Sharp HospiceCare's *Transitions Program*

A New Model for Late Stage Disease Management

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- First generation outpatient palliative care
- Second generation outpatient palliative care

1. UCSF
2. Kaiser
3. Sutter (AIM)
4. VA
5. Care More
6. Health Care Partners
7. Partners Medical Group (Boston)
8. University of Pittsburgh
9. Long Island Jewish
10. Hospice of the Valley
11. Sharp HealthCare

Goals

CMS Goals:

1. Better individual patient care
2. Better population care
3. Lower growth in health care expenditures
4. Prevent readmissions

Sharp *Transitions* Goals:

1. Better individual patient care
2. Better population care
3. Reverse the growth in heath care expenditures
4. Better professional caregiver support
5. Better professional family support and conflict resolution
6. Prevent any admissions including primary admissions

Principles of *Transitions*

- Proactive In home Disease Management
- Proactive Psychosocial Management
- Accurate description of what the health care industry can and cannot provide

Cultural Mind Shift

"The continued application of traditional treatment strategies which are valuable to the patient at an earlier time in their health experience has the opposite effect on patients at end of life resulting in inferior outcomes."

Daniel Hoefer, MD
CMO, Outpatient Palliative Care and Hospice
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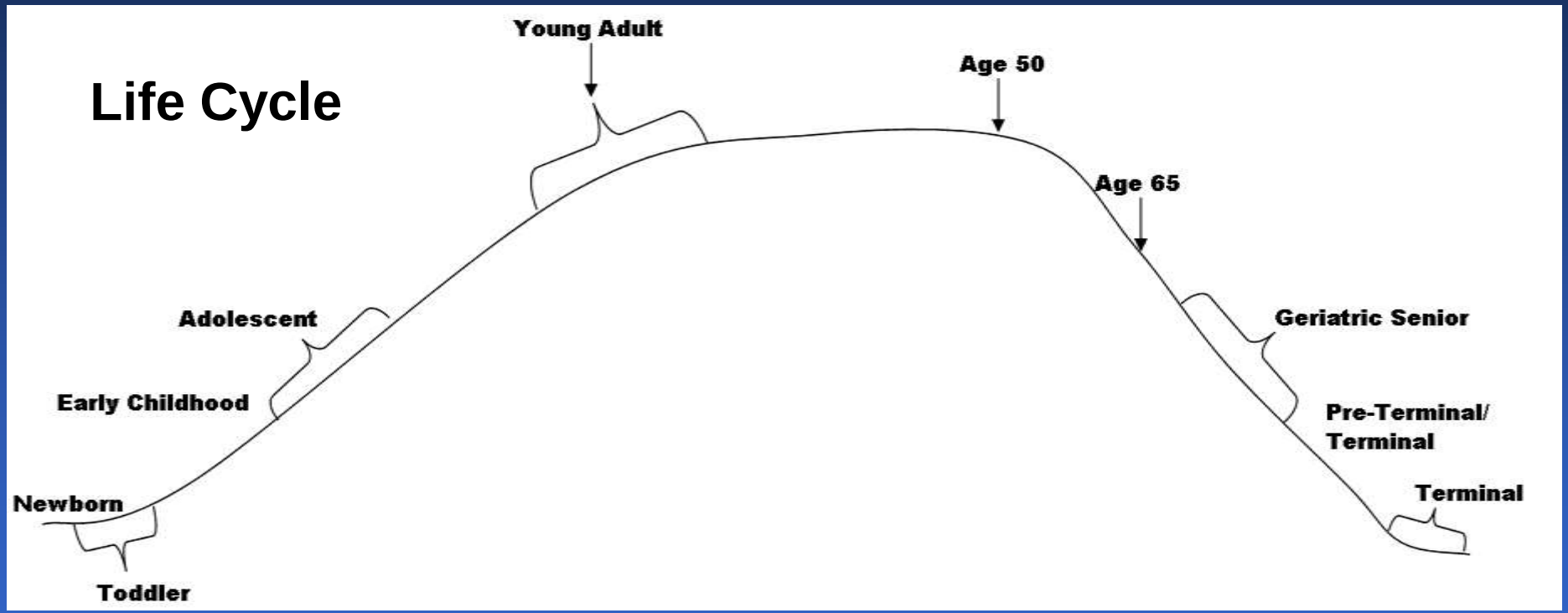
Up to Date: Physiology and Goals of Care for the Pre-terminal Populations are Not the Same as a Younger and Healthier Geriatric Patient



“Standard of Care” versus “Evidence Based Medicine”

1. Pressure Ulcers
   - No trial has proven an elimination of pressure ulcers over time. Thomas, MD. 2005 jamda
   - Evidence Based Medicine: The development of a pressure ulcer is not necessarily a sign of bad care but a sign that the patient is terminal. Healthcare providers need to acknowledge this issue.
2. Weight Loss
   - Natural part of the life cycle Henderson, MD 1992 J Clin Nutr
   - Evidence Based Medicine: there is a point in the life cycle when efforts to feed the patient are actually associated with increased morbidity and mortality.

“Standard of Care” versus “Evidence Based Medicine”

(continued)

3. Delirium
   - Associated with statistically significant decreases in mental and physical decline, and higher mortality rates
   - Evidence Based Medicine: The induction of delirium by an elective procedure is associated with significant long term health consequences.

"Standard of Care" versus "Evidence Based Medicine"

(continued)

- **Delirium accounts for 49% of all hospital days in hospitalized older patients**

  Inouye, Sharon K, MD, *Delirium in Older Persons,* NEJM, 2006, vol.354(11), PP.1157-68

- **Demented Patients are at 500% the risk of developing Delirium**

  Cole, Martin G, MD, FRCP, *Delirium in Elderly Patients,* 2004, J Ger Psychiatry, vol.12(1), pp.7-21

"Standard of Care" versus "Evidence Based Medicine"

(continued)

4. Infections
   a. Immune Senescence Mandates an updated standard of care. Givens, MD 2010, Arch Internal Medicine

   b. "We have treated your loved one's infection. However, the issues which permitted your loved one's infection to occur in the first place have not gone away. So the issue isn't is your loved one going to develop the same infection but what do you want us to do about it when it occurs?" D. Hoefer, MD

Evidence Based Potential Harms of Hospitalization: Especially in the Late Stage populations

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More Conflict:

Thirteen (13) evidenced based reasons **hospitalization harms these demographics: the "iatrogenic consequences of hospitalization."**

1. Physical trauma of transfer
2. High rates of delirium – delirium is NOT necessarily reversible
3. High rates of **hospitalization induced** functional decline - frequently permanent
4. Inability to address the patient's special needs
5. Lack of communication of goals of care
6. Falls

Thirteen (13) evidenced based reasons (continued)

7. Medication Errors
8. Adverse Drug Events (ADEs)
9. Polypharmacy
10. Infections
11. Adverse Procedures – e.g . catheters, feeding tubes, CTs/MRIs
    a. “stroke code” on a patient with delirium
12. Burdensome cost to patient/family.
13. Anxiety for Loved Ones

- ACP is associated with:

1. Improved Quality of Care
2. Less in Hospital Death
3. Increased Use of Hospice with less stays < 3 days
4. Less likely to be admitted to the ICU
5. Less likely to visit the ED more than once in their last month
6. Fewer stays > 2 weeks if admitted

Bischoff, Kara MD, et al, ***Advance Care Planning and the Quality of End-of-Life Care in Older Adults***, 2013, JAGS

Patient Goals of Care Who Completed an Advance Directive:

- 92% requested to prioritize comfort and forgo extensive measures to prolong life
- 5% expressed a desire to limit care in certain situations
- 3% requested all care possible

Current Culture of Health Care

- Reactive versus Proactive
- Paternalistic
- Dependent

Medicare Cost in Matched Hospice and Non-Hospice Cohorts

Bruce Pyeson FSA, MAAA et al, *Journal of Pain and Symptom Management,* May 2004, Vol 28(3) pp 200-210

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Comparing Hospice and Non-Hospice Patient Survival Among Patients Who Die Within a Three Year Window

Steven Connor PhD, et al, *Journal of Pain and Symptom Management,* March 2007, Vol (3) pp 238-246

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Mean Survival

Increased by 29 days for patients who chose hospice over non-hospice care:

CHF	= + 81 days
Lung Cancer	= + 39 days
Pancreatic Cancer	= + 21 days
Colon Cancer	= + 33 days
Breast Cancer	= + 12 days
Prostate Cancer	= + 4 days

The Traditional Medical Model
"This Disease Can Be Cured"

27% of patients with incurable terminal disease believed they could have been cured

Unresectionable non-small-cell lung cancer	54%
AIDS	32%
CHF	22%
ALS	16%
COPD	12%

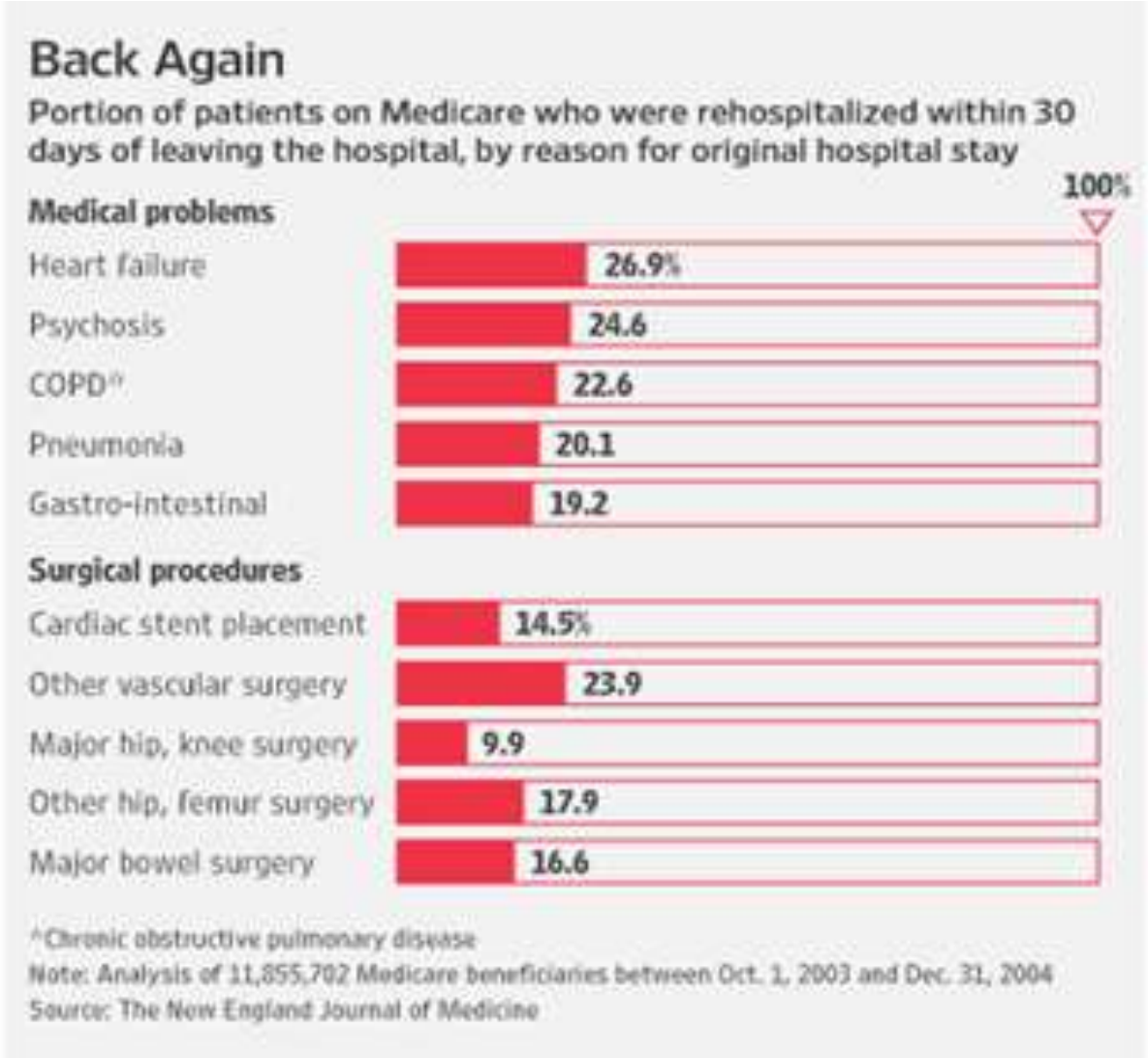
Daniel P Sulamsy, OFM, MD, PhD, et al, *The Accuracy of Substituted Judgment in Patients with Terminal Diagnoses,* April 1998, Annals of Internal Medicine, Vol 128(8), PP 621-29

Hospitalizations last year of life - CHF Acceptable or Not?

- Historical average hospitalizations for CHF during the last year of life 3.5

Where Patients with CHF Die Acceptable or Not?

- Historically 63% of CHF patients died in the hospital (2005)



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Expanding the Care Continuum

- Home Setting
- Focus on high risk late stage chronic illnesses
- Skilled Clinicians
- Flexible Models
- Cost efficient

Four Pillars of *Transitions*

Extending the evidence based benefits of Hospice Care to patients at an earlier point in their healthcare.

- Comprehensive in-home patient and family education about their disease process; proactive medical management
- Evidence-based Prognostication
- Professional Proactive Management of the Caregiver
- Advance Health Care Planning

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Pillar One
In Home Proactive Disease Management

Registered Nurse

Medical Social Worker

Spiritual Care

Primary Care MD

Palliative Care MD

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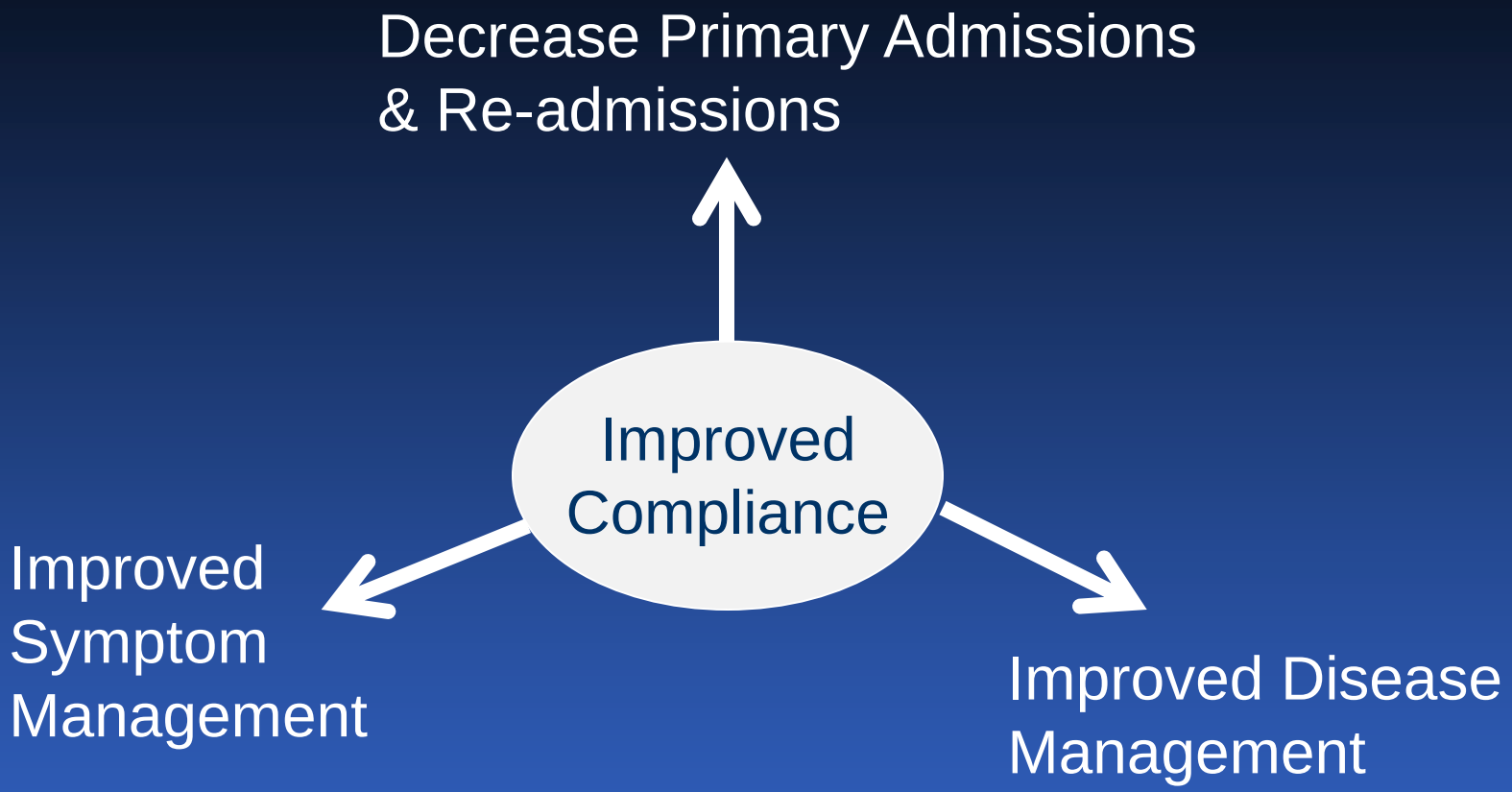

The best medication reconciliation occurs in the home

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Pillar Two
Evidenced-Based Medical Prognostication

1. 343 doctors
2. Estimates on 468 terminally ill patients
3. Mean patient survival – 24 days
4. Considered accurate if estimate within 33% for any give patient
5. 20% of the time accurate
   a) 80% of the time inaccurate
   b) 63% over-optimistic

British Medical Journal; Extent and Determinants of Error in Doctors Prognoses in Terminally Ill patients; Prospective Cohort Study; Vol 320(7233), 19 Feb 2000 pp.469-473

The Clinical Consequences of Institutionalized Over-optimism

(Pillar two continued)

6. The average over-optimistic estimate was off by 530%
    a. Increases the risk that treatment decisions by patients, families and healthcare providers are NOT consistent with reality
    b. Leaves patients and families emotionally unready for inevitable outcomes
    c. Increase risk that providers will lose credibility

British Medical Journal; Extent and Determinants of Error in Doctors Prognoses in Terminally Ill patients; Prospective Cohort Study; Vol 320(7233), 19 Feb 2000 pp.469-473

Diagnosis and Treatment
vs.
Diagnosis, Treatment and Prognosis

The only group more overly optimistic than healthcare providers are patient and families.

General Prognostic Data

1. Age
2. Male
3. BMI
4. Weight Loss
5. Depression
6. Geriatric Frailty Syndrome

Biometric models + functional decline patterns + specific biological data + general biological data + adjusting for your personal tendencies = accurate, effective, professional and compassionate information.

Event Prognostication – Prognostication which guides the patient in an expected series of events.

Anticipatory Guidance

Age (mos)	0-1	2	4	6	9	12	16	24
Diet	breast/bot		solids	finger foods	wean bottle/reduced appetite			healthy diet
Safety	car seat (all)	rolling	reaching	chocking/poison prev		climbing		
	fever/signs of illness		walkers	crawling	baby proofing	brush teeth		
	shaking (0-6 mos)			water safety (6-24 mos)				
	scalds (all)			sunscreen				
	passive smoke (all)							
Behavior	sleep (all)	crib	supine bot	stranger anx	exploring	discipline/tantrums		toileting
		talk to baby	hands in mouth					

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Test	Result	Flag	Reference

Result History

	21 Jan 11	13 Dec 10	25 Mar 10	28 May 09	02 Dec 08	17 June 08	07 May 07	07 Nov 06
	8:43 am	8:00 am	9:47 am	8:11 am	8:07 am	8:43 am	8:33 am	7:57 am
BNP	1270	631	386	103	173	111	170	148

CHF
82 Year old male
Co-managed with specialist
Functional Decline
Progressive decline SOB
Slow rise in ADL decline

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Results History

	21Jan2011	13Dec2010	25Mar2010	29Dec2009	28May2009	02Dec2008	17Jun2008	07May2007	12Feb2007	07Nov2006
	8:43 AM	8:00 AM	9:47 AM	8:52 AM	8:11 AM	8:07 AM	8:43 AM	8:33 AM	8:02 AM	7:57 AM
Sodium	144	142	142	145	141	143	142	143	139	142
Potassium	4.4	4.4	4.7	4.3	4.6	4.8	4.8	4.5	5.1	4.4
Chloride	106	104	104	106	105	105	105	107	105	106
Carbon Dioxide	31	29	31	31	33	29	31	30	29	30
BUN	44	44	48	17	26	19	23	11	30	16
Creatinine	1.5	2.0	1.9	1.1	1.2	1.1	1.1	1.0	1.2	1.2
Calcium	9.9	9.6	9.8	9.4	9.4	9.5	9.5	9.0	9.5	9.2
Glucose Non-Fasting	*107									

Results History

	13Dec2010	25Mar2010	29Dec2009	28May2009	02Dec2008	07Nov2006
	8:00 AM	9:47 AM	8:52 AM	8:11 AM	8:07 AM	7:57 AM
WBC	8.4	6.5	8.0	7.9	8.3	8.3
Hgb	12.5	12.0	12.6	13.1	13.4	14.4
Hct	37.9	37.5	38.2	39.1	40.1	42.7
Platelet	199	210	182	179	189	171
Rdw For SRS	13.5	14.0	13.4	13.2	13.3	12.3
MCV	93	92	93	90	90	90
RBC	4.08	4.09	4.11	4.33	4.44	4.76
MCH	31	29	31	30	30	30
MCHC	33.0	32.0	33.0	33.5	33.4	33.7
MPV	6.5	6.9	6.2	6.8	6.3	7.6

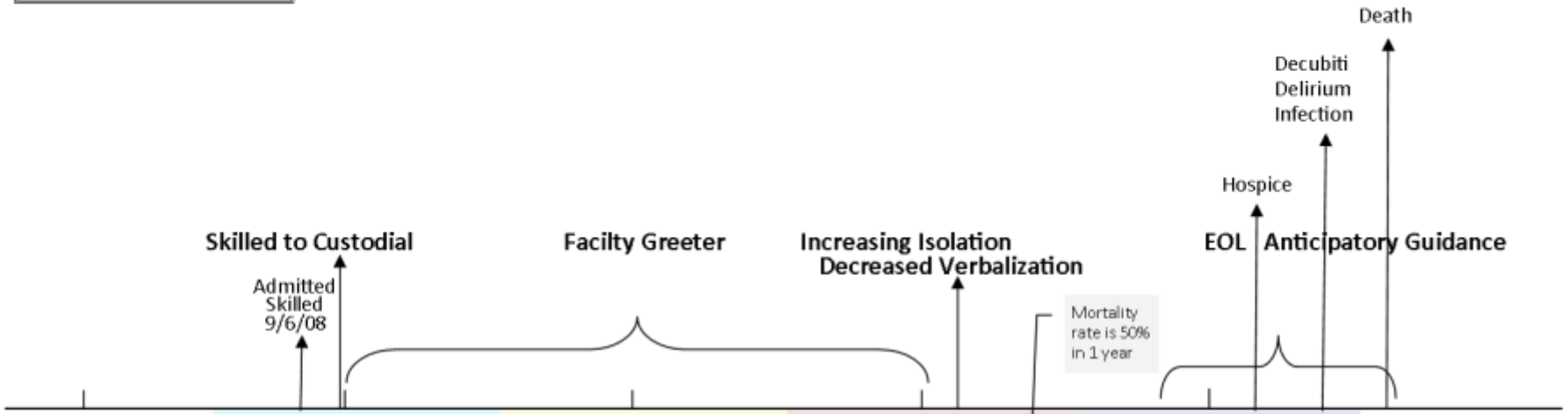
PROGNOSTIC DATA

71 Year old male

CHF - Moderate
Dementia - Moderate
Tib Fib– FX

a. 20% of Medicalre - Hospital to Skilled
b. 1/3 of Skilled to Custodial
c. Greater than 50% of new Custodial patients die withing 6 months

a. Complete ADL deficit
   - Worst 1st year Prognosis
b. Anticipate:
   - Pressure Ulcers
   - Weight Loss
   - Delirium
   - Infection



Tib Fib Fx
NWB → W/C

13lb wt loss

Weight	206	208	206	204	206	204	191	192	186	184
ADL (Assist)	Assisted Living → 3 ADL	-4		-4		-5		-6**		
Alb		3.6			3.4	3.4	3.4(8/13/11)	2.9(1/12/12) ╪		
Chol				LDL 109	161(LDL 101)	178 (114)	156(90) ╪*			
Hgb		12.5		12.1	12.2	12.2	11.4 ╪			
BNP				294		391, 417, 594				
Cr		1.2		1.1		0.8				

*Cholesterol less than 150 in men 63% mortality at 14 months
** Worst 1 year prognostic marker
╪ Low cholesterol, low albumin, low hemoglobin = 84% 1 year mortality

Pillar Three
Professional Evidence-Based Care for the Caregiver

Evidence based medicine - Hospice care is associated with an absolute reduction in death rates in the caregiver at 18 months post death of the patient of 0.5% (1 in 200)

Nicholas Christakis, et al, *The Health Impact of Health care on families: a Matched Cohort Study of Hospice Use by Decedents and Mortality Outcomes in Surviving, Widowed Spouses,* Social Science and Medicine 2003, vol57 pp.465-475

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Pillar Four
Advance Health Care Planning

Evidence based medicine shows that AHCDs (which would include POLST) do not consistently match the health care desired by the patient with the care received by the patient

Problems with Advance Health Care Directives

- They are not disease specific
- They are too vague or contradictory to be interpreted in the context of the care which is being provided

Resolve Morale Conflict Proactively

Create Disease Specific Directives

Issues Important in the Management of a Pre-terminal Aging Population:

- Mobility Deficit
- Transportation Deficit
- Financial Restraint
- Social Support/Family Deficit
- Cognitive Deficit
- Compliance Deficit
- Change in Goals of Care

It is better to bring healthcare to patients at this time, than to bring patients to healthcare.

What *Transitions* does not do …

- We do not prevent or discourage the patient from seeing their cardiologists or PCPs
- We do not prevent or discourage state-of-the-art cardiology therapies or interventions
- We do not discourage hospitalizations
- We do not "take over" the medical management of the patient

Key Performance Indicators

- Reduction of hospitalizations/ED visits
- Completion of advance healthcare plan
- Timely referral to hospice
- System cost savings
- Patient/family satisfaction

Transitions – Interventions

- To educate patient/family
  - Disease process
  - Early symptom recognition
  - Medication management
  - Dietary considerations
- To facilitate the development of a long term care plan that aligns with patient goals of care
- To improve care coordination between PCP/Specialist and patient/family
- To improve the end-of-life care by creating the option for the hospice pathway

Transitions
Case Management Design

- Active Phase
- Maintenance Phase
- Role of Hospice
  - 24 hour call availability
  - Full integration and hand offs between programs

Transitions
Active Phase

RN Case Manager

- 4-6 visits in 6 week time frame

MSW

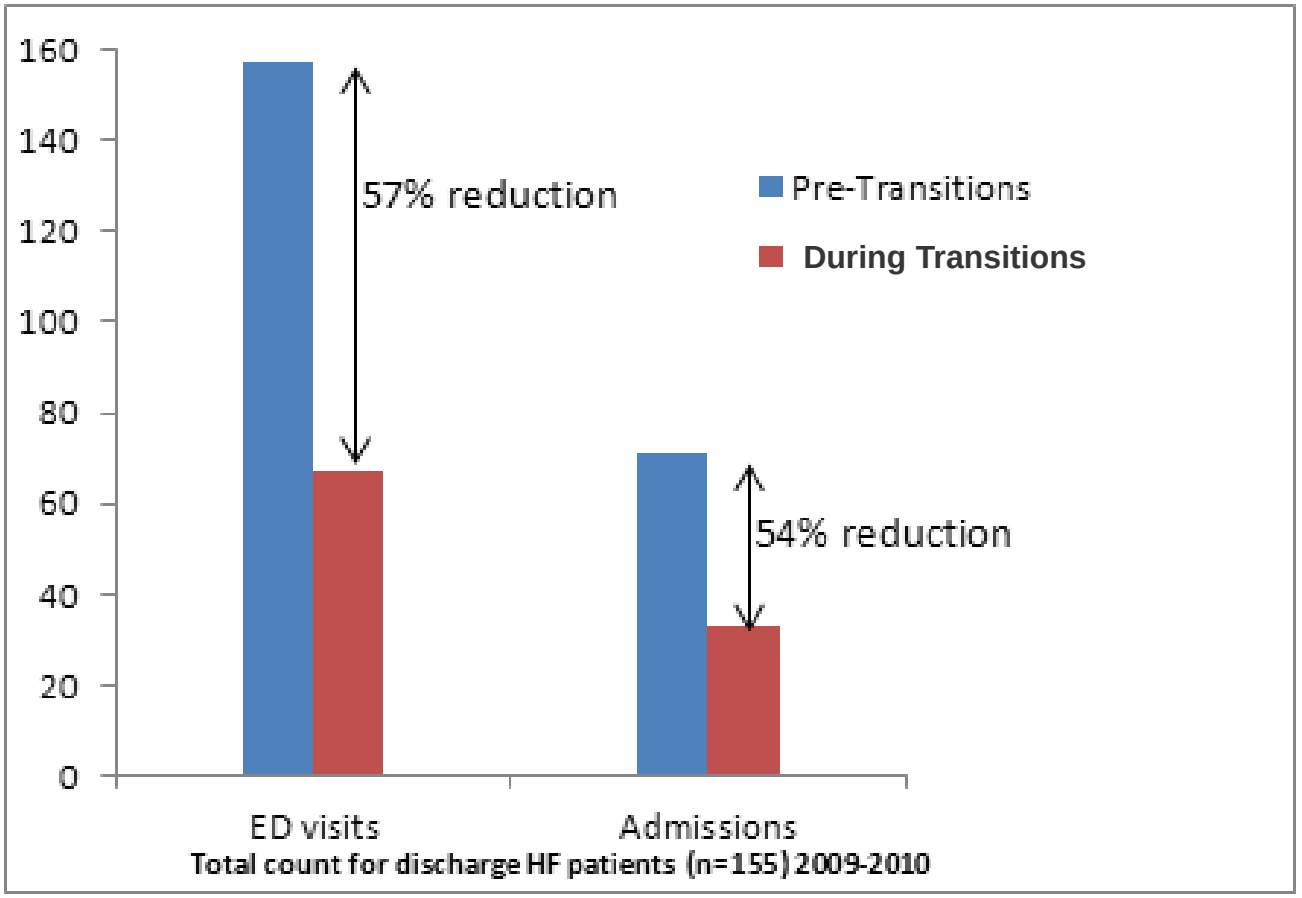
- 1-2 visits for goals of Care discussion; completion of POLST

Transitions
Maintenance Phase

RN Case Manager

- Telephonic case management – every 2-4 weeks until transferred to hospice
- Home visits as needed for assessment
- Coordinate care with MD ongoing
- Transfer to hospice when appropriate

Hospitalization ER Utilization: All cause



94% reduction in primary CHF admissions

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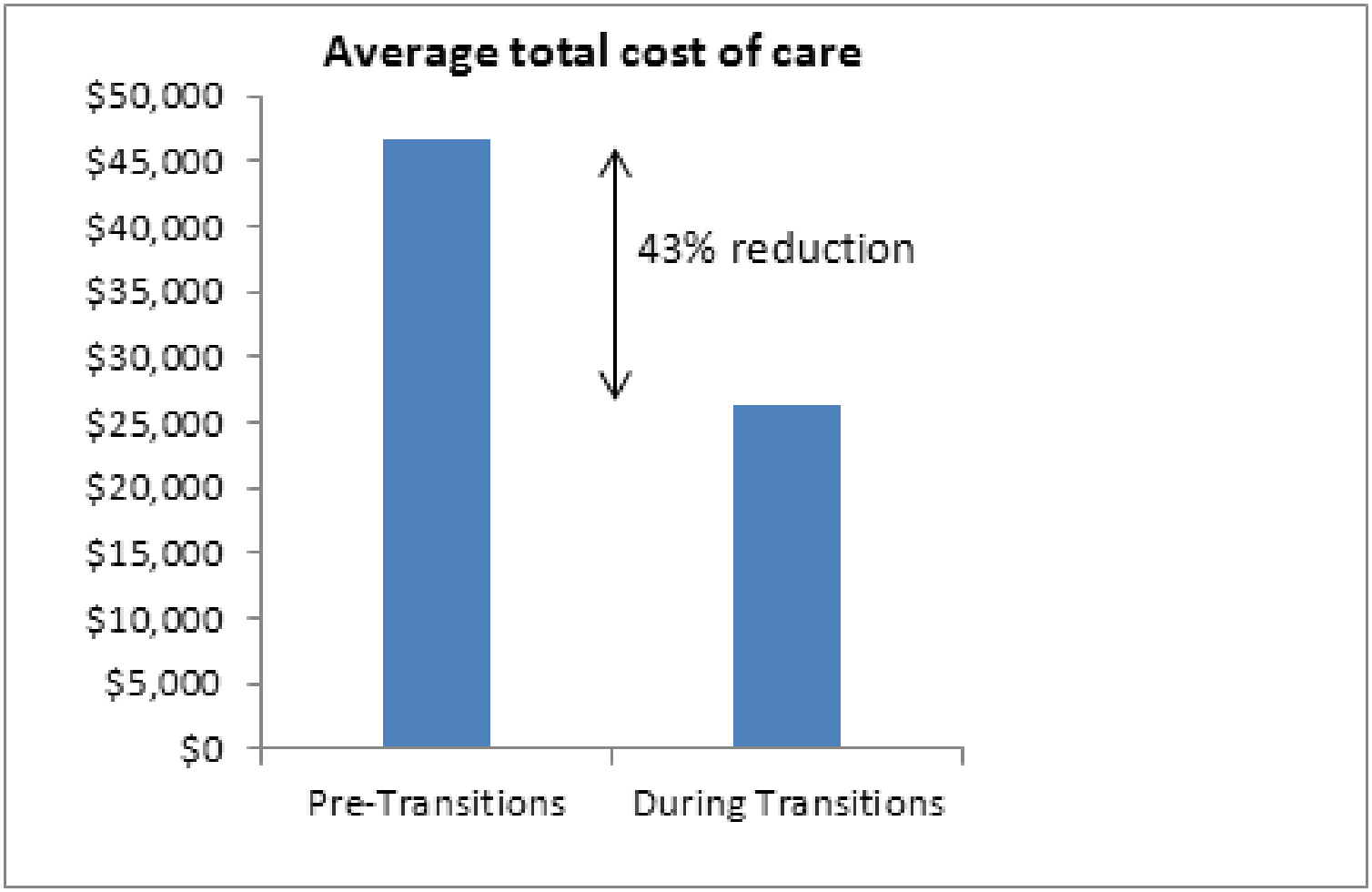
It’s not about the hospital…

it’s about the “non-event”

Cost of Care



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Transition patient demographics

(patients with primary diagnosis of heart failure, discharged from Transitions between 2008-2010)

Total N	155	
Age on enrollment	84	Range: 45 – 102
Average LOS in Transitions	165 days	Range: 2 – 726
Reasons for Discharge		
Transfer to Hospice	116	74.8%
Death at Home	8	5.2%
Death in a Facility	9	5.8%
No Further Care Needed	3	1.9%
Moved From Service Area	1	0.65%
Discharged: Other	18	11.6%

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Patient Family Satisfaction *Transitions* FY2011

Percent VERY satisfied	CHF	COPD	Dementia	Overall
1. The extent to which you were taught to manage your medications and symptoms related to your diagnosis	76%	75%	88%	79%
2. The education you received regarding contacting the *Transitions* team at any time for assistance in managing your symptoms	75%	88%	90%	82%
3. The assistance you received with long term care planning and advanced directives	81%	86%	88%	84%
4. Improvement in your quality of life	69%	57%	89%	72%
5. Assistance received from the nurse or medical social worker when problems occurred	69%	75%	82%	74%
6. Likelihood of recommending the Sharp *Transitions* Program to others for managing advanced chronic illness	78%	100%	91%	86%

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Synergy

Transitions to Hospice

….The impact of change…

10 Leading Causes of Death and What They Cost the U.S. Economy

1. **Heart Disease** - Number of deaths 585,444 - 25% decrease in death rate
2. **Cancer** - Number of deaths 573,855 – 7.5% decrease in death rate
3. **Chronic Lung Disease** - Number of deaths 137,789 - 25% decrease in death rate
4. **Strokes** - Number of deaths 129,180 – 31% decrease in death rate
5. **Accidents** - Number of deaths 118,043 – 7.6% decrease in death rate
6. **Alzheimer's Disease** - Number of deaths 83,308 - 50% decrease in death rate
7. **Diabetes Mellitus** - Number of deaths 68,905 - 11% decrease in death rate
8. **Renal Disease** - Number of deaths 50,472 - 21% decrease in death rate
9. **Pneumonia/Flu** - Number of deaths 50,003 - 32% decrease in death rate
10. **Suicide** - Number of deaths 37,793 - 15% decrease in death rate

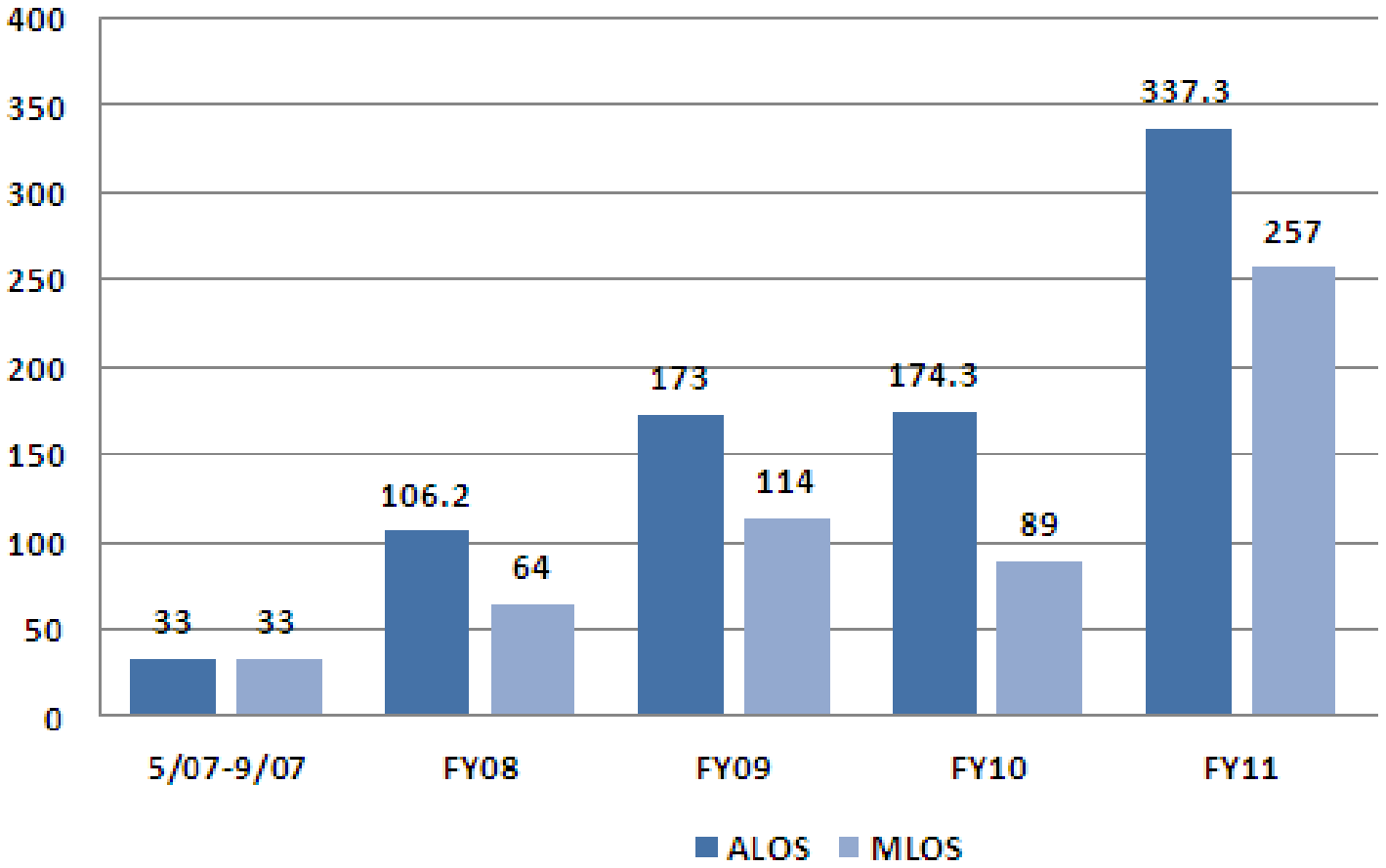
Centers for Disease Control and Prevention (CDC) Estimated causes of death for 2010

Current Programs

- CHF
- COPD
- Dementia
- Cancer
- Geriatric Frailty Syndrome
- ACP
- Nursing Home Care

Coming soon…Renal Failure, other neurodegenerative disorders

Transitions Program: CHF Lengths of Stay



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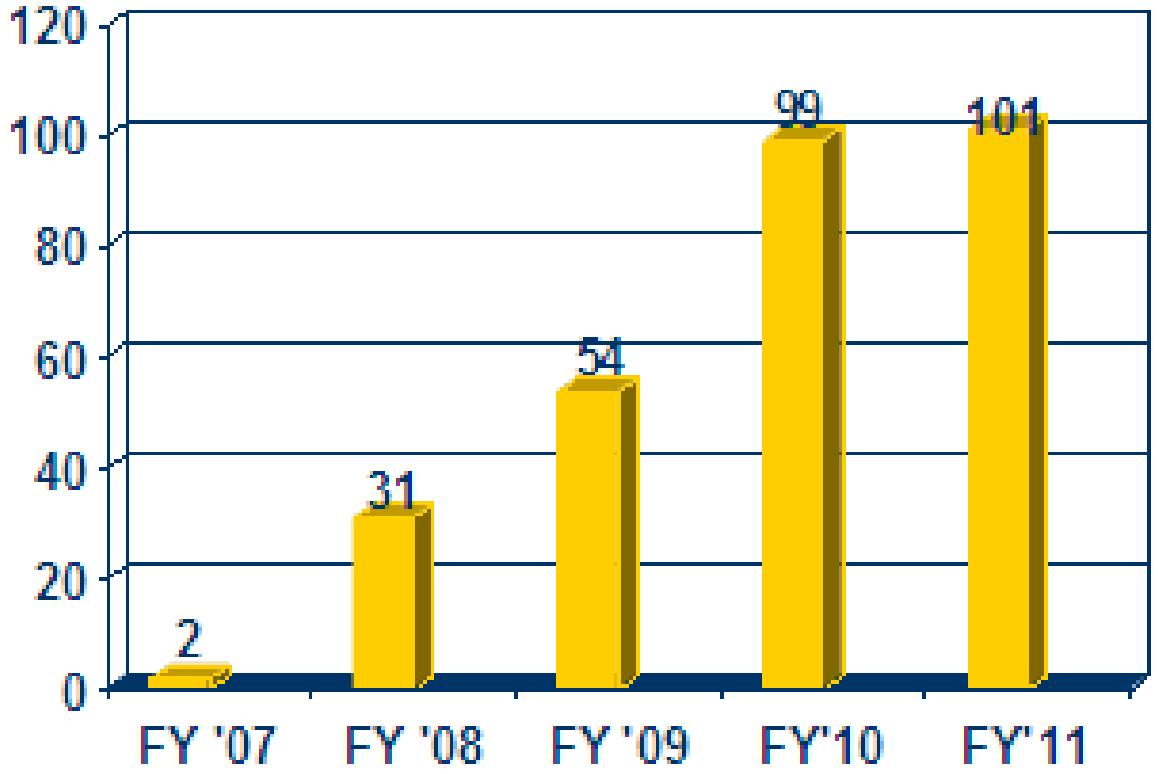
Hospice
Transitions Transfers to Hospice



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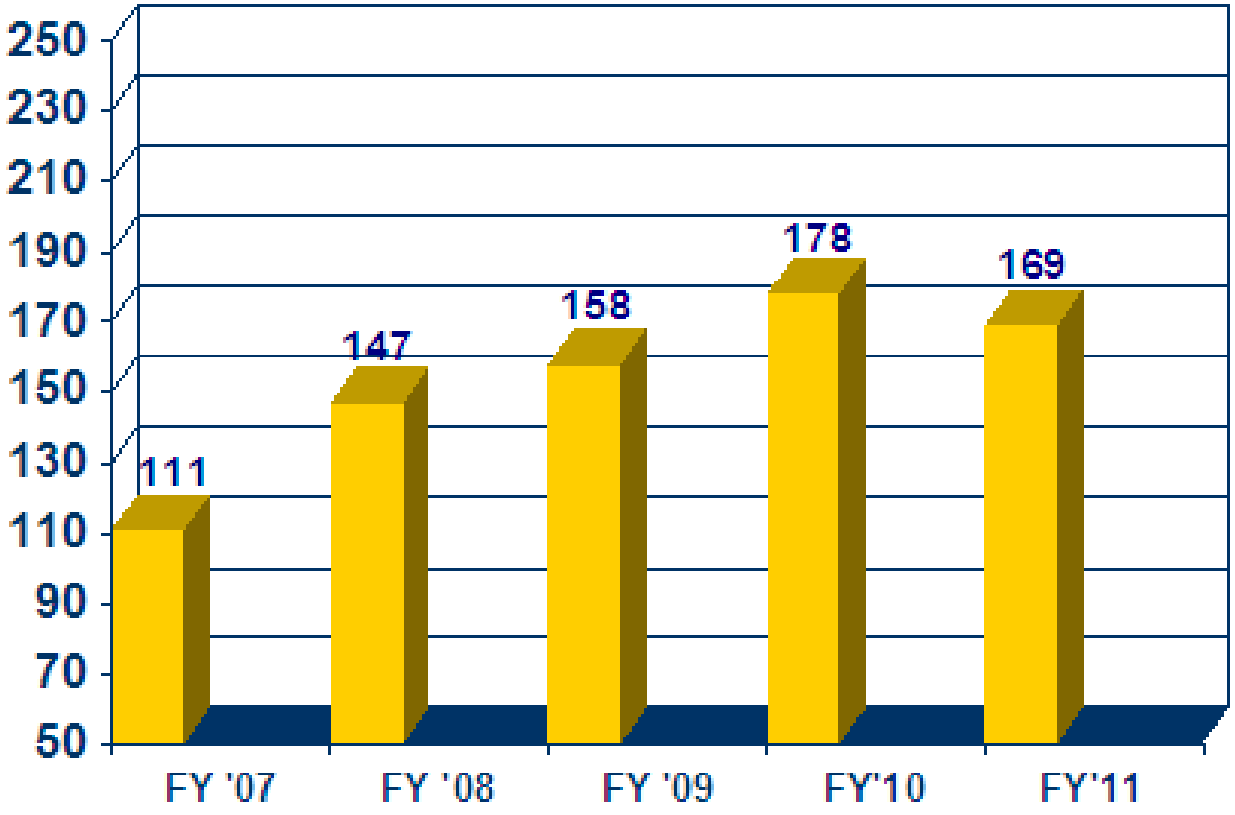
Hospice
Admissions - Heart Failure



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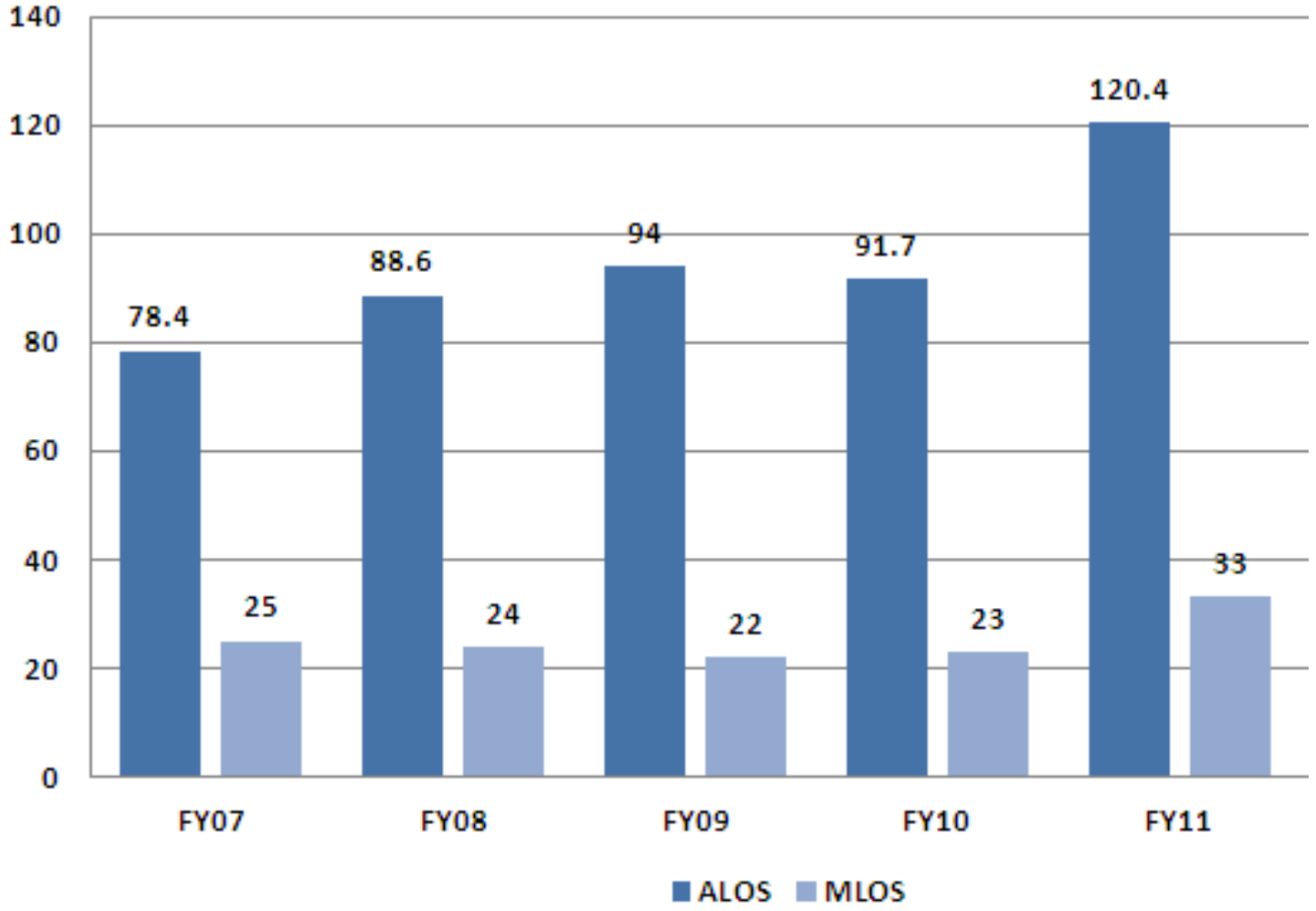
Hospice Lengths of Stay: CHF



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Thank You

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