift costs indefinitely...”
- “Cost shifting is like heroin – it’s time to kick the habit. This means instilling rigorous cost discipline in collaboration with physicians.”

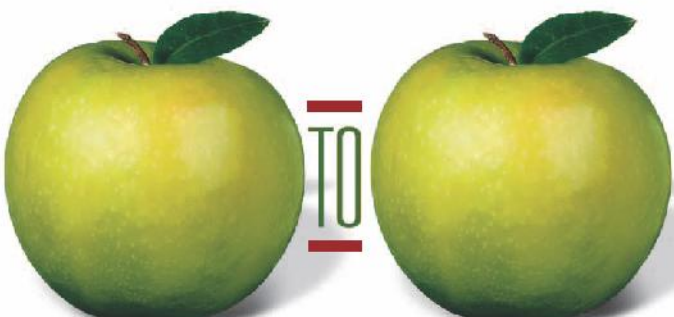
Source: “Beyond Healthcare Reform”  
Jeff Goldsmith, President of Health Futures, Inc.  
October 2009

# Model of Efficiency?

12 Carolyn Clancy's Quality Mission 33 Hospitals Go Wireless 36 AHA NOVA Winners 2009

# H&HN

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**Could Your Organization *Survive on Medicare Rates Alone?***

A Novant Health experiment aims to find out—and the results so far may surprise you.

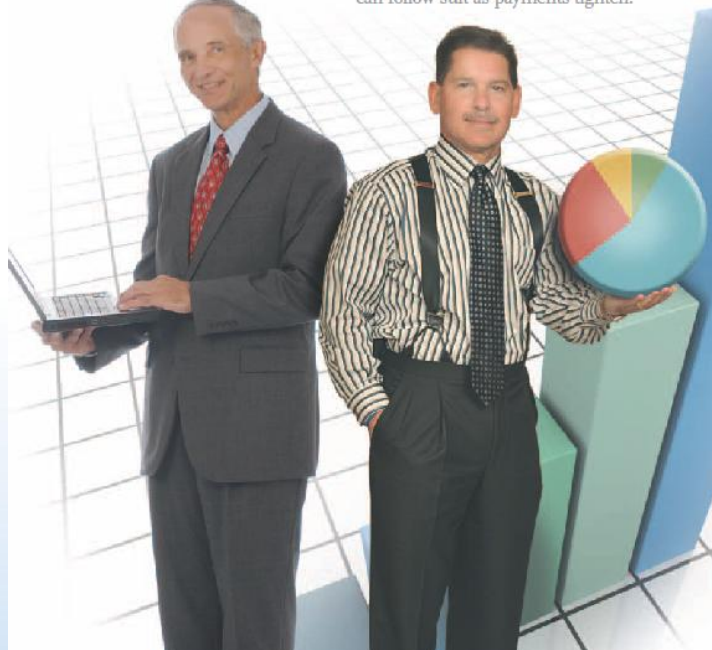
**AHA**

COVER HEALTH REFORM

## A Model of Efficiency














BY MATTHEW WEINSTOCK

With sharper benchmarking, Novant Health launched an all-out assault on variations and inefficiencies. Other hospitals and health systems can follow suit as payments tighten.



One of the Top 10 requested articles for 2009

# 2009 Acute Care Statistics

	Licensed Beds	Adjusted Discharges	Emergency Visits	IP and OP Surgeries		
Forsyth	932	60,978	104,752	25,359		
Presbyterian	531	49,434	81,939	22,452		
Rowan	268	21,588	58,320	9,666		
Prince William	170	28,048	68,925	8,543		
Thomasville	149	10,125	33,812	3,748		
Upstate Carolina	125	7,793	31,609	3,190		
Matthews	114	18,488	48,812	6,191		
Orthopaedic Hosp	156	5,129	NA	6,889		
Huntersville	60	13,292	33,935	5,731		
Brunswick	60	8,617	24,223	3,798		
Franklin	70	5,127	19,246	2,255		
Medical Park	22	5,848	NA	11,416		

# Six Steps

- 1) We defined the destination and made it a key element of our strategy
- 2) We created a structure to support changing our model.
- 3) We are shining a bright light on every type of variation and identifying promising opportunities.
- 4) We are engaging all groups in Novant to go on our journey.
- 5) We are using all tools to change and take advantage of our promising opportunities.
- 6) We are tracking our progress towards becoming more affordable.

**1) We defined the destination and made it a key element of our strategy.**

- Inspirational
- About the patient and community
- Simple

***Our goal is to deliver a Remarkable Patient Experience in every dimension, every time.***



# The Remarkable Patient Experience



# Novant Vision Elements



## Safety

Our patients are safe and free from harm when they are in our care. Our work environment is one of open communication and timely feedback about the patient's safety and care experience which is guided by the expectation *"First, Do No Harm."*



## Quality

An integrated system of healthcare services which delivers superior outcomes as measured against national, state and regional benchmarks, peer databases, internal standards, and the patient and family experience. Incorporates prevention, early detection, treatment and ongoing health across all venues of care. Our public transparency about our outcomes data creates a compelling reason for patients, communities, physicians and employees to affiliate with Novant and choose us for their healthcare needs.



## Affordability

Commitment to develop a system of care that provides value, as judged by our patients and their payers. Novant will compare favorably to a similar group of top performing health systems. Our sustained financial strength will allow us to grow strategically and invest to meet the needs of the communities we serve.

# Novant Vision Elements



## Easy for Me

A convenient and seamless patient and family experience which is accessible and welcoming. Patients understand they are part of a system of care and can describe what is going to happen during their journey and why. Resources and information are readily available and waits are filled in ways that add value to patients and their families.



## Voice & Choice

Patients are genuinely engaged as partners with their caregivers in a dialogue about their health conditions and treatment options. Patients and their families are provided with necessary information consistent with their level of interest to make knowledgeable and confident care decisions.



## Authentic Personalized Relationships

Patients receive care with sensitivity to their cultural differences and always with compassion. Our caregivers take time to know their patients' needs and preferences and recognize the mind, body and spirit connection in the healing process. Our genuine and caring relationships make patients feel like family.

# Affordability



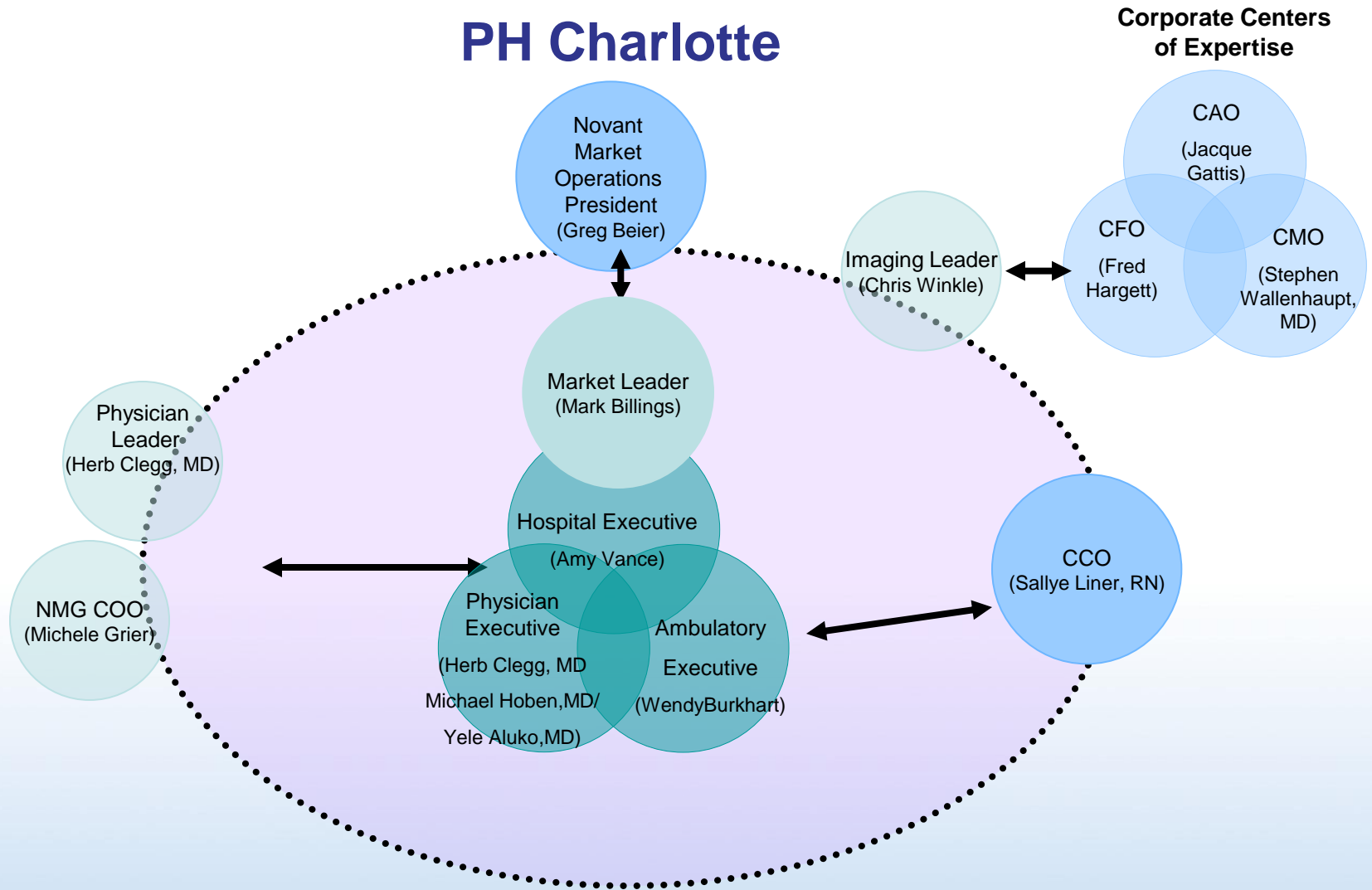
While Novant must deliver a product that provides value to our patients, it is critical that we deliver the Remarkable Patient Experience through a care model and support system that recognizes the external forces impacting our system and creates sustained financial performance

- In 2015
  - Patients in the communities we serve receive remarkable care through a financially strong system that is truly integrated and recognized nationally for the value provided
  - Our health care services are known by our patients for their value, when compared to our competitors
  - The overall financial health of our health care system allows us to grow strategically in terms of new facilities and other services to meet the needs of patients and communities

## 2) We created a structure to support changing our model.

- Matrix Organization
  - Optimize care for each community
  - Develop the “Novant Way” to execute the Remarkable Patient Experience in a unified low variation model.

# Greater Charlotte Market PH Charlotte



### 3) We are shining a bright light on every type of variation and identifying promising opportunities.

- We use existing tools (Trendstar) and existing information (Expected Medicare Payment) to create a relative value system and tracking tools.

***“Faced with the choice between changing and proving there is no need to...Almost everyone chooses to get to work on the proof.”***

*-John Kenneth Galbraith, American Economist circa 1980*

# Payor Neutral Revenue

## Net Revenue vs. Payor Neutral Revenue

## Operating Expense as % Net Rev & PNR

	<b>Net Rev</b>	<b>PNR</b>	<b>Net Rev</b>	<b>PNR</b>
	<b>July YTD 2010</b>	<b>July YTD 2010</b>	<b>Baseline</b>	<b>Baseline</b>
	<b>2008</b>	<b>2008</b>		
Presbyterian Main/Orthopedic	\$406,228	\$283,071	89%	120%
Presbyterian Matthews	95,966	62,946	69%	104%
Presbyterian Huntersville	74,949	49,189	70%	109%
Forsyth Medical Center/Medical Park	462,490	325,830	84%	110%
Thomasville Medical Center	38,993	30,236	89%	111%
Brunswick Community Hospital	31,826	25,590	105%	126%
Rowan Regional Medical Center	103,193	76,155	94%	113%
	<b>\$1,213,645</b>	<b>\$853,017</b>	<b>85%</b>	<b>113%</b>

## **4) We are engaging all groups in Novant to go on our journey.**

- Board and Physician Leadership own the destination with us and see affordability as part of Remarkable Patient Experience.
- Leaders embrace the accountability for becoming affordable as part of their balanced scorecard
- Physicians partner with us to understand the variation and help us create the Novant approach to clinical care.
- Employees are engaged in learning and helping us transform our process of care to reduce waste and improve quality and safety.



## **5) We are using all tools to change and take advantage of our promising opportunities.**

- Management precision 2009 - 2015
- How we support care 2010 – 2015
- Create the Novant Science 2010 - ?
- Transform care processes 2011 - ?

# Payor Neutral Revenue helps us ask the following kinds of questions:

- 1) Management Precision
  - Why does one hospital consume 30% less of PNR for labor in the OR to do hip procedures?
  
- 2) How we support delivering the Remarkable Patient Experience
  - Why does the % of PNR consumed for pharmacy services vary 20% in similar hospitals?
  
- 3) How clinical practice variation impacts affordability
  - Why does one team of hospitalists get excellent clinical outcomes with CHF patients and consume 50% less of PNR for imaging services.

## Examples of Management Precision

- We found several hospitals were consuming a much lower % of PNR for nursing labor than other hospitals in our system. One pay practice was changed and \$5.5 million was saved.
- We internally benchmarked what % of PNR was being consumed in leadership structures at each hospital. Nearly \$3 million was saved in two hospitals by eliminating a layer of management.

# Examples of Transforming Support Structure

- High variation in the % of PNR being consumed for Pharmacy led to the creation of a virtual pharmacy. This will result in safer more consistent care and \$9 million in savings. *Case study to follow...*
- High capital cost, as a % of PNR, in our new community hospitals showed the need for a new plan. Square footage will be reduced by 33% for the next hospital we build. In a recently filed CON application it is worth noting the construction cost of Novant's 50 bed hospital was \$77M and the competing proposal was at \$127M.

## Example of creating the Novant Science to reduce clinical variation.

- Drug costs in one cath lab are 50% less than at other comparable hospitals, as a % of PNR. Currently physicians decide on their individual protocol.

A Cardiac Council was formed to develop a single protocol for all cardiac services in 12 hospitals.

## Example of Transforming Care at the Bedside

- Clinical Documentation Team has been launched to transform documentation for care. Expected savings of two hours per nurse per shift. We have approximately 5,000 nurses.

## 6) We are tracking our progress towards becoming more affordable.

	<i>Net Revenue vs. Payor Neutral Revenue</i>		<i>Operating Expense as % of PNR</i>		
	<b>Net Rev 2010</b>	<b>PNR 2010</b>	<b>Baseline 2008</b>	<b>2010</b>	<b>24 Month Improvement</b>
Presbyterian Main/Orthopedic	\$691,647	\$484,264	120%	109%	\$53,197
Presbyterian Matthews	164,309	108,683	104%	98%	3,488
Presbyterian Huntersville	127,296	83,623	109%	99%	5,531
Forsyth Medical Center/Medical Park	724,408	557,574	110%	102%	39,328
Thomasville Medical Center	67,052	51,896	111%	105%	2,743
Brunswick Community Hospital	53,620	43,649	126%	111%	6,337
Rowan Regional Medical Center	159,307	130,082	113%	104%	11,500
	<b>\$1,987,639</b>	<b>\$1,459,771</b>	<b>113%</b>	<b>105%</b>	<b>\$122,124</b>

# PNR versus Net Revenue

- ***Use PNR to Assess...***

- Variation in resource consumption between nursing units, product lines, physician groups and hospitals
- Operational improvements over time
- Where you should focus your operational improvement efforts
- Helping to set targets for budget

- ***Use Net Revenue to Assess...***

- Revenue cycle improvements
- Growth & pricing strategies over time
- Where you should focus your marketing & contracting efforts
- Strategic investments



# “Traditional” Income Statement

	<u><i>Hospital 1</i></u>	<u><i>Hospital 2</i></u>
Gross Revenue	\$278,803,000	\$100,335,000
Charity Care	\$11,536,000	\$13,046,000
Net Revenue	\$124,925,000	\$39,737,000
Salaries % of Net Revenue	43.65%	45.60%
Supplies % of Net Revenue	11.40%	9.75%
Other Expenses % of Net Revenue	14.46%	16.53%
Total Expense % of Net Revenue	<b>69.51%</b>	<b>71.89%</b>
Bad Debt % of Net Revenue	12.84%	8.53%
Margin	\$22,052,000	\$7,784,000
Margin %	17.65%	19.59%

*Which hospital is the most productive and efficient?*

*Hospital 1*

# “PNR” Income Statement

	<u><i>Hospital 1</i></u>	<u><i>Hospital 2</i></u>
Gross Revenue	\$278,803,000	\$100,335,000
Charity Care		
Payor Neutral Revenue (PNR)	\$78,391,000	\$30,236,000
Salaries % of PNR	69.56%	59.93%
Supplies % of PNR	18.16%	12.81%
Other Expenses % of PNR	23.05%	21.73%
Total Expense % of PNR	110.77%	94.47%
Bad Debt % of PNR	0.00%	0.00%
PNR Margin	-\$8,441,000	\$1,671,000
PNR Margin %	<i>-10.77%</i>	<i>5.53%</i>

*Which hospital is the most productive and efficient?*

*Hospital 2*

# Case Studies

- Pharmacy Transformation
- Physician Facilitated Practice



# Novant Pharmacy Transformation

# How Did We Find This?

## 2008 Pharmacy Drug Cost % PNR

	<u>Hosp 1</u>	<u>Hosp 2</u>	<u>Avg PNR</u>
IP Invasive Cardiology PL	7.7%	5.7%	\$17,005,459
OP Oncology PL	15.8%	37.1%	\$16,082,864

*In early 2009, we partnered our like facilities into 'couplets' for comparative purposes.*

# Why Did We Do This?

- Improve safety and quality for patients with increased affordability for all
- Eliminate drug cost differences among facilities or regions
- Reduce high variation in % of PNR across system pharmacies

# Physician Involvement

- Physicians involved from the beginning
- Transparent/Inclusive/Collaborative
- Formed System Wide P&T Committee
- Developed sub-specialty committees for specific areas

# Inventory Consolidation

## 18 Months Into the Process

- 57% of formulary consolidated system-wide end of 2010
  - Eliminate duplications
  - Increase drug turn-around
  - Enhance system-wide contracts
  - Optimize select 340-B Pricing
- Contract optimization – VHA
  - Net savings \$700k
- Mitigation of drug shortages



# Clinical Pharmacists – Pharm D's

- Medication safety guiding principle in transformation efforts
- IV to PO drug conversions
- Auto substitutions to formulary medications
- Clinical Decision Support
  - Zosyn IV over 8 hours q8<sup>o</sup> instead of q6<sup>o</sup>
    - More effective for patient
    - Less nurse & pharmacist time
    - Saved 1 dose per day of therapy
    - Saved \$151,000 drug cost alone in 2010

# Pharmacy Personnel

- Improved resource management
- Top of the License
  - Pharm D's
    - (Clinical Pharmacists)
  - Rph
    - (Starts, Revisions, Cancels)
  - Pharmacy Tech
    - Pyxis Optimization
    - Proactive monitoring of drugs for expiration

# Where We Are Going

- Software for a 'virtual pharmacy'
  - Inventory Control
  - Centralized Receiving & Distribution

# Savings

- Inventory Consolidation \$4M (one-time)
- Medication Turn-Over \$2M (annual run rate)
- Optimized Formulary Selection \$3 M (annual run rate)

# Lessons Learned

- Involve physicians from the beginning
- Culture change process
  - Facility operator ownership
  - Integration into budget process



# Physician Facilitated Practice

## Why Did We Do This?

- To improve overall safety & patient care
- To increase affordability for patients & system

# How Did We Find This?

## NICS Stroke % PNR 2009

NICS GROUP	Cases	ALOS	Readmit Rate	Charges per Case	PNR per Case	Cost per Case	Cost % PNR	Pharmacy % PNR	Imaging % PNR	Lab % PNR
NICS BCH	60	2.82	6.67%	17,552	5,425	2,562	47.22%	6.12%	4.49%	5.01%
<b>NICS PHH</b>	<b>75</b>	<b>2.65</b>	<b>8.00%</b>	<b>14,838</b>	<b>5,842</b>	<b>2,796</b>	<b>47.87%</b>	<b>4.58%</b>	<b>6.74%</b>	<b>4.50%</b>
NICS PHM	201	3.07	4.48%	15,297	5,776	2,381	41.23%	4.63%	5.24%	3.54%
NICS TMC	96	2.24	5.21%	14,123	6,206	2,841	45.77%	3.93%	4.14%	6.91%
Grand Total	432	2.78	5.56%	15,270	5,834	2,581	44.23%	4.65%	5.14%	4.69%

Among Novant's community hospitals in 2009, PHH had the highest readmission rate and cost as a percent of PNR for Stroke cases.



# PHH Physician Detail

## NICS Stroke % PNR 2009

ATTENDING MD	Cases	ALOS	Readmit Rate	Charges per Case	PNR per Case	Cost per Case	Cost % PNR	Pharmacy % PNR	Imaging % PNR	Lab % PNR
Physician 1	14	1.86	14.29%	10,954	5,045	2,010	39.85%	3.17%	5.88%	4.08%
Physician 2	6	3.33	0.00%	14,903	5,994	3,072	51.25%	5.25%	6.68%	2.98%
Physician 3	6	3.17	0.00%	17,938	6,161	3,228	52.40%	4.94%	8.69%	4.14%
Physician 4	8	3.38	12.50%	16,701	5,755	3,288	57.13%	6.12%	7.97%	4.70%
Physician 5	8	2.50	12.50%	15,335	5,614	2,726	48.56%	4.22%	8.02%	4.76%
Physician 6	17	2.65	11.76%	16,519	6,348	2,889	45.50%	4.75%	6.40%	5.52%
Physician 7	16	2.63	0.00%	14,086	5,982	2,910	48.64%	4.45%	5.83%	4.13%
Grand Total	75	2.65	8.00%	14,838	5,842	2,796	47.87%	4.58%	6.74%	4.50%

# Get the Data to the Physicians!

- Why Am I Different?
  - Research best practices and evidence-based medicine
  - Discuss with specialty physicians and ED
  - Present best practice models

*That's Why I'm Different!!*

# Physician Facilitated Practice

- Establish a Physician Facilitated Practice Committee
  - Not an ALOS Committee!
- Review cost and clinical outcomes
  - Direct Cost as % of PNR for Pharmacy, Imaging, & Lab
  - Average Length of Stay
  - Readmission Rates

# Outcomes

- Better Utilization
  - Pharmacy drug cost & selection
  - Lab Studies
    - Serial BNP – No evidence of benefit in Heart Failure
    - Sputum Cultures – No evidence of benefit after antibiotics administered
  - Imaging MRI & Ultrasound
    - Serial Chest X-Rays – No evidence of benefit if patient clinically improving
- Better Communication Through Use of a Priority of Service Form

# NICS Stroke 2010

NICS GROUP	Cases	ALOS	Readmit Rate	Charges per Case	PNR per Case	Cost per Case	Cost % PNR	Pharmacy % PNR	Imaging % PNR	Lab % PNR
NICS BCH	104	2.88	5.77%	18,184	5,581	2,557	45.82%	5.67%	3.90%	4.80%
<b>NICS PHH</b>	<b>121</b>	<b>2.69</b>	<b>6.61%</b>	<b>15,591</b>	<b>6,085</b>	<b>2,684</b>	<b>44.12%</b>	<b>4.37%</b>	<b>6.33%</b>	<b>5.20%</b>
NICS PHM	205	3.21	5.37%	17,333	6,020	2,632	43.72%	4.84%	4.71%	4.42%
NICS PWH	76	3.42	9.21%	14,510	6,888	3,589	52.10%	5.52%	5.37%	3.48%
NICS RMC	175	3.91	7.43%	18,108	6,189	3,384	54.69%	6.63%	4.57%	3.97%
NICS TMC	95	2.73	5.26%	16,156	6,534	3,389	51.86%	5.21%	4.07%	6.11%
Grand Total	776	3.20	6.44%	16,930	6,157	2,986	48.50%	5.40%	4.82%	4.60%

*In 2010, PHH's readmission rate declined 1.39% and cost as a percent of PNR declined 3.75%.*

# Lessons Learned

- Data to compare with like facilities
- Get the data out soon for discussion
- Collaboration between physicians and administrative leaders

# Remember...

- The most important distance to travel on this journey is the first six inches.
- Changing our mental-model *from* achieving budget *to* accountability for long term affordability.



**Questions ?**