ASCO's Quality Training Program

Project Title: Reducing the percent of ICU deaths of patients with advanced cancer at Stanford Health Care

Presenters' Names: Pelin Cinar, MD, MS & Zarrina Bobokalonova, RN, MSN, BEc

Institution: Stanford Cancer Center

Date: 10/08/2015

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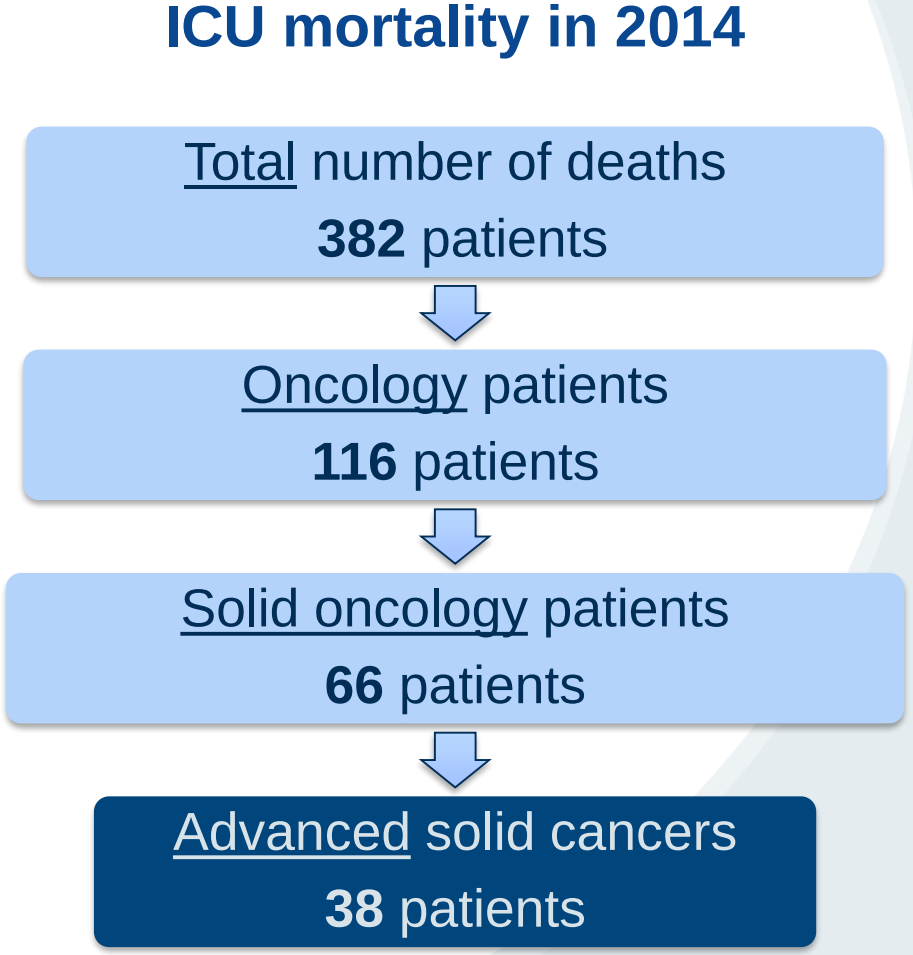
Institutional Overview

- Stanford Cancer Center is an NCI-designated Cancer Center located in Palo Alto, California.
- There are a total of 51 faculty members in the Division of Oncology.
- There are 66 adult ICU beds at the Stanford Health Care.
- In all of the Stanford Cancer Center clinics there were **~95,000** visits in the FY14 of which **~5,500** were new patients.
- Additional satellite Cancer Center opened in the South Bay in July 2015.

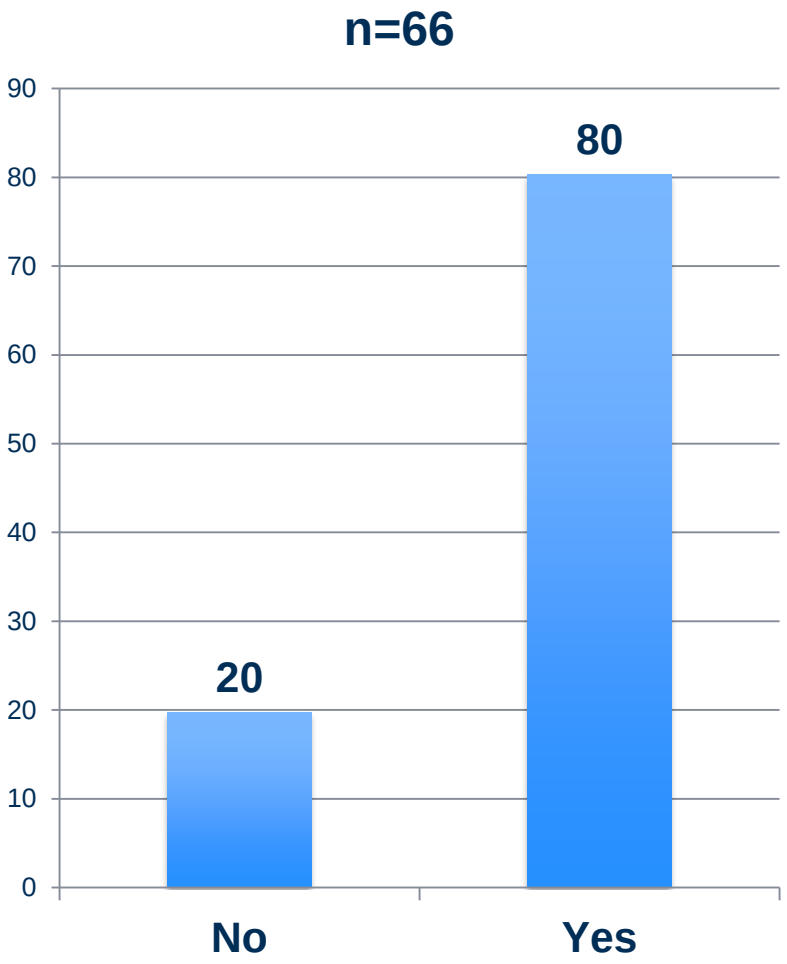
Problem Statement

- In 2014, **40.4%** of patients with solid tumors admitted to the Stanford Healthcare ICU died with advanced stage disease.

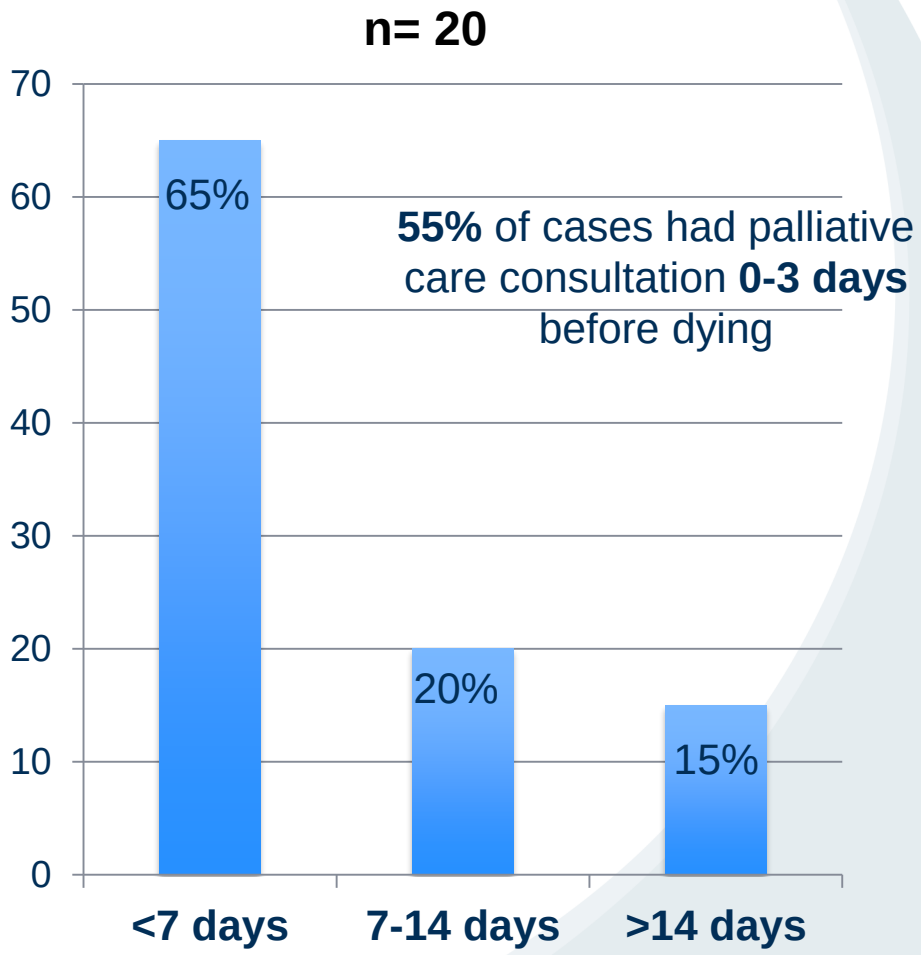
- This compromised the patients' quality of life and resulted in excessive costs for patients and their families.



Percent of Palliative Care Consultation



Number of days prior to death when Palliative Care Consulted



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Team Members

Team Leader:

- Pelin Cinar

Team Members:

- Core team members:
  - Zarrina Bobokalonova, Clinical Quality Specialist
  - Sandy Chan, Manager of Palliative Medicine
  - Eric Hadhazy, Senior Quality Consultant
- Extended team members:
  - Palliative Care- Judy Passaglia, Michael Westley
  - ED- Sam Shen, David Wang, Feliciano Javier, Cheryl Bucsit
  - ICU- Ann Weinacker, Norman Rizk, Javier Lorenzo, Preethi Balakrishnan
  - GI Oncology Social Worker- Ruth Kenenmuth
  - Thoracic Oncology- Millie Das
  - Internal Medicine (resident)- Thomas Keller

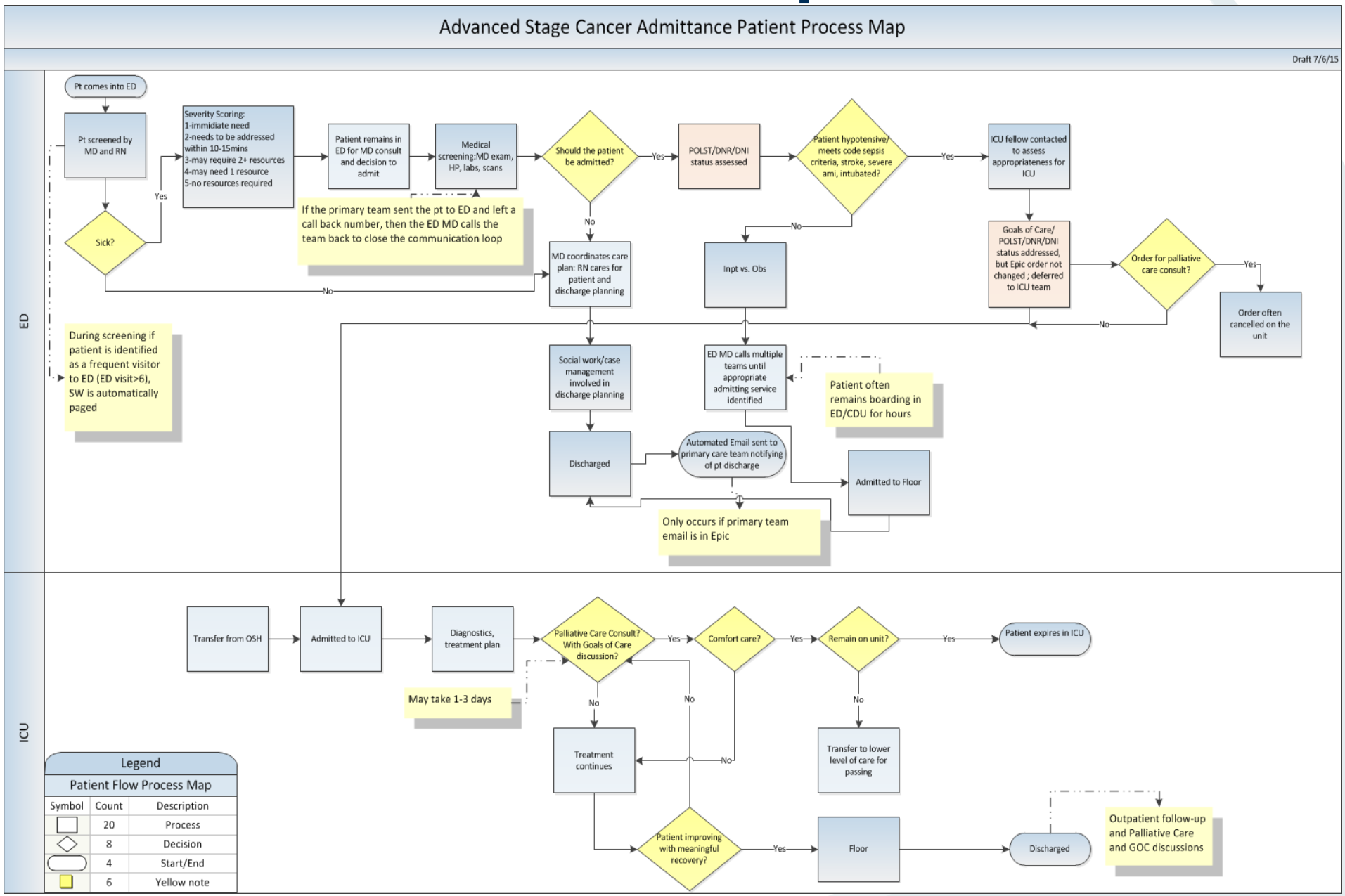
Project Sponsor:

- Douglas Blayney

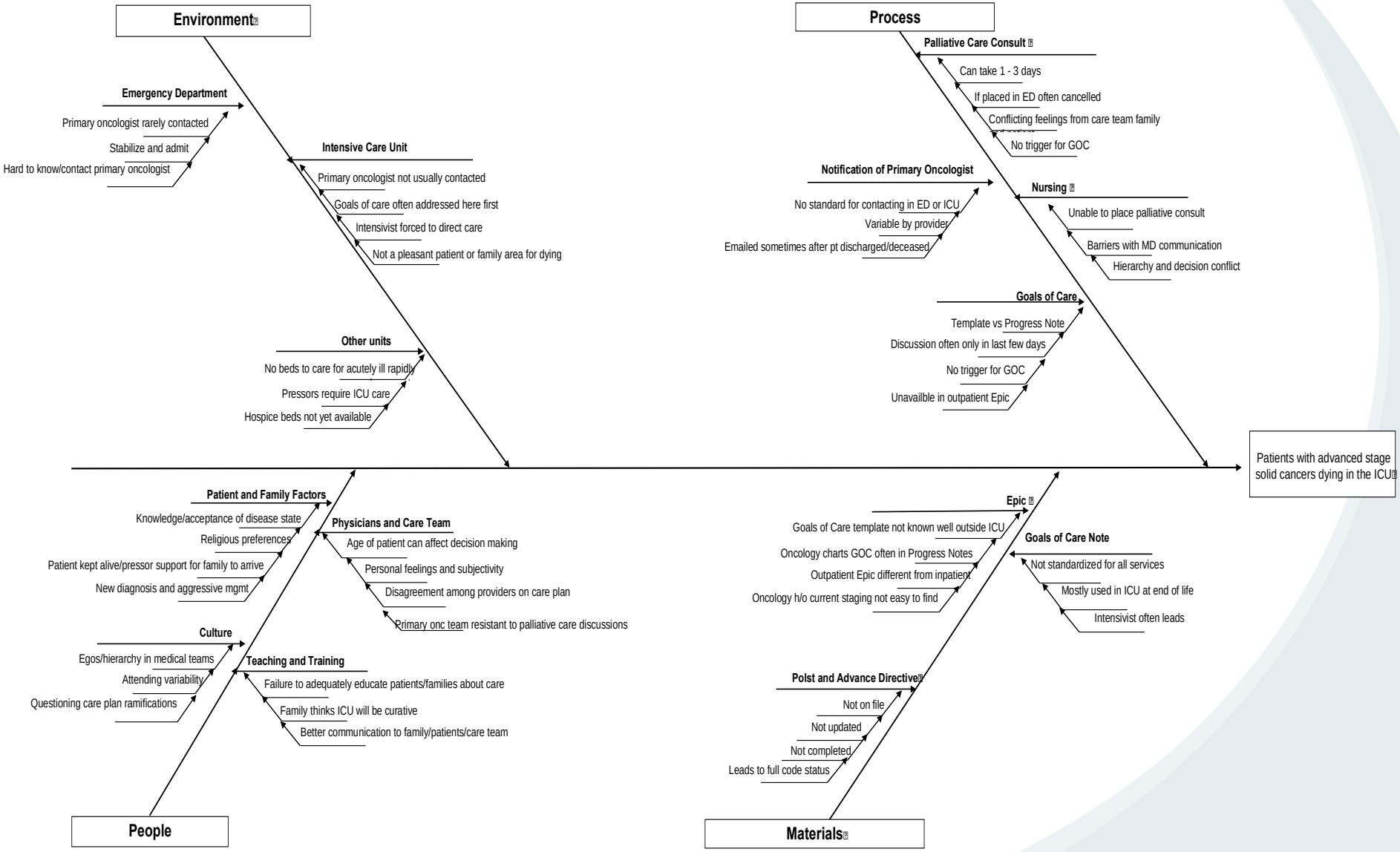
Improvement Coach:

- Holley Stallings

Process Map


Advanced Stage Cancer Admittance Patient Process Map
Draft 7/6/15
ED
ICU
Pt comes into ED
Pt screened by MD and RN
Sick?
Yes
No
Severity Scoring:
1-immidiate need
2-needs to be addressed within 10-15mins
3-may require 2+ resources
4-may need 1 resource
5-no resources required
Patient remains in ED for MD consult and decision to admit
Medical screening:MD exam, HP, labs, scans
If the primary team sent the pt to ED and left a call back number, then the ED MD calls the team back to close the communication loop
Should the patient be admitted?
Yes
No
POLST/DNR/DNI status assessed
Patient hypotensive/ meets code sepsis criteria, stroke, severe ami, intubated?
Yes
No
ICU fellow contacted to assess appropriateness for ICU
Goals of Care/ POLST/DNR/DNI status addressed, but Epic order not changed ; deferred to ICU team
Order for palliative care consult?
Yes
No
Order often cancelled on the unit
MD coordinates care plan: RN cares for patient and discharge planning
Inpt vs. Obs
During screening if patient is identified as a frequent visitor to ED (ED visit>6), SW is automatically paged
Social work/case management involved in discharge planning
ED MD calls multiple teams until appropriate admitting service identified
Patient often remains boarding in ED/CDU for hours
Discharged
Automated Email sent to primary care team notifying of pt discharge
Admitted to Floor
Only occurs if primary team email is in Epic
Transfer from OSH
Admitted to ICU
Diagnostics, treatment plan
May take 1-3 days
Palliative Care Consult? With Goals of Care discussion?
Yes
No
Comfort care?
Yes
No
Remain on unit?
Yes
No
Patient expires in ICU
Treatment continues
Transfer to lower level of care for passing
Patient improving with meaningful recovery?
Yes
Floor
Discharged
Outpatient follow-up and Palliative Care and GOC discussions
Legend
Patient Flow Process Map
Symbol | Count | Description
20 | Process
8 | Decision
4 | Start/End
6 | Yellow note

Cause & Effect Diagram



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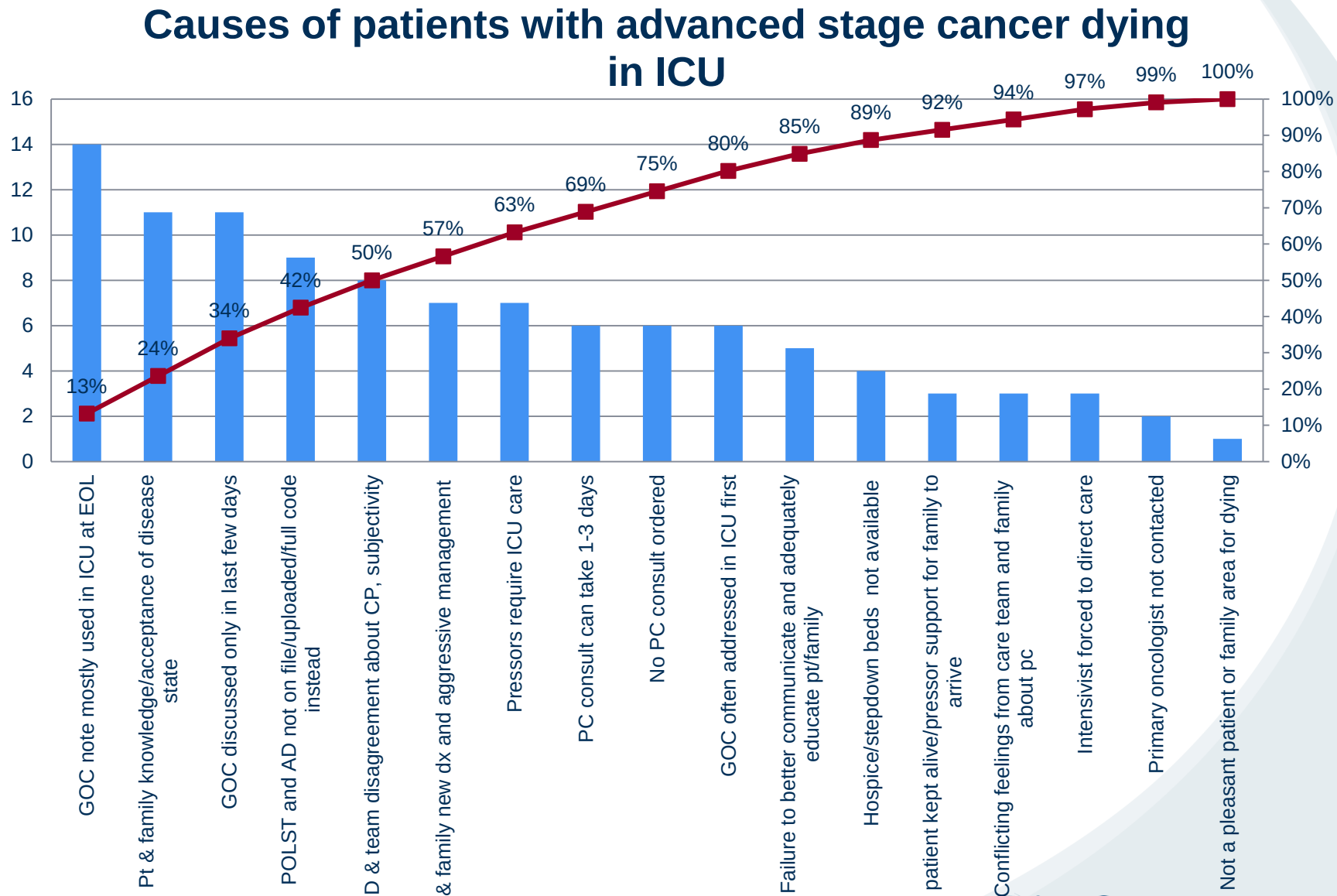
Diagnostic Data



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Aim Statement

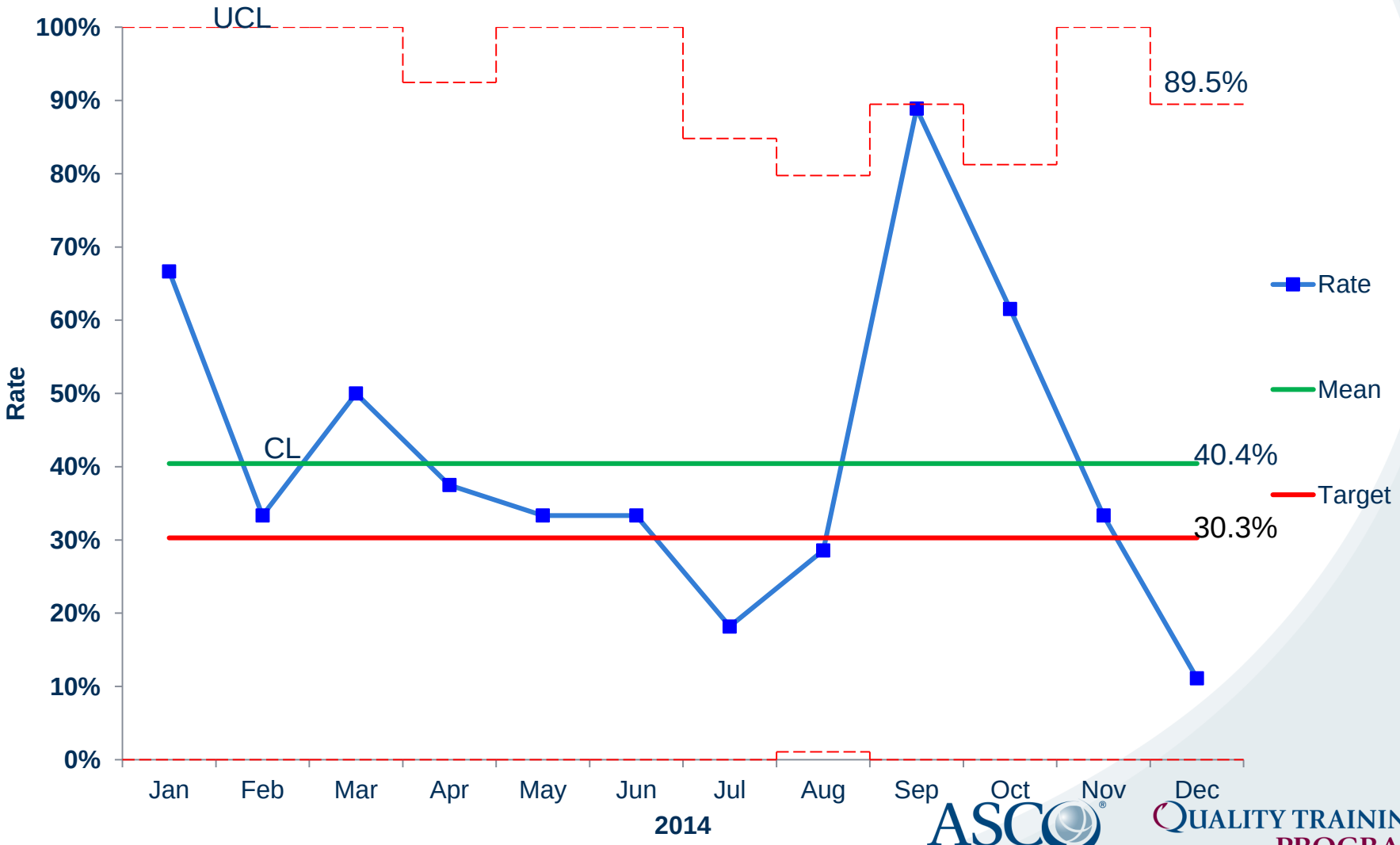
By October 2015, we will decrease the percentage of advanced solid tumor ICU deaths at Stanford Health Care by **25%**.

Measures

- **Measure:** Death of patients in the ICU
- **Patient population:** Patients with advanced solid tumors
- **Calculation methodology:**
  - Numerator
    - Patients with advanced solid tumors dying in ICU
  - Denominator
    - Patients with solid tumors admitted to ICU
- **Data source:** Midas report
- **Data collection frequency:** Monthly
- **Data quality (any limitations):** ICD-9 codes for solid tumors were used to identify cases

Baseline Data (Jan – Dec 2014)

Rate of advanced stage cancer patients dying in ICU



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Prioritized List of Changes (Priority/Pay-Off Matrix)

Impact	Easy	Difficult
High	•Palliative care consultation for all patients with advanced solid cancers admitted to the ICU after approval by the primary oncologist •POLST and Advance Directives to be found easily on EPIC •Adding designated hospice beds •Automated EPIC notification to the primary oncologist at the time that the patient is being admitted to the hospital/ICU	•Goals of Care of Note of all advanced stage solid tumors by primary oncologist •POLST completed for all advanced stage solid tumors by primary oncology •Intensivist calls primary oncologist within 3 days of ICU admission to join in family meeting •Oncology team to hold daily rounds with the ICU team with family meetings every 3 days •Advanced stage cancer patients easily identified in EPIC •Engage patient and family in early discussions about disease progression and goals of care by primary oncologist
Low	•Early referral to outpatient palliative medicine in outpatient clinic •Automated EPIC notification to primary oncologist for all oncology patients who present to ED	•ICU requests palliative care consultation within 3 days

Ease of Implementation

PDSA Plan (Tests of Change)

Date of PDSA cycle	Description of intervention	Results	Action steps
9/1/2015 – 9/21/2015	Criteria developed to **communicate** with the primary oncologists and trigger **early referral** to **palliative care**	-No change between pre-PDSA and post-PDSA death rates. -Palliative care consults were requested within one day of admission and were completed the following day.	-Share results with ICU/Oncology -Educate other critical care units.

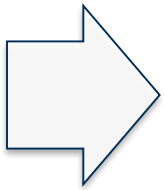
Materials Developed

Criteria for Obtaining Palliative Care Consultation for Oncology Patients admitted to the ICU

Any Stage IV disease or Stage III lung or pancreatic cancer

AND one or more of the following:

- 2+ lines of prior therapy with **life expectancy <6 months** or **refractory** disease (need to confirm with primary oncologist)
- Hospitalization within prior **30 days**
- **>7** day hospitalization
- **Uncontrolled** symptoms (pain, nausea, dyspnea, delirium, distress)



Resident/fellow calls the **primary oncologist*** for all oncology patients

If the criteria are met:

- Contact and discuss with the primary oncologist and place Palliative Care consult.
- Document** that you have spoken to the primary oncologist.
- If the patient does not have a primary oncologist, inpatient oncology service is consulted for their input.

*If the patient is admitted overnight, may call primary oncologist at 8 am the following morning.
**Add to your progress note approximate time and date of contact with primary oncologist

Change Data

Pre-PDSA (n= 13): 8/3/15 - 8/17/15

Implementation of Criteria on **9/1/15**

Post-PDSA (n= 10): 9/7/15 - 9/21/15

- Of the patients with advanced cancer who met our criteria,

  Primary Oncologist contacted:

Pre-PDSA: 38.5%

Post-PDSA: 40%

Palliative Care Consultation obtained:

Pre-PDSA: 30.8%

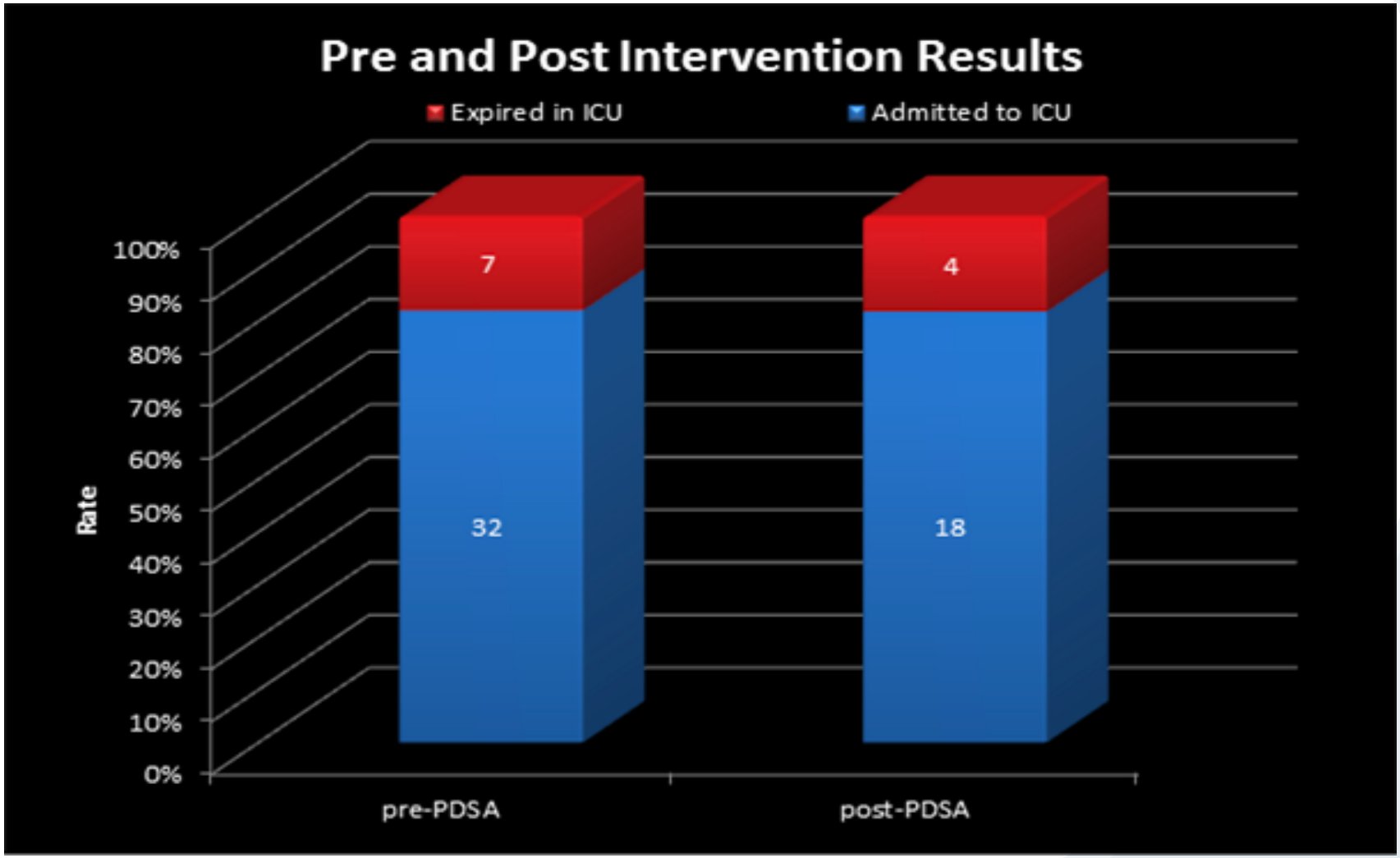
Post-PDSA: 30%

Frequency of Each Criterion

Pre-PDSA n=13	CRITERIA	Post-PDSA n=10
3 (23.1%)	2+ lines of prior therapy with **life expectancy <6 months** or **refractory** disease	4 (40%)
7 (53.8%)	Hospitalization within prior **30 days**	3 (30%)
1 (7.7%)	**>7** day hospitalization	1 (10%)
1 (7.7%)	**Uncontrolled** symptoms	0
1 (7.7%)	2+ lines of therapy **+** Hospitalization in 30 days	1 (10%)
0	Hospitalization in 30 days **+** >7 day hospitalization	1 (10%)

Change Data

Rate of ICU deaths of patients with solid tumors did not change after the intervention



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Conclusions

- The rate of palliative care consults for patients meeting the criteria for pre- and post-intervention did not change.

- More data may be needed to observe a change in the frequency of contacting the primary oncologists and palliative care consultations.

Next Steps/Plan for Sustainability

- Share the results with the ICU and Oncology Divisions.
- Update the criteria to include patients who presented to the ED within the last 30 days.
- Educate the providers who are in other critical care units (i.e. Neuro-critical Care).

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Eric Hadhazy, MS, Senior Quality Consultant
Sandy Chan, LCSW, ACHP-SW, Manager, Palliative Medicine

Stanford HEALTH CARE
STANFORD MEDICINE

Reducing the percent of ICU deaths of patients with advanced cancer at Stanford Health Care

AIM: By October 2015, we will decrease the percentage of advanced solid tumor ICU deaths at Stanford Health Care by **25%**.

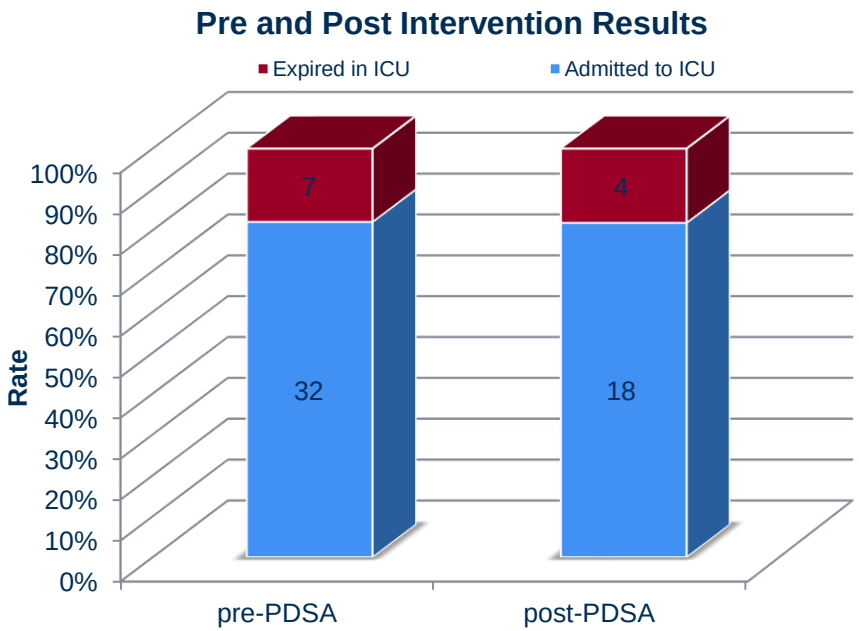
INTERVENTION: Criteria were developed to assist with triggering consultation with early palliative care consultation. The criteria included: stage IV disease or stage III lung or pancreatic cancers and one or more of the following: 2+ lines of prior therapy with **life expectancy <6 months** or **refractory** disease; hospitalization within prior **30 days; >7** day hospitalization; u**ncontrolled** symptoms (pain, nausea, dyspnea, delirium, distress). The primary oncologist was contacted by the ICU team if the patient admitted to the ICU met these criteria. If the primary oncologist agreed, Palliative Care service was consulted. ICU team was asked to document that primary oncologist was contacted and whether Palliative Care service was consulted.

TEAM:
Palliative Care
ED
ICU
GI Oncology
Thoracic Oncology
Internal Medicine (resident)

PROJECT SPONSORS:
Douglas Blayney, MD

QUALITY COACH:
Holley Stalling, RN, MPH, CPH, CPHQ

RESULTS:



CONCLUSIONS:
- The rate of palliative care consults for patients meeting the criteria for pre and post intervention did not change
- More data may be needed to observe a change in the frequency of contacting the primary oncologists and palliative care consultations

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