Developing a Palliative Care Medical Home

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Steven Lai, MD
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Objectives

- Understand why the Palliative Care Medical Home Model is needed
- Learn steps needed to develop your own program—how
- Describe our program functions on a day to day basis and it’s impact on patients/families—what
The WHY

Palliative Care Research Shows...

HOMEBOUND: 45% decreased cost and increased patient satisfaction with less utilization of ER/MD visits/SNF & Hosp days (J Pall Med 2004 Vol. 6(5):715-724)


OUTPATIENT CLINIC: Improved symptom control and increased patient satisfaction (J Pain Symptom Manage. 2004 Jun;27(6):481-91)

INCREASED length of life advanced NSCLC (N Engl J Med 2010; 363:733-742)
**EFFICIENCY**

**International Comparison of Spending on Health, 1980–2009**

Average spending on health per capita (US PPP*)

Total expenditures on health as percent of GDP

* PPP=Purchasing Power Parity.


Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2011.

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**Cost: Hospital Spending per Discharge, 2009**

Adjusted for Cost of Living

Dollars

Source: OECD Health Data 2009 (June 2009).
Where does Palliative Care come in?

The sickest and most vulnerable 5% of patients account for 50% of all healthcare spending

www.medpac.gov  
CBO May 2009 High Cost Medicare Beneficiaries  www.cbo.gov  
nchc.org/facts/cost.shtml
Target Population for Palliative Care
Distribution of Total Medicare Beneficiaries and Spending, 2009

- 10% of beneficiaries account for 90% of Medicare spending.
- 63% of beneficiaries account for 37% of Medicare spending.
- 37% of beneficiaries account for 10% of Medicare spending.

Average per capita Medicare spending (FFS only):
- 10%: $7,554
- 63%: $48,220

Total Number of FFS Beneficiaries: 37.5 million
Total Medicare Spending: $417 billion

NOTE: FFS is fee-for-service. Includes noninstitutionalized and institutionalized Medicare fee-for-service beneficiaries, excluding Medicare managed care enrollees.

The CMS Mission

As an effective steward of public funds, CMS is committed to strengthening and modernizing the nation’s health care system to provide access to high quality care and improved health at lower cost.
Measures of Success: The Three Part Aim

Better health: Better health as measured by individual and population metrics

Better health care: Improved experience of care measure by Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity metrics

Reduced costs: Lower total cost of care through improvement

3-Part AIM

Population Health

Experience of Care

Per Capita Cost
Health Care

**CURRENT STATE**
- Producer Centered (unsustainable)
- Volume Centered (Revenue Outcomes)
- FFS Payment Centered (lack of transparency)

**FUTURE STATE**
- People Centered (PCMH/data transparency)
- Outcome Centered (VBP)
- Payment reform (ACO/Shared Savings)

Need delivery system and payment reform
Consumer driven

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To Save, Workers Take On Health-Cost Risk
(3/18/13 WSJ)

On the Exchange
Workers’ choices changed for 2013 when they used an exchange.

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer-Directed</td>
<td>12%</td>
<td>39%</td>
</tr>
<tr>
<td>Consumer-Directed</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Health Maintenance</td>
<td>70</td>
<td>47</td>
</tr>
<tr>
<td>Organization (HMO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred-Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization (PPO)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ann Hebert, The Wall Street Journal
Transformation: A Necessary and Sufficient Rx?

Every clinician and health care administrative person starts every day believing that success – whether it’s the success of the patient, the doctor, or the organization – is directly related to their ability to achieve better health, better care, and lower costs through improvement for their population and that they have the knowledge and tools necessary for success.

How will reform happen?

- Organizations need to commit to the change
- Payers need to embrace this
- Models need to be available
- These models need to be evaluated
- Successful models need to spread
- The Hospice and Palliative Care Delivery Models can play a large role in leading healthcare reform.
The HOW......

Program Development/Design

- Garner Champions
- Analysis of current State/Gap/desired future State
- Presentation to Leadership/elevator speech
- Needs analysis-program design, metrics, business plan
- Presentation to Leadership/elevator speech
- Ramp up needs
- Pilot
- Presentation to Leadership/elevator speech
- Reevaluate
- Spread (implementation)
- Continual QI and run charts
- Presentation to Leadership/elevator speech
PAMF’s Current State

COMMUNICATION GAPS:
Between care settings regarding plan of care, medication reconciliation, advanced care planning.

EDUCATION GAPS:
Providers understanding when patients are failing and what palliative care can offer. Having tough conversations. Patients needing knowledge about disease process.

FRAGMENTATION OF SERVICES:
Most end of life care occurring within days or weeks of death when patients are sent to hospice. Fragmented access to education like the Health Resource center. Fragmented access to Palliative Care (hospitals, some via home health).

CARE COORDINATION GAPS:
Palliative Care should be a “team sport” linking specialists, PCP’s and patients.

Presentation to Leadership

- Current State
- Future State
- Gap
- Make a case for the “why”
- Patient story-old vs new paradigm
- “Ask”
The Problem - part of the why

- Over 60% of US hospitals with >300 beds have inpatient palliative care programs.

- What happens to those patients/families before and after that admission?

Elevator Speech

- 30-60 seconds to make a powerful impression
- Planned and rehearsed
- Concise
- Powerful
- Conversational
- Hook - I’d like to meet with you to discuss...
- You tube examples
Elevator Speech

- Elevator Speech #1
- Elevator Speech #2

Utopia Vision
Palliative Care Medical Home Model

MD Office
PC Clinic
Cancer/POE
PCP
Specialist

Patient/Family

Hospital

HOME

SNF

Hospice
Home Health
Components of a Medical Home

- Engaged Leadership
- Patient Empanelment
- Continuous team-based healing relationships
- Patient-centered interactions
- Enhanced Access
- A QI strategy
- Organized, evidence-based care

http://www.safetynetmedicalhome.org

Palliative Care & Support Services

Stakeholders

<table>
<thead>
<tr>
<th>REGION</th>
<th>Santa Cruz</th>
<th>Palo Alto</th>
<th>Conomo</th>
<th>East Bay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice</td>
<td>HEOS: Heartland</td>
<td>Pathways: Vitas</td>
<td>Odyssey Sutter VNA</td>
<td>Pathways: Vitas Sutter VNA Aria AmericanHealth</td>
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<tr>
<td>Home Health</td>
<td>Sutter VNA DH</td>
<td>Pathways TLC</td>
<td>Pathways TLC</td>
<td>Pathways TLC</td>
</tr>
<tr>
<td>SNF</td>
<td>1-SNF: Chestwood SCNDC PCM ARVRCU</td>
<td>3-5-SNF: Eder Care Great QUEST</td>
<td>2-SNF: Eder Care Great QUEST</td>
<td>1-SNF: Fremont Health Center Winton Park Country Drive Park Central Valley Care</td>
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<tr>
<td>Hospital</td>
<td>El Camino- EPPC Hospitalist Suite Maternity Watsonville</td>
<td>Stanford-EPPC Hospitalist</td>
<td>Heather Harris</td>
<td>El Camino- EPPC Hospitalist</td>
</tr>
<tr>
<td>Other resource</td>
<td>Oncology POE - community health education Twenten MSW</td>
<td>Oncology POE - MSW- F(2) Owen Smith- M(2) education (2) (Casey Cappio)</td>
<td>Oncology POE - Health Resource Center (F2)</td>
<td>Oncology POE - Health Resource Center (F2)</td>
</tr>
<tr>
<td>Physicians</td>
<td>TAPPIS BORGHAN SOFEN RMD</td>
<td>CHENG HARRIS JOHNSTON-NICA EISENBERG SMITH RMD</td>
<td>TAI EANDREA KOPF DEKAR CHANGKUND CUNNINGHAM RMD</td>
<td>WU SHAPIERI CUNSF KNOX RMD</td>
</tr>
</tbody>
</table>
**Integrated Palliative Care Delivery Model**

**Driver Diagram - Sharon Tapper, MD**

**AIM and Outcome**
1. Reduce hospital admissions (90 days pre compared to 90 days post enrollment) in patients participating in the palliative care service by 35%
   By December 2012

**Primary Drivers**
1. Restructuring care-delivery model to better support seriously ill patient/family regardless of their physical location
2. Getting Patients and Providers to participate
3. Having the conversation to obtain the goals of care

**Secondary Drivers**
1. Establishing a Care Team
2. Determining patient’s acuity level

**Change**
1. Development of registry
2. Standardization of EMR documentation
3. Development of disease specific algorithms
4. Developing a system of Patient referral into the service

1. Track the number of patients referred who accept enrollment into the service
2. Monitor physician referral and specialty

1. Develop a list of Stakeholders to Engage
2. Monitor provider satisfaction
3. Monitor physician referral specialty

1. Tracking completion of advance care wishes and goals.
2. Monitor patient satisfaction with the program
3. Monitoring hospice referral rate and length of stay
Metrics

What to Measure
How to Measure

Multiple testing context

Knowledge and Reliability

Hunches, Theories, Ideas

Time

Data

Designs That Result in Improvement

Short and long term process measures

Outcome Measures
What to measure

General principles

• Good enough measures
• Simple to collect
• Relative real time
• Purpose: Evaluating change, not precision
• Frequent small samples
• Repeated and tracked over time (~ 24 months)
• Manageable number of measures
### Types of measures

**Processes and outcomes**

<table>
<thead>
<tr>
<th>Type of measure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome measures</strong></td>
<td>AE rates, Re-admits</td>
</tr>
<tr>
<td></td>
<td>% screening, % A1c controlled, etc</td>
</tr>
<tr>
<td></td>
<td>Cost per capita</td>
</tr>
<tr>
<td><strong>Process measures</strong></td>
<td>% use check list</td>
</tr>
<tr>
<td></td>
<td>% follow protocol</td>
</tr>
<tr>
<td></td>
<td>Overuse</td>
</tr>
<tr>
<td><strong>Balancing measures</strong></td>
<td>Costs, Resources</td>
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<tr>
<td></td>
<td>Delays</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
</tr>
</tbody>
</table>

### Three part aim measurements

- **Outcome**
  - Pop health: .................................................................
  - Patient care: ...............................................................  
  - Cost/efficiency: ..........................................................
### Metrics

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>OUTCOME</th>
</tr>
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<tbody>
<tr>
<td>Health</td>
<td>Goals of Care</td>
</tr>
<tr>
<td></td>
<td>Patient Enrollment</td>
</tr>
<tr>
<td></td>
<td>Patient Satisfaction</td>
</tr>
<tr>
<td></td>
<td>Hospice referral rate and LOS</td>
</tr>
<tr>
<td></td>
<td>Percent of Deaths on Hospice</td>
</tr>
<tr>
<td>Care</td>
<td>Goals of Care</td>
</tr>
<tr>
<td></td>
<td>Completion of ACP</td>
</tr>
<tr>
<td></td>
<td>Patient Satisfaction</td>
</tr>
<tr>
<td></td>
<td>Hospice referral rate and LOS</td>
</tr>
<tr>
<td>Cost</td>
<td>Drop in Hospital days pre/post</td>
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### CHCF survey results

Survey occurred in late 2011 and had 1669 participants including 393 who lost a loved one in the past year. Margin of error is 2.4%

82% says it’s important to put wishes in writing but < 25% have
80% say if seriously ill, they would want to speak with their doctor about end of life care but less than 10% have, including just 13% of those over 65 years of age.

Majority want to die at home (70%) but only 32% do
Majority do not want to be a burden, financially or emotionally
How to measure

Measurement approach

- Plot on annotated run chart
  - Minimal standard
- Plot and evaluate over time
- Small frequent samples
  - Better than large infrequent samples
- OK but not required
  - Control charts, other statistical tests
Process Metric Example - Enrollment

MONTHLY CUMULATIVE NEW PATIENT ENROLLMENT FROM JANUARY 2012 for SC & PA

Process Metric Example - Goals of Care

Goals Of Care Documented in EPIC for SC & PA (started 4-12)
Process Metric Example—Completion of AHCD and POLST

COMPLETION OF POLST & AHCD 60 DAYS AFTER START DATE 2012 for SC & PA

Doctor Talking with Patient About End-of-Life Wishes, California, 2011

Have you ever had a doctor ask you about your wishes for medical treatment at the end of your life?

- Refused
- Yes
- No

Most likely to say "yes":
- Age 65+
- Women

Most likely to say "no":
- Age 45 to 64
- Men

Source: California HealthCare Foundation
Outcome Metric Example-Deaths on Hospice

1 yr Measurement of Deaths on Registry - % on Hospice for SC & PA
MLOS 28 days/ALOS 60 days

Preferred Location of Death, California, 2011

Home 70%
Hospital 16%
Other 7%
Don’t know/Not sure (2%)
Refused (4%)
Hospice facility (5%)

Note: Data may not add to 100% due to rounding.

1. California Advanced Hospice of Life Issues, 2011: California survey of 1,685 adult Californians, including 850 respondents who chose not
   have a PA in the past 12 months.
2. CMS: Medicare Hospital Inpatient Prospective Payment System Data.
Outcome Metric Example-Hospital Admits Post Enrollment

Hospital Admission % change SC PC Pre & Post 90 Days by Start Date 12 Month Look Back

Santa Cruz - Palliative Pt. Case Mix

Patient Case Mix: Feb 11 - Feb 12
N = 368
The WHAT.........

Passion, Purpose & Reality
Case: Mr S

- 51 y/o male with widely metastatic prostate cancer to spine
- Presented with back pain and leg weakness-cord compression
- Extensive thoracic laminectomies, radiation, followed by acute rehab
- Returned home with family, bedbound status

Case: Mr S

- Pain
  - Neuropathic
  - Previous side effects and inadequate analgesia with oxycontin and fentanyl patch
  - Switch to methadone regimen
  - Weekly monitoring, adjustments of methadone with hydromorphone for breakthrough
Case: Mr S

- Other symptoms:
  - Depression/anxiety
    - On zoloft, klonopin
  - Fatigue
    - Underlying disease progression, medications
  - Constipation
    - Senna/colace/miralax regimen

Case Mr S

- Discussed disease trajectory and likely prognosis
- Priorities and goals
  - Live to see his daughter graduate from high school
  - Optimize his function
  - Good pain control
  - Stay at home with family, avoid hospitalizations
Case Mr S

- Difficulty coping with decline in health and facing death
  - Life review
  - Social worker support patient and family
  - Gently probing patient and family regarding advance care planning
  - POLST completed

Case Mr S

- Escalation of back/leg pain, requiring increasing methadone
- Likely disease progression rather than opioid tolerance
- Needing more close follow-up for pain control and support for family
- Hospice referral made
What does PCSS offer?

- Ongoing evaluation and management to include:
  - Discussions of underlying disease processes
  - Goals of care/priorities for patient and family
  - Advance care planning
  - Symptom management
  - Psychological and spiritual support
  - Coordination and communication between providers

Early Palliative Care for Patients with Metastatic Non-Small Cell Lung Cancer
Temel JS, et al NEJM 2010
What’s the secret sauce?

- Building rapport, relationships
- Treatment of symptoms
- Understanding of illness, prognosis
- Establishing preference for information

Yoong J, JAMA Int Med 2013
What’s the secret sauce?

- When the patient’s disease progressed, palliative care focuses more on coping
- Focus is **not** putting pressure into accepting hospice and avoiding resuscitation or hospitalization

Yoong J, JAMA Int Med 2013

Patients’ Expectations about Effects of Chemotherapy for Advanced Cancer

- How likely did you think it was that chemotherapy would help you live longer, cure your cancer, or help you with problems you were having because of cancer?
- Prospective, observational cohort study of 1993 patients who were alive 4 months after diagnosis and received chemotherapy for newly diagnosed metastatic lung or colorectal cancer
- 69% of patients with lung cancer and 81% of those with colorectal cancer did not report understanding that chemotherapy was not at all likely to cure their cancer

Weeks JC et al NEJM 2012
ASCO: The Integration of Palliative Care into Standard Oncology Care

- Expert consensus: combined standard oncology care and palliative care should be considered early in the course of illness for any patient with metastatic cancer and/or high symptom burden
- Strategies to optimize concurrent palliative care and standard oncology care, with evaluation of its impact on important patient and caregiver outcomes (QOL, survival, health care utilization, and costs) should be an area of intense research

Smith, T J Clin Onc 2012

Case Mr H

- 91 y/o male with multiple medical problems including dementia, congestive heart failure, and chronic kidney disease had progressive functional and cognitive decline after several admissions in past 6 months for aspiration pneumonia or UTI.
- Mr H had prolonged hospitalization for sepsis and delirium, leading to dysphagia and feeding tube placement for nutrition
Case Mr H

- Patient sent to SNF for rehab and palliative care consultation for clarifying goals of care and symptom management

Case Mr S

- Symptoms
  - Delirium and agitation
  - “I want to eat!”

- Nonpharmacologic approach
  - Good oral care
  - Involve recreational therapist: classical music
  - Social worker help find spiritual support from rabbi
Case Mr H

- Clarify goals of care
  - Coordinated interdisciplinary SNF family meeting
  - 2 sons involved in decision-making with different viewpoints toward father’s quality of life and treatment preferences
  - Build trust and rapport
  - Weigh benefits/burdens of artificial nutrition
  - Discussion of patient’s previous statements and values, “do everything”

Case Mr H

- POLST from full code to DNR and limited additional interventions
- Readmitted to hospital for aspiration PNA
- Hospital visits by palliative care team to support the hospitalist and participated in family meeting to revisit goals of care
Despite IV antibiotics and trial of BIPAP support, he had worsening respiratory failure

Transitioned to full comfort care in hospital, morphine drip started, died peacefully with family at bedside

The Family Meeting

- Complex interdisciplinary procedure that can achieve humane and effective care when patients face end-of-life decisions
- Proactive versus reactive meetings
- Establish an agenda with the key clinicians
- Empathetic communication, listening and responding to families through acknowledging and addressing emotions
Family Meeting Room

POLST

- Opportunity for a meaningful conversation

<table>
<thead>
<tr>
<th>MEDICAL INTERVENTIONS:</th>
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</thead>
<tbody>
<tr>
<td>Person has pulse and/or is breathing.</td>
</tr>
<tr>
<td>Check One</td>
</tr>
</tbody>
</table>

- Comfort Measures Only: Use medication by any route, positioning, wound care and other measures to relieve pain and suffering. Use oxygen, suction and manual treatment of airway obstruction as needed for comfort. Antibiotics only to promote comfort. **Transfer if comfort needs cannot be met in current location.**

- **Limited Additional Interventions:** Includes care described above. Use medical treatment, antibiotics, and IV fluids as indicated. Do not intubate. May use non-invasive positive airway pressure. Generally avoid intensive care.

- **Do Not Transfer to hospital for medical interventions. Transfer if comfort needs cannot be met in current location.**

- **Full Treatment:** Includes care described above. Use intubation, advanced airway interventions, mechanical ventilation, and defibrillation/cardioversion as indicated. **Transfer to hospital if indicated.** Includes intensive care.

Additional Orders: ___________________________
**Prognosis**

- Struggle with uncertainty
- Often patients want to know
- Information influences decisions
- Accuracy not critical: hr-d, d-wks, wks-mo
- *Do homework, talk to specialists*

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**Health Care Transitions at EOL**

- Most would prefer to die at home if terminally ill
- Site of death often a quality measure for EOL care, institutional setting often associated with poor QOL compared to care at home with hospice
## Health Care Transitions at EOL

Teno JM, JAMA 2013

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths in hospital</td>
<td>32.6%</td>
<td>26.9%</td>
<td>24.6%</td>
</tr>
<tr>
<td>ICU in last month in life</td>
<td>24.3%</td>
<td>26.3%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Hospice use at time of death</td>
<td>21.6%</td>
<td>32.3%</td>
<td>42.2%</td>
</tr>
<tr>
<td>Health care transitions in last 90 days of life, mean</td>
<td>2.1</td>
<td>2.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Health care transitions in last 3 days of life</td>
<td>10.3</td>
<td>12.4</td>
<td>14.2</td>
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</tbody>
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## Passion, Purpose, & Reality
Video – Cost of Dying; Relief at the Door

- Cost of Dying; Relief at the Door

Palliative Care Patient Video

- Mary Ellen Video
Thank-you and Questions

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lais3@pamf.org