Clinical Safety & Effectiveness

Increasing Palliative Care Consultations in the Medical Intensive Care Unit

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Educating for Quality Improvement & Patient Safety

Why Is Palliative Care Essential in the ICU?

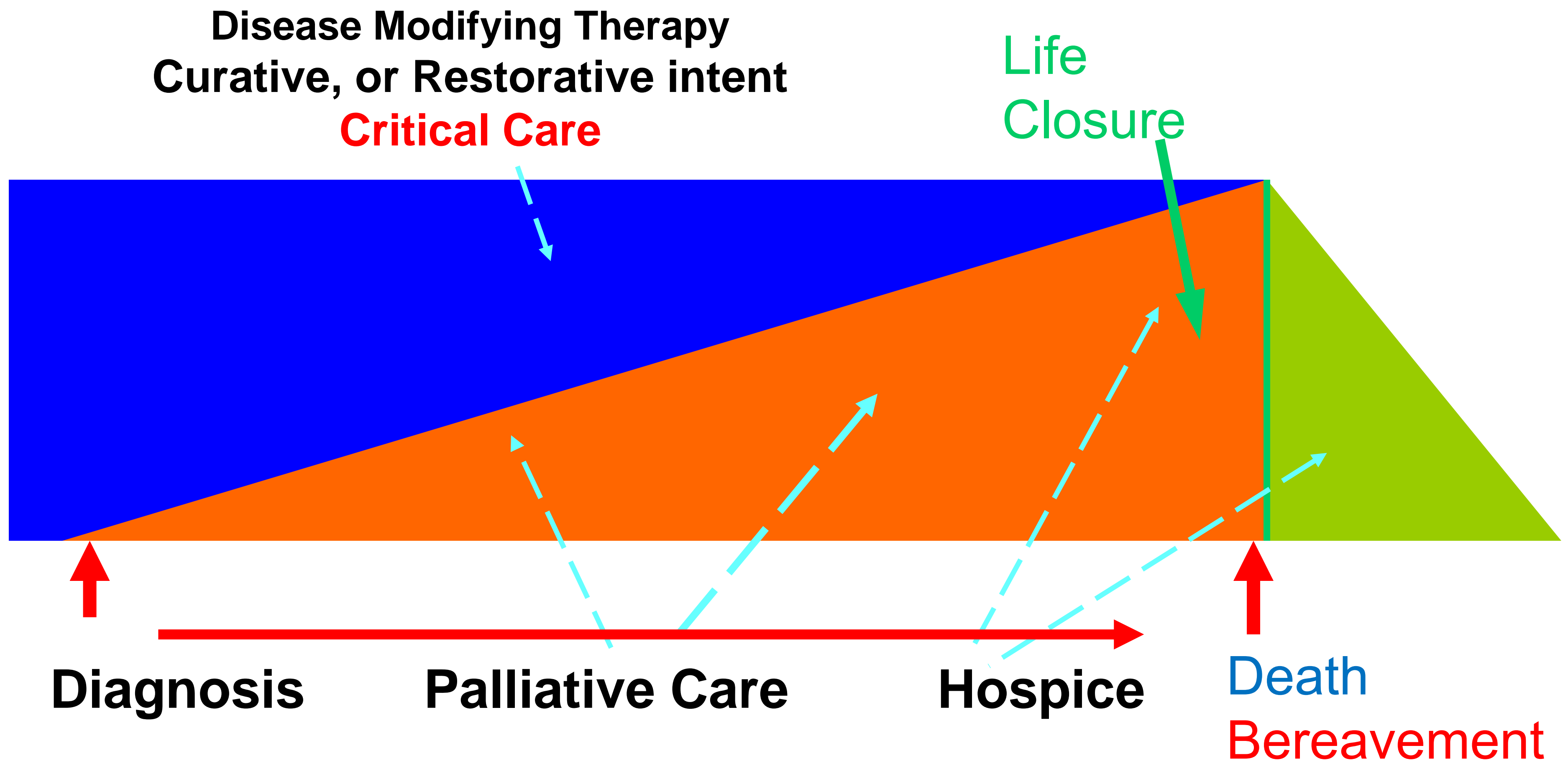
After receiving ICU treatment many patients:

- Die in ICU or soon after ICU care
  - 1/5 dies following treatment in an ICU, 20%, 500,000 US/year
- Remain “chronically critically ill”
  - 100,000 ICU “survivors” in the US at any point in time who continue with critical illness on a chronic basis

Nelson JE et al. *Am J Respiratory Crit Care Med 2010*
Angus DC et al. *Crit Care Med 2004; 32: 6380-643.*

Conceptual Model:

Palliative Care in the MICU



Shouldn't all clinicians be good at Palliative Care?

Of Course!
Primary Palliative Care
Secondary Palliative Care
Tertiary Palliative Care

Von Gunten, MD, PhD
JAMA 2002

What Defines Quality?

RWJ Critical Care Peer Workgroup: Domains of ICU Palliative Care Quality

- Symptom management and comfort care
- Communication within team and with patients/families
- Patient- and family-centered decision making
- Emotional and practical support for patients and families
- Spiritual support for patients and families
- Continuity of care
- Emotional and organizational support for ICU clinicians

Clarke et al. Crit Care Med 2003; 31:2255-2262.

Palliative Care in the ICU has been prioritized

Selecky PA et al. ***Chest*** 2005;128:3599-610.
(American College of Chest Physicians)

Lanken PN et al. ***Am J Respir Crit Care Med*** 2008;177:912-27.
(American Thoracic Society)

Truog RD et al. ***Crit Care Med*** 2008;36:953-63.
(American College of Critical Care Medicine)

Institute of Medicine (IOM)

Veterans Administration Healthcare System

Institute for Healthcare Improvement

Commercial insurers

Clinical Practice is lagging…

- Much is now known about effective strategies for ICU Palliative Care quality improvement.
- These methods can be applied to improve ICU Palliative Care.
- Palliative Care is linked to ”Giving Up”: a major barrier to providing quality care for our pat/families

Palliative Care Publications 2010

The NEW ENGLAND JOURNAL of MEDICINE

ARCHIVES OF PEDIATRICS & ADOLESCENT MEDICINE

ONCOLOGY NURSING FORUM

JAMA®
The Journal of the American Medical Association

HealthAffairs

Annals of Internal Medicine
Established in 1927 by the American College of Physicians

ARCHIVES OF INTERNAL MEDICINE

JOURNAL OF CLINICAL ONCOLOGY
Official Journal of the American Society of Clinical Oncology

JCN Journal of Clinical Nursing

HSR HEALTH SERVICES RESEARCH
The Global Journal for Improving Health Care Delivery and Policy

Palliative Care Media Highlights 2010

The New York Times

Newsweek

USA TODAY

Los Angeles Times

The Philadelphia Inquirer

What do our patients/families want?
Define High-Quality ICU Palliative Care

- ► Communication by Clinicians:
  - -timely, ongoing, clear, complete, sensitive
  - -addressing condition, prognosis, treatment
- ► Patient-Focused Decision-Making:
  - -aligned with values, goals, preferences
- ► Clinical Care of the Patient:
  - -comfort, dignity, personhood, privacy
- ► Care of the Family:
  - -proximity/access, support including bereavement care

Nelson JE, Puntillo KA, Pronovost PJ, Walker AS, McAdam JL, Ilaoa D, Penrod J. Crit Care Med 2010;38:808.

N=48 subjects (15 pts, Fam); Focused group

And What They Get …

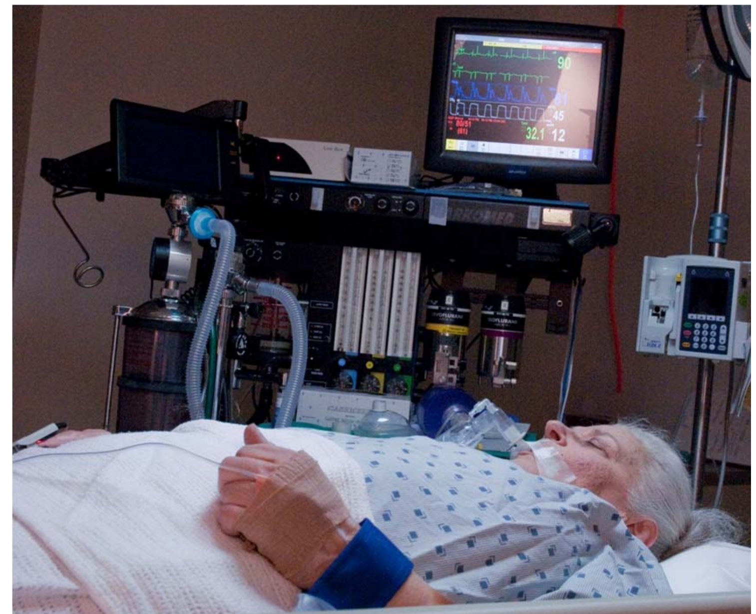
Not enough contact with MD:	78%
Not enough emotional support (pt):	51%
Not enough emotional support (family):	38%
Not enough information about what to expect with the dying process:	50%
Not enough help with pain/SOB:	19%

Teno et al. JAMA 2004;291:88-93.
N=1578 descendents (NH, hosptial)

More Medical Care Leads to *Lower* Emotional Satisfaction With Care

Family members of decedents in high-intensity hospital service areas report lower quality of:

- Inadequate Emotional support decedent (RR=1.2, 95%, CI=1.0–1.4)
- Concerns Shared decision-making (RR=1.8, 95% CI=1.0–2.9),
- Information about what to expect (RR=1.5, 95% CI=1.3–1.8)



Teno et al. JAGS 2005;53:1905-11.

High (n=365) vs low (n=413)

Serious adverse outcomes for bereaved caregivers

Wright et al. JCO 2010: Sept 13   Place of death: Correlation with QOL of pats with cancer and predictors of bereaved CG mental health.

-Death in ICU and Hospital vs. Death at home/Hospice N=342, enrollment, 2 wks, 6 mo, QOL, psychiatric

-Death in ICU associated with 5X family risk of PTSD

-Death in hospital associated with 8.8 X family risk of prolonged grief disorder

Anderson WG et al. J Gen Intern Med 2008; 23:1872. N=50 families

-Anxiety/depression in ICU and 1 mo and 6 months later. (42% - 15%; 16%-6%)

-PTSD and complicated grief at 6 months. (35%)

Paparrigopoulos T et al. J Psychosom Res 2006; 61:719. N=32 families

-High rates of anxiety, depressive (87%), and posttraumatic stress symptoms (81%) within a week of ICU admission.

-At 3-2 days prior ICU discharge PTSD persisted in families (59%).

Beneficial for hospice
The Impact of "the talk"

Table 3. Medical Care Received in the Last Week of Life by End-of-Life Discussion

	No. (%)			Adjusted OR (95% Confidence Interval)[a]	*P* Value
		End-of-Life Discussion			
	Total (N=332)	Yes	No		
Medical care received in the last week	332	123 (37.0)	209 (63.0)		
ICU admission	31 (9.3)	5 (4.1)	26 (12.4)	0.35 (0.14-0.90)	.02
Ventilator use	25 (7.5)	2 (1.6)	23 (11.0)	0.26 (0.08-0.83)	.02
Resuscitation	15 (4.5)	1 (0.8)	14 (6.7)	0.16 (0.03-0.80)	.02
Chemotherapy	19 (5.7)	5 (4.1)	14 (6.7)	0.36 (0.13-1.03)	.08
Feeding tube	26 (7.9)	11 (8.9)	15 (7.3)	1.30 (0.55-3.10)	.52
Outpatient hospice used	213 (64.4)	93 (76.2)	120 (57.4)	1.50 (0.91-2.48)	.10
Outpatient hospice ≥1 wk	173 (52.3)	80 (65.6)	93 (44.5)	1.65 (1.04-2.63)	.03

Abbreviation: ICU, intensive care unit; OR, odds ratio.
[a] The propensity-score weighted sample was used for these analyses. Logistic regression models were also adjusted for patients' treatment preferences, desire for prognostic information, and acceptance of terminal illness.

JAMA *Wright, A. A. et al. JAMA 2008;300:1665-1673*.

Outcomes

Outcome	Study
↓ ICU/Hospital Length of Stay	Norton, Quill et al. 2007 n=191, Criteria, 8 to 16 d p=.0001
↓ Time from Poor Prognosis to Comfort- Focused Goals (Proactive Palli C/S)	Campbell 2003 n=332, 7.3 to 2.2 d 6.3 to 3.5 d for MOF, CV p=<.05; No MDD in families
↑ Family Satisfaction/Comprehension	Curtis 2004 n=214 FM; MD 71%, FM 29%
↓ Conflict over Goals of Care	Curtis 2004
↑ Symptom Assessment ↑ Patient Comfort	Erdek 2003; SICU QI, 10 pt/wk for 5 wks, Q4h, 42% to 71% pain assessment, 59%- 97% pain management, VAS

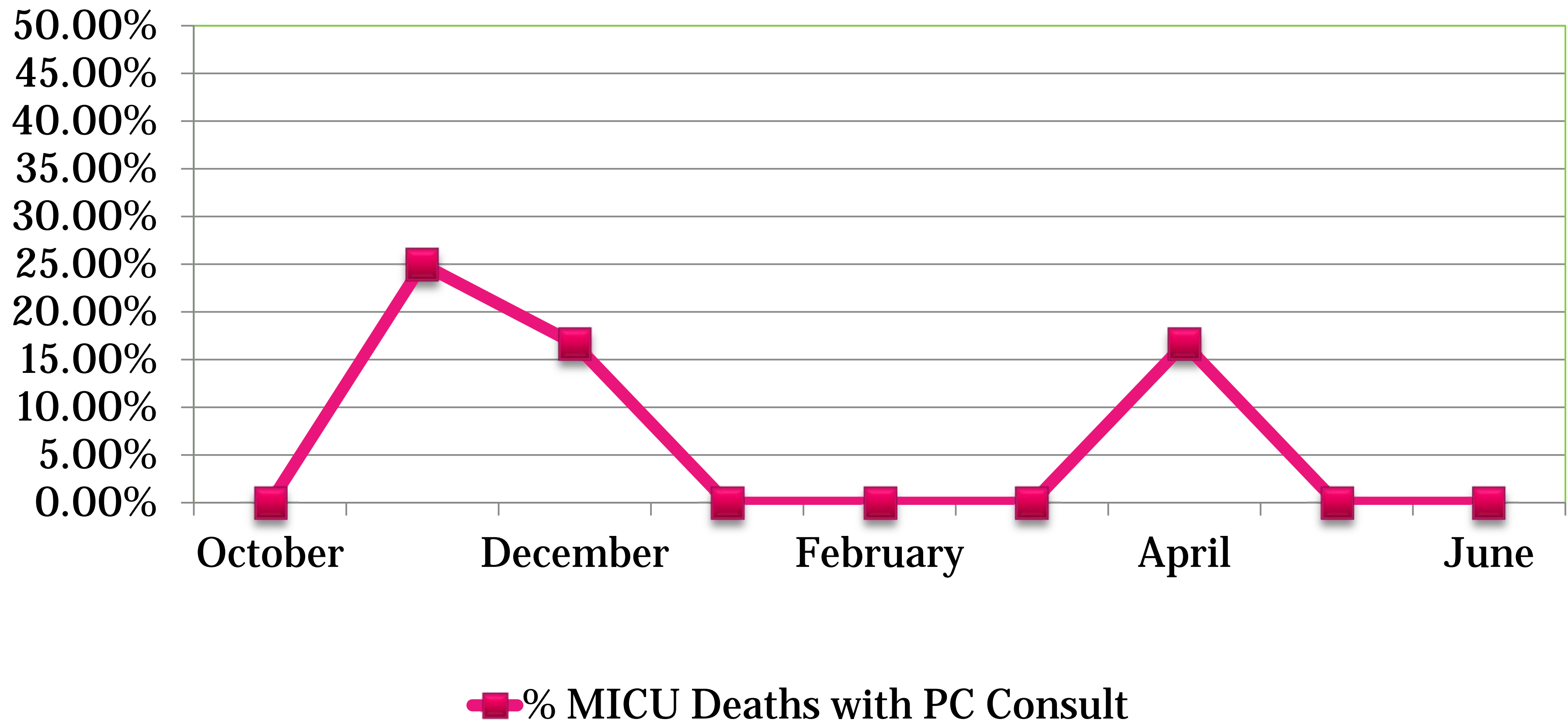
Why focus on MICU?

FY10: # of Inpatient Deaths/Unit	
UNIT	**# DEATHS**
5 MICU	68
ECTC-1	68
KTC2B	25
5A MED	24
6 CCU	21
6B MED	15
KTC3	14
2 SICU	13
K5B MED	11
5 PCU	10
ECTC-2	9
4 SOUTH	7
KTCC1	6
KTC2A	5
7 BMT	3
GLD SCI	1

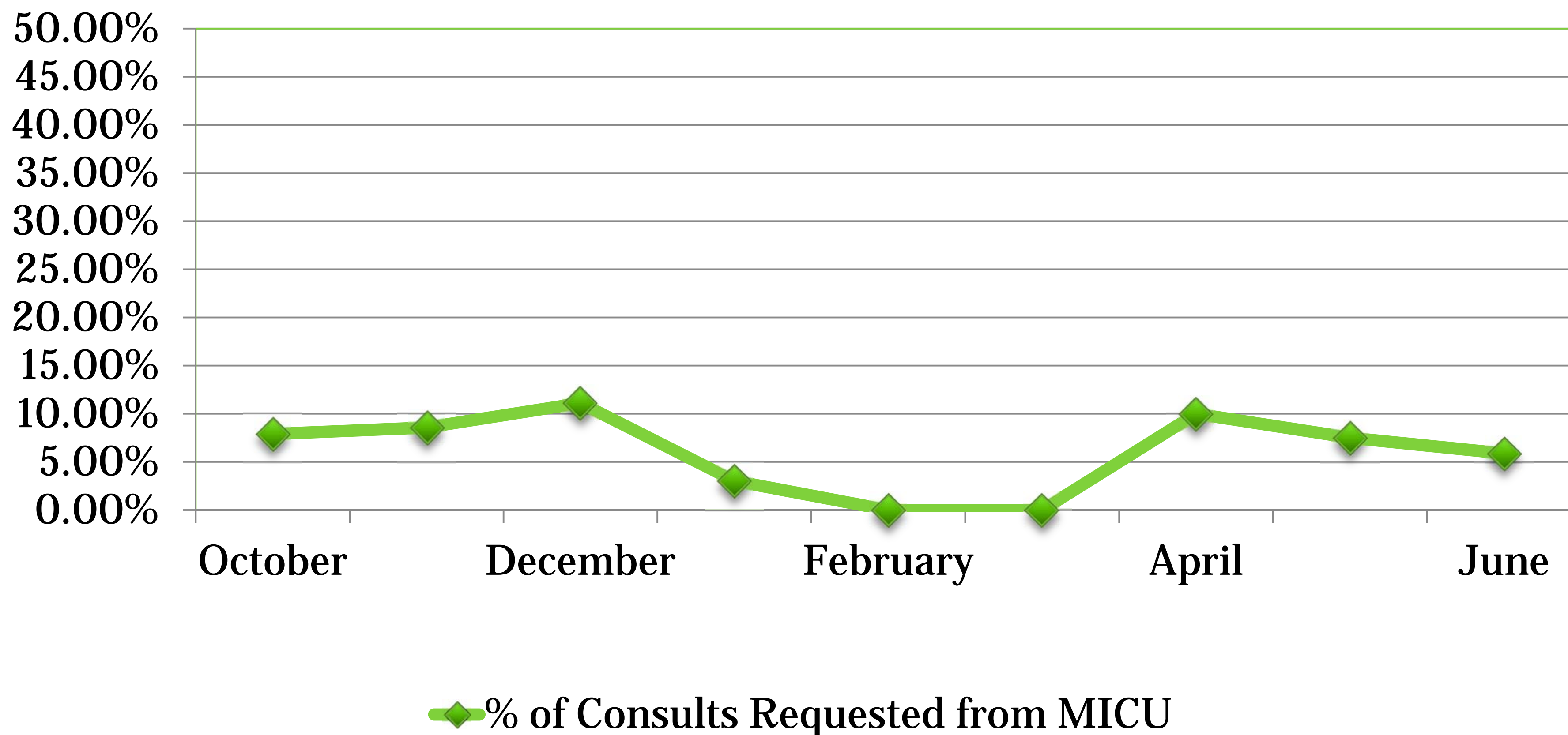
That where the money is ….

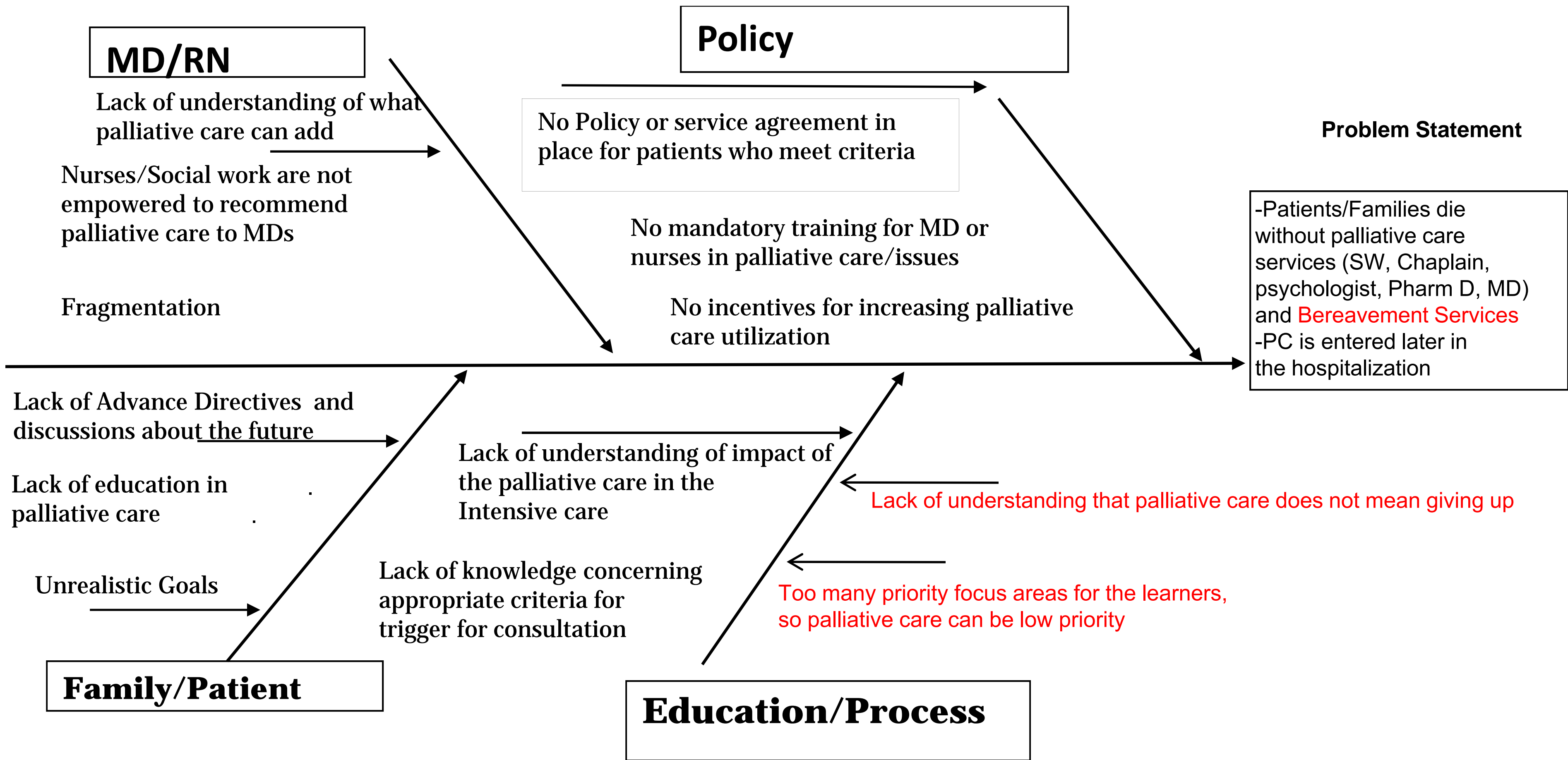
"Slick Willie"
Famous Bank
Robber

FY 10: % of MICU Patients who Died with a Geriatric Palliative Care Consultation



FY 10: % of Geriatric Palliative Care Consultations requested from the MICU




MD/RN
Lack of understanding of what palliative care can add
Nurses/Social work are not empowered to recommend palliative care to MDs
Fragmentation
Policy
No Policy or service agreement in place for patients who meet criteria
No mandatory training for MD or nurses in palliative care/issues
No incentives for increasing palliative care utilization
Problem Statement
-Patients/Families die without palliative care services (SW, Chaplain, psychologist, Pharm D, MD) and Bereavement Services
-PC is entered later in the hospitalization
Lack of Advance Directives and discussions about the future
Lack of education in palliative care
Unrealistic Goals
Family/Patient
Lack of understanding of impact of the palliative care in the Intensive care
Lack of knowledge concerning appropriate criteria for trigger for consultation
Lack of understanding that palliative care does not mean giving up
Too many priority focus areas for the learners, so palliative care can be low priority
Education/Process

The Paradigm

Integrate Geriatric Palliative Care in the ICU

- *beginning at ICU admission*
- *regardless of prognosis*
- *part of the comprehensive critical care plan*

- Overall Goal: Increase the frequency/timeliness of Geriatric Palliative Care Medicine consultations

Aim Statement

- To increase the percent of patients who are referred for a Geriatric Palliative Care Medicine consultation at the STVHCS MICU from 10% to 40% during October 2010 to Dec 2010.

Primary Measures

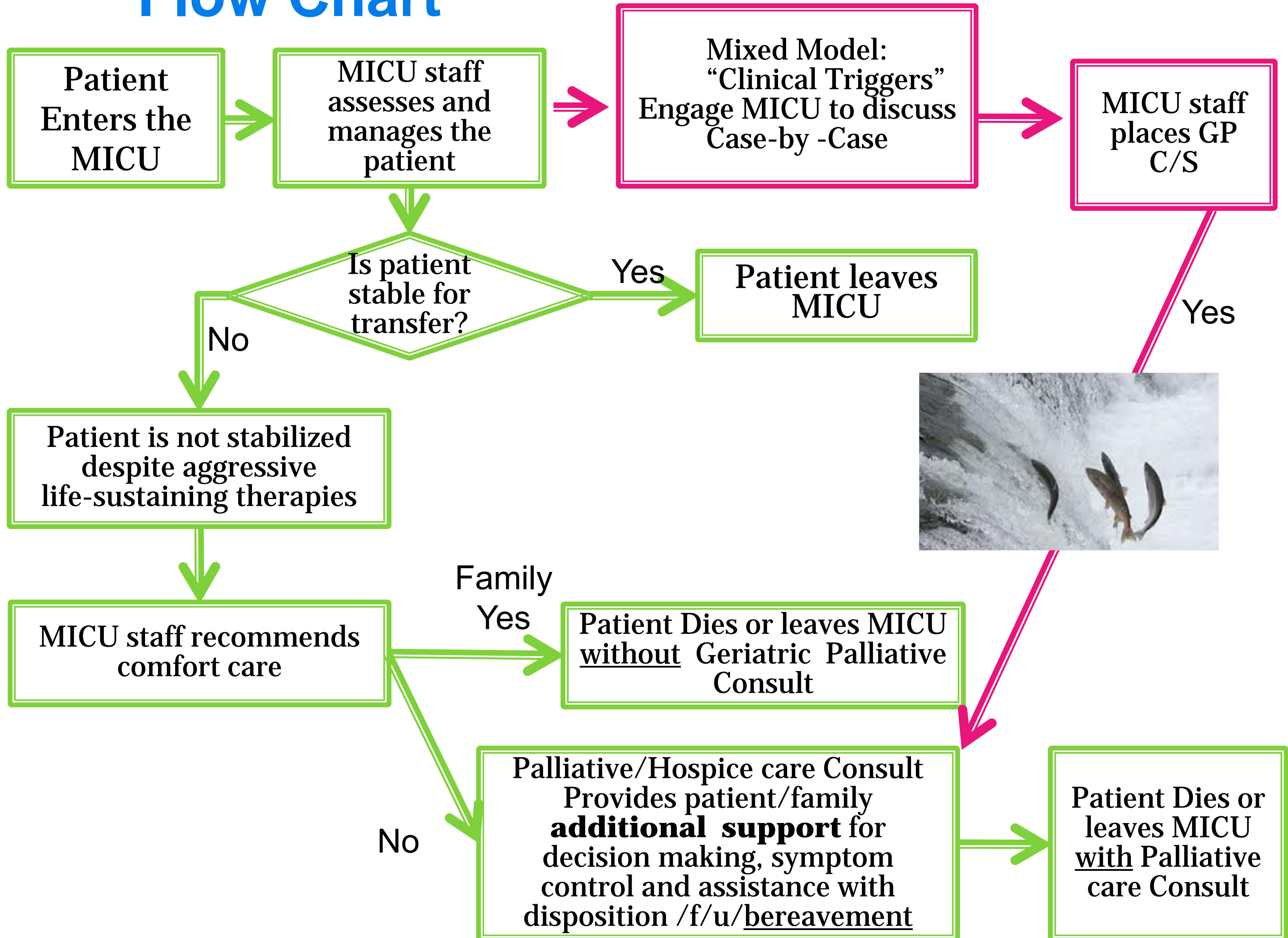
MICU Patients *with* a GPC consult
---
total MICU patients

MICU Patients who Died *with* a GPC consult
---
total MICU patients who Died

GPC: Geriatric Palliative Consultation

Measures

- Demographics
- Diagnosis
- Discharge Location (Home, SNF, Hospice (home/inpatient, Died, still in MICU/hospital)
- % Documented *Social Work* support and *Spiritual* support



Flow Chart
Patient Enters the MICU
MICU staff assesses and manages the patient
Mixed Model: "Clinical Triggers" Engage MICU to discuss Case-by -Case
MICU staff places GP C/S
Is patient stable for transfer?
Yes
Patient leaves MICU
No
Yes
Patient is not stabilized despite aggressive life-sustaining therapies
MICU staff recommends comfort care
Family
Yes
Patient Dies or leaves MICU without Geriatric Palliative Consult
No
Palliative/Hospice care Consult Provides patient/family additional support for decision making, symptom control and assistance with disposition /f/u/bereavement
Patient Dies or leaves MICU with Palliative care Consult

"Clinical Triggers"

Baseline patient characteristics

- Preexisting functional dependency with ≥1 chronic life-limiting conditions (e.g.dementia)
- Advanced-stage malignancy
- Admission from a community hospice, or on "comfort measures only"
- ALS /neuromuscular disease considering mechanical ventilation/BIPAP, feeding tube
- Recurrent admissions (>2/year)
- End Stage of COPD

Selected Acute diagnosis

- Global Cerebral ischemia
- Intra-cerebral hemorrhage requiring mechanical ventilation
- Status post cardiac or respiratory arrest
- Prolonged dysfunction of multiple organs (multi-system organ failure)
- Status Epilepticus > 24 hrs

Adapted from Mt Carmel, MSM, Nelson et al. 2010; Crit Care Med; 38: 1765-72

"Clinical Triggers"

Healthcare Use

- Prolonged or failed wean from the ventilator
- DNR and DNI status established or requested
- Decision to forego life-sustaining therapies with expected death

Family Characteristics

- Psychological or spiritual distress
- Family distress impairing surrogate decision-making, complex decision making
- Family request for information regarding palliative care or hospice appropriateness

Adapted from Mt Carmel, MSM, Nelson et al. 2010; Crit Care Med; 38: 1765-72

Interventions: Education/Collaboration

- Interdisciplinary (IDT) Workgroup:

-MICU Leaders: medical director Dr. Restrepo
nurse director Janet Tidwell

-MICU IDT staff/champions: Chaplain Robert Bellin,
RN Robbie/Alodia, Clerk Tom Cardinal

-GPC staff: Bonnie Howard, RN/CNS

-GPC Fellow: Dr. Jennifer Healy

-Incoming Resident: Dr. Linda May

-Information systems (Karla Strawn), Statistician (Shuko Lee), Dr. Linda May

Interventions: Education/Collaboration

- Key Persons: Critical Care Fellows/Residents
  Social worker Jennifer Kelley,

- Collaborators: Dr. Judith Nelson (VISN 3, VHA Inc., Comfort Bundle, IPAL-ICU NIA Grant)

- UT Clinical Safety & Effectiveness Course
  (UT HSC: Dr. Jan Patterson, Amruta Patel, Edna Cruz, MD Anderson: Wayne Fisher)

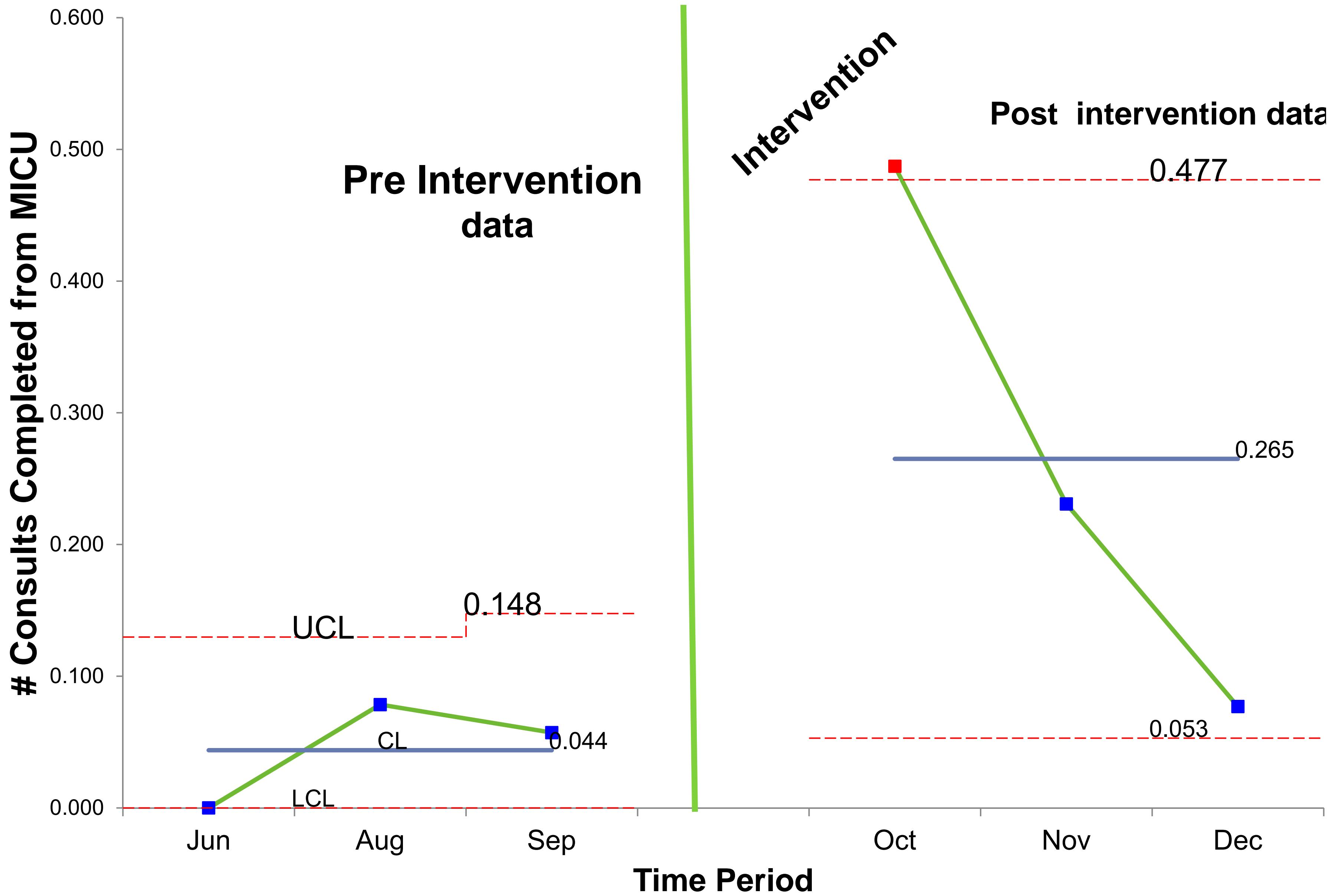
Palliative Care in the ICU:
Bringing the Evidence to the Bedside

Results

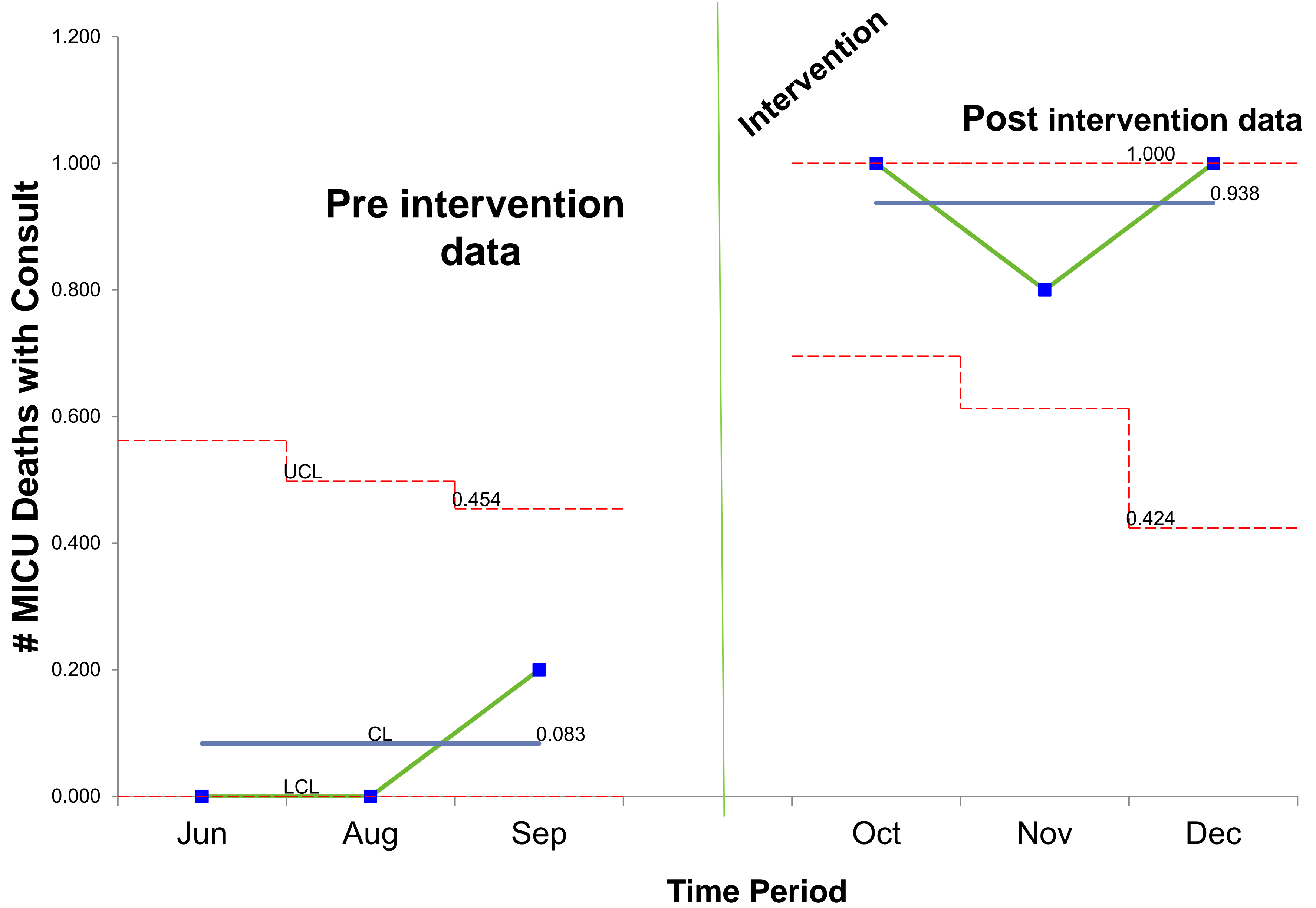
“You Cannot Improve What You Cannot Measure.”
-Business Adage,
Used By Don Berwick (IHI)

Table: Patient Characteristics/LOS

		June, Aug-Sept N=85	Oct-Dec N=78
Age		65.4 ± 11.3	64.7 ± 11.0
Gender (Male)		84 (97.7)	112 (96.6)
Ethnicity	White	48	87
	Hispanic/Latino	33	19
	Black	3	5
	Asian	2	1
	Other	0	4
Diagnosis	Cancer 4	16	6
	Sepsis	4	11
	RF	10	15
	Other (MOF, ESLD, CV, ESRD)	56	84
Length of Stay in Hospital		3.3 ± 4.0	5.4 ± 8.4
Discharge Type	Home	55	48
	Skilled Nursing Home/ECTC	8	29
	Death in Hospital	15	23
	Hospice	7	5
	Still in Hospital	0	7



# of Paliative Care Consults Completed from MICU at STVHCS
Consults Completed from MICU
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Pre Intervention
data
Intervention
Post intervention data
0.477
0.265
0.053
UCL
0.148
CL
0.044
LCL
Jun
Aug
Sep
Oct
Nov
Dec
Time Period



MICU Deaths with Palliative Care Consult
MICU Deaths with Consult
1.200
1.000
0.800
0.600
0.400
0.200
0.000
Pre intervention data
UCL
0.454
CL
0.083
LCL
Intervention
Post intervention data
1.000
0.938
0.424
Jun
Aug
Sep
Oct
Nov
Dec
Time Period

Conclusions

- More MICU patients and families received GPC services:

  -We provided support for more patients who were expected to benefit from ICU treatment and those who died.

- Aim: To increase the percent of patients who are referred for a Geriatric Palliative Care Medicine consultation at the STVHCS MICU from 10% to 40% during October 2010 to Dec 2010.

Lessons Learned

- Work force is #1 Major Barrier
- Work processes and systems (rounding, predictability, turnover)
- Sustainability
- Interval Management with stakeholders and workgroup key
- *BUY-IN* is crucial
- Culture change-Still not viewed as standard of care, *goals of care conversations start early!*

Lessons Learned

- Defining a *“Clinical Triggers”* criteria
- Understanding what we can offer: *Acute and chronic have different needs, skills*
- Fragmentation – Rounds
- Opportunities for Education: *GPC is only for when someone is actively dying*
- Need for IT resources for data collection, accessibility of data: lag time

Next Steps

- PC team is working on new projects/collaboration
- Education: *Knowledge and skills needed clinicians and patients and families* (Pocket Cards, RN/MD orientation, modules, videos, surveys, focus groups)
- Increase IDT family meetings (MD/RN/SW), Templates
- Bereavement/Anticipatory Grief Support Templates/Implementation/Interventions, "Bereavement Bags"

“Care and Communication Bundle” of ICU Palliative Care Quality Measures

Day 1

(1) Identify Decision-Maker

(2) Address AD status

(3) Address CPR status

(4) Distribute informational pamphlet to family

(5) Assess pain regularly

(6) Manage pain optimally

Day 3

(7) Offer Social Work support

(8) Offer Spiritual support

Day 5

(9) Family Meeting

Nelson and Pronovost 2006; Quality and Safety in Health Care; 15:264-271.
www.qualitymeasures.ahrq.gov

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"There's no easy way I can tell you this, so I'm sending you to someone who can."

Acknowledgements

- MICU MD, RN leaders (Marcos Restrepo MD, Janet Tidwell RN), Jay I. Peters MD, RNs
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- GRECC Sara Espinosa, MD MSc, Karla Strawn
- Scotte Hartronft MD, Michael Lichtenstein MD MSc
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Thank you!

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