



Integrating Palliative and Oncology care for patients with advanced cancer

Project Lead

Laura Hanson, MD, MPH

Project Sponsor

Lisa Carey, MD

Funding Sponsor

IHQI

One patient's experience

49 y/o Asian woman diagnosed with stomach cancer 6 years ago. She is married and has 2 sons in college and a daughter in high school.

- Presents to hospital with bony metastases, intractable pain and dyspnea. Mental status altered due to symptoms.
- Day of admission she speaks with her outpatient oncologist, who recommends hospice.
- Due to pain and mental status changes, patient reluctant to participate in goals of care discussion.

What is Palliative Care?

“Palliative Care is specialized medical care for people with serious illnesses. It is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness—whatever the diagnosis. The goal is to improve quality of life for both the patient and the family.

Palliative care is provided by a team of doctors, nurses, and other specialists who work together with a patient's other doctors to provide an extra layer of support. It is appropriate at any age and at any stage in a serious illness and can be provided along with curative treatment.”

Center to Advance Palliative Care



Palliative Care reduces costs . . .

- Palliative Care reduces ^{1,2,3,4}
 - ICU transfers
 - 30 day readmissions
 - Emergency visits
- Cost-savings range from \$1696 per admission to \$4855 over 6 months ⁵

... while improving patient outcomes

- Cancer patients with Palliative Care experience^{6,7,8,9}
 - More advanced care planning communication
 - Reduced ICU admissions
 - Earlier hospice referral
- Cancer patients who receive Palliative Care have less pain and depression, and better quality of life
- Palliative care does not shorten life and may improve survival^{6,10,11}

Our baseline practices

At UNC Hospitals

- Uncontrolled symptoms are the primary reason cancer patients present to our ED¹²
- Cancer hospital patients use rapid response team more than other medical inpatients; 38.5% are then transferred to ICU and 56% die during admission¹³
- With PC -- Stage IV cancer patients receive more comprehensive symptom assessment and goals of care discussions¹⁴

QI Project Summary

Objective: Enhance palliative care for hospitalized patients with advanced cancer

Target Population: Med E patients with Stage IV cancers

Intervention:

- a) Structured data from chart reviews
- b) Monthly feedback and training in ACP skills for housestaff
- c) Daily Med E census review for potential PC consults
- d) Review of ICU transfers

Outcome measures:

- PRIMARY Documented GOC / ACP discussions (goal 48% by July 2016)
- SECONDARY ICU transfer (days), 30-day readmission, hospice referral, symptom screening and treatment

Monthly Meetings

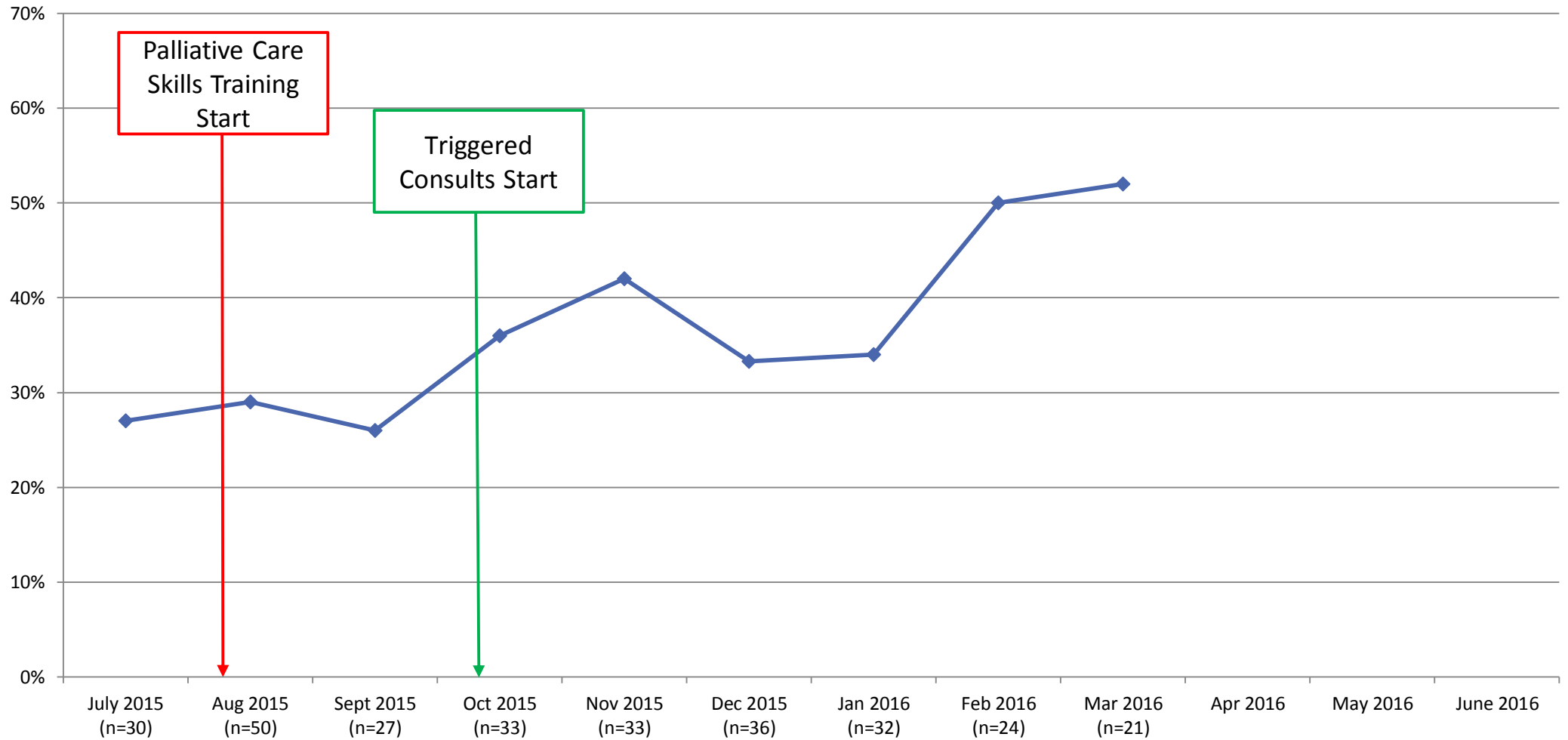
Issues and Questions:

- The relationship among inpatient and outpatient oncology, in regards to GOC
- Chemotherapy vs hospice referrals
- What influence does a particular attending have on our numbers?
- How does information spread among residents?
- Why are some patients successfully referred to palliative or supportive care while others are not?

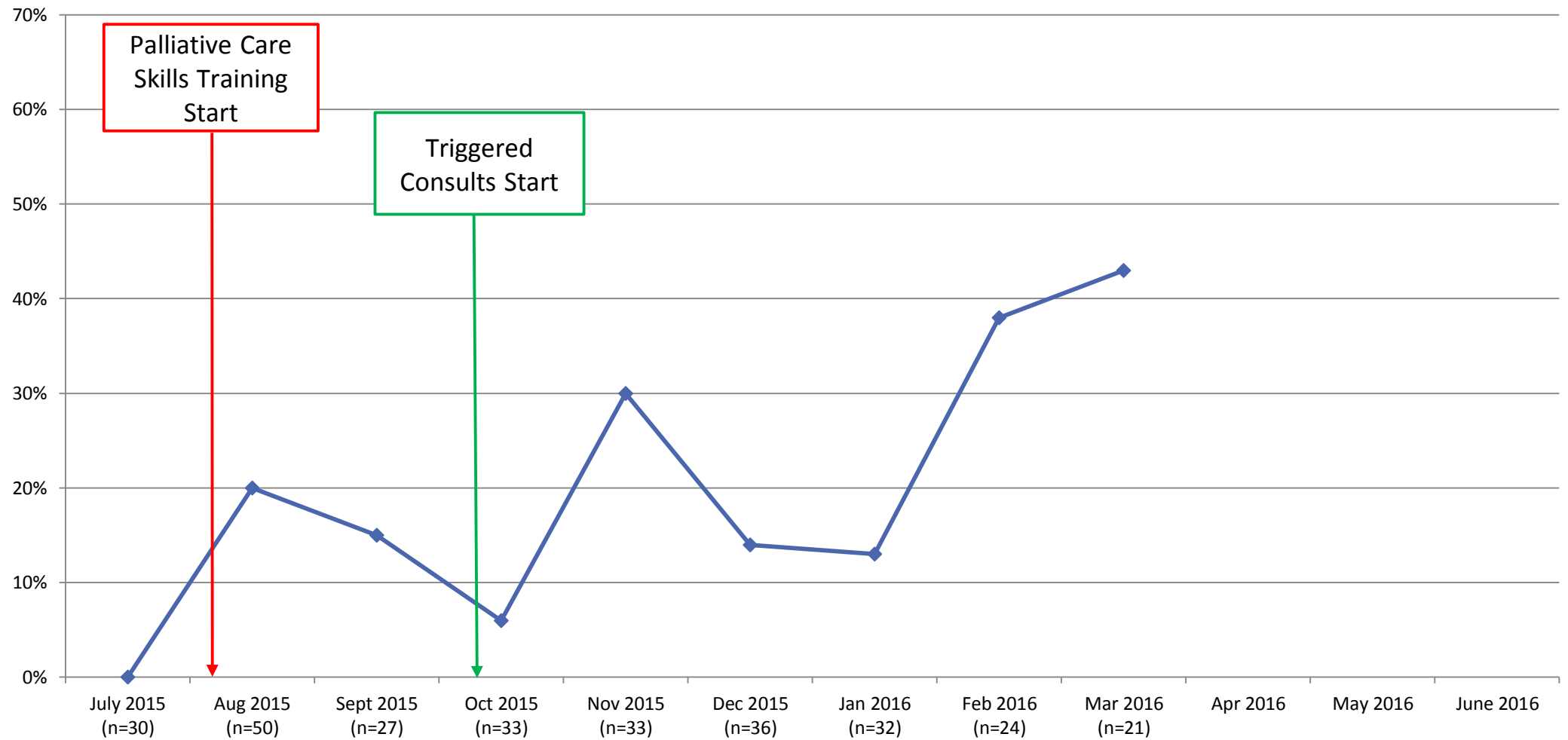
Problems addressed:

- Revising house staff trainings
- Adding triggered consults
- Enhancing data collection
- Assessing how often patients are referred to supportive care

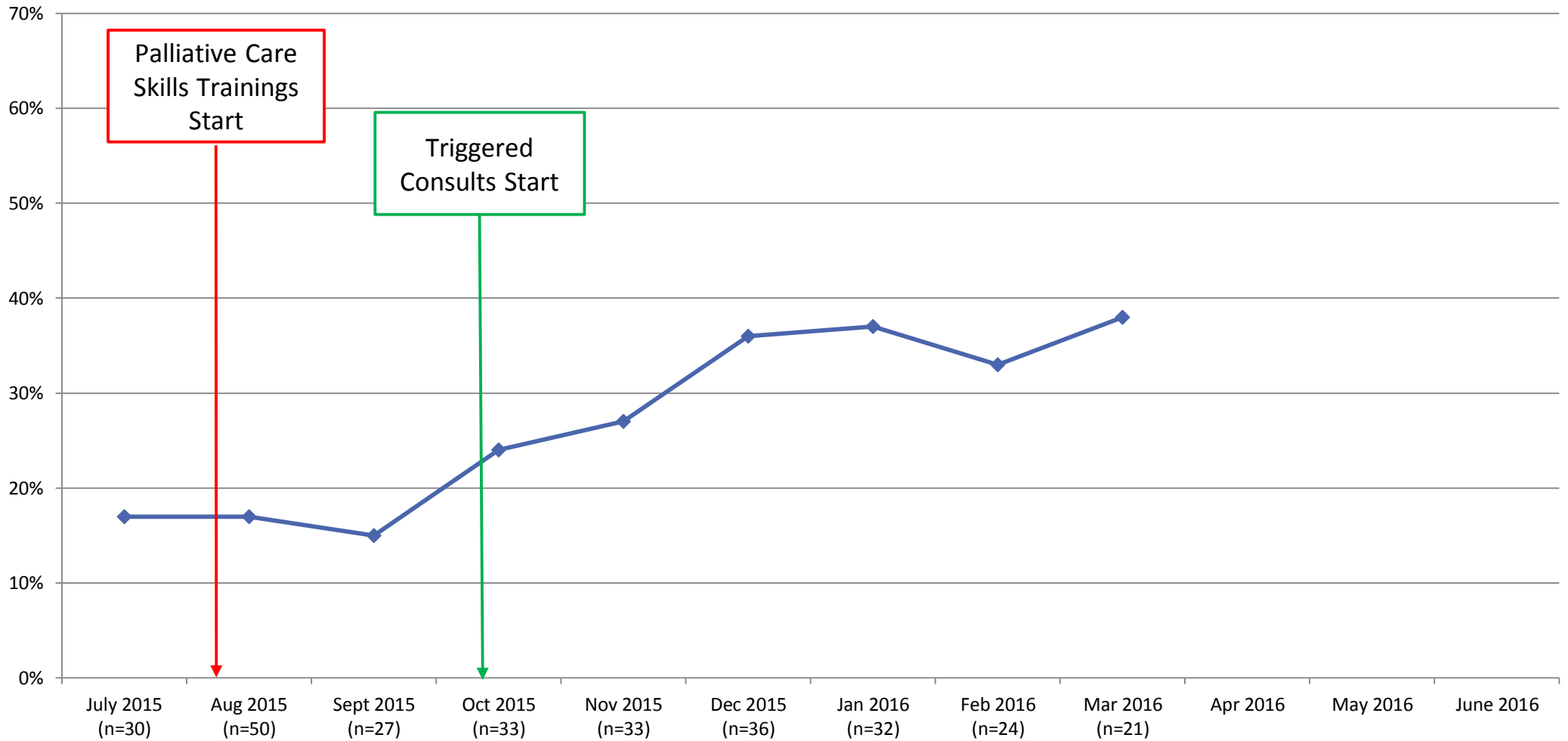
Goals of Care Discussed



Advanced Care Planning Note



Palliative Care Consult



Stage IV patients with vs without PC

	Pts with PC consult (n=78)	Pts without PC consult (n=208)
Charlson Score mean[range]	6.83 (6-16)	6.76 (6-11)
GOC discussion	70 (90%)	32 (15%)
ACP note	40 (51%)	14 (7%)
MD reports ADs	53 (68%)	24 (12%)
MD reports HCPOA / surrogate	54 (69%)	69 (33%)
ICU transfer (after PC)	3 (4%)	6 (3%)
DNR/DNI	49 (63%)	55 (26%)
Spiritual Needs	35 (45%)	19 (9%)
Hospice	13 (17%)	16 (8%)
30 Day readmission	63 eligible 4 readmit (6%)	187 eligible 43 readmits (23%)
Median LOS	7 days (1-44)	3 days (1-30)

Successes

- In March, 52% of patients have a documented care discussion—this exceeds our primary outcome goal of 48%
- Percentages of patients with PC consults and ACP notes have also increased
- As number of PC consults increase, fewer need to be triggered

Opportunities

Hematologic Malignancy Patients
October 1st through March 31st, 2016

	N=38 patients
Age	Mean=58, Range (20-80)
Cancer Type	
AML +65	13(34%)
AML relapse	10(26%)
ALL relapse	9(24%)
ALL +65	6(16%)
Charlson Index Score	Mean=3.26, Range (2-7)
Palliative Care consult	5(13%)
MD reports Advanced Directives	7(18%)
DNR/DNI order	12(32%)
Documented GOC discussion	14(37%)
ACP note	6(16%)
Spiritual Needs Assessed	21(55%)
Hospice Referral	4(11%)
ICU transfer	7(18%)
In-hospital mortality	5 (13%)

- Consider expansion of project to poor prognosis heme malignancy patients
- Embedding ACP training for house staff
- Connecting to outpatient oncologist and supportive care team

Case Example Follow-up

Woman with Stage IV stomach cancer in pain, unable to participate in GOC discussion on day of admission

- PC consulted on day 2 for symptom management and to assist GOC discussion
- As patient's pain stabilized, she increasingly engaged in GOC discussions
- She elected DNR on day 3. Discharged with hospice on day 6.

Oncology Care Team Perspective

- *“I think one thing that we probably could do is once someone is diagnosed as stage 4, consider them for a palliative care consult rather than waiting until they're really symptomatic, because maybe -- I know they've done studies that if you start palliative care earlier, people do better.”*
- *“I think that all of the patients that palliative care has taken from us have been very appropriate patients, and they've always given us really good feedback that they always have great recommendations that we're not already doing.”*
- *“I think it's a good relationship. It's a strong relationship, and palliative care is also very positive and encouraging of the patients, and like I said, they always have good relationships or good recommendations.”*
- *“So, I mean, on one hand I've been hearing talk, at least on the conferences of this automated referral type of thing that's supposed to be happening where palliative care is supposed to be getting involved kind of pretty automatically.”*

Sustainability and Spread Plans

- Tracking system and mechanism for continued triggered consults
- Publications / presentations
 - Main analysis
 - Malignant hematology descriptive analysis
 - Root cause analyses of rapid responses and ICU transfers
- Expand to outpatient oncology

Acknowledgements

Team members

Laura Hanson, MD

Stephen Bernard, MD

Fran Collichio, MD

Ashley Freeman, MD

Matt Milowsky, MD

Bill Wood, MD

Bhisham Chera, MD

Crista Creedle, RN

Summer Cheek, RN

Erin Burgess, BA

Lydia Chang, MD

Judy Kuhn MD

Stacey Gabriel, MPH

Alexandra Fox, MSW

Many thanks!

IHQI

Mike Pignone, MD

Laura Brown, MPH

Works Cited

1. Enguidanos S, Vesper E, Lorenz K. 30-day readmissions among seriously ill older adults. *J Palliat Med* 2012; 15:1356-1361.
2. Henson LA, Gao W, Higginson IJ, Smith M, Davies JM, Ellis-Smith C, Daveson BA. Emergency department attendance by patients with cancer in their last month of life: a systematic review and meta-analysis. *J Clin Oncol* 2014; Dec 22. pii: JCO.2014.57.3568. [Epub ahead of print]
3. Obermeyer Z, Makar M, Abujaber S, Dominici F, Block S, Cutler DM. Association between the Medicare hospice benefit and health care utilization and costs for patients with poor-prognosis cancer. *JAMA* 2014; 312:1888-1896.
4. Khandelwal N, Kross EK, Engelberg R, Coe NB, Long AC, Curtis, JR. Estimating the effect of palliative care interventions and advance care planning on ICU utilization: a systematic review. *Crit Care Med* 2015; DOI: 10.1097/CCM.000000000000085. [E-pub ahead of print]
5. Morrison RS, Penrod JD, Cassel JB, et al. Cost savings associated with US hospital palliative care consultation programs. *Arch Intern Med* 2008;168:1783-1790
6. Temel JS, Greer JA, Muzikansky A et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010; 363:733-742.
7. Parikh RB, Kirch RA, Smith TJ, Temel JS. Early specialty palliative care-- translating data in oncology into practice. *N Engl J Med* 2013; 369:2347-2351.
8. Gade G, Venohr I, Conner D, et al. Impact of an inpatient palliative care team: a randomized controlled trial. *J Palliat Med* 2008;11:180-190
9. Zimmermann C, Swami N, Krzyzanowska M, Hannon B, Leighl N, Oza A, Moore M, Rydall A, Rodin G, Tannock I, Donner A, Lo C. Early palliative care for patients with advanced cancer: a cluster randomized controlled trial. *Lancet* 2014; 383:1721-1730.
10. Bakaitas M, Lyons KD, Hegel MT, Balan S, Brokaw FC, Seville J, Hull JG, Li Z, Tosteson TD, Byock IR, Ahles TA. Effects of a palliative care intervention on clinical outcomes in patients with advanced cancer: the Project ENABLE II randomized controlled trial. *JAMA* 2009; 302:741-749.
11. Connor SR, Pyenson B, Fitch K, Spence C, Iwasaki K. Comparing hospice and nonhospice patient survival among patients who die within a 3-year window. *J Pain Symptom Manage* 2007; 33:238-246.
12. Mayer DK, Travers D, Wyss A, Leak A, Waller A. Why do patients with cancer visit emergency departments? Results of a 2008 population study in North Carolina. *J Clin Oncol* 2011; 29:2683-2688.
13. Austin CA, Hanzaker C, Stafford R, Mayer C, Culp L, Lin FC, Chang L. Utilization of rapid response resources and outcomes in a comprehensive cancer center. *Crit Care Med* 2014; 42:905-909.
14. Hanson LC, Rowe C, Wessell K, Caprio AJ, Winzelberg G, Beyea A, Bernard SA. Measuring palliative care quality for seriously ill hospitalized patients. *J Pall Med* 2012; 15:798-804.