End of Life Care and the Electronic Physician Order for Life Sustaining Treatment Project

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Outline

• Background on end-of-life care: Deepthi
• The ePOLST Registry: Jeff
• Demo
• ePOLST video
• Questions
Background

• US Life expectancy is increasing (prediction for 2050: 79.4 and 83 years for men and women)

• Causes of death no longer infectious diseases
  – Heart disease and cancer

• Increased demand for palliative and end-of-life care services
Phases of Life

Conception

Gestation

Birth

Infancy

Toddlerhood

Terrible Twos

Preschool

Kindergarten

Grade School

Pre Teen

Teenage

Middle School

High School

Terrible Teens

Learning Driver

Graduate

First Job

Legal Drinking Age

College

Graduate School

Real Job

First Love

First Heartbreak

Adulthood

Parenthood

Relapse to Childhood

Adulthood Phase II

Parent of Teenagers

Second Childhood

Mid Life Crisis

Sandwich Phase

Empty Nesting

Grandchildren

Golden Years

Third Childhood

Platinum Years

Old Age

Infirmity

Senility

Death

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Why Do We Care about EOL

- People die; no one can skip this phase
- All about respect for the individual
- We each can have a good death; “I want mine to be.....”
- Conversations need to happen; and it is hard
- Social change is never easy
Discussing Death

• Immortal
• Denial
• Distant Acceptance
• Acceptance
• Planning
• Preparation

• People die
• Where they die
• What happens before they die
• How can people get the death they want
• Resources

leaving well

living well through the end of life

http://leaving-well.org/
Advanced Directives

• Anyone over 18 years; currently healthy
• Description of one’s perspective of healthcare; instructions to an ‘agent’
• What if.....
• Self directed; witnessed not notarized
• May refer to any of several ‘forms’
  – Living Will
  – Healthcare power of attorney
Physician Orders for Life-Sustaining Treatment (POLST)

• Any seriously ill person; doesn’t replace other Advance Directives
• Legal form; Must be completed and signed by patient and provider
• Should include conversation with patient/family
  ➢ Based upon patient values/desires
• Part of one’s medical record
• A gift to one’s family
POLST Paradigm History

• Proposed by Oregon in 1991
• Translates patient’s EOL care wishes into medical orders
• Endorsed by 15 states
  ➢ In Utah: POLST forms are authorized under the Life with Dignity Orders under Utah Law § 75-2a-106
  ➢ 32 states are in process of developing POLST programs
  ➢ A tool to initiate the EOL care conversation between providers and patients (and families)
### Paper POLST Form-1

**Utah Department of Health**  
**Bureau of Health Facility Licensing, Certification and Resident Assessment**

**Physician Order for Life Sustaining Treatment**  
**Utah Life with Dignity Order**  
**Version 2 – 9/09**

**State of Utah Rule R432-31**  

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**This is a physician order sheet based on patient wishes and medical indications for life-sustaining treatment. Place this order in a prominently visible part of the patient's record. Both the patient and the physician must sign this order (two physicians must sign if the patient is a minor child). When the patient's condition makes this order applicable, first follow this order, and then, if necessary, contact the signing physician.**

**Section A**

<table>
<thead>
<tr>
<th>Check one</th>
<th>Treatment options when the patient has no pulse and is not breathing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td>Attempt to resuscitate  ___ Do not attempt or continue any resuscitation (DNR)</td>
</tr>
</tbody>
</table>

Other instructions or clarification:

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**Last Name of Patient:**

**First Name/Middle Initial:**

**Date of Birth:**

**Effective Date of this Order:**

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### Section B

**Treatment options when the patient has a pulse and is breathing:**

- **Comfort measures only:** Oral and body hygiene; reasonable efforts to offer food and fluids orally; medication, oxygen, positioning, warmth, and other measures to relieve pain and suffering. Provide privacy and respect for the dignity and humanity of the patient. **Transfer to hospital only if comfort measures can no longer be effectively managed at current setting.**

- **Limited additional interventions:** Includes care above. May also include suction, treatment of airway obstruction, bag-valve-mask ventilation, monitoring of cardiac rhythm, medications, IV fluids. **Transfer to hospital if indicated, but no endotracheal intubation or long-term life support measures.**

Other instructions or clarification:

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- **Full treatment:** Includes all care above plus endotracheal intubation, defibrillation/cardioversion, and any other life sustaining care required.

If necessary, transfer to (hospital name): ____________________________

Other Instructions or clarification:

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### Section C

**Antibiotics:** (Comfort measures are always provided)

- **No antibiotics**
- **Antibiotics may be administered**

Other Instructions or clarification:

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Paper POLST Form-3

<table>
<thead>
<tr>
<th>Section D</th>
<th>Artificially administered fluid and nutrition: (Comfort measures are always provided)</th>
</tr>
</thead>
</table>
| Check all that apply | Feeding Tube:  
  ___ No feeding tube  
  ___ Defined trial period of feeding tube  
  ___ Long-term feeding tube  
| IV Fluids:  
  ___ No IV fluids  
  ___ Defined trial period of IV fluids  
  ___ IV Fluids  
| Other Instructions or Clarification: |

<table>
<thead>
<tr>
<th>Section E</th>
<th>Discussed with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check all that apply</td>
<td></td>
</tr>
</tbody>
</table>
  ___ Patient / Parent(s) of Minor Child  
  ___ Surrogate (source of legal authority, name, and phone number):  
  ___ Other (name and phone number): |

**Patient preferences to guide physician in ordering life sustaining treatment**

<table>
<thead>
<tr>
<th>Section F</th>
<th>I have given significant thought to life-sustaining treatment. Please see the following for more information about my preferences:</th>
</tr>
</thead>
</table>
|          | Advance Directive  
  ___ no  
  ___ yes  
| Other: |

I have expressed my preferences to my physician or health care provider(s) and agree with the treatment order on this document. Please review these orders if there is a substantial permanent change in my health status, such as:

- Close to death
- Advance progressive illness
- Improved condition
- Permanently unconscious
- Extraordinary suffering
- Surgical procedures

**Brief Summary of medical condition and brief explanation of treatment choice:**

<table>
<thead>
<tr>
<th>Signature of person preparing form (if not patient’s physician)</th>
<th>Print name and phone number</th>
<th>Date prepared:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of physician or other licensed practitioner</td>
<td>Print name and license number</td>
<td>Date signed:</td>
</tr>
<tr>
<td>Signature of second physician or other licensed practitioner (required for minor patients only)</td>
<td>Print name and license number</td>
<td>Date signed:</td>
</tr>
<tr>
<td>Patient, Parent, or Surrogate signature</td>
<td>Print name and phone number</td>
<td>Date signed:</td>
</tr>
</tbody>
</table>
Situations for POLST form Updates

• POLST Form has to be reviewed when:
  – Patient is transferred from one care setting to another
  – Patient’s health status changes substantially and permanently
  – Patient’s treatment preferences change

• Any change by the patient or surrogate requires a new form to be completed and placed in the medical record

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Paper POLST form: Disadvantages

• No systematic processes for version control
  – Paper form at home may not be most current

• May be inaccessible at time of need or lost

• Cannot be accessed by multiple users at the same time (EMTs, ED providers, etc.)
Electronic POLST

- Utah Improving Care through Connectivity, and Collaboration (IC³) Beacon grant awarded by ONC
  - Funded in 2010
  - Collaboration between UDOH and HealthInsight to:
    - Improve consistency between patient wishes and care provided during the last six months of life
    - Create an electronic POLST registry for use in Utah
Other Electronic POLST Initiatives

• Oregon
  – Paper POLST forms and manual data entry
  – 24/7 call center

• West Virginia
  – paper process to create provider accounts

• New York
  – eMOLST
ePOLST Development

• Why Vital Records?
  – Electronic Death Entry Network (EDEN)
  – ~300 physicians certify 70% of all deaths

• Oregon ePOLST experience
  – Paper POLST forms
  – 24/7 call center
Steering Committee

• Representatives from
  – Office of Vital Records and Statistics (UDOH)
  – Bureau of Emergency Medical Services (UDOH)
  – Utah Commission on Aging
  – Physicians and staff (palliative care, EMS, hospice care, geriatrics)

• Meetings between 2010-present to develop requirements
ePOLST Architecture

Electronic Death Entry Network (EDEN)

- Physicians
  - Social Workers
  - Admin staff
  (Create, modify, sign—depending on role)

- ePOLST secure data (MySQL)
  - ePOLST Internet Registry (Linux-Apache-PHP)

- Emergency Department Providers
  Emergency Medical Technicians
  (Read only access)

ePOLST Management Use Case

ePOLST Search Use Case

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Agile Development Process

- Constrained by budget, scope, and time

Diagram:

- Discuss
- Demonstrate
- Develop
- Design

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ePOLST Walkthrough:1

Utah Department of Health ePOLST Registry

WARNING

This Web site is maintained by the Utah Office of Vital Records and is protected by state law. Use of this computer system without authority or in excess of granted authority, such as access through use of another's Login ID and/or password, may be in violation of state and federal law, including the False Claims Act, the Computer Fraud and Abuse Act and other relevant provisions of federal civil and criminal law. Violators will be subject to administrative disciplinary action and civil and criminal penalties including civil monetary penalties. For site security purposes we employ software programs to monitor and identify unauthorized access, unauthorized attempts to upload or change information, or attempts to otherwise cause damage. In the event of authorized law enforcement investigations, and pursuant to any required legal process, information from these sources may be used to help identify an individual and may be used for administrative, criminal or other adverse action.

EXIT IMMEDIATELY IF YOU DO NOT AGREE TO THE CONDITIONS STATED IN THIS WARNING.

User Name
User Password
Log In
Exit

Need help logging in?

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## ePOLST Registry

**Electronic Physician Orders for Life Sustaining Treatment**

**A Utah Life with Dignity Order**

Utah Department of Health, Office of Vital Records and Statistics

### Select Search Options

- Search By Names - Unordered
- Combination: First Last Names Birth Date
- ePolst ID
- Pattern Matching: Variable

### Search Help

**Patterns**: duck d < Found 3 matching record(s)**

**Name Search:**

- Donald Duck 1947-05-26 Male
- Daffy Duck 1981-01-01 Male
- Daffy Duck 1981-01-01 Male

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ePOLST Walkthrough:3

**Code Status (A):** Attempt to resuscitate

**Medical Care (B):** Comfort measures - Allow Natural Death
ePOLST Walkthrough:4

ePOLST Registry
Electronic Physician Orders for Life Sustaining Treatment
A Utah Life with Dignity Order
Utah Department of Health, Office of Vital Records and Statistics

Medical Care

Instructions: Prior to completing this form section, elicit the patient's goals of care and explain how each option will or will not help the patient to receive treatment that will promote the patient's goals of care. Emphasize that comfort care will always be provided.

- Comfort measures - Allow Natural Death: Oral and body hygiene; reasonable effort to offer food and fluids orally; Heimlich maneuver for choking or other minimally invasive emergency procedures; medication, oxygen, positioning, warmth, and other measures to relieve pain and suffering. Provide privacy and respect for the dignity and humanity of the patient. Transfer to hospital only if comfort measures can no longer be effectively managed at current setting.

- Limited additional interventions: Includes care above. May also include suction, treatment of airway obstruction, bbl/valve/mask ventilation, monitoring of cardiac rhythm, medications, IV fluids. Transfer to hospital if indicated, but no endotracheal intubation or long-term life support measures.

- Full treatment: Includes all care above plus endotracheal intubation, defibrillation/cardioversion, and any other life sustaining care required.

- No choice: Patient declines to make a choice on the POLST form about medical treatment.

Other instructions or clarifications:

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**Antibiotics**

**Instructions:** Prior to completing this form section, elicit the patient’s goals of care and explain how each option will or will not help the patient to receive treatment that will promote the patient’s goals of care.

Antibiotics may always be provided for the purpose of comfort.

**Antibiotics:**

- (Comfort measures are always provided)

- **No antibiotics**

- **Antibiotics may be administered**

- **No choice indicated on paper form**

**Other Instructions or clarification:**
ePOLST Registry

Electronic Physician Orders for Life Sustaining Treatment
A Utah Life with Dignity Order
Utah Department of Health, Office of Vital Records and Statistics

Nutrition and Hydration

**Instructions:** Explain the benefits and burdens of food and fluids by tube. Explain that food and fluids by mouth will always be offered when feasible.

Artificially administered fluid and nutrition. (Comfort measures are always provided)

**Feeding Tube:**
- No feeding tube
- Defined trial period of feeding tube
- Long-term feeding tube
- No choice indicated on paper form

**IV Fluids:**
- No IV fluids
- Defined trial period of IV fluids
- IV fluids
- No choice indicated on paper form

Other Instructions or Clarification:
ePOLST Walkthrough:7

Utah ePOLST Registry
Electronic Physician Orders for Life Sustaining Treatment
A Utah Life with Dignity Order
Utah Department of Health, Office of Vital Records and Statistics

Code Status

Instructions: Explain odds of success of resuscitation for relevant patient populations. Explain that the DNR order applies only if the patient has no pulse and is not breathing, and that the level of care desired by the patient will be provided if the patient has a pulse or is breathing.

Treatment options when the patient has no pulse and is not breathing:

- Attempt to resuscitate
- Do not attempt or continue any resuscitation (DNR)
- No choice indicated on paper form

Other instructions or clarification:
ePOLST Walkthrough: 8
ePOLST Dramatization

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