Palliative Care: Using the EHR for Patient Care

March 1, 2016

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Conflict of Interest

Lynn Hollar, RN
Suzanne Parra, RN
Have no real or apparent conflicts of interest to report.
Agenda

• Learning Objectives
• Project Overview
• Ascension – University of Pennsylvania partnership
• Clinical Design
• EHR Utilization – Technical Build
• Lessons Learned
Learning Objectives

1. Describe the details of the Randomized Evaluation of Default Access to Palliative Services (REDAPS) NIH clinical trial

2. Discuss the use of the EHR to identify patients and document outcomes in clinician workflows with technical EHR design and build

3. Summarize lessons learned, project challenges and mitigation strategies utilized for project success
An Introduction of How Benefits Were Realized for the Value of Health IT

Satisfaction: Identification of patients without increasing documentation burden. Streamlined documentation for palliative care team.

Treatment/Clinical: Rule to automate palliative care consult order.

Electronic Information/Data: Patient identification criteria and outcomes.

Patient Engagement and Population Management: Standardized identification and documentation leads to measurable outcomes for holistic approach to patient care.

Savings: Total cost per palliative care patient
Ascension Health

Ministry Markets
- Hospitals
- Health Systems, Non-Controlling or Sponsorship Interest

- Ascension Community Clinics
- Ascension Senior Living Locations
- Ascension Health At Home Communities*

* some launching in 2016
Palliative Care Vision Statement

A society in which every person living with or affected by a chronic or life threatening condition receives compassionate, holistic, coordinated care.

This will include relief of pain, suffering and other symptoms from the time of diagnosis throughout the process of living and dying.

Such excellent care will be provided according to need, respecting the values and goals of individuals, their families and other loved ones.

It will assist them to live fully in community and will support survivors in their bereavement. Through such care, we believe that God's healing love is revealed.
Project Overview

Development of EHR content to support delivery of palliative care

- Identification of patients eligible for palliative care consults
- Notification to providers of patient’s eligibility
- Automation of palliative care consult order
- Documentation to support palliative care
  - Provider consult and progress notes
  - Chaplain services
  - Social worker / case managers
- Consult tracking tool
- Interdisciplinary plan of care
- Patient notifications to palliative care team
A Partnership is Formed

• University of Pennsylvania
  – Dr. Scott Halpern, MD, PhD, M. Bioethics
    • Associate Professor of Medicine, Epidemiology, Medical Ethics, and Health Policy
    • REDAPS Lead Investigator

• Ascension
  – Sarah Hill, MA, PhD
    • Program Manager, Palliative Care
    • Clinical Information Systems Team
    • Care Excellence Data Analytics Team
    • 11 Facilities at 7 Health Ministries

This innovative clinical trial will be conducted at 11 Ascension health hospitals over a 3-year study period (October 2015 – September 2018) and will provide the first experimental evidence of the effectiveness of inpatient palliative care consultative services in real-world settings.

• NIH Grant #4UH3AG050311-02
Improved patient-centered outcomes can be achieved without higher costs by simply changing the default option for palliative care consultation from an opt-in to an opt-out system for patients with life-limiting illnesses.
Aims of the REDAPS

• UH2 Aim 1: Charter a data coordinating center and validate data-transfer protocols at participating hospitals
• UH2 Aim 2: Develop patient identification and automatic ordering processes in the electronic health records
• UH2 Aim 3: Validate the capture of all proposed outcomes in a sample of de-identified patients
• UH2 Aim 4: Validate methods for tracking adherence to electronically generated palliative care orders
• UH2 Aim 5: Establish mechanisms and materials for notifying patients and clinicians about the research study
• UH2 Aim 6: Complete regulatory compliance, including Internal Review Board (IRB) approval, trial registry, and Data Safety Monitoring Board (DSMB) assembly
**Stepped Wedge, Cluster Design**

**Intervention:**
- default palliative care consultation order on hospital day 2 (with physician opt-out option)

**Randomization:**
- time that hospitals adopt

**Primary outcome:**
- composite of hospital length of stay and mortality
Eligibility criteria

• Age greater than 45 years **AND**
• One or more of the following conditions present on admission:

**Primary**

1. Chronic obstructive pulmonary disease (COPD) **AND**:

2. Dementia **AND**:

3. End-stage renal disease (ESRD) **AND**:

**Secondary**

Long-term oxygen therapy dependence **OR**
Hospitalized 2 or more times in past 12 months

Has surgical feeding tube **OR**
Admitted from a long-term care facility **OR**
Hospitalized 2 or more times in past 12 months

Chronic hemodialysis **OR**
Peritoneal dialysis
Outcomes

- Patient characteristics: 21 items
  - All from EHR
  - Gender, Age, Race, Length of Stay, etc.
- Hospital characteristics: 5 items
  - All from Care Excellence data warehouse
  - Number of beds, number of ICU beds, etc.
- Inpatient Palliative Care Services (IPCS) characteristics: 5 items
  - Program survey
  - Longevity of program, number of consults per year, etc.
- Outcomes Measures: 28 items
  - All from EHR
  - Process measures: 14 items
    - IPCS team members, documentation of pain, documentation of goals of care
  - Clinical measures: 14 items
    - Pain scores each day, transfer to ICU, hospital mortality, etc.
- Economic Measures: 5 items
  - All from revenue cycle
  - Total cost of stay, actual costs, etc.
Clinical Workflow

• Patient eligibility
  – Clinical documentation for secondary criteria, if needed

• Order automation
  – Time for provider review
  – Reason for order removal
  – Approval by Medical Executive Committee
  – Ascension review with legal

• Notification to palliative care team

• Documentation by palliative care team and supporting services
  – Pulling in pertinent completed documentation from other clinical documentation

• Tracking palliative care patients
  • Interdisciplinary plan of care
  • Alerts to palliative care team
Clinical Design

Framework:
• On site clinical workflow review
• Patient care model
• Clinical Governance Committee
  – Clinical design of EHR
  – Joint Commission, Center to Advance Palliative Care (CAPC), Measuring What Matters
  – Local and national patient care goals
• Use of this project to benefit Ascension palliative care providers
  – Workflow standardization
  – Knowledge sharing
  – Pilot sites
  – Support team collaborations
Project Scope

Rules
- Eligibility Criteria
- Notifications
- Automation of consult order

Documentation
- Secondary eligibility criteria
- Outcomes
- Supporting services documentation

Reports & Data Extraction
- Validation and audit
- De-identified outcome data files send to uPenn
- Attach study ID
Default palliative care standing order

24-hour opt-out alert interval
EHR notification to physicians for opportunity to cancel automated palliative care consult order

Hospitalization

day 0 = admission

day 1 = nursing documentation & review of history elements

day 1 study criteria met; system creates palliative care consult order with start time of day 2 at 1500

day 2, 1500 = palliative care consult is activated
Eligibility Criteria

- Over 45 years old
- Diagnosis / Problem Table: COPD, Dementia, ESRD
- Admissions Data: 2 admissions in the last year
- Secondary criteria documentation
- Orders: no prior PC consult order for this encounter
Notification to RN on Open Chart

Documentation Required

Documentation of Home Oxygen Use, Prior Admission History, Dialysis Treatment, Long Term Care Admission Source and Surgical Feeding Tubes is Required for patients over 45 years of age with the following condition:

End stage renal disease

Please document the required results by clicking the DOCUMENT button.
Secondary Eligibility Criteria

- Does the patient use oxygen at home?
  - Yes
  - No
  - Unable to obtain

- Has the patient been admitted 2 or more times to any hospital in the last 12 months?
  - Yes
  - No
  - Unable to obtain

- Did the patient have jejunostomy or gastrostomy (PEJ, PEG) feeding tube at the time of admission?
  - Yes
  - No

- Was the patient admitted from a long term care facility?
  - Yes
  - No

- Was the patient on dialysis treatment at the time of admission?
  - Peritoneal dialysis
  - Hemodialysis
  - No
  - Unable to obtain

If yes, indicate type of dialysis.
Consult Palliative Care Order:

• Ordering provider is most recent attending of record
• Notification presented to identified providers for 24 hours before becoming active order
• Providers have opportunity to cancel consult order
• If provider cancels palliative care consult order, must enter a reason
• Standard list of reasons presented with option to enter free text “other”
Notification of Consult Order

Palliative Care Consult Alert

An order for Palliative Care Consult was entered for this patient: TESTING, NIHPC, MRN#: SMO-123123 based on the following criteria:

End stage renal disease and patient is on dialysis

If you are the attending physician and would like to discontinue the Palliative Care consult order, go to the order profile, right click and CANCEL/DC the order and indicate the reason for discontinue***.
Reason for order cancellation

NIH Discontinue Reason

Please click Document and chart the reason the Palliative Care order is being discontinued.
Order cancellation reasons

- Goals of care already established, will re-consult with changes
- The primary team is already meeting all of the patient's Palliative Care needs
- Patient defers
- Family / caregiver defers
- Other

Other Reason:
Consult note details for study outcomes

Reason for referral
Advance directive details
Code status orders
Health care proxy/power of attorney
Problem List
Pain & other symptom assessments
Issues discussed with patient and/or family/caregiver
Pros/cons of anticipated treatment; accept, decline, or defer
Palliative care goals
Palliative care assessments: ESAS, PPS, ECOG
ADL Index score
Education, counseling, follow-up
Participants in family/caregiver meetings
Counseling summary, duration
Tracking of Palliative Care patients and alerts

<table>
<thead>
<tr>
<th>Patient</th>
<th>Location</th>
<th>Reason for Palliative Care</th>
<th>Consults</th>
<th>PPS</th>
<th>ESAS</th>
<th>Family Meeting</th>
<th>Goals</th>
<th>End of Life Plan</th>
<th>Advance Directive</th>
<th>Resuscitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>McClure, Frederick</td>
<td>Baseline East</td>
<td>Frequent Hospitalization</td>
<td>4</td>
<td>✎</td>
<td>40%</td>
<td>Aug. 25, 2015 11:14am</td>
<td>Return home as soon...</td>
<td>✦ Add End of Life Plan...</td>
<td>✦ Add Advance Dir...</td>
<td><img src="image" alt="Heart" /></td>
</tr>
<tr>
<td>Richardson, Jessica</td>
<td>Baseline East</td>
<td>Establish Goals of Care</td>
<td>4</td>
<td>✦</td>
<td></td>
<td>Add Family Meeting</td>
<td>Add Goals of Care</td>
<td>Yes</td>
<td>Yes</td>
<td><img src="image" alt="Heart" /></td>
</tr>
<tr>
<td>Smith, Thomas</td>
<td>Baseline East</td>
<td>Complex Pain and Symptoms</td>
<td>3</td>
<td>✦</td>
<td>80%</td>
<td>Aug. 30, 2015 5:36am</td>
<td>Add Goals of Care</td>
<td>✦ Add End of Life Plan...</td>
<td>✦ Add Advance Dir...</td>
<td><img src="image" alt="Heart" /></td>
</tr>
</tbody>
</table>
Outcomes data extract files

Patient Characteristics:
- Gender
- Age
- Race
- Ethnicity
- Marital status
- Insurance status
- BMI (height, weight)
- Zip code
- Acute hospitalizations in last year
- Date/time of admission to hospital
- Source of hospital admission
- Place of first hospital admission
- ICU length of stay
- Hospital length of stay
- Hospital readmission dates
- Prior palliative care consultation
- ED visits, not admitted
- Advance Directive (AD)
- Physician Orders for Life-Sustaining Treatment (POLST)
Outcome measures:

- Pain scores for each day of hospitalization
- Dialysis order
- Mechanical ventilation
- CPR
- Surgical feeding tube placement
- Transfer to ICU
- Hospital mortality
- ICU mortality
- Transfer to inpatient hospice
- Discharge disposition code
- Discharge planning orders
- Code status
- Comfort care order set
Lessons Learned

• Keep your eye on the prize
• Clinically led provided strong support and adoption
• Critical to have clinician support for research related questions
• Multiple stakeholders input
• Standardized design across multiple sites
• Challenges with import / localization of palliative care provider documentation
• Education on complete workflow
• Creating value metrics with clinical input
A Summary of How Benefits Were Realized for the Value of Health IT

Satisfaction: Identification of patients meeting eligibility criteria utilizing documented information. Standardized documentation for palliative care team for data extraction.

Treatment/Clinical: Palliative care consult orders have increased. <will use statistics not available right now>

Electronic Information/Data: Standardized patient outcomes to support value metrics.


Savings: Total cost per palliative care patient
Questions

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