

ASCO's Quality Training Program

Project Title: Wilmot Cancer Institute Ambulatory Treatment Handoff Project

Presenter's Name:

David Dougherty MD, MBA

Tammy Clarke RN, MS, OCN, BMTCN

Elizabeth Scarsella RN, MS, OCN, NE-BC

Institution: Wilmot Cancer Institute

Date: January 26, 2017

Team Members

David Dougherty MD, MBA, WCI – Chief Quality and Safety Officer, Team Leader

Tammy Clarke RN, MS, OCN, BMTCN – WCI Quality Care Outcomes Manager, Facilitator

Elizabeth Scarsella RN, MS, OCN, NE-BC – Senior Nurse Manager WCC Outpatient Clinic, Core Team Member

Stephanie Buia Amport MBA, CPHQ – Improvement Coach

Institutional Overview

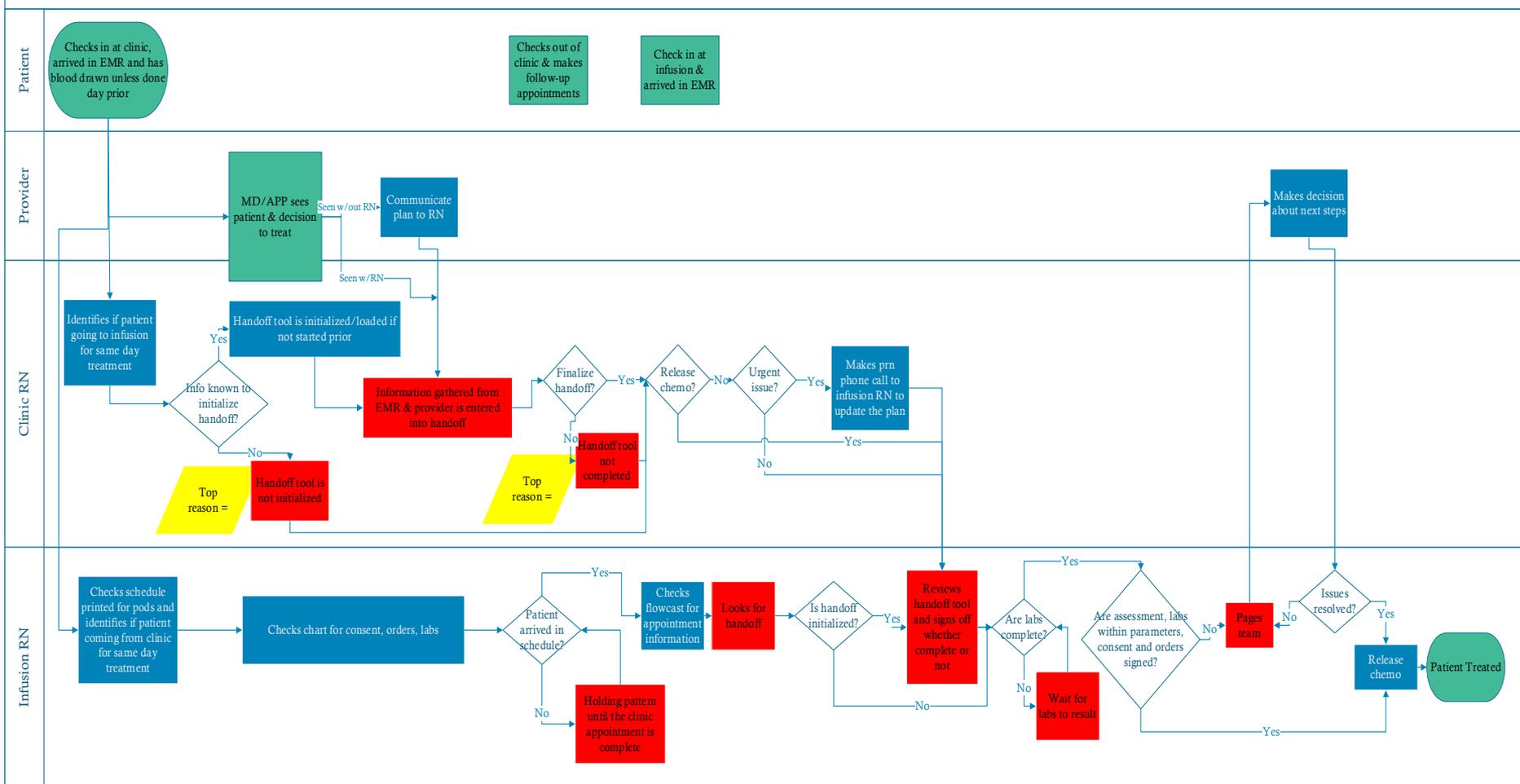
- University of Rochester Medicine's Wilmot Cancer Institute (WCI) features an 84-bed cancer center with 11 outpatient locations and over 6,000 analytic cancer cases throughout the Rochester and Finger Lakes region
- WCI is a component of Strong Memorial Hospital (SMH) and offers patients and their families comprehensive services including one of upstate New York's largest blood and marrow transplant programs and the Rochester area's only American College of Surgeons (ACOS) accredited breast cancer center
- WCI is home to the region's first survivorship clinic and offers clinical trials of new therapies and options that may not be available anywhere else upstate
- In addition, WCI includes a team of scientists who investigate many aspects of cancer, with an emphasis on how best to provide precision cancer care

Problem Statement

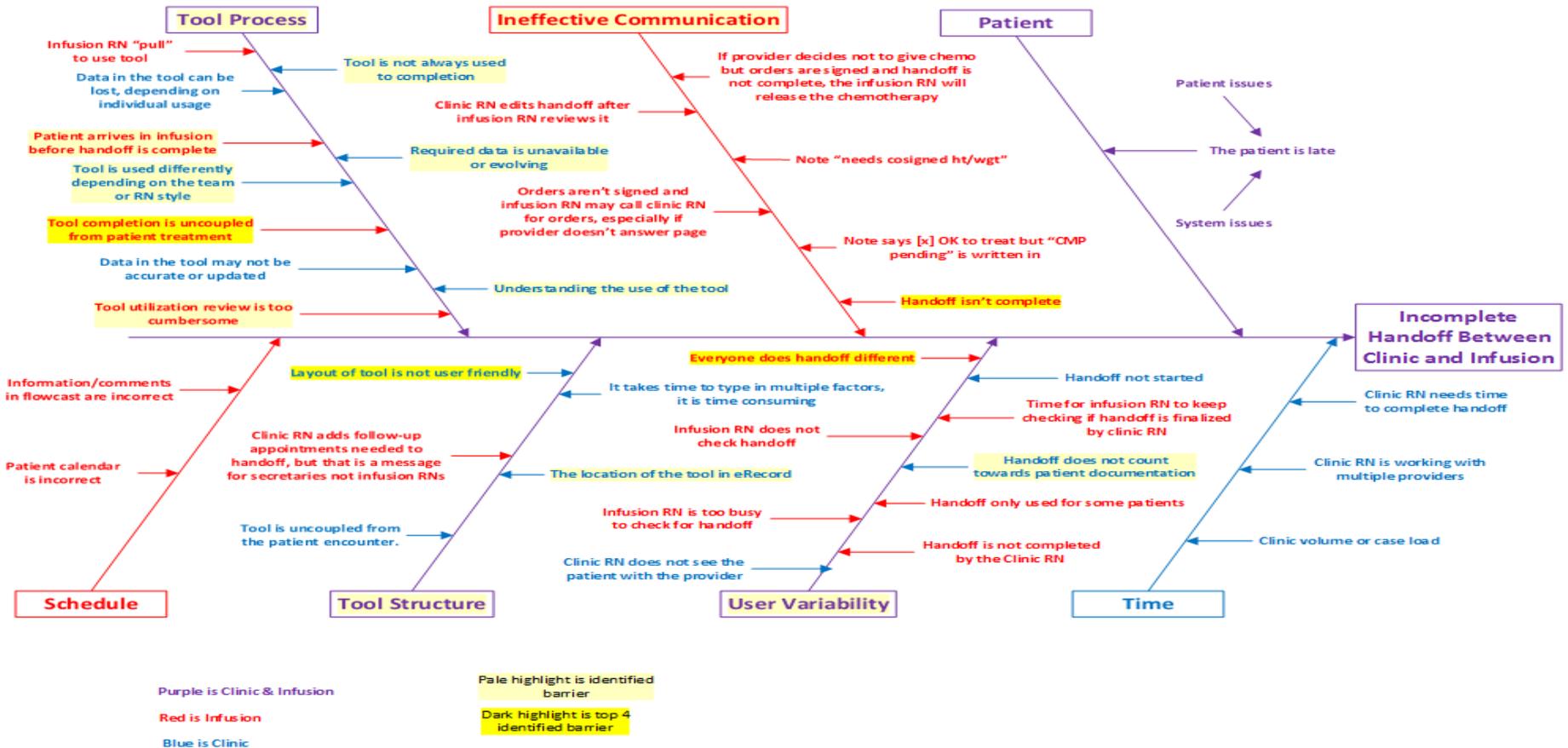
- Fifty-nine percent of reported medication events for patients receiving anti-cancer treatments at WCI Infusion Center on the same day as clinic visits from 7/24/2014 to 6/30/2016 were due to ineffective handoff communication
 - The completion rate of the WCI handoff tool from 10/1/2015 to 6/30/2016 for patients treated with anti-cancer therapy on the same day as a clinic visit is 32% (based on 25 audits per month, or 5% of patients)

Process Map

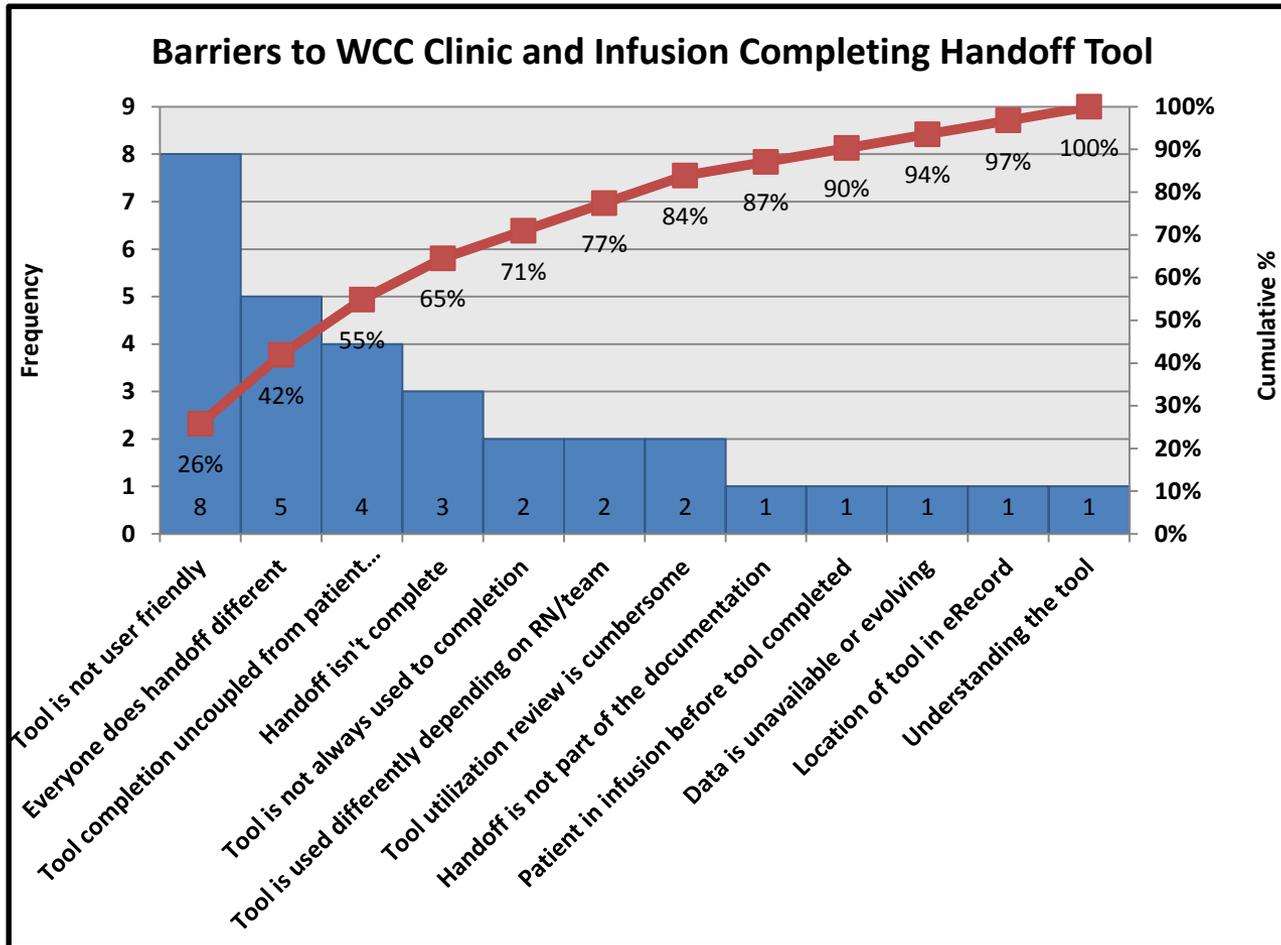
Same Day Infusion Hand-off Process



Cause and Effect Diagram



Diagnostic Data – Pareto Chart



Top Barriers

- Tool is not user friendly
- Everyone does handoff differently
- Tool completion uncoupled from patient treatment
- Handoff isn't complete
- Tool not always used to completion
- Tool is used differently depending on RN/team
- Tool review is too cumbersome

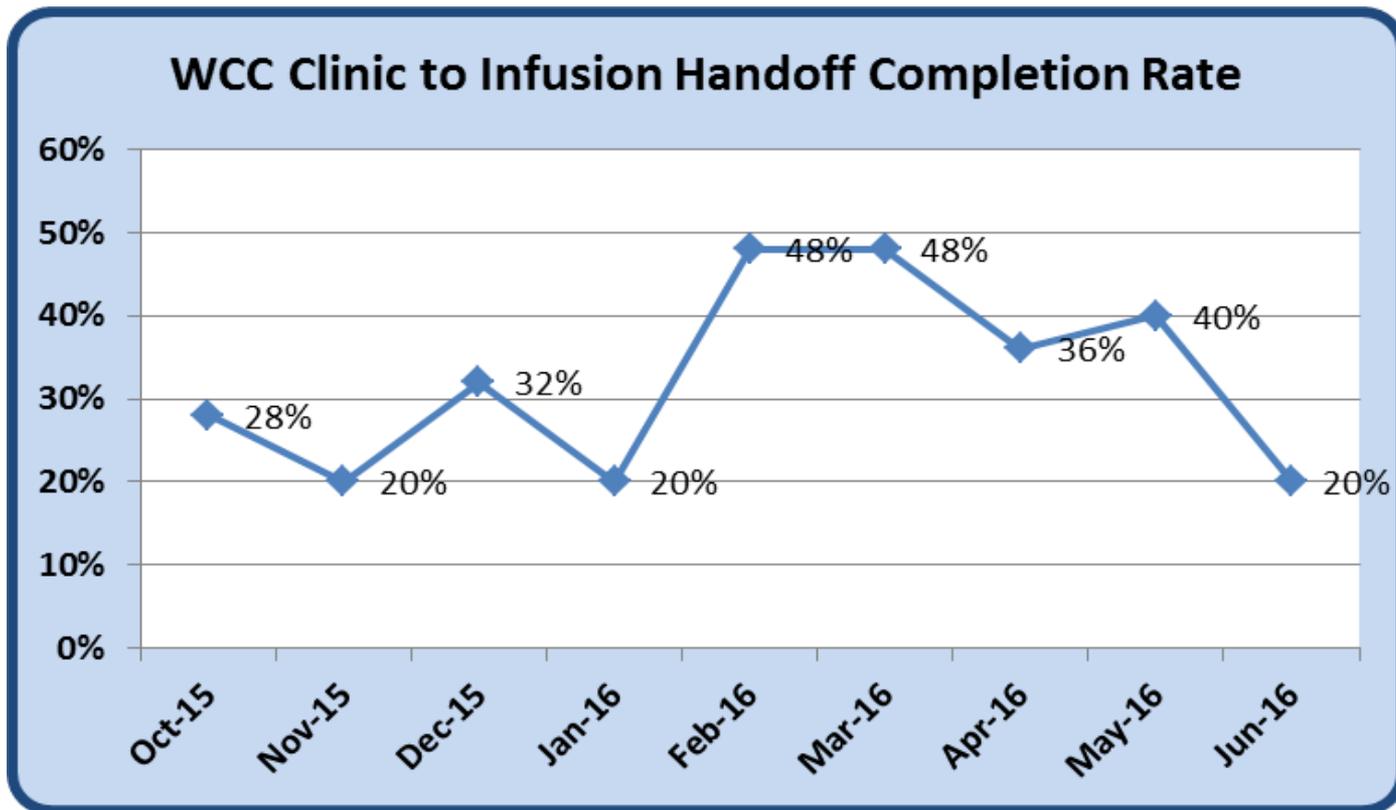
Aim Statement

By December 2016, improve completed handoff tool utilization rate from 32% (10/1/2015 to 6/30/2016) to 75% for patients treated with anti-cancer therapy on the same day as clinic visit.

Process Measures

	Outcome Measure	Process Measures	Balance Measure	Diagnostic & Outcome Measure
Measure	Handoff tool completion rate, by clinic and infusion RNs	Handoff tool utilization rate broken out by clinic and infusion RNs	Adverse drug events	Infusion and Clinic RN survey of perception and utilization of current handoff tool
Patient Population	Patients at Wilmot Cancer Center with clinic and infusion appointments on the same day	Patients at Wilmot Cancer Center with clinic and infusion appointments on the same day	Patients at Wilmot Cancer Center with clinic and infusion appointments on the same day	Survey was sent to all clinic and infusion RNs in Wilmot Cancer Center (n=42)
Calculation Methodology	Audits of handoff tool	Audits of handoff tool	Review of medication events entered in RL Solutions Reporting System	SAS
Data Source	Patient Care Coordination Note in patient's chart	Patient Care Coordination Note in patient's chart	RL Solutions Reporting System and patient charts	Survey
Data Collection Frequency	Twenty-five monthly audits completed 10/1/15 – 6/30/16, representing 5% of patients	Twenty-five monthly audits completed 10/1/15 – 6/30/16, representing 5% of patients	All events entered between 7/24/14 – 6/30/16	Pre-implementation and post-implementation of intervention
Data Quality	Audits are completed manually by one individual, which limits the number of audits that can be completed	Audits are completed manually by one individual, which limits the number of audits that can be completed	Limited by the events that are entered into RL Solutions and the information provided in the event	Limited by response rate (70%)

Baseline Data – Handoff Completion



Baseline Data- Survey

How Effective do you feel the PCCN Is In -			
	Ensuring Safe Treatment	Preventing Errors	Promoting Patient Satisfaction
Not at all effective	2.4%	7.1%	7.3%
Somewhat ineffective	19.0%	14.3%	7.3%
Neutral	19.0%	31.0%	53.7%
Somewhat effective	40.5%	35.7%	26.8%
Very effective	19.0%	11.9%	4.9%

How Often do You Use PCCN for Same Day Appointments	
Never	14.3%
Rarely	2.4%
Sometimes	2.4%
Frequently	33.3%
Always	47.6%

Staff Identified Barriers - Same Day Appointments	
Time consuming	0%
Not component of current workflow	16.6%
Not a service-line priority	7%
Not used by counterpart in infusion/clinic	4.8%
Other	10%

Which Factors Would be Most Likely to Increase Your Utilization of the PCCN	
Workflow priority	52.4%
Ease of use	40.5%
Other	33.3%

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

Impact	High	<ul style="list-style-type: none"> • Standardized use of handoff (Tool Structure) • Standardized education, consistent for all users (User Variability) • Identify when handoff must occur (Tool Process) • Educate staff on the value of the tool (Tool Process) 	<ul style="list-style-type: none"> • Set expectations, monitor compliance, hold staff accountable (Tool Process) • Standardized handoff format/redesign the tool to meet the needs of staff (Tool Structure) • Create a tool using real-time point and click rather than a typing workflow (Tool Structure)
	Low	<ul style="list-style-type: none"> • Have some indicator for infusion nursing that the patient just arrived from clinic, i.e. a dot system (User Variability) 	<ul style="list-style-type: none"> • Tool is not visible finalized (User Variability) • Hard stop, infusion cannot proceed without handoff (Tool Process) • Hard stop in the tool so all questions must be answered (User Variability) • Require for every patient going from clinic to infusion (User Variability) • Do a verbal sign off for every patient (Ineffective Communication)

Easy

Difficult

Ease of Implementation

PDSA Plan (Test of Change)

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
Start 9/28/16 End 10/26/16	Completed tool and implemented paper trial in two providers clinic.	Clinic RNs provided feedback.	Tool revised based on feedback
Start 10/26/16 End 11/22/16	Tool available in “playground” and walked through using different clinical scenarios .	Infusion RN sign-off too cumbersome. Other flow issues found	Developed an different sign off for infusion nurse. Tool revised and a second trial on paper was completed.
Start 11/23/16 End 11/30/16	Final revisions were made. Education was developed using screen shots and reviewed as a team	Revisions to the education made. The team agreed on the final handoff tool to be published in eRecord	Education finalized
Start 12/1/16 End 12/6/16	Education completed with clinic and infusion nurses.	BMT team was not available to participate in the education	BMT use delayed until able to provide education
Start 12/7/16 End 12/20/16	Go-live with in eRecord on 12/7/16 Go-live with infusion RN flowsheet 12/20/16	Overwhelming positive feedback	Continue reinforcing education.
Start 12/20/16 Ongoing	Changes to infusion nurse flowsheet, moved data line to the top and added n/a and verbal handoff options	Go live is 1/18/16	

Materials Developed (Basic Handoff Tool)

WILMOT CANCER CENTER SAME DAY TREATMENT HAND-OFF Note

SITUATION

Scheduled treatment category for today

Cancer treatment

Chemotherapy	Antibody	Immunotherapy	Transfusion	IV Fluids	Electrolytes	Bisphosphonate	Immunization	Antibiotics
Injection	Growth factor	Other						

Is this a new cancer treatment?

Yes No

BACKGROUND

Consent obtained

Yes No Not needed

Labs complete

Yes Not needed Pending

ASSESSMENT

Current patient status

Scheduled treatment Scheduled treatment with change Urgent or emergent treatment

New Treatment Plan

Additional relevant information

Disease progression Difficult social/emotional situation Other

RECOMMENDATION

OK to treat for scheduled treatment

Yes No Pending

Service: Date of Service: 12/15/2016 01:00 PM

Share w/ Pt Bookmark

Materials Developed (Nested Questions)

SITUATION

Scheduled treatment category for today

Cancer treatment

Chemotherapy	Antibody	Immunotherapy	Transfusion
IV Fluids	Electrolytes	Bisphosphonate	Immunization
Antibiotics	Injection	Growth factor	Other

Is this a new cancer treatment?

Antibiotics	Injection	Growth factor	Other
-------------	-----------	----------------------	-------

Growth factor

OBI

Neulasta

Filgrastim (start date)

Materials Developed (Nested Questions)

BACKGROUND

Consent obtained

Yes

No

Not needed

Labs complete

Yes

Not needed

Pending

BACKGROUND

Consent obtained

Yes

No

Not needed

Location

Media

To be scanned

Labs complete

Yes

Not needed

Pending

Within parameters

Yes

No

Exceptions to parameters

Materials Developed (Expanded Handoff Tool)

ASSESSMENT

Current patient status

Scheduled treatment
Scheduled treatment with change
Urgent or emergent treatment
New Treatment Plan

Current patient status

Scheduled treatment
Scheduled treatment with change
Urgent or emergent treatment
New Treatment Plan

Scheduled treatment change(s)
Comments on change

Dose reduction	Dose escalation
Hold drug	Additional supportive care

ASSESSMENT

Current patient status

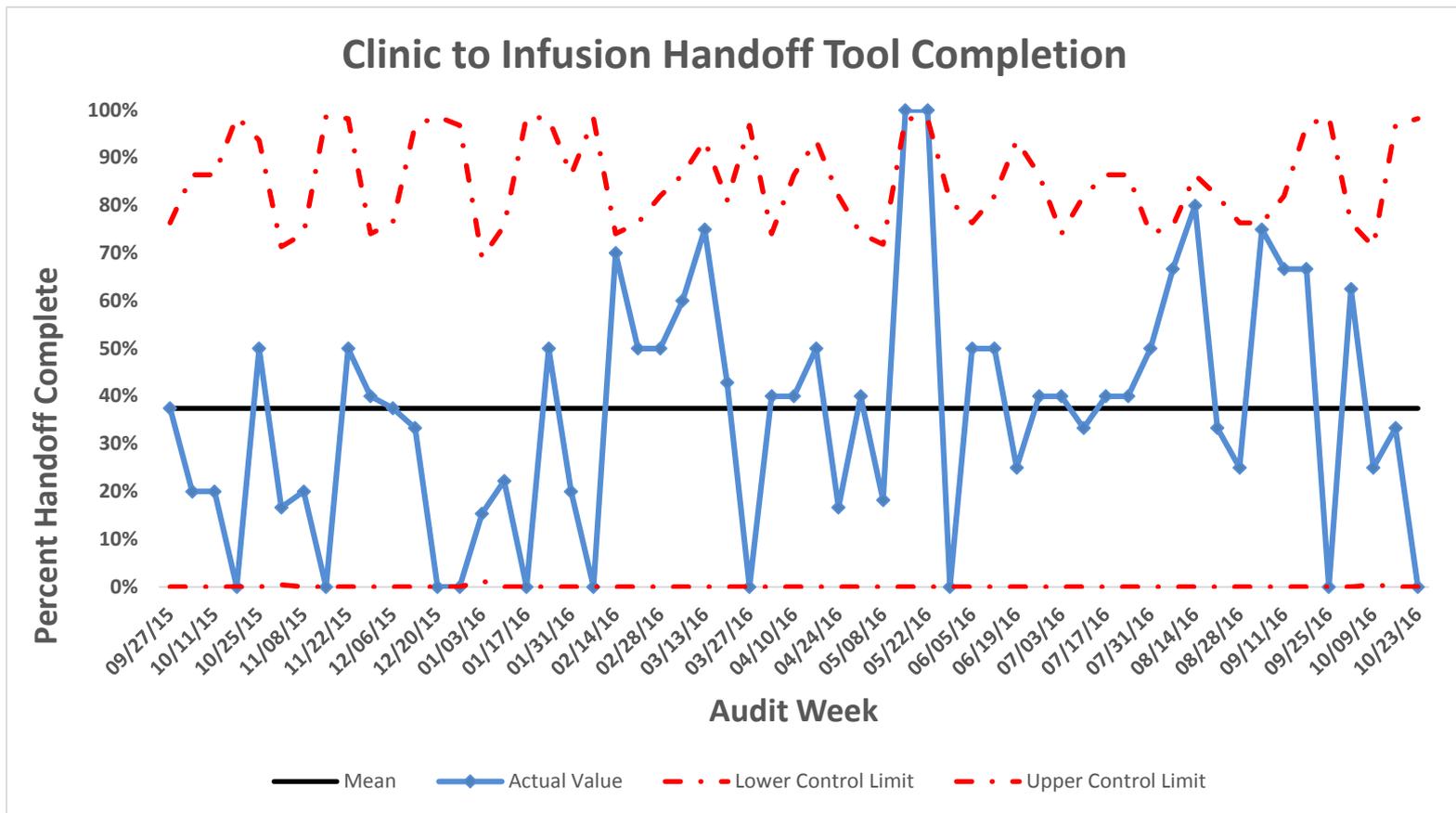
Scheduled treatment
Scheduled treatment with change
Urgent or emergent treatment
New Treatment Plan

Urgent or emergent treatment

Antibiotics	IV Fluids
Transfusions	Anti-emetics
Pain Management	Other

Comments on change

Change Data- Handoff Completion



Change Data- Survey

How Effective do you feel the PCCN Is In -						
	Ensuring Safe Treatment		Preventing Errors		Promoting Patient Satisfaction	
	Pre	Post	Pre	Post	Pre	Post
Not at all effective	2.4%		7.1%		7.3%	
Somewhat ineffective	19.0%		14.3%		7.3%	
Neutral	19.0%		31.0%		53.7%	
Somewhat effective	40.5%		35.7%		26.8%	
Very effective	19.0%		11.9%		4.9%	

How Often do You Use PCCN for Same Day Appointments		
	Pre	Post
Never	14.3%	
Rarely	2.4%	
Sometimes	2.4%	
Frequently	33.3%	
Always	47.6%	

Staff Identified Barriers - Same Day Appointments		
	Pre	Post
Time consuming	0%	
Not component of current workflow	16.6%	
Not a service-line priority	7%	
Not used by counterpart in infusion/clinic	4.8%	
Other	10%	

Which Factors Would be Most Likely to Increase Your Utilization of the PCCN		
	Pre	Post
Workflow priority	52.4%	
Ease of use	40.5%	
Other	33.3%	

Conclusions

- Taking multidisciplinary approach to define the problem and better understand the issues provided a solid base to build a tool that met the needs of all users
 - Overwhelming positive response from both clinic and infusion nurses
- Outcome Measures
 - Pending data
- Balance Measures
 - Too early to say if we have impacted safety
- Diagnostic & Outcome Measures
 - Pending survey data

Next Steps/Plan for Sustainability

- Maintain handoff as a standing agenda item on clinic and infusion staff meetings
- Define co-owners of the tool
- Continue with monthly review of utilization and report to clinic and infusion
- Ongoing optimization of tool
- Roll out the tool to other high volume areas

Lessons Learned

- The process of a patient going from clinic to infusion was much more complicated than we ever realized
- Clinic staff didn't know the handoff tool was encounter based,
- Clinic staff anxious about not pre-loading the tool when other staff are covering for them