### ASCO Quality Training Program

### Improve Safety and Compliance of Oral Antineoplastic Agents

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### Institutional Overview

- Texas Tech University Health Sciences Center (TTUHSC) El Paso is an academic institution that serves a culturally diverse community.
- At Texas Tech University, we strive to "promote wellness and relieve human suffering through excellence in healthcare, intellectual innovation, and service without borders".
- The Hematology/Oncology division provides care as part of a multispecialty Internal Medicine Clinic.
  - We serve a predominantly Hispanic (approximately 90%) medically undeserved population.
- In association with our chief teaching hospital, University Medical Center of El Paso, we are the "safety net" health system for El Paso county.
- We are a "stones throw" away from Ciudad Juarez, Mexico.

### Team members

Role	Name	Role	
Project Sponsor	Debarata Mukerjee, MD	Department Chair	
Team Leader	Sumit Gaur, MD	Project Leader	
Team Member	Rosalinda Heydarian, NP	Nurse Practioner	
Team Member	Sara Gonzalez, RN	Head Nurse	
Team Member	Sabrina Iturralde, CMA	Clinical Assistant	

### **Problem Statement**

It is critical for patients, who have been prescribed an oral antineoplastic agent, to have a timely lab screening in order for the physician to determine any safety issues in a timely manner.

**During the months of Nov 2019 and January 2020**, The average number of days between the writing of a prescription for a new oral antineoplastic agent, at the county hospital's pharmacy, and the availability of lab results (per guidelines) was <u>38 days</u>.

This led to delays in toxicity assessments and dose adjustment.



#### *Outcome Measure*

#### Baseline Data summary

Item	Description
Measure:	Days between prescription written & lab results available
Patient population: (Exclusions, if any)	Patients who had a new oral antineoplastic agent filled at the county hospital pharmacy.
	By medication
Calculation methodology: (i.e. start / stop time)	• <b>Start time:</b> Date in which the provider writes the prescription
	• <b>Stop time</b> : Date in which the patient completes their lab check
Data source:	EMR, county hospital pharmacy, lab.
Data collection frequency:	One time review (as it was retrospective)
Data limitations: ( <i>if applicable</i> )	Data only applies to patients who filled their prescription at one pharmacy.
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#### Outcome Measure Baseline data



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### Aim Statement

**To decrease** the average number of days between a prescribed oral antineoplastic agents and available lab results **by 50%**, by June 31, 2020.



### **Process map**



There were 3 main decision points where lab orders are given.

- Was the patient given a lab order with the prescription?
- Was the patient informed as to when to have labs done?
- Did the patient actually have the labs drawn?

### Cause and Effect diagram



We felt that instituting a way to stay in touch with patients in-between their visits can be a very simple way to improve outcomes.

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### Diagnostic data summary – by patient

Item	Description
Measure:	% of patients who did not have "timely" lab screening.
Patient population: <i>(Exclusions, if any)</i>	<ul> <li>Patients who had a new prescription for an oral antineoplastic filled at the county hospitals pharmacy (Nov 2019 – Jan 2020)</li> <li>Hormonal agents were excluded.</li> </ul>
Calculation methodology: (i.e. numerator & denominator)	<ul> <li><u>Numerator</u>: Total # of pts prescribed a new oral antineoplastic agent who <u>did not</u> have timely screening.</li> <li><u>Denominator</u>: Total # of patients who had a prescription for new oral antineoplastic agent filled at the county hospitals pharmacy.</li> </ul>
Data source:	Texas Tech EMR and County Hospital pharmacy.
Data collection frequency:	Nov 1, 2019—January 31, 2020
Data limitations: (if applicable) Iraining Program	Include only newly prescribed

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#### Diagnostic data – by patient

Patient timely lab screening (Nov 2019 - Jan 2020)



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#### Diagnostic data summary – by drug

Item	Description
Measure:	# days for an oral antineoplastic agents that have lab results.
Population: (Exclusions, if any)	New prescription for an oral antineoplastic filled at the county hospitals pharmacy (Nov 2019 – Jan 2020) • Hormonal agents were excluded.
Calculation methodology: (i.e. numerator & denominator)	<ul> <li>Start – Date oral antineoplastic agents prescribe by provider</li> <li>Stop – Date lab results are available</li> </ul>
Data source:	Texas Tech EMR and County Hospital pharmacy
Data collection frequency:	Nov 1, 2019—January 31, 2020
Data limitations: (if applicable)	Include only newly prescribed

#### Diagnostic Data – by drug



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#### *Priority / Pay-off Matrix* Countermeasures



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# Test of Change

Date	PDSA Description	Result
Jul – Sep 2020	<ul> <li>Institute a policy of weekly contact for patients starting new OAN</li> <li>Develop a template for the call</li> </ul>	# average days between prescription ordered and available lab results fell from 38 to 21 (44% decrease)
Sep 2020	Generate a quick reference guide summarizing which tests should be done and when for the most commonly prescribed drugs and have this available in the clinic area for ready reference.	Draft developed; however, not being fully utilized. Needs to be loaded onto a shared drive
TBD	<b>Educate providers</b> to order drug specific lab monitoring and to specify how many days after starting the drug, labs should be checked.	



#### MEDICATION

Name of Medication:

Date Prescribed:

Date Started:

If not started, why not:



YES	NO	
		Received education materials in clinic
		Regimen as prescribed
		Side effects experienced by patient
		Can patient name potential side effects?
		Does patient know name of medication?
LAB ORDERS		
Schedule for labs to be drawn:		

YES	NO	
		Patient knows when to have labs drawn?
		Patient given lab orders at clinic visit?
PATIENT FEEDBACK		

#### **Outcome Measure**

#### Post Countermeasure



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#### **Outcome Measure**

#### Post Countermeasure



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## *Change data*Patients <u>timely</u> lab screening





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## *Change Data* **Number of days between – by drug**



# Next steps Sustainability Plan

Next Steps	Owner
Continued weekly check-ins with patients starting OAN over the phone to sustain gain	R Heydarian
Educating and training other clinic RNs to assist with weekly check-ins.	S. Gonzalez
Ongoing education of providers and their CNAs to order appropriate labs monitoring at the time of prescribing OAN	S Gaur, S Iturrulde.



### Conclusion

Contacting patients between the time their prescriptions are ordered and when they are required to complete lab screening leads to:

- Increase in patient satisfaction
  - Patients complete their lab screenings
  - Patients better prepared for their appointments
- Increase in provider satisfaction
  - Better informed
  - Decrease delays in toxicity assessments
  - Decrease in dose adjustment

