

ThedaCare (Wisconsin)

- **Context:** 4 hospitals, 22 Primary care centers, rural
- **Why?**

Create a customer-driven interdisciplinary model of care that delivers exceptional outcomes and makes ThedaCare hospitals the inpatient destination of choice for patients and healthcare professionals.
- **What were the innovations/ strategic changes?**
 - A vision of hospital care with nursing at its center
 - A new model of inpatient care delivery based on change in team roles and responsibilities (people), innovative processes, principles of error proofing and visual management
 - Provide an environment designed specifically for the model, to reduce waste, to ensure safety and to promote healing
- **An 18 month redesign of care at the bedside utilizing LEAN concepts that focused on:**
 - Physician as the medical expert for the team
 - Nurse as coordinator of care/ “care manager”
 - Pharmacist as clinical expert at the bedside
 - Patient and family as the center of care
 - An electronic medical record supporting one plan of care
 - An assessment of patients as a team to develop an interdisciplinary plan of care to improve outcomes and increase patient and professional satisfaction.

ThedaCare: Strategic Change Processes

PAST vs. CURRENT

<u>KEY ATTRIBUTE</u>	<u>TRADITIONAL MODEL</u>	<u>COLLABORATIVE MODEL</u>
Patient Experience	Disjointed. May be confusing, even contradictory.	Single plan of care developed with patient - is visible, continuously updated with patient driven schedule and goals.
Clinical Quality	Admirable, but not 100% reliable. Manage errors. Nursing maintaining thru heroics	Reliable, standard work, using evidence-based quality and real time problem solving to prevent errors.
Physician Role	Hierarchical.	Partner in care team. Exposes thinking to professionals team.
Nursing Role	Task oriented. Too much time spent running for supplies and equipment.	Care manager. Expanded and empowered role in decision making and patient care progression. Bedside management of quality measures
Pharmacist Role	Back end.	Bedside presence. More involved in patient contact/education. Teacher to patient and team.
Environment	Semi-private, dated.	Private. Designed for patient/ staff safety, and to support collaborative processes.

Key Elements of Redesign

- Admission Trio
- Tollgates
- Daily Bedside Care Conferences
- Electronic Medical Record (EMR) supporting one plan of care and links to Milliman Guidelines
- Visual Production Control Management for care progression
- Clarity of all roles to function at their highest scope of practice
- Create a physical environment that promotes safety and key processes that increase care at the bedside

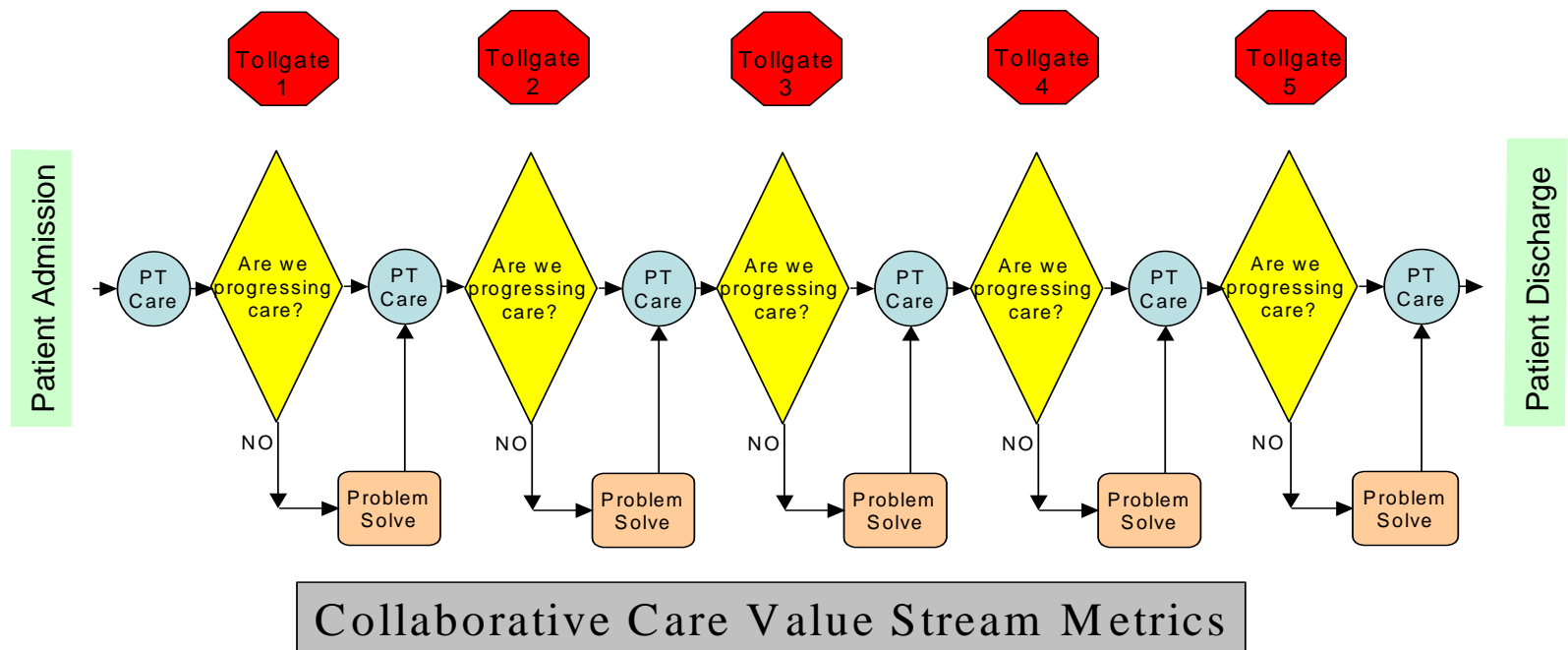
Admission Trio

- Done jointly by MD, Nurse and Pharmacist
- Admission Med Rec by the Pharmacist
- HPI, ROS and Physical exam by MD and Nurse
- Risk screens completed by the nurse and affirmed by the team
- Problem list and Plan of Care determined
- Interventions begun very timely
- Anticipated discharge date discussed



Tollgates

Collaborative Care Patient Progression



Copyright © 2006, All Rights Reserved—Patent Pending

Daily Bedside Care Conference

- Done daily (more than once if patient demand exists)
- Care Team (MD, Nurse, Pharmacist, Care Manager/Social Worker) present
- Pre-huddle, in room patient assessment and discussion, post huddle
- Plan of Care evaluated and updated using Milliman Guidelines as the framework for the team
- Production Control Board visual tracking



EMR and Milliman Guidelines

- Used upon admission to estimate a discharge timeline
- Link is embedded within our EMR product, not the content
- Builds the care plan and education plan for the patient
- Part of standard discussion at the daily Bedside Care Conference
- Documentation occurs against the guideline by members of the care team
- Variances tracked by RN's to *guide* “progression of care” and documented through EMR within care planning, whereas Care Managers *monitor* “progression of care” and document variances

Optimal Recovery Course						
Day	Level of Care	Clinical Status	Activity	Routes	Interventions	Medications
1	<ul style="list-style-type: none">• Floor• Discharge planning	<ul style="list-style-type: none">• Clinical Indications met¹¹• Fever, cough• Possible dyspnea, purulent sputum, pleuritic pain	<ul style="list-style-type: none">• Activity as tolerated¹¹	<ul style="list-style-type: none">• IV fluids• Parenteral or oral medications• Liquid to usual diet	<ul style="list-style-type: none">• WBC• ABG or oximetry Q1P¹¹• Sputum Gram stain, cultures¹¹ Q1P¹¹• Possible respiratory therapy¹¹• Probable oxygen• Possible thorax¹¹• Incentive spirometry• Head of bed at 30 degrees	<ul style="list-style-type: none">• IV antibiotics¹¹ Q1P¹¹

The screenshot shows the 'Care Plan' interface in an EMR system. The left sidebar lists various categories like Demographics, Documentation, and Medications. The main area displays a list of interventions, including 'Generic Phase 1', 'Generic Phase 2', 'Generic Phase 3', and 'Milliman Care Guideline'. The 'ORG Reviewed' intervention is selected, showing a detailed view with a 'Description' field containing the text: 'Discontinued (Date: 9/7/2007). Review the specific Milliman Care Guideline via the Hyperlink in the ORG Reviewed intervention.' Below the description are 'Web Links' and a 'Reactivate' button. The interface also shows a 'Last Documented on 09/07 16:32 by Brent Baumer' timestamp.



Patient Care Plan Note (example)

Problem: Pneum Com Ac Milliman Phase 3

Goal: Pneumonia, Com Acquired Review Care Notes

Intervention: Pneumonia, Com Acquired Document Care Note

Patient is on Milliman day 3 of 3.

The patient states: "I'm always sweaty like this."

The patient's current status and their interventions are currently:

Pneumonia: Continue on PO Levaquin and PO Prednisone. Increased prednisone dose and back to IV today d/t increased wheezing. Nebes might have contributed to fluid retention. Will increase nebs to every 4 hours as well.

Diabetes: Metformin and SS Novolog for elevated BS. Still in 200s most likely d/t steroids. Will add NPH 10u bid.

To advance the patient to the next phase of Milliman, the patient must:

1) IV solumedrol to po 2) BS controlled 3) decreased wheezes

The current discharge plan is: 2/13 to home with wife, poss home Oxygen

Production Control Board

PATIENT PRODUCTION CONTROL BOARD

PATIENT PRODUCTION CONTROL BOARD

HOSPITAL DAY #

PROBLEMS:
 If blue, identify missed tollgate
 If yellow, identify reason (initial delay)
 If red, identify reason for actual delay(s) and if stays overnight, track as avoidable day(s)

Room #	Admit Date	Milliman dc date	Projected dc date	AM/PM 24 hr	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6 Plus	Patient Initials
367	4/12	4/15	4/15				Green semi-circle				RU
368	4/13	4/15	4/19	am	Green semi-circle						RU
369	4/12	4/14	4/16			Green semi-circle				withdrawl syndrome	RU
370	4/12	4/15	4/15	pm		Green semi-circle				Prob. DC home	RU
371A	4/13	4/16	4/16		Green semi-circle						RU
371B											
372	4/12	4/10	TBD							Need DL NGT, tolerate PD ↓ loose stool	RU
373A											
373B	4/20	-	TBD							Placement	RU
374	4/13	4/15	4/15		Green semi-circle						RU
376	4-9	4/15	TBD							With placement/Palliative Care Cons	RU
377	4/10	4/13	4/15				Green semi-circle			Not Progressive, Uncontrolled pain	TH
378	4/9	4/13	4/15								TH
379	4/12	4/14	4/14			Green semi-circle					TH

Supportive Physical Environment

- Patient Servers- contain 90% of the supplies needed at the bedside



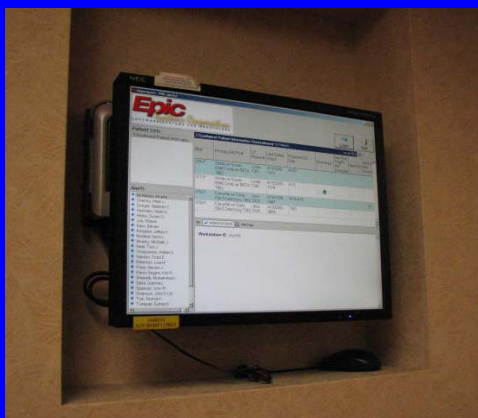
- All designs created by front line clinicians



Visual Cues

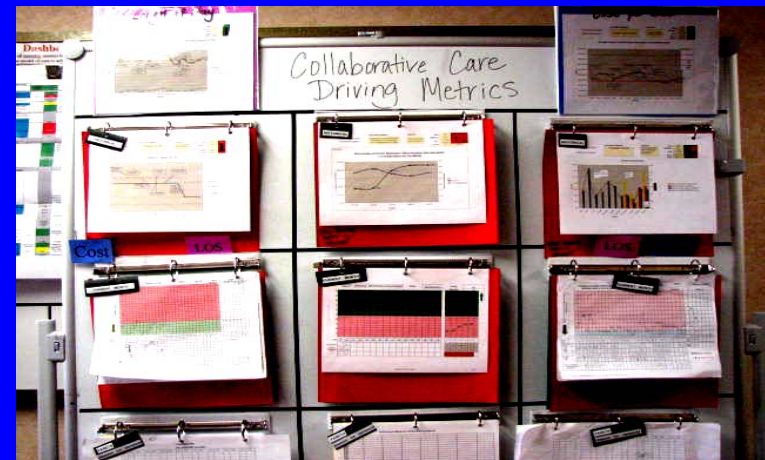


Room: 367 Phone: 735-7467 Date: April 14 2009 Tuesday	Dine: #3463 Diet: General
Progression Of Care: <ul style="list-style-type: none"> - Neurology to see 4/13 - Occupational Therapy - IV Dexamethasone Neurological checks every 4 hrs - Telemetry on bedrest 	Pharm: <ul style="list-style-type: none"> Care Team: MD: Twork RN: Christy LPN: Deb CNA: Linda/Deb
Mobility: <ul style="list-style-type: none"> Notes: crossed bed, ryg, (1/2 an) phone, call light 	Discharge Date: 4/15?
OF ASSISTANTS EQUIPMENT ALARMS	Time: Mode: Location:



ThedaCare: Strategic Change Processes

- Clarity of roles and responsibilities
- Partnered approach to delivery of care and functioning within one plan of care
- Respect for each other's knowledge and skill
- Higher level of teamwork
- Engagement and influence in daily problem solving and outcome measurement
- Continuous daily improvement of the new delivery system



Outcomes: ThedaCare (Wisconsin)

Measure	Pre-Collaborative Care (2006)	End of 2007	End of 2008	2009 YTD (thru Sept)	Compares to non-Collaborative Care units 2009 thru Sept
Defect-Free Admission Medication Reconciliation	1.05 defects per chart	0.01 defects per chart (-99% vs.2006)	0 defects	0 defects	1.25 defects per chart without RPh
Quality Bundle Compliance	38% Pneumonia (2005 baseline) No baseline for CHF	100% Pneumonia 92.5 % CHF	95% Pneumonia 85% CHF	91% Pneumonia 100 % CHF	89% Pneumonia (All or none bundle score) 89 % CHF (all or none bundle score)
Patient Satisfaction	68% rated as top box	87% (+30% vs. 2006)	90%	4.95 on scale of 5 (revised tool Sept '08)	Not captured for other units.
Length of Stay*	3.71	2.96 (-20% vs. 2006)	3.16	3.19	3.48 days (through June)
Case Mix Index* <small>Used top 16 DRG's that match across cc and non-cc</small>	1.08	1.12	1.11	1.12	1.27 (through June)
Average Cost Per Case* (using Medicare RCC)	\$5669 - fully loaded	\$4467 - fully loaded (-21% vs. 2006)	\$5849	\$4970—fully loaded (thru August—lagging metric)	\$6093—Fully loaded (thru June)

•Financial Indicators represent a subset of the patients to demonstrate impact of the delivery model. Excluded from both baseline and pilot are: observation patients, ICU patients, and LOS >15 days. Pilot numbers includes: Admits from ED to Unit, or direct admits to unit. 2006 is updated baseline.

•From: "Writing the new playbook for health care: lessons from Wisconsin," 2009, *Health Affairs*, 28, p.1348

•Copyright © 2009 ThedaCare. All Rights Reserved.



What we're still learning and improving...

- How to spread the model (2nd unit went live July '09) and continuous daily improvements amongst multiple units
- This is a never ending cycle of learning and personal development; cannot take the model and apply it to another unit with expectations that the same results will occur
- Audit tools for sustaining standard work processes
- How to manage patient flow in our own area/trigger for team process work
- How to work ***together*** in the ***same space*** and ***individually*** in the ***same space***
- Collaborative Care model progression will be a supporting driver for the system in dealing with other issues such as bed management, EMR functionality, etc.