

# Timely Administration post TURBT (TApT)

2026 Cancer Programs National QI Project Informational Webinar  
November 14, 2025

## Housekeeping:

- Please mute yourself
- We will email slides to all who registered
  - Slides and recording will be posted to the project website
  - FAQ will be created and posted to the project website

## **Agenda**

Science behind BLCT1 and Quality Measures

Project Overview

Q and A



# Today's Presenter and National Project Lead



## M. Minhaj Siddiqui, MD

- Professor of Surgery, University of Maryland School of Medicine
- Chief of Urology, University of Maryland Medical Center and Maryland VA Healthcare System
- Director of Urologic Oncology, University of Maryland Greenebaum Comprehensive Cancer Center

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# Science behind BLCT1

Mohammad Minhaj Siddiqui, MD FACS

Professor of Surgery, University of Maryland School of Medicine

Chief of Urology, University of Maryland Medical Center and Maryland VA Healthcare System

Director of Urologic Oncology, University of Maryland Greenebaum Comprehensive Cancer Center

# Background

- Bladder cancer is the sixth most commonly diagnosed cancer in the US
- Most patients have non-muscle invasive bladder cancer (NMIBC)
  - Characterized by:
    - High recurrence rates
    - High surveillance burden
    - Risk for progression

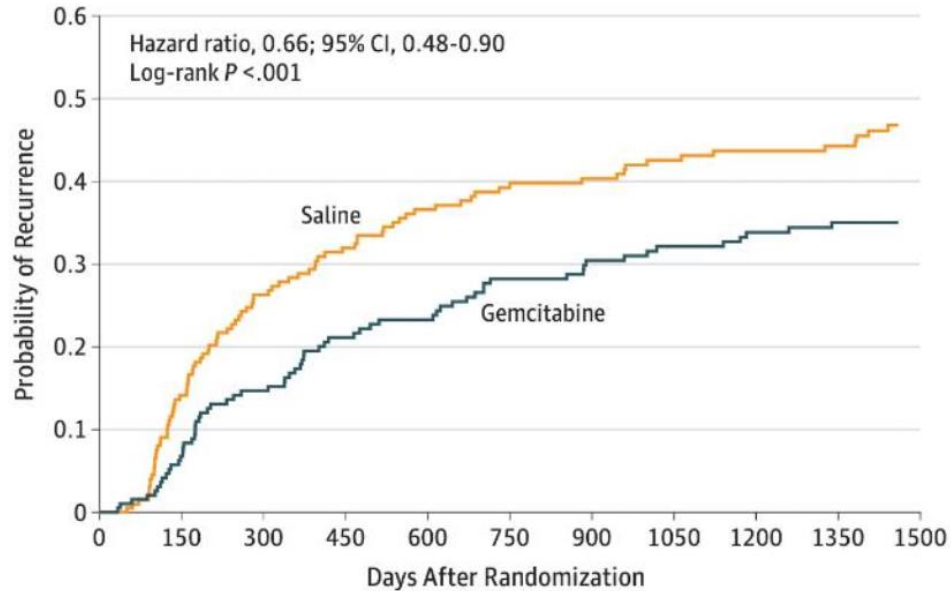
1. DeGeorge KC, Holt HR, Hodges SC. Bladder Cancer: Diagnosis and Treatment. *American family physician*. 2017;96(8):507-514.

# Background

- Multiple RCTs have shown decreased recurrence with single dose intravesical chemotherapy immediately after TURBT for Low-Grade NMIBC
  - Thought to kill circulating tumor cells after resection
  - Main Agents:
    - Gemcitabine
    - Mitomycin
- American Urological Association (AUA), Society of Urologic Oncology (SUO), and NCCN guidelines all recommend single dose chemo post TURBT for low grade disease

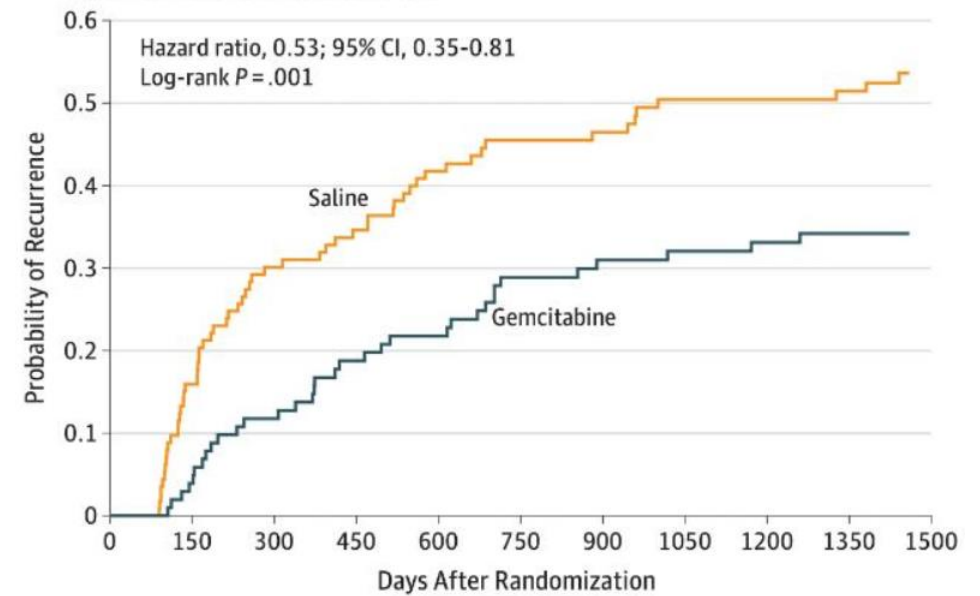


**A** Time to recurrence among all randomized eligible patients



No. at risk										
Saline	205	165	137	125	113	103	97	88	84	78
Gemcitabine	201	171	155	141	135	123	118	112	105	95

**B** Time to recurrence among patients with low-grade disease who received treatment as randomized



No. at risk										
Saline	113	95	78	73	63	56	53	48	47	43
Gemcitabine	102	98	90	81	77	68	65	63	61	55

Messing EM, Tangen CM, Lerner SP, et al. Effect of Intravesical Instillation of Gemcitabine vs Saline Immediately Following Resection of Suspected Low-Grade Non–Muscle-Invasive Bladder Cancer on Tumor Recurrence: SWOG S0337 Randomized Clinical Trial. *JAMA : the journal of the American Medical Association*. 2018;319(18):1880-1888. doi:10.1001/jama.2018.4657

# Diagnosis and Treatment of Non-Muscle Invasive Bladder Cancer: AUA/SUO Guideline (2020)

15. In a patient with suspected or known low- or intermediate-risk bladder cancer, a clinician should consider administration of a single postoperative instillation of intravesical chemotherapy (e.g., gemcitabine, mitomycin C) within 24 hours of TURBT. In a patient with a suspected perforation or extensive resection, a clinician should not use postoperative intravesical chemotherapy. (Moderate Recommendation; Evidence Strength: Grade B)



## NCCN Guidelines Version 2.2025 Bladder Cancer

[NCCN Guidelines Index](#)  
[Table of Contents](#)  
[Discussion](#)

### PRINCIPLES OF INSTILLATION THERAPY

**Indications:** Based on probability of recurrence and progression to muscle-invasive disease, such as size, number, and grade.

#### Intravesical Therapy for Bladder Cancer

##### Immediate Postoperative Intravesical Chemotherapy

- [Clinical Presentation and Initial Evaluation \(BL-1\)](#)
- A single instillation of chemotherapy is administered within 24 hours of surgery (ideally within 6 hours).
- Gemcitabine (category 1) (preferred)<sup>1</sup> and mitomycin (category 1)<sup>2</sup> are the most commonly used agents in the United States for intravesical chemotherapy. Thiotepa does not appear to be effective.<sup>3</sup>
- Immediate postoperative intravesical chemotherapy reduces the 5-year recurrence rate by approximately 35% and has a number needed to treat to prevent a recurrence of 7. However, it does not reduce the risk of progression or the risk of cancer mortality.<sup>3</sup>
- It is not effective in patients with an elevated EORTC recurrence risk score (≥5). This includes patients with ≥8 tumors and those with ≥1 recurrence per year.
- Most efficacious in patients with low-grade, low-volume Ta urothelial cancer.
- Contraindications include: bladder perforation, known drug allergy.

# Quality Assurance and Data Committee (QADC) Quality Measures

## Best Care through Best Practices



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A QUALITY PROGRAM  
of the AMERICAN COLLEGE  
OF SURGEONS

# Priority Checklist for new measures

*Factors to consider when evaluating a measure idea*

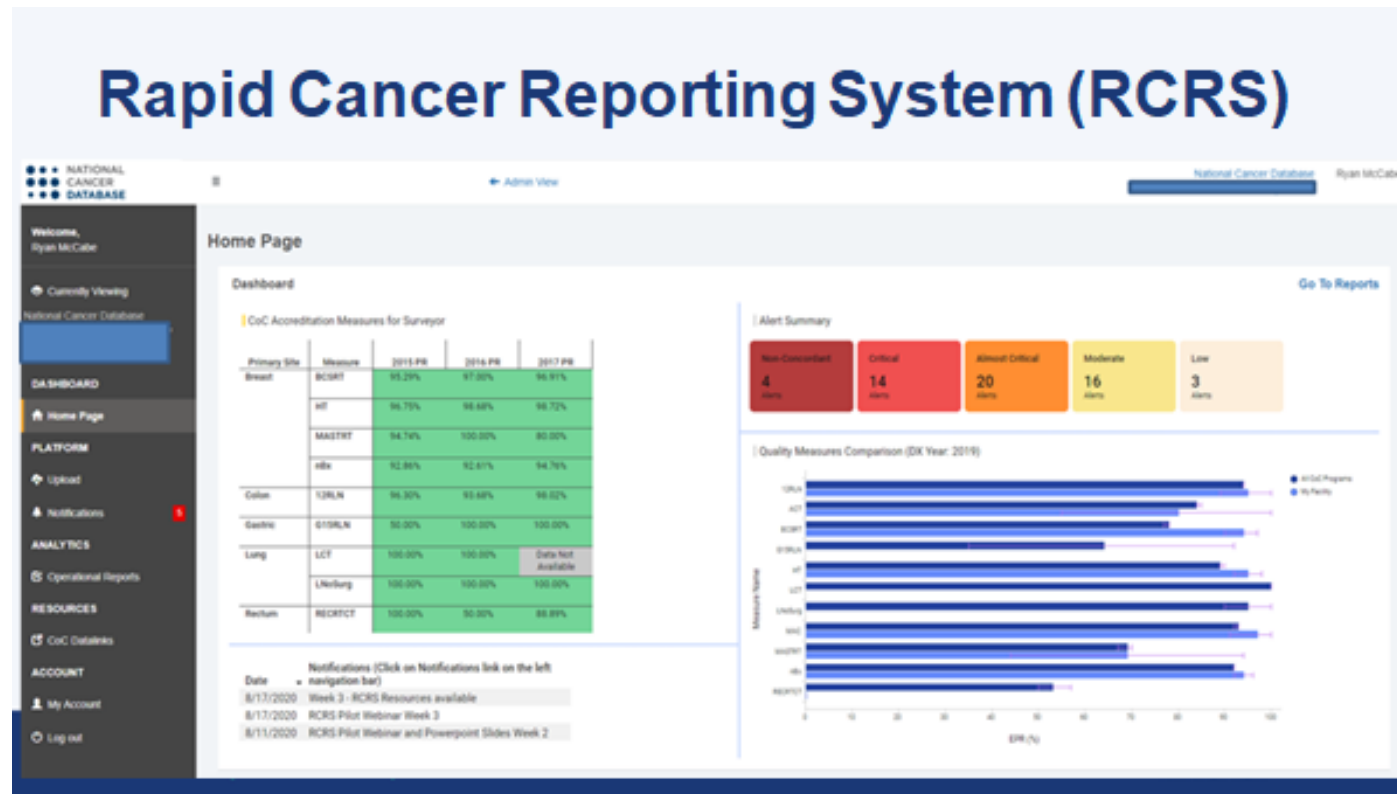
Importance	Impact	Feasibility
<input type="checkbox"/> Dashboard	<input type="checkbox"/> Case Count	<input type="checkbox"/> Coverage
<input type="checkbox"/> Disease Team Leader	<input type="checkbox"/> Survival	<input type="checkbox"/> Variable Availability
<input type="checkbox"/> Patient (PRO)	<input type="checkbox"/> Disparity	<input type="checkbox"/> CTR Effort
<input type="checkbox"/> C suite	<input type="checkbox"/> Compliance	<input type="checkbox"/> Tied to Standard
	<input type="checkbox"/> Multiple Processes	<input type="checkbox"/> Durably Relevant

As of July 17, 2025

Primary Site	Measure Abbreviation	Measure Description	Year-Released
Bladder	BLCT1	For patients with low grade Ta bladder cancer undergoing transurethral resection of bladder tumor, intravesical chemotherapy* is initiated within 24 hours of the procedure, or recommended. *chemotherapy within 24 hours of the transurethral resection assumed to be intravesical however the NCDB does not differentiate this from systemic chemotherapy.	2024

# Dashboard and RCRS

*Major improvement, real-time accrual and dissemination of data*



# TApT (Timely Administration post TURBT)

A National QI project



# Why?

Amongst the entire portfolio of CoC Quality Measures,  
BLCT1 currently has the second lowest performance rate nationally (by 0.1 percent!)

Diagnosis Year	2019	2020	2021	2022	2023
Estimated Performance Rate	25.1%	26.8%		26.9%	30.4%
Measure Eligible Cases	9500	7925		8857	8652
Measure Compliant Cases	2380	2123		2381	2630
Measure Eligible Hospitals	1183	1132		1137	1128
Measure Compliant Hospitals	705	670		708	722



# Why?

Variability observed various individual and institutional characteristics

## Utilization of intravesical chemotherapy following TURBT: A pre-implementation analysis of American College of Surgeon Commission on Cancer GU quality measures

Omri Nativ<sup>a</sup>, Sabika Sadiq<sup>a,\*</sup>, Adam Williams<sup>a</sup>, Gareth Reid<sup>a</sup>, Bruno Nahar<sup>a</sup>, Sanoj Punnen<sup>a</sup>, Mark Gonzalgo<sup>a</sup>, Dipen J. Parekh<sup>a</sup>, Kristen Scarpato<sup>b</sup>, Mohummad Minhaj Siddiqui<sup>c</sup>, Chad R. Ritch<sup>a</sup>

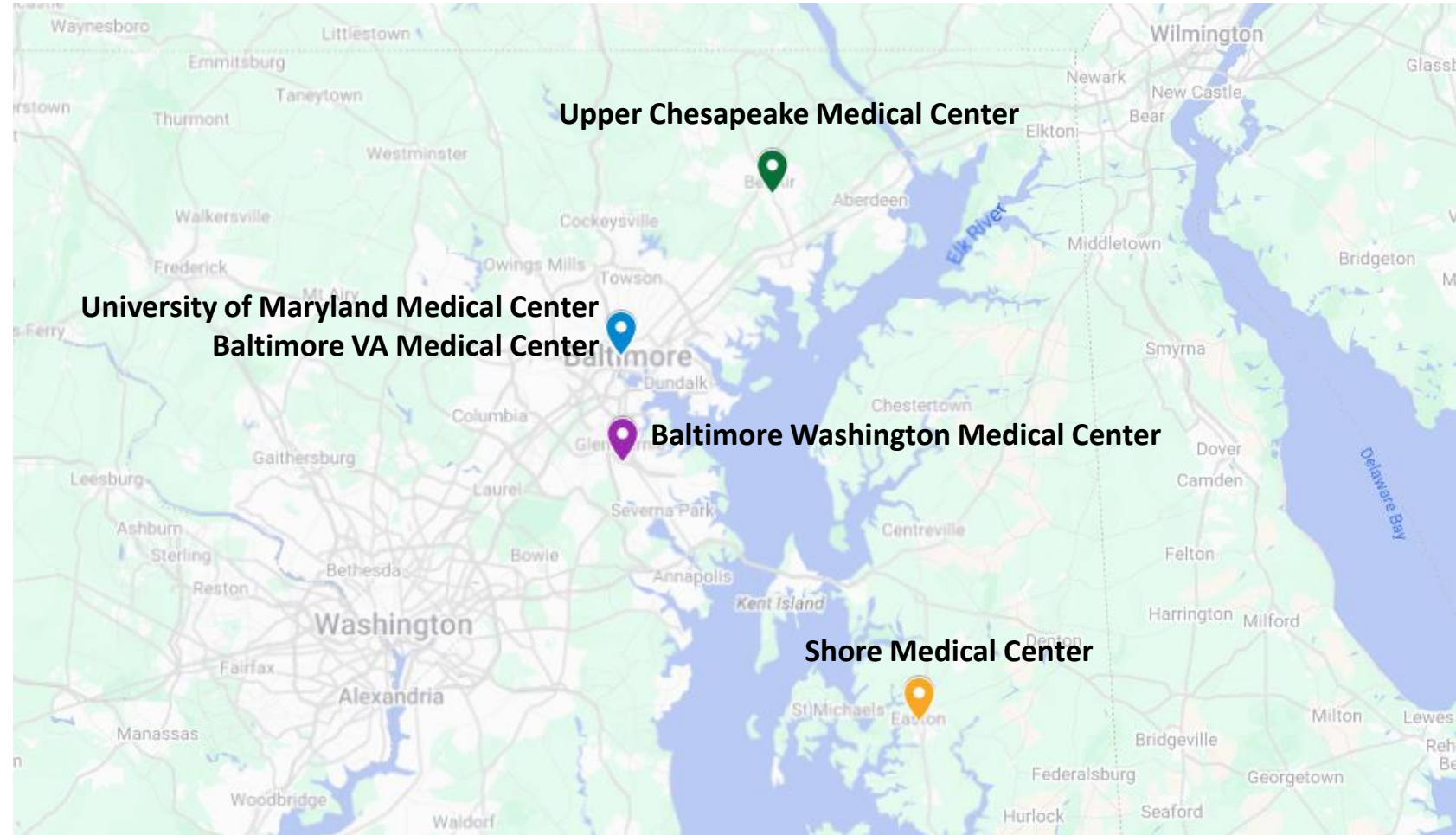
Multivariable logistic regression for predicting perioperative chemotherapy		
	OR (95% CI)	P-value
Age (ref ≤ 70)		
≥70	0.909 (0.827, 0.999)	<b>0.0490</b>
Sex (ref = Male)		
Female	1.054 (0.966, 1.150)	0.2341
Race (ref = White)		
Black	0.946 (0.811, 1.163)	0.1581
Other	1.550 (1.231, 1.953)	<b>0.0009</b>
Facility Type (ref=Community cancer program)		
Comprehensive community cancer program	1.090 (0.953, 1.247)	0.8348
Academic/ Research program	0.953 (0.822, 1.106)	0.6233
Integrated network cancer program	1.327 (1.143, 1.540)	<b>&lt;0.0001</b>
Insurance Status (ref = Private)		
Uninsured	0.734 (0.522, 1.031)	0.5155
Medicaid	0.770 (0.632, 0.939)	<b>0.0308</b>
Medicare	0.895 (0.808, 0.933)	<b>0.0472</b>
Other government insurance	0.735 (0.520, 1.038)	0.1127
Unknown	0.755 (0.496, 1.173)	0.7610
Rurality (ref = Metro)		
Urban	1.153 (1.023, 1.300)	<b>0.0418</b>
Rural	1.186 (0.878, 1.601)	0.1511
Great circle distance in miles	1.000 (0.999, 1.001)	0.8415
Income quartile (ref = <\$57,856)		
>\$57,857	0.900 (0.823, 0.983)	<b>0.0198</b>
Charlson-Deyo Score (ref = 0-1)		
2-3	1.049 (0.936, 1.175)	0.4141
Tumor Size (ref ≤ 3 cm)		
≥3 cm	0.825 (0.753, 0.905)	<b>&lt;0.0001</b>

# How?

## University of Maryland Pilot Evaluation

Feasibility of QI project was evaluated at 5 sites

- VA Medical Center
- Urban tertiary referral center
- 2 Suburban hospitals
- Rural hospital



# How?

## University of Maryland Pilot Evaluation

Utilization rates of intravesical chemotherapy after TURBT at all sites evaluated retrospectively

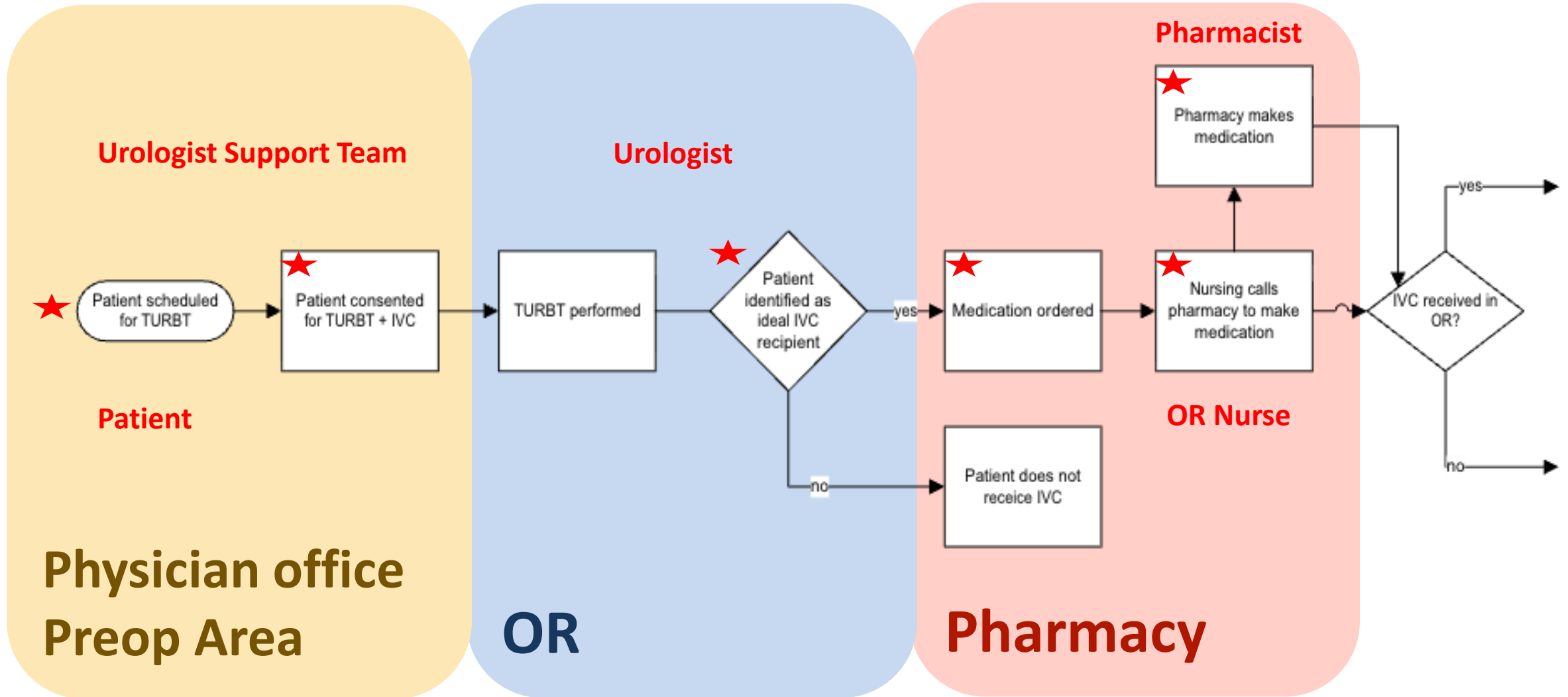
Highest volume urologists that perform the procedure identified (15 urologists)

IVC process evaluated and process mapped at each site

Stakeholders interviewed and Facilitators and Barriers identified

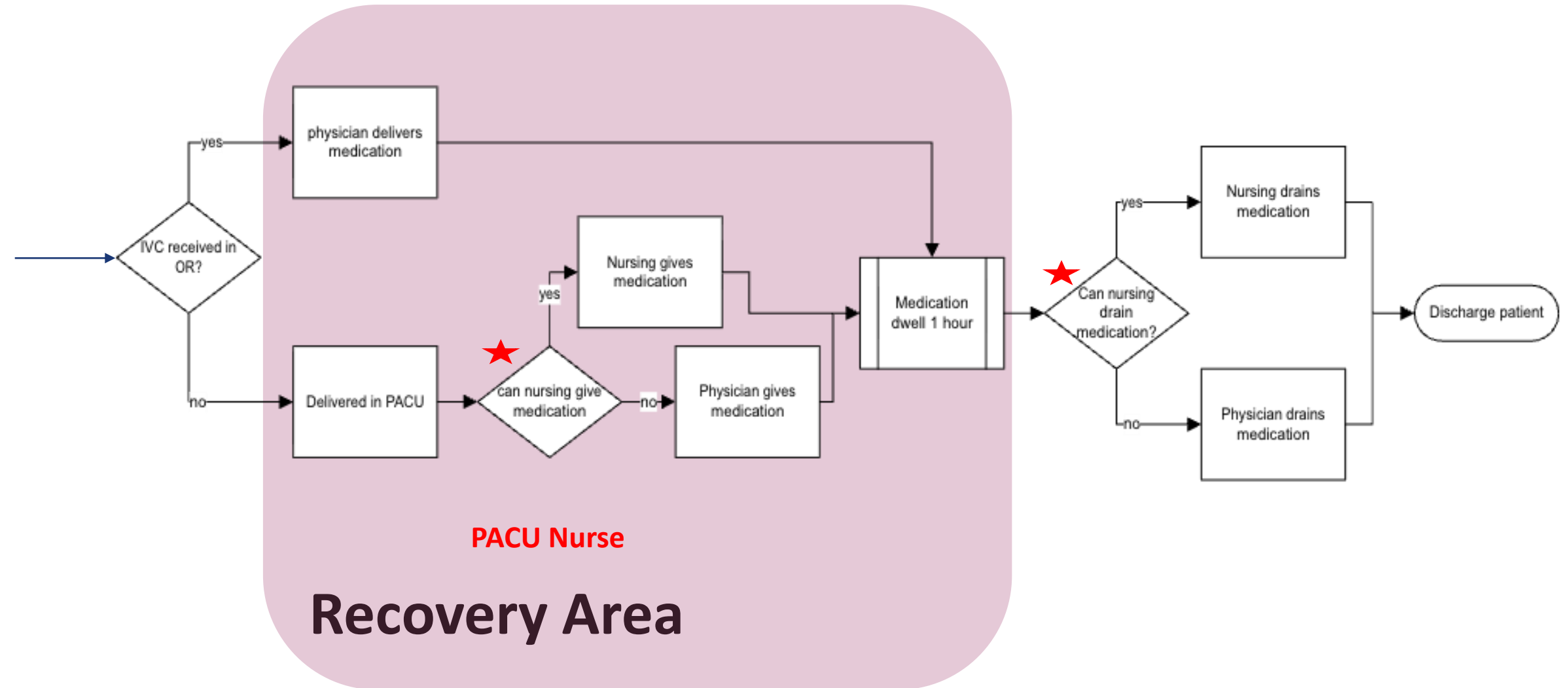
# How?

## University of Maryland Pilot Evaluation



# How?

## University of Maryland Pilot Evaluation



# University of Maryland Evaluation

Site	TURBTs	IVC	%IVC Given
VA Site	53	28	52%
Urban Academic Site	13	3	23%
Suburban Site #1	26	10	38%
Rural Site	60	41	68%
Suburban Site #2	4	0	0%
Total	156	82	52%

# University of Maryland Evaluation

Site	Urologist	TURBTs	IVC	%IVC Given
VA Site	1	20	13	65%
	2	8	4	50%
	3	11	6	55%
	4	2	0	0
	5	12	5	42%
Urban Academic Site	1	7	1	14%
	2	3	1	33%
	3	2	1	50%
Suburban Site #1	6	8	2	25%
	7	3	0	0
	8	4	1	25%
	9	7	5	76%
Rural Site	10	14	8	57%
	11	29	22	76%
	12	10	5	50%
	13	6	5	83%
Suburban Site #2	14	2	0	0
	15	2	0	0

# Facilitators and Barriers

Process Step	Facilitators	Barriers
Ordering	<ul style="list-style-type: none"> <li>Pre-operative electronic order set</li> <li>Standardized consent</li> <li>Case scheduled with planned IVC administration</li> </ul>	<ul style="list-style-type: none"> <li>Paper consent</li> <li>Paper intra-op orders</li> <li>Pharmacy must be called to prepare drug</li> <li>Safety concerns (e.g., mitomycin)</li> <li>Misconceptions about eligible patients</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>Pre-made dose available for every TURBT</li> <li>Medication ready in OR</li> <li>Standardized nurse-directed delivery protocol</li> <li>Residents available for instillation</li> </ul>	<ul style="list-style-type: none"> <li>Nursing reluctance to handle chemotherapy</li> <li>Delay until physician confirmation</li> <li>Medication delivered to PACU</li> </ul>
Drainage	<ul style="list-style-type: none"> <li>Chemotherapy-trained nurses handle catheter removal</li> </ul>	<ul style="list-style-type: none"> <li>Physicians/residents required to manage catheter</li> <li>Lack of chemotherapy disposal bin in PACU delaying catheter removal</li> </ul>



# What:

Measure	Measure Abbreviation
For patients with low grade Ta bladder cancer undergoing transurethral resection of bladder tumor, intravesical chemotherapy* is initiated within 24 hours of the procedure, or recommended. *chemotherapy within 24 hours of the transurethral resection assumed to be intravesical however the NCDB does not differentiate this from systemic chemotherapy	BLCT1

- *Programs will achieve a >20% increase of individual baseline, or at least **75% compliance** with BLCT1*
- Improve the quality of cancer care and patient outcomes by accomplishing delivery of intravesical chemotherapy within 24 hours of the procedure
- Assist programs to identify root cause challenges in achieving compliance
- Develop a standardized way for programs to assess and monitor their compliance
- Identify and implement successful and sustainable solutions

# What should the target compliance be?

**This is not a quality measure where 100% compliance is feasible or desired!**

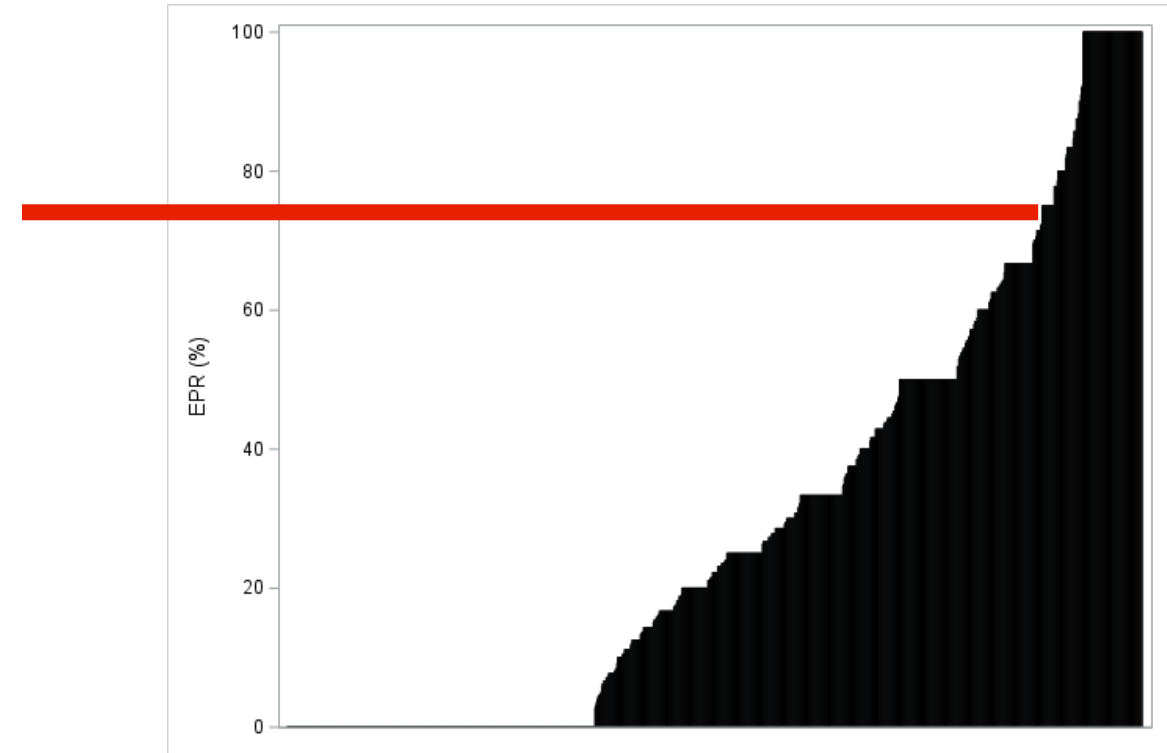
Legitimate reasons why intravesical chemotherapy is not given after resection:

- Concern for perforation
- Severe hematuria
- Extensive, deep resection
- Patient allergy

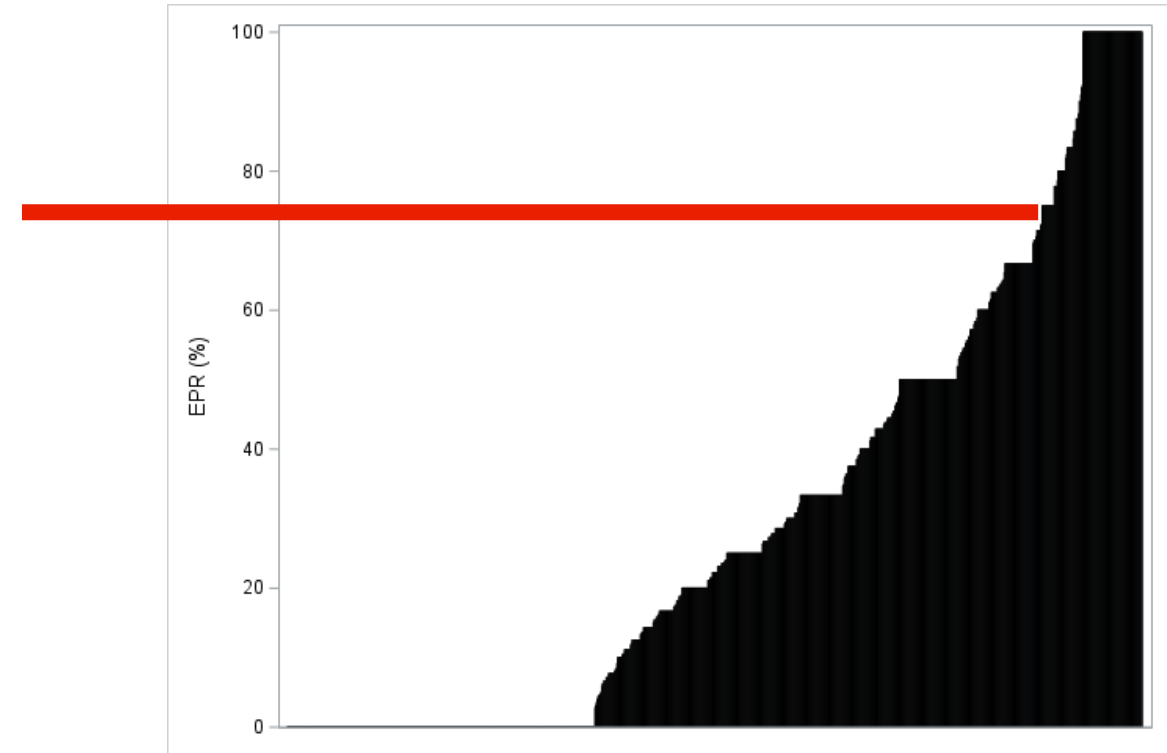
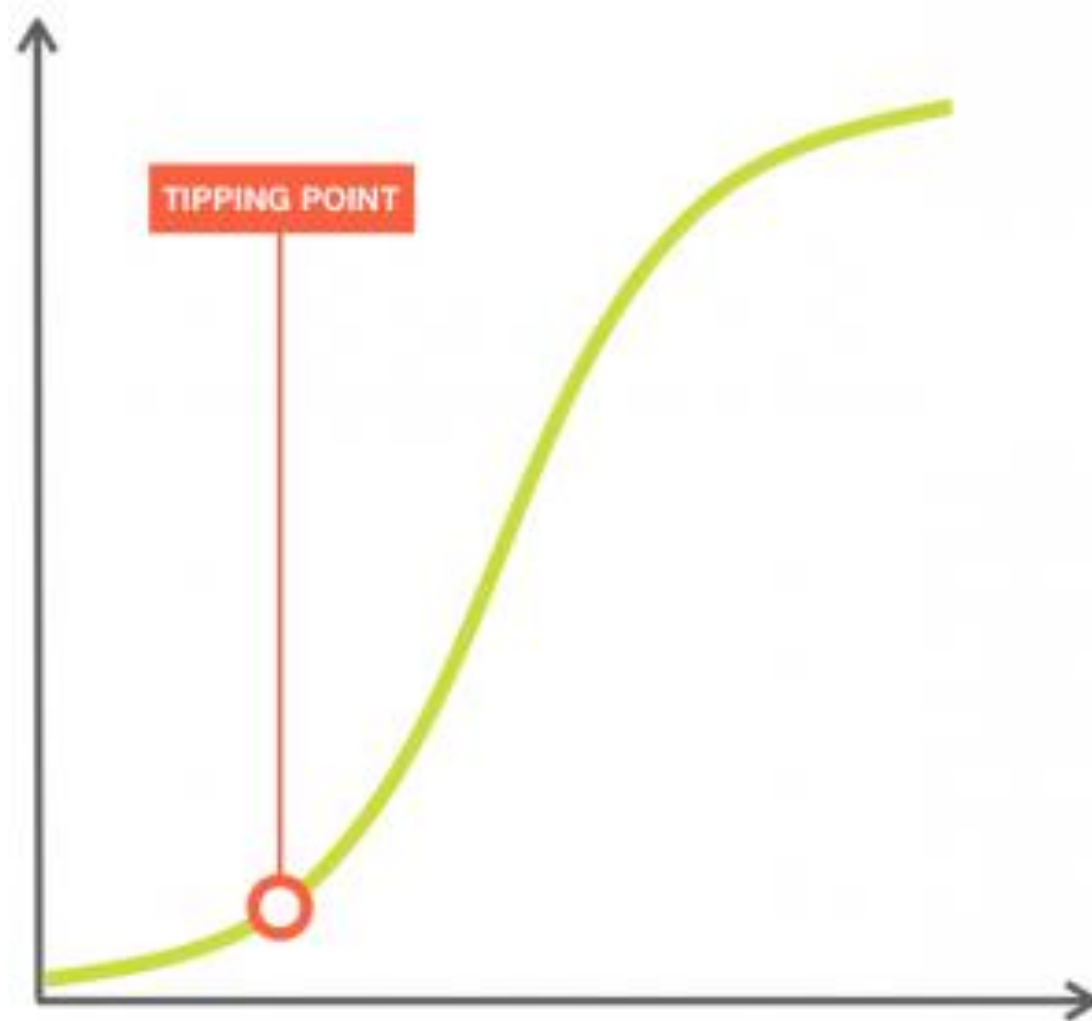
**These cases should be excluded by coding criteria however!**

# What should the target compliance be?

Compliance	#/% of hospitals
1-10%	9 (2.79%)
11-25%	86 (26.63%)
26-50%	103 (31.89%)
51-75%	34 (10.53%)
76-90%	12 (3.72%)
91-100%	79 (24.46%)



# What should the target compliance be?



# What should the target compliance be?

**We chose 75% as a target compliance,  
or at least 20% improvement from your baseline,  
whichever is easier to accomplish**

- In 2023, 87.5% of CoC hospitals had <75% compliance
- 57% of the hospitals had a 0% rate of delivery
- Amongst hospitals where at least one IVC has been given, 71.8% have <75% rate of compliance

# Project Details

Eileen Reilly

Quality Improvement Manager, Cancer Programs

# Details

- Who can participate?
  - Any CoC accredited program
  - Must have completed >10 TURBT procedures in calendar year 2024
  - Must have a pharmacy on site or access and ability to provide intravesical chemotherapy instillation with gemcitabine or mitomycin.
  - Be willing to submit data on cases via RCRS
  - Current BLCT1 measure offers opportunity for improvement for many hospitals
  - Must have support of cancer committee and pharmacy
    - Core team is formed (at least 3 people)
      - Physician champion (CLP, urologist, or other individual with knowledge of the procedure)
      - Clinical project leader
      - Oncology Data Specialists
      - Nursing staff member
      - Pharmacy team member

# Why Participate?

- Provide better guideline concordant patient care
- Increase compliance with QM BLCT1
- Share challenges and successes with other programs across the country
- Earn credits for CoC Standards
  - PENDING
    - 7.2 (Guideline Concordant Care) and
    - 7.3 (Quality Improvement)) for calendar year 2026



# What will we be doing?

## Plan:

- Form a QI team
- Review programmatic baseline data, audit records to determine if recommended guidelines are followed
- Create current state process map

## Do:

- Conduct a root cause analysis
- Develop and implement plan to address root cause
- Iterate, adapt, as needed
- Submit data

## Study:

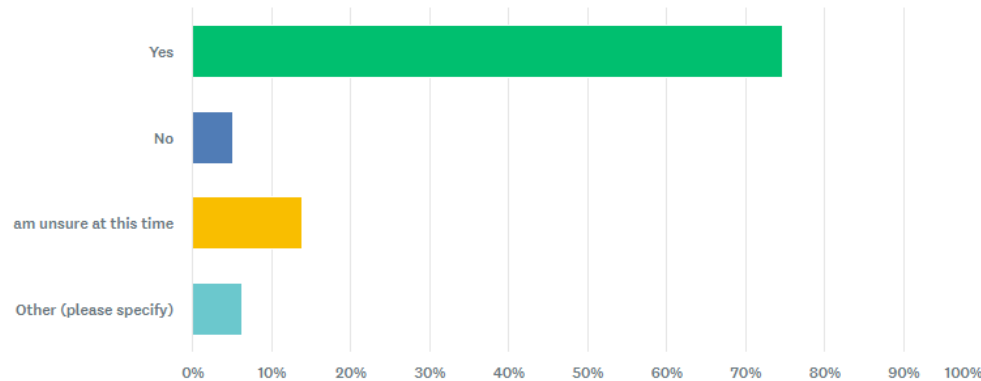
- Review data
- Review implementation plan

## Act:

- Share successes and challenges with other programs
- Codify changes (adapt, adopt, or abandon)
- Continue to monitor data
- Develop sustainability plan

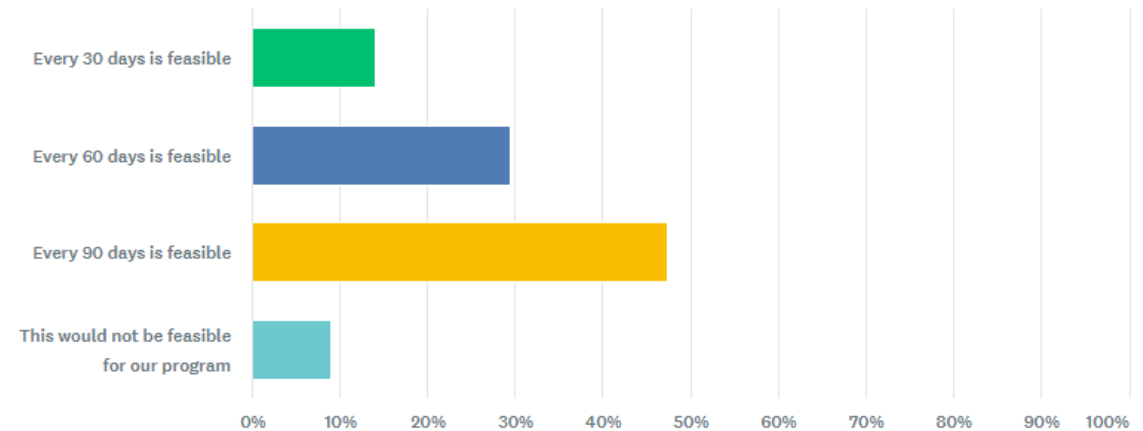
# Data Collection Feedback

- Is it feasible for your program to prioritize abstracting and entering data on patients that meet criteria for BLCT1 sent to RCRS?



- Is using REDCap an option?
  - 89% yes, for me or someone else at our program

- How quickly could these cases be abstracted?



- Barriers:
  - Timeliness (of case identification, of complete info in EHR, timely staging)
  - Staffing (and lack of time, backlog of cases, shortages etc)
  - Buy in from urologists and others
  - Bladder caseload
  - Contracted staff complying with guidelines, accessing records from these physicians

# Data (enter into RCRS) \*or REDCap

Case Eligibility Criteria			
Diagram Reference	Assessment	STORE Item	STORE Codes
1	Diagnosis of bladder cancer	Primary Site	C67.0 – C67.9
2	Diagnosed in 2018 or later	Date of Initial Diagnosis	Dx Year $\geq$ 2018
3	Adult patient at diagnosis	Age at Diagnosis	018 – 120
4	First or only tumor diagnosis	Sequence Number	00, 01
5	Tumors which can be staged according to AJCC 8 <sup>th</sup> edition	Histology	8000, 8010, 8020, 8031, 8041, 8070, 8082, 8120, 8122, 8130, 8131, 8140
6	Invasive or in-situ tumors	Behavior Code	2, 3
7	All or part of the first course of treatment was performed at the reporting facility	Class of Case	10 – 22
8	Low grade	Grade Clinical	L
9	Select Clinical AJCC TaN0M0 cancer	AJCC TNM Clin T	Clinical: Ta, N0, M0  (assumed missing Clinical M = cM0)
		AJCC TNM Clin N	
		AJCC TNM Clin M	
10	Transurethral resection performed at any facility	Surgical Procedure of Primary Site	<i>For Dx Years 2018 – 2022:</i> Surgical Procedure of Primary Site = 20, 22, 27
		Rx Summ—Surg 2023	<i>For Dx Years <math>\geq</math> 2023:</i> Rx Summ—Surg 2023 = A200, A220, A270
11	Exclude if chemotherapy is not recommended	Chemotherapy	<i>Include:</i> Chemotherapy $\neq$ 82

# DRAFT Data Collection Strategy

	Eligible Patients	Data Due
Baseline	March 1-May 31 2024*	March 30
Collection 2	March 1-May 31, 2026	June 30
Collection 3	June 1-August 31, 2026	Sept 30
Collection 4	Sept 1-Nov 2026	Dec 31

If 2024 data is fully abstracted, sent to RCRS- nothing will be needed for this due date

# Key Dates

- **DUE February 15, 2026:**
  - Intent to participate survey due
  - Link and PDF found on the project website
  - Submission of survey and requirement criteria ensures automatic participation
- **March 13, 2026, 12pm ET:** Kickoff call

# FAQ

- What if we don't hit the goal of increase of >20% of more?
- Do we need IRB approval?
- Do patients need to sign a participation agreement?
- Does this count for clinical trial accrual (9.1?)
- We are at 90% for the BLCT1 measure. Should we still participate?
- How do I know which patients have low vs high grade bladder cancer? How do I select the correct patients for this project?
- We don't have a pharmacy on site. Can we still participate?
- We do not due concurrent data abstraction. Should we still participate?
- What do we need to do to show we are participating?
- What happens if we begin but drop out before project completion?
- Is this project available for programs undergoing initial accreditation?



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