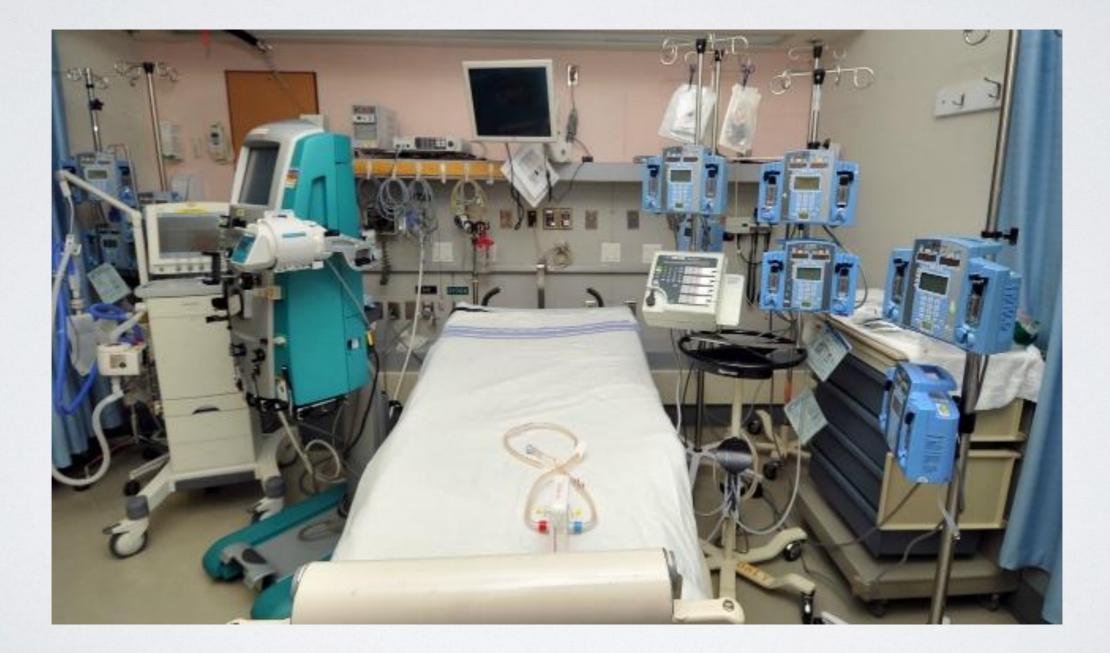
THRIVING AFTER CRITICAL ILLNESS

Lessons on the essential role of spiritual and family support

> Jason H Maley, MD Chief Medicine Resident Hospital of the University of Pennsylvania

Why do this work?



"There is no greater agony than bearing an untold story inside you."

Maya Angelou

Provide Patients a Voice

Lesson 1

"People...sometimes don't know what you go through. They think that because you are in one piece, everything is fine. But inside I'm all screwed up now."

ICU Survivor

THEMES

Pervasive memories of ICU Stay

Day-to-day impact of new disability

Critical Illness defining sense of self

Relationship strain and change

Coping

STRATEGIES TO ADAPT

Optimism

Hope

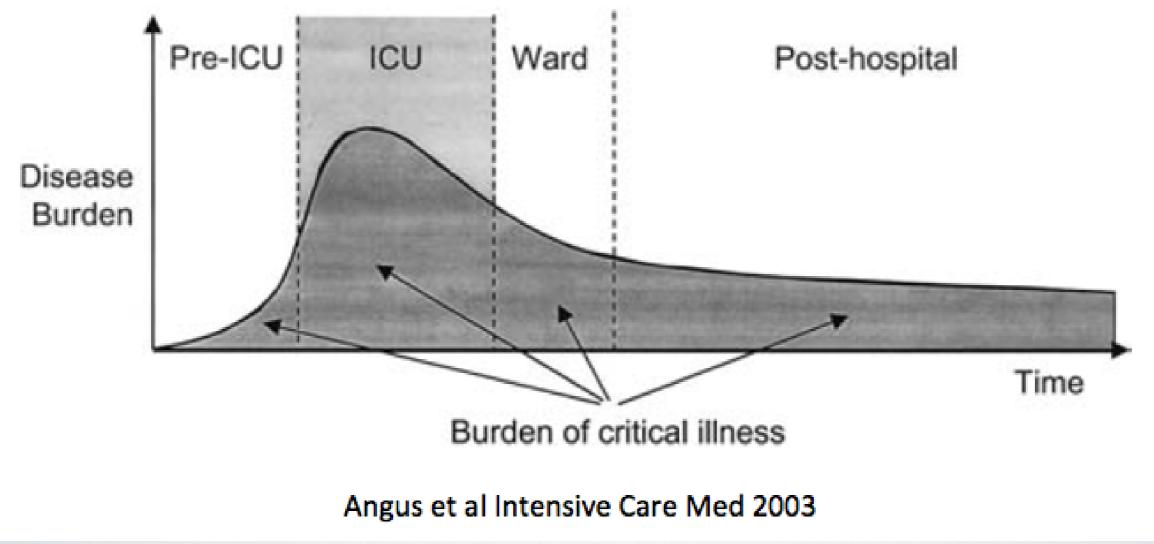
Support of Friends and Family

Spirituality

Patients and families want to understand their illness and the road ahead

Lesson 2

On the day of ICU discharge, the patient's wife asks "When will he be himself? When will he back on his feet? What should we expect moving forward? What can we do to help?"



Slide Courtesy of Mark E Mikkelsen, M.D.

"Nobody prepared us for what to expect when we left. When we asked about the quality of life issues, I actually heard one of the doctors say, 'Well, he's alive, isn't he?'"

ICU Survivor

Post-Intensive Care Syndrome – A Societal (& a UPHS) Threat

- Cognitive impairment
 - 34% impaired at a level of moderate TBI at 12m
- Mental health
 - 22-28% point prevalence
- Physical impairment
 - 27% disabled at 12m

Pandharipande et al NEJM 2013 Desai et al Crit Care Med 2011 Jackson et al Lancet Resp Med 2014

- Among 43 HUP & PPMC MICU survivors contacted 6-9m postdischarge
 - PICS present: 84%
 - <u>PICS worse</u>: 54% selfreported that function was worse

Maley et al Annals ATS 2016

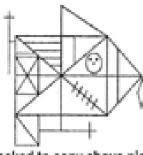
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CHALLENGES IN ICU

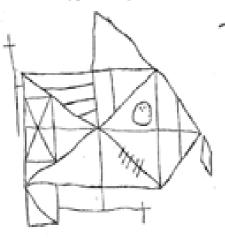
Location	Theme	Patients Reporting [n (%)]	Examples
	Recovery Challenge	s across the Continuum of Ca	re
Intensive care unit	Physical weakness	21 (48.8)	"Being in the MICU was scary. I was afraid I would not wake up. I was too weak to make it to the bathroom and [] all over the floor. I felt really embarrassed but everyone was incredibly kind and professional."
	Cognition	15 (34.9)	"In the beginning, in the ICU, I was very confused and couldn't communicate with people."
	Mental health, including anxiety, fear, and nightmares	15 (34.9)	"I can't remember 2 wk of my ICU stay, which is a challenge. [It's] hard to get used to the idea that you needed help that you were essentially handicapped."
	Difficulties with eating or communication Symptoms, including pain, dyspnea, and insomnia	8 (18.6) 6 (14.0)	

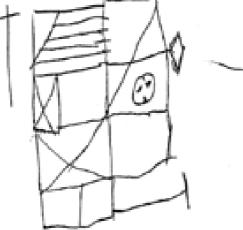
Maley et al. Annals ATS 2016

Cognitive Impairment: What Does It Look Like?



asked to copy above picture, results below:





Near normal rendition by unimpaired 69 y/o pulmonary embolus survivor

Moderate to severely impaired 89 y/o Preumonia survivor Severely impaired 72 y/o ARDS survivor

Jackson et al Crit Care Med 2003

"I felt like I was in a cloud or something. I had no attention span. I couldn't get past two sentences before I was wondering what I was reading—it didn't stick. I felt like I was brain damaged." - Perspective from a critically ill survivor

"It was like I was married to somebody else...he didn't remember anything I told him. We went to making lists for everything. I finally told him not to turn on the stove, the washing machine, anything! I was worried he'd burn down the house."

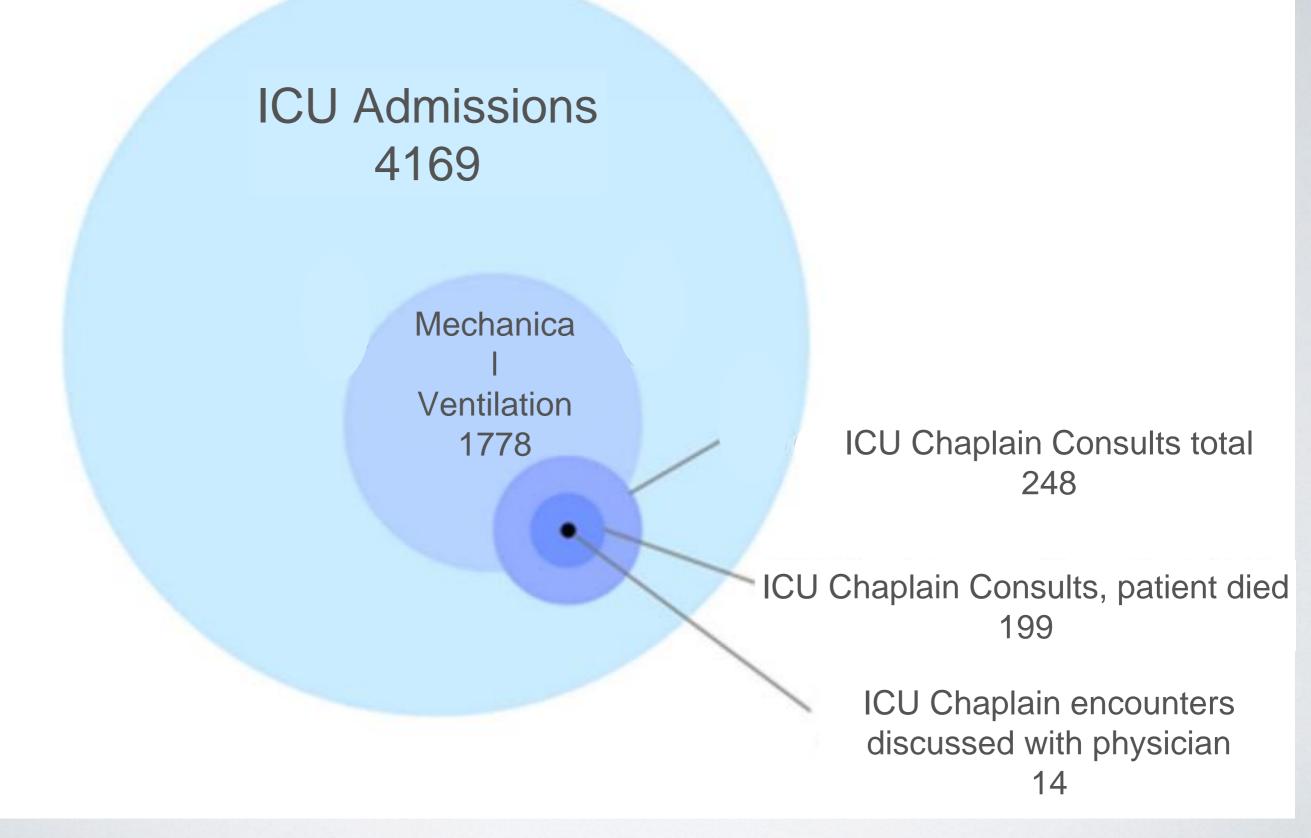
- Perspective from a caregiver

Cox Crit Care Med 2009

Slide Courtesy of Mark E Mikkelsen, M.D.

Spiritual and Family Support is Vital

Lesson 3



Adapted from Choi et al. J Pain Symptom Management. October 2015

Spiritual guidance and support is underutilized

Choi et al. J Pain Symptom Management. October 2015

Support in ICU

Theme	Patients Reporting [n (%)]	Examples
Facili	tators of Recovery	
Support (spiritual, family)	13 (30.2)	"While in the hospital, the chaplain who came was extremely helpful. And the fac that he kept coming back meant a lot."
Information, engagement, and reassurance provided by staff	10 (23.2)	"My religious faith was very helpful."
Postdischarge services (physical therapy, home nursing)	9 (20.9)	"You have to have support from family and friends, otherwise it's very hard to recover."

Opportunities on Ward

	Theme F	Patients Reporting [n (%)]	Examples
			•
Medical ward	Dependence, including inability to to one's self	feed 14 (32.6)	"Feeling weak. I didn't even have the strength to feed myself."
	Symptoms, including pain, dyspnea insomnia, and loss of appetite	a, 14 (32.6)	"Trying to move and ambulate. Trying to remember what happened. Dealing with the pain."
	Physical weakness	12 (27.9)	"Overcoming the loneliness of being in the hospital."
	Mental health, including anxiety, fe PTSD, loneliness, abandonment, difficulty coping		"Floor nurses and doctors don't have as much time to spend with you and can" really spend the same time listening to the patient to figure out what is wrong It makes the patient less involved in their care."

Communication is Essential Even When Patients Cannot Speak Lesson 4

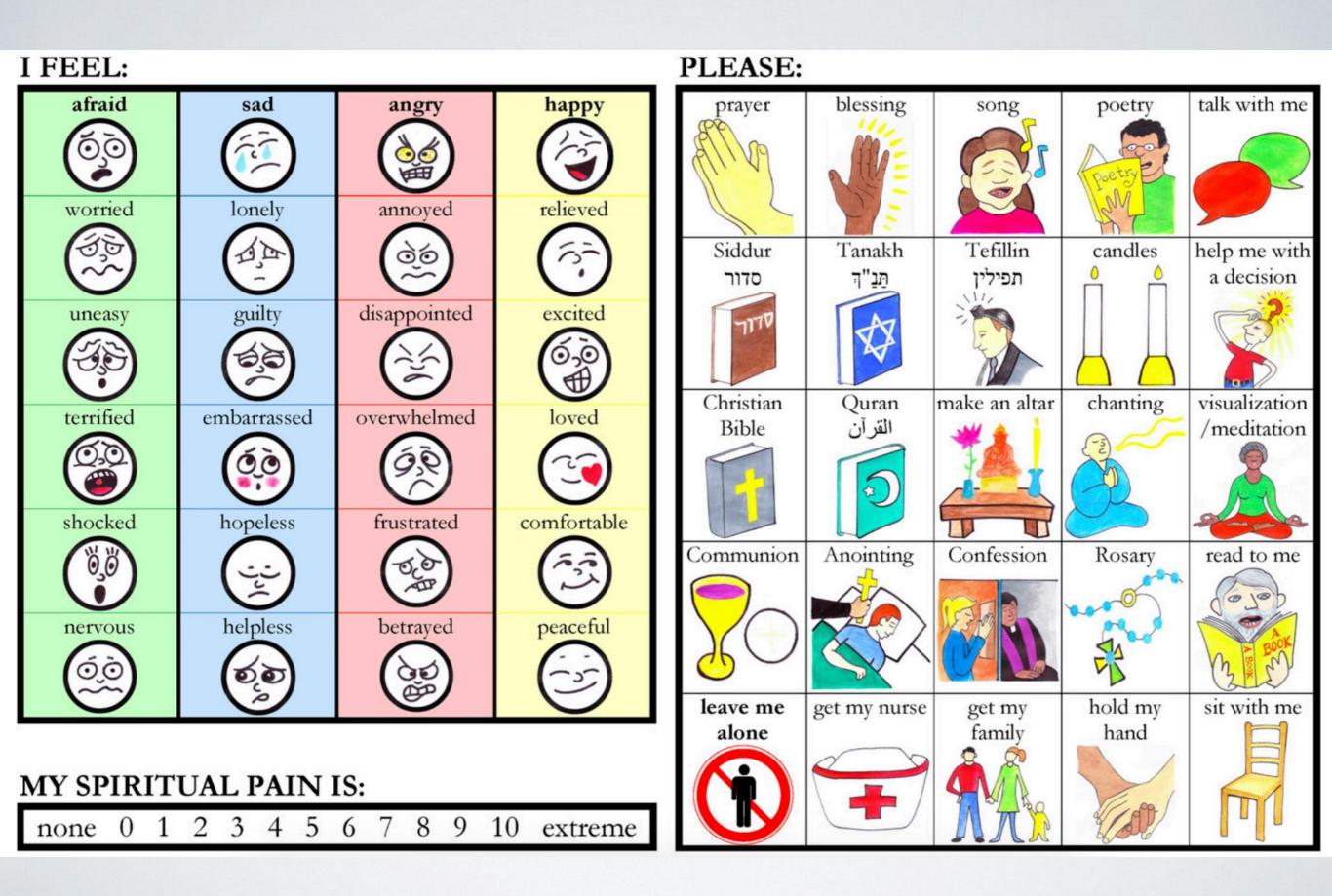
How?

MY RELIGION/SPIRITUALITY IS:

MIT RELIGIC	11, 01 1101 01							
CHRISTIAN	JEWISH	BUDDHIST	ISLAMIC	HINDU	JAIN CILL	SIKH	OTHER	NONE
	XX	B	(AUS)	30		¥	Unitarian- Universalist	Spiritual but not religious
Protestant (Baptist, Methodist, Episcopal, Presbyterian, Lutheran, Pentecostal, etc.)	יְהוּדִים Reform	Zen/Chan	الإسلام Sunni أهل السنة	हिन्दू धर्म હિંદુ ધર્મ ਹਿੰਦੂ ਧਰਮ	ਤੈਂਜ धर्म ਜੈਨ ਧਰਮ জৈন ধৰ্ম	मिंधी सिख धर्म	New Age	Agnostic
Catholic	Conservative	Theravada	Shia شيعة	হিन্দুधर्म بندومت இந்து	جین مت சமணம் ಜೈನ ಧರ್ಮ		Bahá'í Faith	Atheist
Jehovah's Witness	Orthodox	Vajrayana/ Tibetan	Sufi تصوّف	ಹಿಂದೂ ಧರ್ಮ హిందూ మతము	జైన మతము ജൈനമതం		Pagan (Wiccan, etc.)	Humanist
Mormon	Reconstructionist	Pure Land/ Nichiren	Other	ഹിന്ദുമതം			Other	Other
Eastern Orthodox	Renewal	Soka Gakkai (SGI)						
Other	Other	Other				I DON'T KNOW	I PREFER N	IOT TO SAY

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Berning et al. Annals ATS 2016



Berning et al. Annals ATS 2016

CHAPLAIN-LED PICTURE COMMUNICATION

- 72% selected a chaplain intervention
- Patients experienced decreased:
 - Anxiety
 - Stress

Berning et al. Annals ATS 2016

Families provide support and need support of their own Lesson 5

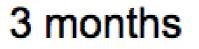
Families Experience PICS with Alarming Frequency

Depression

Anxiety

Post-Traumatic Stress Disorder

Communication as a Means to Mitigate PICS-F



Formal family meetings (N=10) and palliative care consultation (N=6) were rarely used Psychological morbidity was common PTSD 26% Depression 19% Anxiety 15%

Multidisciplinary family meetings and palliative care consultation during the ICU stay were associated with improved psychological function

Kross E et al AJRCCM 2015;A3769

Slide Courtesy of Mark E Mikkelsen, M.D.

The ICU Diary As a Means to Mitigate PICS & PICS-F

12 months

ICU diary, written by relatives and ICU staff, was introduced after the 4th ICU day in a med-surg ICU

Phase	Severe	e PTSD
	Family	Patient
Pre-Diary	80%	35%
Diary	32%	21%
Post-Diary	68%	30%

Garrouste-Orgeas et al Crit Care Med 2012 Jones et al Critical Care 2010

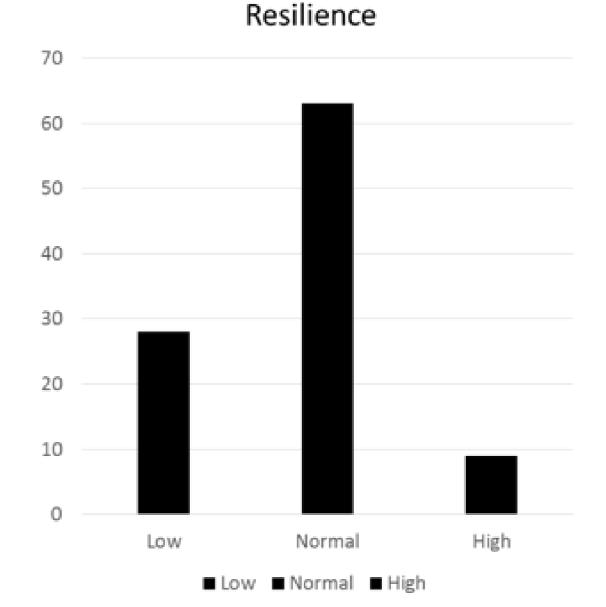
Slide Courtesy of Mark E Mikkelsen, M.D.

The Roadmap to Success: Promoting a culture of resilience

There is Hope

PICS is common

- <u>Resilience</u>, while correlated with executive dysfunction, anxiety, depression, PTSD, self-care difficulties, and pain, <u>is the norm</u>
- Resilience is "ordinary, not extraordinary"
- How can we promote a culture of resilience amongst survivors and their loved ones?



Maley et al Annals ATS 2016 American Psychological Association

Listen to Patient

Support (spiritual, family)	30.2%
Information, engagement, and reassurance provided by staff	23.2%
Post-discharge services (PT, home nursing)	20.9%
Staying positive	18.6%

Maley et al Ann Am Thorac Soc 2016 Ernecoff JAMA Intern Med 2015 "While in the hospital, the chaplain who came was extremely helpful. And the fact that he kept coming back meant a lot."

"My religious faith was very helpful."

"You have to have support from family and friends, otherwise it's very hard to recover."

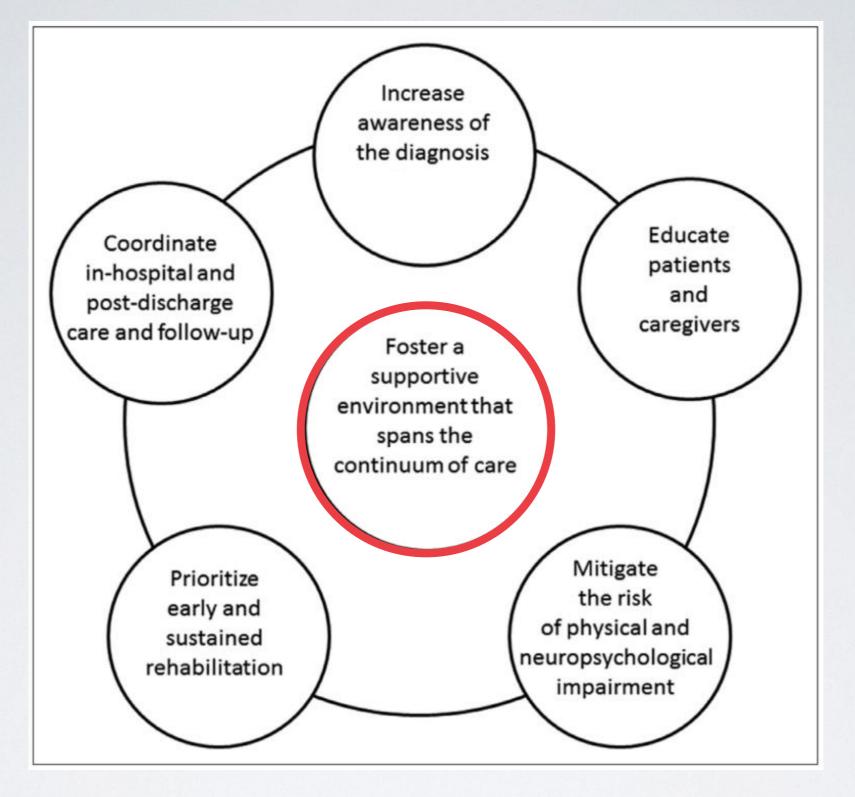
"In the ICU, they treated my wife like one of the team. That was very important to me. They often invited her to rounds."

"I liked feeling like I was part of the decision making."

"Physical therapists were really helpful in getting me up and moving at the hospital and rehab."

"Stay positive. Be motivated."

"After surgery, a woman came in and asked if I would like to hear some music. They brought guitars into my room and played music. I found it to be incredibly uplifting."



Foster Support

Modified from Maley and Mikkelsen. Crit Care Med. 2015

The Longitudinal Perspective "It Takes a Village"

Acute Care	Discharge	Post-Acute Care
Family Friends Chaplain In-patient clinicians Physicians Nurses Nursing assistants Therapists Discharge planning		Survivors Caregivers - Family, Friends - Chaplain Out-patient clinicians PCPs Consultation Home nursing visits Home health aids Physical therapists Occupational therapists Neuropsychologists Nutrition Social workers

Adapted from Mark E Mikkelsen, M.D.

THANK YOU

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