Using Technology to Align Treatment with End-of-Life Goals

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Conflict of Interest

Kathy Blanton, RN, BSN, CPHQ, CPHRM
No real or apparent conflicts of interest to report.

Ryan Van Wert, MD
CEO, Co-founder and Chairman of the Board, Vynca
Conflict of Interest

Ryan Van Wert, MD

Salary: Yes  
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Other: None
The value of advance care planning (ACP)
• Physician Order for Life-Sustaining Treatment (POLST) form
• POLST/ACP state registries
  – California eRegistry Pilot
• Sutter
  – The need for an ACP solution
  – Evaluation process
  – Key change management strategies
  – Implementation
  – Learnings
  – Metrics for success
• eRegistry value prop and success
• A look at Oregon
Learning Objectives

• Explain the purpose and goals of implementing an EMR-integrated eRegistry ACP technology platform across the health system and state registry
• Assess the value proposition of a dedicated ACP technology to coordinate the sharing of POLST information across the medical community
• Show how the use of a dedicated ACP technology improves patient engagement, system utilization, ACP document capture rates and impacts unnecessary admissions and ICU utilization
• Define the implementation and change management strategies needed for success
• Identify organizational readiness for participation in a POLST eRegistry
What is Advance Care Planning?

Advance care planning (ACP) is a lifelong process of personal reflection to determine and document future care preferences.

To be successful, ACP must:

• Help the individual accurately reflect on their values
• Provide sufficient health-related information from the care team to fit values within a specific context
• Be documented in a way that is legal (usually at the state level)
• Be conducted in appropriate settings
• Be available in appropriate settings
The Current State of Advance Care Planning

The Wall Street Journal

End-of-Life Care in U.S. Is Lacking, Report Says
Conversations About Dying Should be Held Throughout Life To Save Costs, Improve Care

Politico

End-of-life instructions find no place in electronic health records

Panel Urges Overhauling Health Care at End of Life

I saved an old man’s life. He didn’t want it.

The Patients Were Saved. That’s Why the Families Are Suing.

Barbara Bush’s End-Of-Life Decision Stirs Debate Over ‘Comfort Care’
What is the Value of ACP?

A rare opportunity to:

• Improve quality care at an important time of life
• Improve family experience
• Reduce unwanted utilization
• Achieve quality and value metrics
• Achieve cost savings
ACP Supports Quality and Value Metrics

- 30% ↓ Reduction in hospital deaths
- 83% ↑ Increase in hospice use
- 43% ↓ Reduction in hospital admissions through systematic post-acute ACP program

*Teno et al. JAGS 2007; 55:189-194; Molloy et al JAMA 2000; 283(1437-1444)*
ACP Improves the Patient Experience

Primary care: 686 patients over 75 years old, or over 50 with chronic illness

- 34% increase in patient satisfaction
- 51% satisfaction rate

Hospitalized patients: 309 elderly patients randomized to ACP or usual care

- 65% increase in patient satisfaction
- 93% satisfaction rate

ACP Document Types

STRUCTURED GUIDES
- Form to guide conversations and communicate goals for patients and providers
- Self-developed or third party

ADVANCE DIRECTIVES
- Specifies actions if patient is no longer able to speak
- Living will, medical directive, advance directive

LIFE SUSTAINING TREATMENT FORM
- Form to capture and honor treatment preferences of seriously ill
- POLST, MOLST, MOST, etc
Value of the POLST Form

• Serious illness or frailty
  – Generally used when death is expected within a year

• Communicates treatment wishes valid in the outpatient setting
  – Attempt CPR or not; if no pulse or breathing
  – Other medical intervention/treatment:
    • Full – Selective – Comfort Focused
  – Artificial nutrition wishes

• Designed to ensure care concordant with patient wishes
  – Emergency medical services personnel
  – Emergency Department personnel
    • MD with patient makes final call
  – Nursing facility staff
  – Clinic staff
  – All other providers
National POLST Program Designations
As of November 2018

- Mature Program
- Endorsed Program
- Developing Program
- Program Does Not Conform to National POLST Paradigm
- Oregon separated from the National POLST Paradigm in 2017
National POLST Registry Information
As of April 2018

As of April 2018
- Dark blue: Has Active Statewide Registry
- Medium blue: Piloting a Registry
- Light blue: Actively Working on a Registry
- Light purple: Had a Registry
Technical Components of a State Registry

**CAPTURE**
- ADT/FTP
- Web portal
- HL7

**STORE**
- Electronic completion
- Centralized, HIPAA compliant database
- Patient matching

**ACCESS**
- Call center
- ED eFax
- Web Portal
Sutter Health – Sacramento, CA

- Not-for-profit Integrated Healthcare System

**Numbers**
- Large ambulatory network: Ambulatory Surgery, Urgent Care, Walk-in centers, Home Health, AIM, Hospice
- 24 hospitals and 4,259 Licensed Acute Beds to include 5 trauma centers
- 191,000+ Discharges 2017
- 868,000+ ED visits 2017

**People Make the Network**
- Partner with more than 12,000 doctors
- 53K staff and 5K volunteers
- 3 Million Patients in 22+ counties across 100 California communities
California Story

• POLST introduced through legislation in 2008

• Became effective January 1, 2009
  – Widespread use of POLST across the state

• At Sutter year-end 2017 (just prior to go-live):
  – 150,000+ POSLT forms on file
  – 2,700 new forms each month
  – 40% of patients aged 65+ with a POLST or advanced directive
At Sutter, We Could Do Better...

- Key Challenges – Inappropriate care due to:
  - Paper form and reliance on human processing
    - Scan to wrong document type – **POLST lost in record**
    - Scan to wrong chart – **POLST lost in another record**
    - Delay in scanning of form in record – **POLST not available**
    - Form does not contain all elements to be legally valid – **POLST not legal**
    - Form contains conflicting wishes – **Cannot interpret POLST**
    - Form legibility and/or scan quality poor – **Cannot read POLST**
    - Multiple forms with no known signature date – **Most current POLST unclear**
  - 87% paper forms not available in an emergency [1]

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Organizational Readiness
Participation in an eRegistry

• Clinical Care:
  – Concordance of Care: wherever the patient receives care
  – Improved timely access to POLST forms in an emergency
  – Enable just-in-time quality assurance for patients admitted to ICU with a POLST that states comfort care only

• Business Acumen:
  – Reduce healthcare legal risks
    • Non-concordant care or following orders on a non-legal form
  – Improve organizational reputation
    • Delivery of care concordant with patient wishes even when patient is outside the organization network
  – Align with patient/population health strategy
Organizational Readiness
Participation in an eRegistry

• Engagement:
  – Increase patient and provider satisfaction
  – Increase community collaboration

• Quality Data:
  – Ability to cull detailed data related to POLST use, choices made and impact on care
  – Allow transparency of how often a POLST form is viewed appropriately for targeted educational purposes
  – Mitigation or elimination of inherent issues with paper forms
  – Quality metrics

• Education:
  – Improve organizational culture associated with quality end-of-life conversations
Solution Focused Goal

Securely house uploaded POLST forms on a cloud platform accessible by providers across the state

- In 2014, determined we needed to use an external vendor (build vs. buy)
  - Internal requirement was to allow for concordance of care outside our network
  - Committed to solving with an EMR integrated solution
  - Leverage technology to improve:
    - Advanced Illness Management (AIM) and palliative care programs
    - Integration with the state registry pilot
    - Outcomes:
      - ACP conversation/informed decision making
      - ACP document preparation and storage rates
      - Readmission rates ICU utilization
      - Concordance of care
We now know what to do…. but how to do it?

• Began work to procure funding for project and seek a vendor
  – All knew this was ‘the right thing to do’ but not sure a priority of senior leaders
  – Defined correlation to strategic goals and key change management strategies
  – Selected Vynca
    • Patient matching
    • eSignature
    • Quality checks
    • EMR flexibility

• California SB 19 (2015) requires POLST eRegistry Pilot in two counties
  – Allowed us to finalize funding and gain approval to move forward with pilot
  – California also selected Vynca as their “vendor of choice” for state registry pilot
1. Correlation to strategic goals

2013 Strategic Level 1 A3: Coordinate Care Across the Continuum

- **Level 2 A3: Integrated Palliative Care**
  - Design and pilot scalable patient-centered Integrated Palliative Care Model – **Experiment #1**:
    - Model requirement impact:
      - Address clinical, operational and infrastructure gaps to deliver enterprise wide PC
        - ACP strategies
      - Improve quality of care for patients/families
        - Driving to full concordance of care
Key Change Management Strategies

2. Robust vendor choice requirements:
   - PHI protection
   - Safety
   - Ease of use
   - Adoption
   - EMR integration
   - Fit into clinical workflow
   - Quality
   - Cost
   - Performance improvement
Key Change Management Strategies

3. Leverage state legislation SB 19 2015
   - Stay ahead of the coming requirements
   - Have a say in the rule making
   - Lead the healthcare community in your state

4. Stakeholder involvement
   - Blind spot identification and proactive solution generation
     - Processes such as Release of Information
     - Reporting methodology for ACP metrics
   - EMR decisions – ensure future state matches current workflows
   - Testing and feedback
   - Training
Key Change Management Strategies

5. **Human Error Proofing**
   - Decision to close the scan doc type POLST to all but HIM after a period of both pathways being open

6. **Robust training tools and communication planning**
   - Cannot rely on the cascade method of communication

**Go live February 2018**
Training & Support Plans

• Special Challenges
  – Big bang vs. pilot
  – Affects POLST access workflows for clinicians
  – *Can potentially impact concordance of care for one or more patients*

• Getting the word out!
  – Direct marketing to providers
  – Cascade methodology
  – Other tools for individual education
  – IT support
## Access: User Roles
### Default Configuration

**Signer:**
- Physicians, NPs, and PAs, who can legally sign and confirm POLST forms as valid

**Preparer:**
- Clinical Staff such as Nurses, Social Workers

**Uploader:**
- HIM Staff

**View Only:**
- Users with a valid EMR User ID but no specific permission setting sent to Vynca

<table>
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<th>Preparer</th>
<th>Uploader</th>
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<td>Complete “Prepared By” Section</td>
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<tr>
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<td>Upload</td>
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What we Learned

Not possible to pilot in small scale
- Care risk as patient moves through geographies
- Not technically possible with one instance of Epic

Enterprise wide go-live

Release of Information Process (ROI) interrupted
- Most ROI types include POLST form and release is automated
- Pulls scanned doc type POLST
- Manual ROI not an option

Separate interface to allow all POLST docs to return
What we Learned

Personnel access templates to POLST link

- POLST link found in patient level data; some staff had encounter level access only

Survey of POLST storage locations challenging

- Unaware Haiku photo forms stored on separate BLOB server – not included in upload of forms

Developed access through snapshot

Temporarily re-opened media tab view to doc type POLST
What we Learned

- Entered signature dates when scanning form would allow software to identify most current valid form
- One Touch+ (inpatient) had this functionality; only an issue in ambulatory setting

Hyland OnBase did not allow for signature dates

- Still many paper forms used which cannot be read for content
- Care at end-of-life requires manual chart review which is not feasible

Elusive concordance of care rate

- eTool use is the solution

Plan development in process
What we Learned

- Change in high-value low occurrence workflow requires deep communication penetration
- Risk: providers use old POLST viewing method, do not see a POLST, assume patient does not have a POLST; Potentially results in care not concordant with wishes

Messaging to providers at this scale

Short messaging
Prioritize messages
Many platforms/venues
Champions
Tool kits
Utilize vendor expertise
Face-to-Face, simple fun posters, fliers, and “2clicks” sheets best methodology
Metrics for Success – Sutter

• 2017: Before Go Live:
  • 150,000+ POSLT forms on file
  • 2,700 new forms each month
  • 40% patients 65 years and over with an ACP document

• Post Go Live February 2018:
  – More than 180,000 existing POLST were located and back-loaded
  – Electronic access to all of these forms within the EMR
  – In first 14 weeks, 764 ePOLST documents were completed
  – Now track who is engaging with POLST forms
    • Majority of forms were completed by providers who are able to legally sign the forms
    • Initial results – 3% of forms having nurses/social work involvement in preparation
Metrics for Success – Sutter November ‘18

- Number of System Accesses: 4029
- ePOLST: 222
- % of total ePOLSTs: 8%
- % ePOLST trend
- POLSTs Scanned: 2297
- Total POLSTs Captured: 2619
- Total Cumulative POLSTs: 214,004
Metrics for Success – Sutter December ‘18

- Number of System Accesses: 4323
- ePOLST: 228
- ePOLSTs of total: 8%
- % ePOLST trend
- POLSTs Scanned: 2490
- Total POLSTs Captured: 2718
- Total Cumulative POLSTs: 216,826
Next Steps for Sutter

• Final closure of historical workflow in EMR

• Awareness and Utilization Campaign *to drive eForm use*
  – Benefit awareness
  – Data use (form access count by provider type, medical group, clinic)

• Optimization
  – Associated EMR functionality
    • Yes/No form presence flag
    • Auto complete of MD/NP credentials
  – Metrics
  – Just-in-time patient intervention review

• Continue sharing Sutter experience
  – Community
  – State
  – National
Community Considerations

• **Critical in building a sustainable and comprehensive approach:**
  1. Widespread confidence in concordance of care
  2. eRegistry well integrated throughout the medical community
  3. POLST data collection

• **Key Stakeholders:**
  – Strong network of engaged stakeholders who support the POLST eRegistry initiative
  – Address privacy and security in process of data sharing forms
  – Lead organization communicates clearly and frequently with community entities
  – Understanding of how to participate, value, timing, and resource requirements.
Organizational readiness
Participation in an eRegistry

Self-assessment Tool

• Purpose:
  – Explore topics which influence successful approach to an eRegistry
  – Explore the value prop
  – Identify areas which need special attention/change to be ready
  – Provide supportive evidence of organizational readiness to leaders

• Self-assessment questions to address:
  – Technical, policy and operational elements
  – Where opportunities are identified, an internal POLST project team should convene to discuss possible approaches

• Community involvement key:
  – Tool should be distributed for use by other members of the healthcare community
  – Community members may then use the completed assessments to identify and review areas of organization and community-wide need that may require collaborative effort
### Assessment Tool

#### Sample of Tool

Please take a picture of the sample tool at your table.

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### Health Information Technology & Data Exchange Capacity

- POLST Input Readiness
- POLST Retrieval Readiness
- POLST Project Staffing and Administrative Capacity
- Community Considerations

**Sample of Tool**

- Element 1.4: Do you have policies that limit sharing of scanned documents with other covered entities if allowed by the patient?
  - Yes
  - No
  - Uncertain

- Element 1.5: Does the organization feed specific data to County, State or Federal registries?
  - 0-3 months
  - 4-6 months
  - >6 months

- Element 1.6: Does the organization participate in a regional health information exchange organization, by sharing and retrieving on-demand data?
  - 0-3 months
  - 4-6 months
  - >6 months

- Element 1.8: Does your EHR vendor provide single sign-on (SSO) with context with other applications from within the electronic patient record?
  - 0-3 months
  - 4-6 months
  - >6 months

- Element 1.9: Does the organization use and/or permit electronic signature capabilities within clinical documentation applications?
  - 0-3 months
  - 4-6 months
  - >6 months
What Ensures Long-term Success of a State Registry?

- Needs to be tied to a local group or coalition
- Integration into clinical workflow
- Mandatory submission of documents
- Easy access to data in emergency settings
- Electronic documentation
- Marketing and awareness
- Sustainable funding
- Participation and adoption by health care organizations
California eRegistry Pilot

• A look at the pilot in Contra Costa county
  – 218,000+ POLST forms
  – Submissions portal
    • Available to all providers with NPI number
    • 1,122 forms uploaded
  – PointClickCare integration with five SNFs
  – American Medical Response MEDs ePCR
    • 43 active EMS users
A Look at Oregon

Oregon POLST Registry (OPR) live since 2009

- Oregonians who died that had a completed POLST form
  - 45% 2015-2016
  - 31% 2010-2011

- When POLST forms had been completed
  - 21 weeks from death 2015-2016
  - 5 weeks from death 2010-2011
  - Alzheimer’s and Parkinson patients completed forms earlier

- Opted for more aggressive treatment
  - 13% requested CPR
  - 11% requested full medical treatment

Impact Across the State

IMPACT (April 2015 – July 2017)

5,711
ED visits in patients who had POLST forms

37%
reduction in hospital admissions when POLST was accessed

59%
reduction in ICU admissions when POLST was accessed
Questions

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• Ryan Van Wert, MD
  ryan@vyncahealth.com
Appendix
Standard User Workflow Signer

Submit & Complete

- Log into EMR
- Access patient - Click Vynca/POLST button
- Discuss POLST with Patient & Family in the Clinic or Hospital
- Complete ePOLST with Patient & Family present to confirm/sign
- Sign & Submit POLST - POLST is Now Active-
- Print form for Patient/Family

Access

- Log into Epic
- Click POLST-YES button
- View & Review POLST Information
- Act on POLST Information
  - Care for Patient
  - Void Form
  - Remove Incorrect Form
  - Identify Matching Error
  - Identify Other Error
Standard User Workflow
Preparer

Submit & Complete

- Log into EMR
- Access patient - Click Vynca/POLST button
- Discuss POLST with Patient & Family in the Clinic or Hospital
- Complete ePOLST with Patient & Family present to confirm/sign
- Contact a Physician/PA/NP to Sign & Submit POLST
- Go to Signer Workflow

Access

- Log into Epic
- Click POLST-YES button
- View & Review POLST Information
- Act on POLST Information
- Care for Patient
  - Remove Incorrect Form
  - Identify Matching Error
  - Identify Other Error
Standard User Workflow
Uploader

Submit & Complete

1. Log into EMR (HIM View)
2. Access patient - Click Vynca/POLST button
3. Select Scanned POLST file & Upload to Vynca POLST user interface
4. Review uploaded document for errors & enter “Date Signed”
5. Confirm & Submit form -POLST is Now Active-

Access

1. Log into Epic
2. Click POLST-YES button
3. View & Review POLST Information
4. Act on POLST Information
   - Remove Incorrect Form
   - Identify Matching Error
   - Identify Other Error
Standard User Workflow

View Only

Submit & Complete

Access

No Abilities

Log into Epic

Click POLST-YES button

View & Review POLST Information

Act on POLST Information

Identify Matching Error

Identify Other Error