# ASCO's Quality Training Program

#### Project Title:

*Creation of a Cross Functional Care Team to Develop Individualized Care Plans in High Utilizer Oncology Patients* 

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Institution: Cleveland Clinic Foundation, Cleveland, OH

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### **Problem Statement**

- With growing attention to quality in health care, readmission have gained much of the national focus. At our institution, it has become clear that a small portion of our patient population drive a significant burden of our readmission rates and resource utilization
- In fact, just 6% of all discharged patients account for a staggering 41% of all readmissions
- However, patients who are most frequently readmitted have complex psychosocial barriers that no general intervention is likely to address





### Process Map







## Institutional Overview

- Cleveland Clinic based in Cleveland, OH is a large academic institution with emphasis on education and research.
- The project will be based on the main campus within the Taussig Cancer Institute Department of Hematology and Oncology
- **Staff**: 18 hematology and oncology fellows, and estimate of 2500-3000 inpatient admissions/year.
- **Patient Population**: Mostly in the north east Ohio region but also serves as a major referral practice for across the Midwestern United States, as well as internationally.





## Team Members

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| Stakeholders and Team Members | Represented Area           |
|-------------------------------|----------------------------|
| Dr. Alberto Montero           | Project Sponsor            |
| Dr. Girish Kunapareddy        | Project Owner              |
| Dr. Ruth Lagman               | Palliative Medicine        |
| Dr. Armida Parala             | Palliative Medicine        |
| Dr. Sudipto Mukherjee         | Malignant Hematology       |
| Dr. Bassam Estfan             | Solid Tumor Oncology       |
| Joseph Hooley                 | Clinical Quality           |
| Lyn Best, Renata McBride      | Inpatient Nursing          |
| Christa Poole                 | Social Work                |
| Helen Tackitt                 | APN/PA supervisor          |
| Gerard Odafe                  | Continuous improvement     |
| Yolanda Curry                 | Case Manager               |
| Julie Fetto                   | Institute Nursing Director |
| Stacey Booker                 | Care Coordinator           |

ASCO American Society of Clinical Oncology

## Cause & Effect Diagram



### **Cause and Effect Diagram**



### **Diagnostic Data**

250 120% 100% 208 203 100% 100% 92% 200 84% 95% 85% Cumulative Percentage 80% **Total Readmissions** 69% 150 129 65% 126 60% 104 100 38% 40% 64 51 50 <sup>31</sup> 27 20% 28 0% 0 2 3 1 4 5+

Pareto: Total Readmits vs. Frequency of Readmission

**Readmission Frequency** 





### Aim Statement

 Reduce the cohort's total number of readmissions 10% by January 15, 2017. This will be accomplished by forming a cross functional care team that would discuss 10 individual patients, with 2 or more readmissions in the past 60 days, by creating individualized care plans to be communicated to primary oncology team and ED.





### Measures

#### <u>Measures:</u>

- # of Individualized Care Plans created by the Cross Functional Team
- # 30-60 Day Readmissions
- # ED visits
- Patient LOS (Days)
- ICU admissions
- Hospice referrals
- # of outpatient visits

### Patient Population:

 All patients discharged from the oncology units with 2 or more readmissions within the past 60 day period

### <u>Calculation Methodology</u>:

 N of Readmissions / Total N of Discharges

### Data Source:

• EHR

### Data Collection Frequency:

 Ongoing, Bi-monthly review during intervention period: 10/1/17 – 1/15/17

### • Data Quality:

 Currently limited by manual review process of cohort patients with new care plans





### **Baseline** Data

- In 2015, there were ~4000 discharges with overall readmission rate of 26%
- In 2015, 68% of all readmitted cancer patients had two or more readmissions within 6 months.
- In the 1st 6 months of 2016, that number was at 62%. The overall readmissions rate has increased to 28% in the 1st 6 months of 2016.
- 70% of the above readmissions were admitted through the ED at least once. 50% with at least two





# Prioritized List of Changes (Priority/Pay –Off Matrix)

Easy

|          | Standardizing Discharge Process  | Same Day Access                             |
|----------|--|---|
| High     | Multidisciplinary Rounds   | Individualized Care Plan<br>Committee       |
| npact    | Moving Scheduler to Bedside  | Social Work<br>Inpatient/Outpatient Liaison |
| ے<br>Low | Standardizing Post-Discharge<br>Follow-up Appointment Process<br>Follow-up Phone Calls | Palliative Medicine Home Visits             |



**Ease of Implementation** 

Difficult



# PDSA Plan (Test of Change)

| Date of PDSA<br>Cycle              | Description of<br>Intervention  | Results                         | Action Steps  |
|------------------------------------|---|---------------------------------|---|
| October 6 <sup>th</sup> , 2016     | Initial creation of multidisciplinary team                                  | Creation of 4<br>ICPs per month | Supplement with<br>patient input prior<br>to ICP              |
| December 1 <sup>st</sup> ,<br>2016 | Communicate with<br>outpatient care<br>coordinator to seek<br>patient input | TBD                             | Supplement with<br>primary<br>ambulatory team<br>prior to ICP |
| February 2 <sup>nd</sup> , 2017    | Supplement with<br>primary ambulatory<br>team prior to ICP                  |                                 |   |





## Materials Developed: ICP

#### PLAN IMPLEMENTATION DATE:

REASON(S) FOR ICP: Frequent hospital admissions for similar complaints

#### COMMON COMPLAINTS AND PRIOR EVALUATIONS: 1, \*\*\*

#### ICP COMMITTEE RECOMMENDATIONS: 1. \*\*\*

This consensus plan was developed by the group members of the Individual Care Plan committee which met in person on 10/20/2016.

SIGNATURE: DATE: TIME: XXXX AM





### **Interim Data**

|  | Pre-ICP Data | Post-ICP Data |
|--|--------------|---------------|
| Average # Hospitalizations in 6<br>months prior to ICP | 6.50         | x             |
| Average # Hospitalizations per<br>month                | 1.08         | 0.23          |
| ALOS for inpatient encounters                          | 4.16 days    | 1.25 days     |
| Average # ED visits in 6 months prior vs. post         | 4.25         | 0.75          |

• Notable decreases in # Hospitalizations and ALOS





## Conclusions

- Creation of a cross functional care team with a wide spectrum of disciplines at a large academic center, focused to develop Individualized Care Plans, is feasible
- Most of ICPs were focused on patient's global needs rather than centered on disease biology.
- With the initiation of the above efforts, our interim data indicates a 3-5x decrease in overall number of hospitalizations, ED visits and average length of stay.
- Although current data suggests a great decrease in readmission rates, it is too early to draw that conclusion. However, current resource utilization by this cohort suggests we should surpass the target of 10% reduction rate in readmissions





# Next Steps/Plan for Sustainability

- Continue Direct involvement of primary outpatient providers in the Cross Functional Care team discussions/review
- Streamline review process to determine preventability of hospitalizations by better allocation of roles within the CFC
- Create a model for predictors of readmissions that can be used to identify high risk patients on the front end
- Collaborate with enterprise efforts to create a predictive model to screen patients in real time during index admission





#### Creation of a Cross Functional Care Team to Develop Individualized Care Plans in High Utilizer Oncology Patients

AIM: Reduce the cohort's total number of readmissions 10% by January 15, 2017. This will be accomplished by forming a cross functional care team that would discuss 10 individual patients, with 2 or more readmissions in the past 60 days, by creating individualized care plans to be communicated to primary oncology team and ED.

**INTERVENTION:** Create cross functional care team, focused on creating care plans for patients readmitted 2 or more times during 60-day period to Cleveland Clinic facilities. Discuss an average of 2 cases per month with an action plan that is comprehensive and formulated by a multi-disciplinary group.

**RESULTS:** Notable decreases in # Hospitalizations and ALOS

|  | Pre-ICP Data | Post-ICP Data |
|--|--------------|---------------|
| Average # Hospitalizations<br>in 6 months prior to ICP | 6.50         | x             |
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#### CONCLUSIONS:

 Preliminary data shows high impact on number admissions/ED visits and aLOS
Although still early to determine if the aim of

**PROJECT SPONSORS:** 

Dr. Alberto Montero

10% reduction in overall readmissions is achieved, current data indicates that focusing on ICPs can help decrease overall readmissions <u>NEXT STEPS:</u>

- Identify predictors amongst the high risk population to better identify likelihood for readmission in real time.

 Collaborate with enterprise efforts to identify prospectively

Identify patients that may benefit from earlier hospice referrals to improve time of referral to death

Above interventions will reduce the lag time from identification to our intervention time

**TEAM:** Hematology/Oncology Solid Tumor Oncology Palliative Medicine Nursing Social Work Care Coordinators Case Management APNs/PAs Quality