## Containing Cost While Providing Prudent Care

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## Caveat #1: What Brought Us to this Dance ...

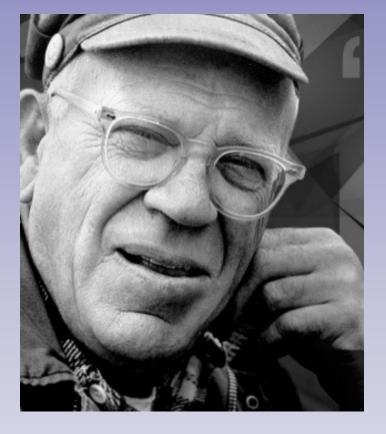
## Ain't Going to Get Us to the Next One ....

#### Caveat #2 – The Best Definition of Madness is

# To keep doing things the same way and expect different results . . .

#### Caveat #3 How Most of Us Approach Change





"In times of change, learners will inherit the earth while the learned find themselves beautifully equipped to deal with a world that no longer exists."

#### **Social Philosopher Eric Hoffer**



Definition of "Resource Utilization" and "Cost Containment"

Major types of over-utilized resources: Staff/Imaging/Lab/Inpatient admissions

"Wasted Bed Capacity"

**Tools available to assist in this process** 

Physician profiling and change management

#### **Definitions**

#### Resource Utilization:

✓ The percentage of time a resource is busy

✓ Use compared to availability

#### Cost Containment:

A wide variety of strategies or methods whose primary goal is to control the rising cost of health care. These strategies and methods may include, but are not limited to government regulation, managed care programs, payment policies, global budgets, rate setting, consumer education, and utilization management

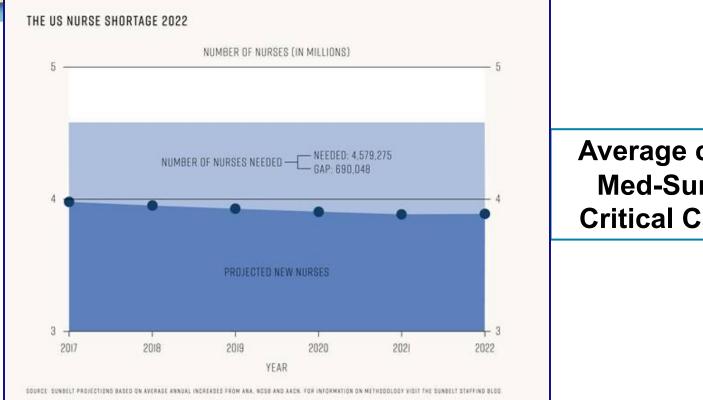
## **Capacity Vs. Demand - IHI**

Matching capacity and demand by making minor adjustments in the availability of health care providers or the scheduling of elective surgeries is often sufficient to reduce delays. If the demand for care is greater than the capacity of the system, there will be a delay in providing care. If the capacity is greater than demand, then resources are being wasted. When capacity and demand are matched, delays in care are reduced. Whenever a quantitative analysis indicates that the system has the capacity to meet the demand during normal functioning, then specific change concepts can be implemented relatively quickly to help align capacity and demand during predicted or unpredicted periods of high demand.

#### Cost = \$\$ Spent – Benefit

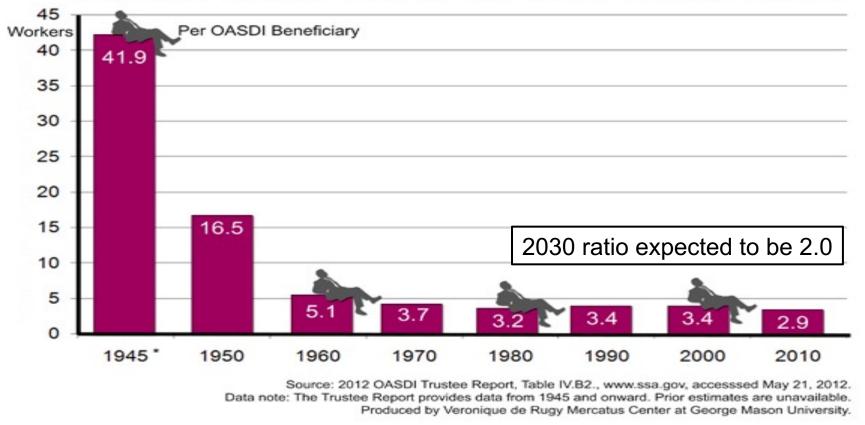


#### Why Is This Important? Example #1: Workforce Shortage



Average cost to replace: Med-Surg \$40-52,000 Critical Care \$70-80,000

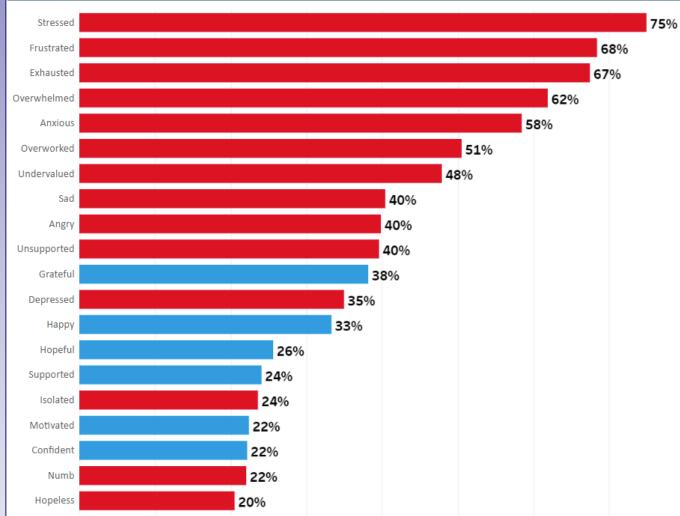
#### How Many Workers Support One Social Security Retiree?



#### **Turnover amidst the Pandemic**

- Since 2016, the average hospital turned over about 90% of its workforce and 83% of its RN staff.
- Hospitals in the Southeast had the highest RN turnover rate in 2020 of 24.9%, 7.2 % increase from 2019.

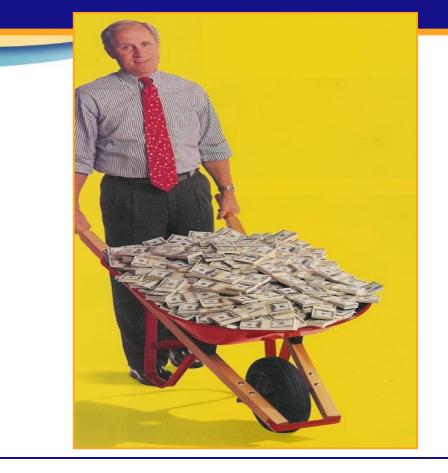
#### In the past 14 days, have you experienced any of the following feelings?



#### American Nurse Foundation Survey (9,572 nurses) August 2021

Stressed	75%
Frustrated	68%
Exhausted	67%
Overwhelmed	62%
Undervalued	48%
Hopeless	20%
Grateful	38%
Нарру	33%
Confident	22%

#### **Example #2: Revenue Maintenance**



If X = healthcare \$, and HEF# of people outilizing theologithcare then ... Z = healthcare \$/person

If X stays ~ the same, and Notreases dramatically, Z will decrease dramatically \*\*\*

Every day 10,000 Americans turn 65 years of age



- We are still viewed as "the most expensive place in the health care system to receive care."
- We are the #1 target for ACO's and organizations committed to value-based payment.
- And . . . Medicaid in most states is the single largest line item in the budget!
- AND . . . In terms of admissions and other costs, EP's control 32%!

#### An Interesting Study by Myles Riner

- 20% of least costly non-admitted ED visits account for 4% of the total cost of all non-admitted ED visits.
- Could save as much \$ if reduce CT scans 1/12.

#### **Responsibilities**

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• Conduct an analysis of programs designed to impact low value care efforts in other states, within Louisiana, and inside LQN.

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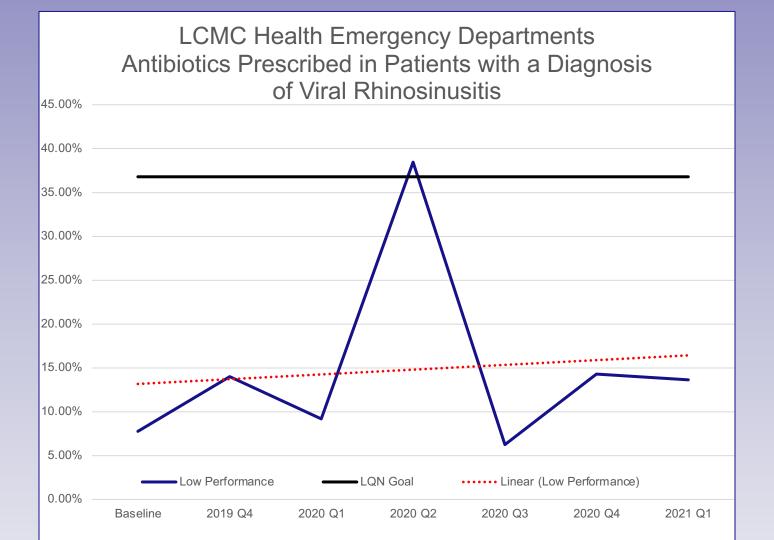
- Develop strategies and leverage technology to explore improvement opportunities that will impact low value care.
- Identify, share and promote best practices within LQN that will identify and fill knowledge gaps, generate creative and innovative ideas, lead to improvements in overall patient care, and result in responsible planning and management of Medicaid resources.
- Promote education and engagement in patient safety, quality improvement and care transitions elements for attending physicians, residents, medical students and advanced practice professionals.
- Meet other deliverables related to the MCIP Program as assigned by the Quality Subcommittee

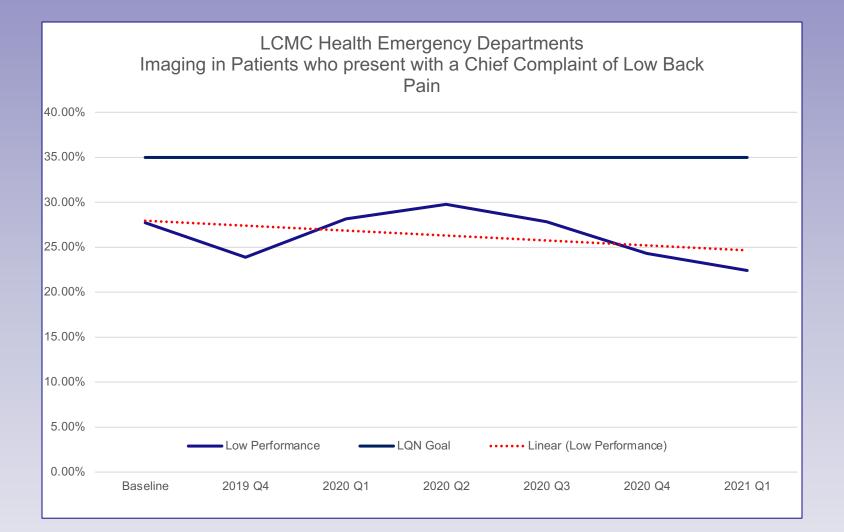
The Louisiana Quality Network Promoting Evidence-based Practice/Reducing Low Value Care Committee has chosen to focus its efforts on:

- Avoid prescribing antibiotics in the emergency department (ED) for uncomplicated sinusitis (Target Guideline A)
- Avoid lumbar spine imaging in the ED for adults with non-traumatic back pain unless the patient has severe or progressive neurologic deficits or is suspected of having a serious underlying condition (such as vertebral infection, cauda equine syndrome, or cancer with bone metastasis) (Target Guideline B)

## **MCIP Educational Actions**

- Educate existing medical staff (MD, NP, PA, Residents) and nursing staff using the letter provided to LQN facilities for the purpose of explaining the MCIP program and socializing baseline performance for Target guidelines A & B.
- Educate medical staff (MD, NP, PA, Residents) using the EBP Grand Round presentation titled "Promoting Evidence-Based Practice and Reducing Low Value Care – LQN Target Guidelines" and "The Evidence Behind the Target Guidelines in the Treatment of Patients with the Complaint of Low Back Pain and the Diagnosis of Sinusitis."
- ▼ Educate medical staff (MD, NP, PA, Residents) and nursing staff of available patient/provider educational material for Targets A & B, including the *Choosing Wisely*® materials.
- Provide online references, including UpToDate for evidence-based practices intended for uncomplicated sinusitis and low back pain.
- ▼ Follow through on education regarding the ACR Select Appropriate Use Criteria software implemented within the Epic electronic health record.
- ▼ Develop and implement Best Practice Advisories (BPA's) to remind physicians within their normal work-flow of the target guidelines and encourage consistent utilization of the guidelines.





### In Terms of \$ Cost, the Real Questions Are

- Do you need to order that imaging study on that patient?
- To you really need to admit that patient?
- Status: Observation or Inpatient?
- ▼ Level of Care: Med/Surg or Tele or ICU?

and . . .

Are all of your clinicians making those decisions in a consistent way?

## In Terms of \$ Cost, the Next Question Is

Are you giving your clinicians individual feedback on their:

- Resource utilization
- Throughput metrics
- Admission/Observation %'s
- ▼ Patient experience
- Relationship with staff
- Relationship with peers

Relationship with medical staff/resident staff?

	PHYSICIAN EVALUATION								
	Physician Name:								
	Evaluation: 90 Day, 6 Month,Year								
	Date:								
		Poor	Fair	Average	Good	Excellent	N/A		
CLINICAL PERFORMANCE: Overall Knowledge: Knowledge of the		1	2	3	4	5	6		
Clinical Literature: Judgment:		1 1	2	3	4 4	5 5	6 6		
Speed: Q/A Issues:		1	2 2 2	3 3 3	4	5	6		
							0		
Physician score: Patients per service hour: RVU's per service hour: % 72 hour returns admitted:									
COMMENT(S):									
	Overall: COMMENT(S):								

#### Questions

- Is ordering the appropriate study equivalent to quality?
- Is not ordering the unneeded study equivalent to quality?
- Is working fully staffed more likely to produce quality?
- Is working short less likely to produce quality?

#### **Choosing Wisely 2013**

#### ACEP Announces List of Tests As Part of Choosing Wisely Campaign

#### October 14, 2013

In Monday's ACEP13 Opening Session, ACEP announced its list of five tests and procedures that may not be cost effective in some situations and should prompt discussion with patients in order to both educate them and gain their agreement regarding avoidance of such tests and procedures, when appropriate. These recommendations are part of ACEP's participation in the "Choosing Wisely<sup>®</sup> campaign.

The mission of "Choosing Wisely" — a multi-year effort of the ABIM Foundation — is to promote conversations among physicians and patients about using appropriate tests and treatments and avoiding care when harm may outweigh benefits. Since launching in April of 2012, more than 80 national, regional and state medical specialty societies and consumer groups have become "Choosing Wisely" partners. ACEP officially joined the campaign in February.

"Overuse of medical tests is a serious problem, and health care reform is incomplete without medical liability reform," said ACEP President Alex Rosenau, DO, FACEP. "Millions of dollars in defensive medicine are driving up the costs of health care for everyone. We will continue to encourage the ABIM Foundation and its many partners in this campaign to lend their influential voices to the need for medical liability reform."

ACEP's five recommendations were developed through a multi-step process that included research and input from an expert panel of emergency physicians and the ACEP Board of Directors.

## **The 5 Initial Recommendations**

- 1. Avoid computed tomography (CT) scans of the head in emergency department patients with minor head injury who are at low risk based on validated decision rules.
- 2. Avoid placing indwelling urinary catheters in the emergency department for either urine output monitoring in stable patients who can void, or for patient or staff convenience.
- 3. Don't delay engaging available palliative and hospice care services in the emergency department for patients likely to benefit.

## The 5 Recommendations

- 4. Avoid antibiotics and wound cultures in emergency department patients with uncomplicated skin and soft tissue abscesses after successful incision and drainage and with adequate medical follow-up.
- 5. Avoid instituting intravenous (IV) fluids before doing a trial of oral rehydration therapy in uncomplicated emergency department cases of mild to moderate dehydration in children.

## **Choosing Wisely 2015: The Second 5**

- 6. Avoid CT of the head in asymptomatic adult patients in the emergency department with syncope, insignificant trauma and a normal neurological evaluation.
- 7. Avoid CT pulmonary angiography in emergency department patients with a low-pretest probability of pulmonary embolism and either a negative Pulmonary Embolism Rule-Out Criteria (PERC) or a negative Ddimer.

#### The Second 5

- 8. Avoid lumbar spine imaging in the emergency department for adults with atraumatic back pain unless the patient has severe or progressive neurologic deficits or is suspected of having a serious underlying condition, such as vertebral infection or cancer with bony metastasis.
- 9. Avoid prescribing antibiotics in the emergency department for uncomplicated sinusitis.

#### The Second 5

10. Avoid ordering CT of the abdomen and pelvis in young otherwise health emergency department patients with known histories of ureterolithiasis presenting with symptoms consistent with uncomplicated kidney stones

- What have you done to implement the Choosing Wisely recommendations?
- What have you done to make your clinicians' practice more consistent?
- Y How have you demonstrated to your leadership (hospital, health system, state legislators) how you are containing cost while providing prudent/quality care?

#### The Real Question is not . . .

# "Quality vs Cost" but rather

"How to Engender Quality and Generate \$
through
Cost-Effective Throughput and
Effective Use of Resources"

#### The Real Issue is Not \$ Spent . . . But

## What Do You Get

# for the \$\$

# You Spend?

The Real Issue is Not \$ Spent . . . But

# You have to learn to talk the language of VOI . . . Value on Investment

# Return on Investment UMC (2019)

#### Increased Admissions/ Observation 1295 patients

#### Increased Visits/Patients treated 3168 patients

#### Additional patients seen who didn't LWOBS 51 patients





## **RETURN ON INVESTMENT - UMC (2019)**

**Of Admissions/ Observations** 

>55.2% Admissions

>31.3% Observations

>13.5% Psychiatric Admissions





## AVERAGE COLLECTED REVENUE (2019)

- Inpatient
- Observation
- Psych inpatient
- Discharged

\$16,873 \$2,376 \$4,699 \$442





#### **RETURN ON INVESTMENT 2019**

- Inpatients: 1295 x 55.2% = 766 patients x \$16,873 = **\$12,924,718**
- Obs: 1295 x 31.3% = 405 patients x \$2,376 = **\$962,280**
- Psych IP: 1295 x 13.5% = 175 patients x \$4,699 = \$822,325
- Total for Admits/Obs = \$14,709,323

#### Plus

 Treated-and-Released: 51 patients (decreased LWOBS) = 51 x \$442 = \$22,542

#### Total increase in revenue = **\$14,731,865**





# RETURN ON INVESTMENT (2018 & 2019) 2018 = \$15,524,027

## 2019 = \$14,731,865

## Total increase in revenue =

## \$30,255,892





#### The Cost-Effective Use of Human Resources ...

Ensure that no one is doing something that could be done by someone who costs less!

(but has the skills and knowledge to get the job done well)

#### **Patient Care Technicians**



#### The Care Pair Concept: Nurses

- Transport
- Do EKG's
- Draw blood
- Take/document vital signs
- Document "patient resting comfortably"
- Change stretcher linen
- Take bedpans

Enter orders/write order slips

#### **Clinical Information Managers - Scribes**



#### The Care Pair Concept: Physicians

- Transcribe
- Document
- Gather lab results
- Know when x-rays are completed
- Follow up on consultants called
- Change stretcher linen
- Take bedpans
- Enter orders/write order slips

#### More Techs, APC's, Scribes











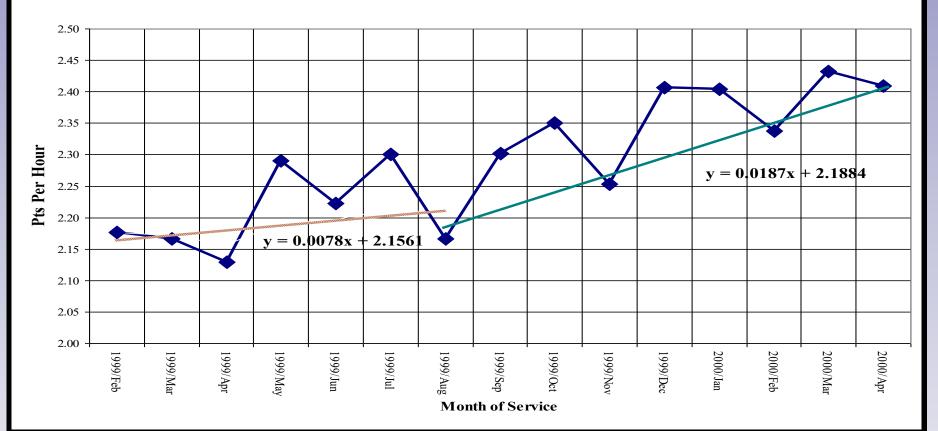
#### **Staffing – Resource Allocation**

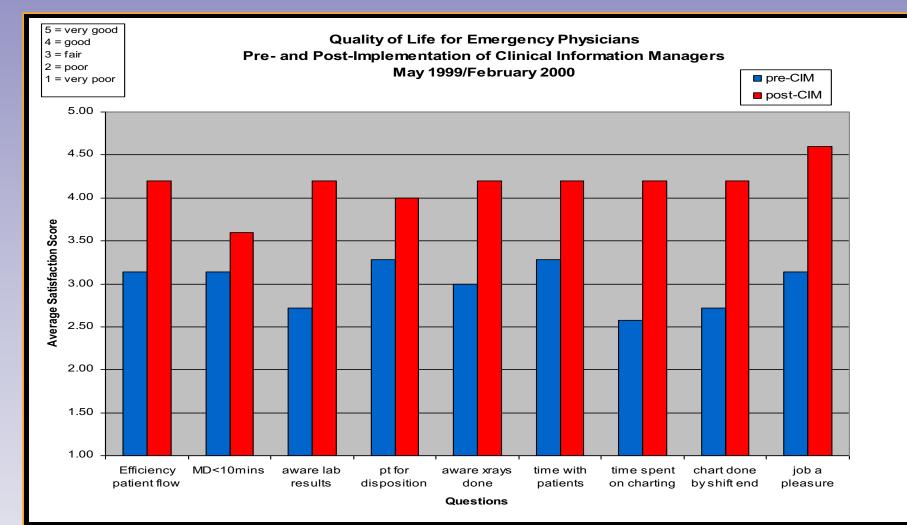
- Dedicated Consistent Charge RN
- Charge/Lead Physician
- **Flexibility**:
  - Floats
  - Liberal use of extenders
  - CIM's/Medical scribes
  - On-call
- Geographic allocation?:
   Nurse, Physician, both?

#### **Clinical Information Managers = Scribes**

- ▼ Go to bedside with you
- Document history and physical exam
- Follow up and alert you re: outstanding lab/ x-ray
- Follow up on requested communication
- Discharge instructions

Avg Patients per Physician Service Hour





#### **The Cost-Effective Use of Space - Throughput**



 Quick Registration
 Intake, not Triage
 Immediate Bedding
 RME: Treat-&-Street from Front/Initiate Care on Others
 Advanced Nurse Protocols

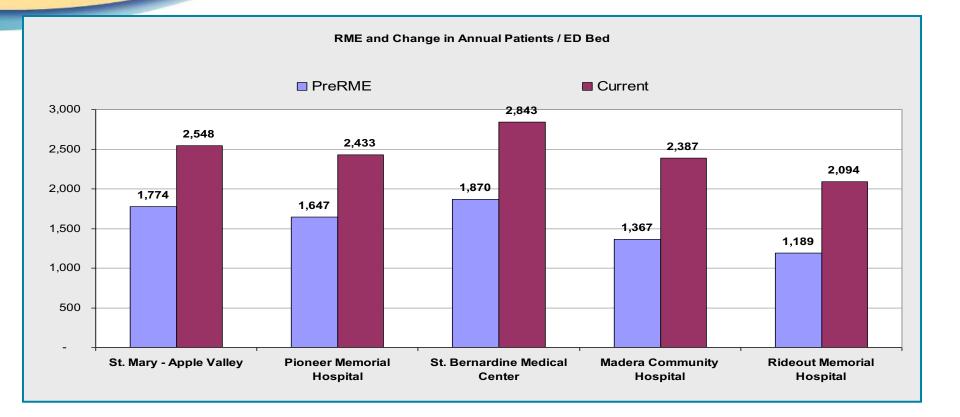


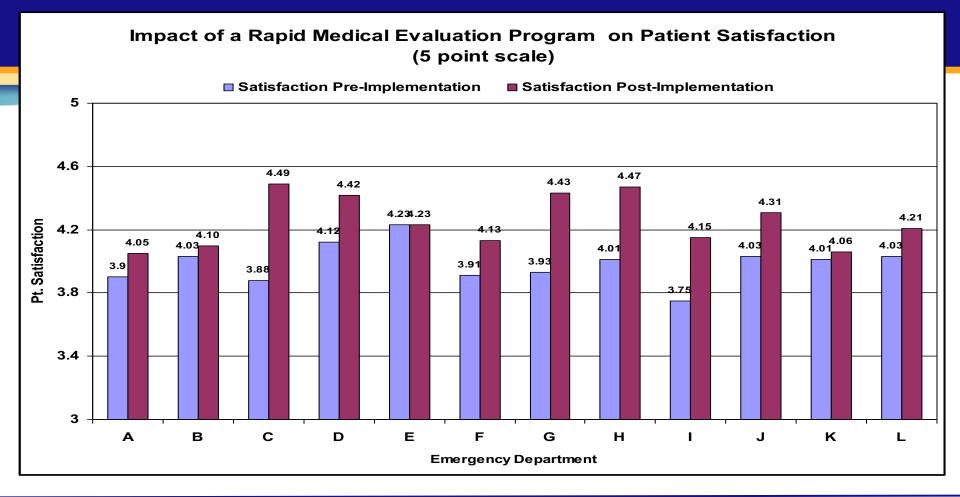
Door to DocPatient Experience

# Treatment Area

If you prefer to wait in the ER lobby, please let us know. Si usted prefiere esparar en la sala de espera en Urgencias, favor de avisamos.

#### **RME and Effective Bed Utilization**













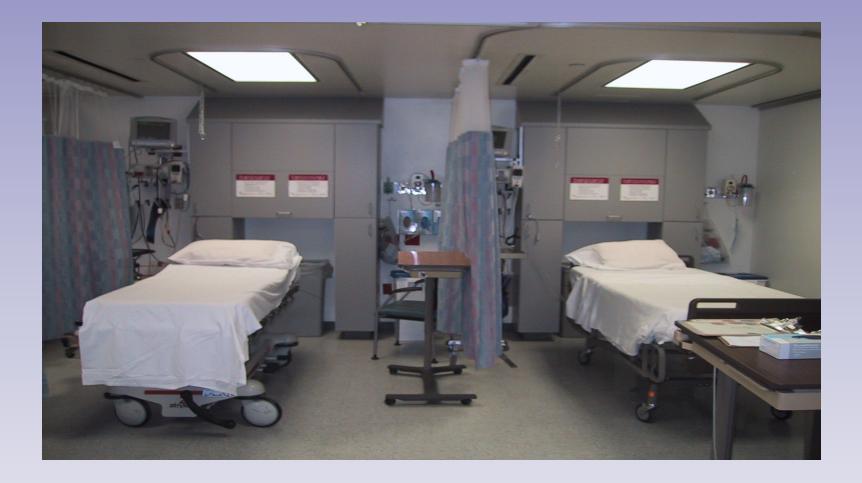
#### Transformation

Collaborative team working together to improve outcomes

- Changed Process enforced changes with leader rounding
- ▼Build out of triage into old waiting room
- ▼Old triage became internal RAP room
- Old storage area became new stretchers
- **Team out front: APP's, nurses, techs**



























### The Emergency Department

Metric	Then	Now
Door to Doc/PA	68 mins	26 mins
Patients LWBS	4.6%	1.5%
LOS Pts D/C'd	260 minutes	196 minutes
LOS Pts Admitted	720 mins	524 mins * (-)71 mins
Patient Satisfaction	3 <sup>rd</sup> percentile	31 <sup>st</sup> percentile (11/12 58 <sup>th</sup> )
Core Measures	Near 100%	Near 100%
		* With Transition Orders

#### **Systems - While Patients Are In**

#### **Turnaround Time Guarantees in Brief**

**Creating Shared Expectations** 



Walsh Hospital

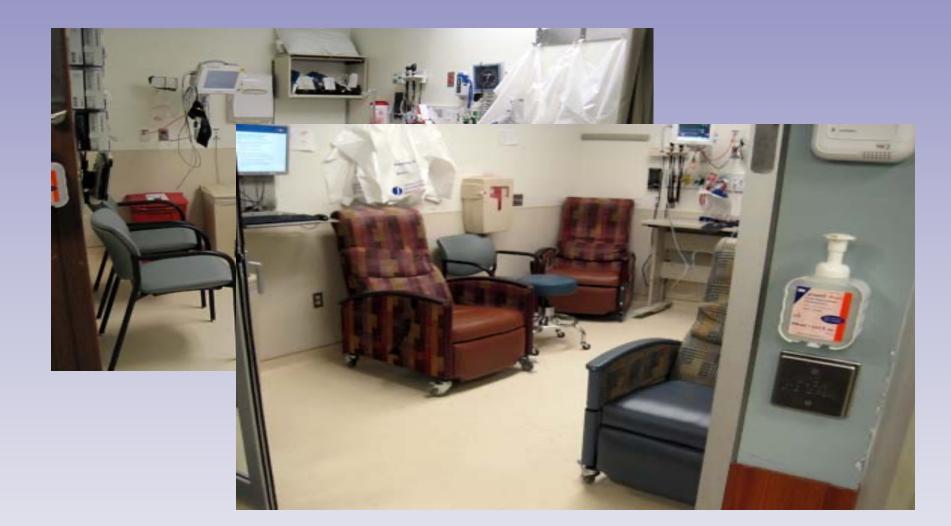
#### LABORATORY OF PATHOLOGY

**Emergency Testing Turnaround Times** 

The laboratory turnaround times for emergency (stat) testing after specimen receipt are the following (95 percent confidence limits):

RRL/Hematology		Chemistry	
Acetone (Ketone)	30	Chemical Assay	
Arterial Blood Gases	30	Abdominal Pain	45
Carboxyhemoglobin	30	Amylase	45
CBC without Diff	30	BUN/Creat	45
Coagulation (PT, PTT)	30	Chem-7	45
CSF Cell Count	45	CK	45
Differential (manual)	45	CSF Glucose/Protein	45
Pregnancy Test, Urine	30	Electrolytes	45
		Enzymes	45
Microbiology		Glucose	45
Gram Stain	45	Liver Profile	45
Group A Strep (Throat)	60	Immunoassay	
Group B Strep (Genital)	120	CK-MB	60
Urinalysis	45	Digoxin	60
T d l		Dilantin	60
Toxicology		hcG, Serum	60
Alcohol	120	Heterophil (Monospot)	60
Toxic Screen, Blood	240-360	Myoglobin	60
Toxic Screen, Urine	240-360	Troponin	60
		Chest Pain Profile	60

Service goals for Lab, **Imaging and Consultants** All rooms multi-purpose Chairs instead of stretchers Extenders ChargeRN/Physician **Board Rounds** 



#### **Systems - Getting Patients Out**

#### Early Inpatient Discharge

- No delay nurse report
- Weekend Discharges
- "Zero Tolerance" on Hidden beds
- Transition orders

Full Capacity Protocol



#### **Measurement – "Inpatient Metrics"**

•Time physician order to discharge to patient out

•Patient out to call to housekeeping

•Call to housekeeping to bed clean

•Bed clean to assignment of new patient to bed

•Time of bed assignment to new patient in bed Time Order to Patient Out

Call to Housekeeping to Room Clean

Key:

- Inpt performance indicators
- •Goals and timeframes
- Data collection process
- Accountability

							Trend This	3	Same			Year over	S	Six Month Performance Indicators						
Metric Category			Metric Nam Select to Dri			Current Month 2021-09	Month vs Prior 3	Month Rolling Average	Month Last Year	Metric Limit	Metric Goal	Year To Date % A	Sep 21	Aug 21	Jul 21	Jun 21	May 21	Apr 21		
	Monthly	y Admission	s (Total)			222		217	213			9%								
Admissions	Monthly	y Admission	s (Observati	ion)		50		41	41			2%	•	•	•	•	•			
Admissions	% of O	bservation A	dmissions			22.5%		19.1%	19.3%			9.9%			•					
	Median	ED Decision	n to Admit t	o Orders W	ritten	52	<b>A</b>	41	34	60	45	29%		•		•	•	•		
LOS	Average	LOS All No	on-Observat	ion Admits	(days)	5.1	•	6.0	3.8	4.5	4.0	27%	•	•		•	•			
LUS	Average	LOS Obser	rvation Adm	its Only (hr	rs)	52.0	•	59.3	38.0	26.0	23.0	19%	•	•			•			
CI:-:-I	30-day	Readmit %	(All cause)			9.0%	•	9.9%	10.8%	11.0%	7.0%	6.0%			•		•	•		
Cinical	Clinical Mortality Rate - (%)		0.0%	•	0.0%	0.0%	1.0%	0.0%	0.3%	•	•		•	•	$\bullet$					
Discharges	% of Pt DC Orders Written before 10am (Excl Obs)		42%	<b>A</b>	31%	45%	35%	45%	17.5%		•		•	•	•					
Discharges	% of Pt	s Discharge	by Noon (E:	xcl Obs)		15%		12%	15%	45%	55%	6.2%	•			•	•			
					<u>Monthly A</u>	.dmissions (C	) bservation)	l,					Per	forma	ince Y	TD	vs PY	TD		
													3	ζTD		]	PYTI	D		
														37			36			
													v	arian	ce YI	D vs	PYTI	D		
41	38	27	26	23	18	37	37	43	41	43	40	50	V	alue			%			
Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021	Feb-2021	Mar-2021	Apr-2021	May-2021	Jun-2021	Jul-2021	Aug-2021	Sep-2021		1			2%			
	gence																			

#### **The Inpatient Process**

Metric	Th	ien	Now
% Pts D/C by 11 am	31	1%	66%
D/C order to Pt Departure	168	mins	189 mins 167 mins (3200)
Departure to Room Clean	84 r	mins	75 mins
ED Admit Request to Orders Received	163	mins	129 mins*
Orders Received to Bed Assignment	280	mins	129 mins
Bed Assign to Pt in Bed	88 r	mins	69 mins
		* Almost Imme	ediate with Transition Orders

#### **Monthly Spreadsheet – Inpatient KPI's**

Inpatient KPIs

					Jan	2020	Feb	2020
KPI	Explanation of Metric	Metric Chosen for 2020	Baselin e		Goal	Actual	Goal	Actual
Discharge Orders by 11 am	% of Discharge Orders by 11 am	SCIC Physician Governance	30.6%	Hosp 1	34.4%	34.1%	34.4%	39.3%
	for Inpatient and Observation	Decision. Baseline is 2019	20.2%	Hosp 2	34.4%	22.2%	34.4%	25.7%
с	-	Average. 2020 Target Goals chosen based on 2019 average	37.7%	Hosp 3	39.6%	41.1%	39.6%	47.4%
		by each facility. Hosptial Throughput Metric.	28.9%	Hosp 4	34.4%	27.4%	34.4%	23.3%
			43.8%	Hosp 5	46.0%	46.3%	46.0%	47.1%
Discharged Patients by 2 pm	% of Admitted Patients that are	SCIC Physician Governance	45.4%	Hosp 1	47.7%	43.3%	47.7%	47.8%
	discharged by 2 pm for Inpatient		32.9%	Hosp 2	35.0%	28.9%	35.0%	25.7%
	and Observation discharges.	Average. 2020 Target Goals chosen based on 2019 average	31.4%	Hosp 3	35.0%	31.8%	35.0%	37.9%
		by each facility. Hospital Throughput Metric.	31.1%	Hosp 4	35.0%	27.4%	35.0%	31.7%
			32.9%	Hosp 5	35.0%	31.8%	35.0%	35.3%

#### ASAP Emergency Department -

#### **KPIs**

					Jan 2	2020	Fe	b 2020
KPI	Explanation of Metric	Metric Chosen for 2020	Baseline		Goal	Actual	Goal	Actual
-	Time from Bed Request Order	ASAP Governance. New metric	NA	Hosp 1	60	19	60	18
	for admission or observation	for 2020 and retired Left	NA	Hosp 2	60	47	60	27
	requested to time bed is	Without Being Seen Metric. No	NA	Hosp 3	60	36	60	25
	assigned (in minutes)	baseline for 2020. 60 minutes	NA	Hosp 4	60	141	60	87
		chosen as standard target goal.	NA	Hosp 5	60	68	60	130
	Time from bed assignment for	ASAP Governance. New metric	NA	Hosp 1	120	39	120	43
	inpatient or observation bed to	for 2020 and retired Admisssion	NA	Hosp 2	120	30	120	44
• •	time patient is physically in	Time from ED to Inpatient. 120	NA	Hosp 3	120	57	120	53
1	inpatient bed (in minutes).	minutes chosen as standard	NA	Hosp 4	120	69	120	64
		target goal.	NA	Hosp 5	120	49	120	52
•	Average duration between a	ASAP Governance. Baseline is	133	Hosp 1	130	140	130	147
	patient's arrival and the time the		136	Hosp 2	136	131	136	146
	patient is discharged from the	specific target goals for 2020	136	Hosp 3	120	136	120	135
	ED. Objective is to be LESS THAN		275	Hosp 4	240	286	240	275
	the target goal	throughput predictions for 2020.	133	Hosp 5	120	129	120	128
Door to Provider		Baseline is 2019 Average. 30	35	Hosp 1	30	34	30	38
	1st seen by a Provider (in	minutes chosen as standard for	19	Hosp 2	30	15	30	19
1	minutes).	2020 at all sites as this is a	5	Hosp 3	30	5	30	5
		national standard expectation.	25	Hosp 4	30	25	30	25
		<u> </u>	19	Hosp 5	30	17	30	19

#### **Individual Physician Profiles**

- If you do not measure by the individual, no one will ever admit that their practice is not A+ the best . . .
- **The excuses are:** 
  - ✓ My patients are different.
  - ✓ The data must be wrong.
  - ✓ It's not statistically valid.
  - **7**...

#### Variation in Clinical Practice is Rampant

IMAGING FOR THE CLINICIAN SPECIAL SECTION CLINICAL RESEARCH STUDY

Robert G. Stern, MD, Section Editor

THE AMERICAN JOURNAL of MEDICINE®

#### Variation in Use of Head Computed Tomography by Emergency Physicians

Head CT examinations were ordered in 8.9% of emergency department visits

- Two-fold variation in overall head CT ordering (6.5–13.5%),
- Three-fold variation in head CT ordering for atraumatic headache (21.2–60.1%).

<sup>,c,e</sup> Richard D. Zane, MD,<sup>a,c,e</sup> e Schneider, MD,<sup>a,c</sup> Richard Hanson,<sup>a,b</sup> 4PH<sup>a,b,e</sup>

<sup>°</sup>Emergency Medicine, and <sup>d</sup>Center for Surgery and Public dical School, Boston, Mass.





- What reserve we had is gone efficient practice is essential.
- Careful resource utilization with appropriate cost containment is crucial to success.
- Consistency is crucial . . . Measurement is a must, individual as well as group.
- ▼ Use of technology is an imperative.

## **Questions?**

Thank you.

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