



When and How to Treat UTI

Section 1: When to Treat



UTI Toolkit – Module 4a

Narration by:

Paula Hardgrove, MD CMD

Wisconsin Association of Medical Directors



Content developed in partnership with the Wisconsin Healthcare-Associated Infections in Long-Term Care Coalition

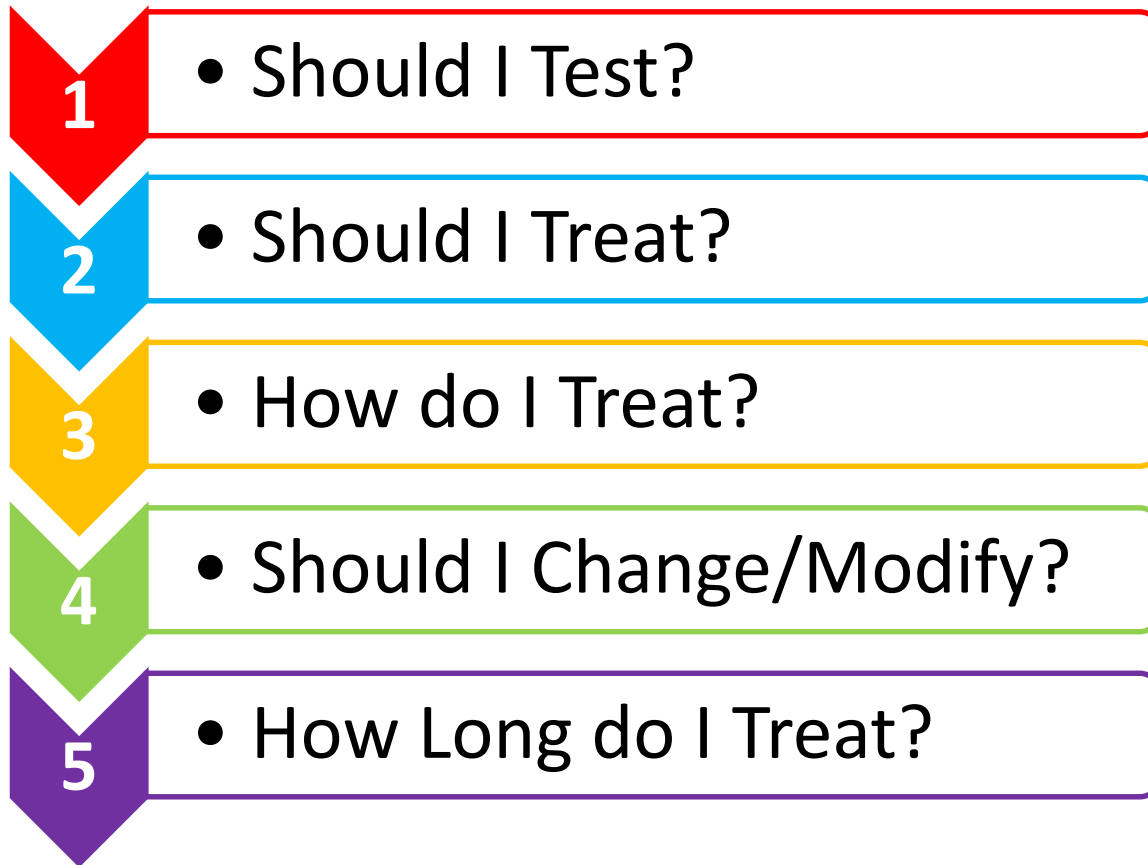


Wisconsin Partnership Program
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SCHOOL OF MEDICINE AND PUBLIC HEALTH

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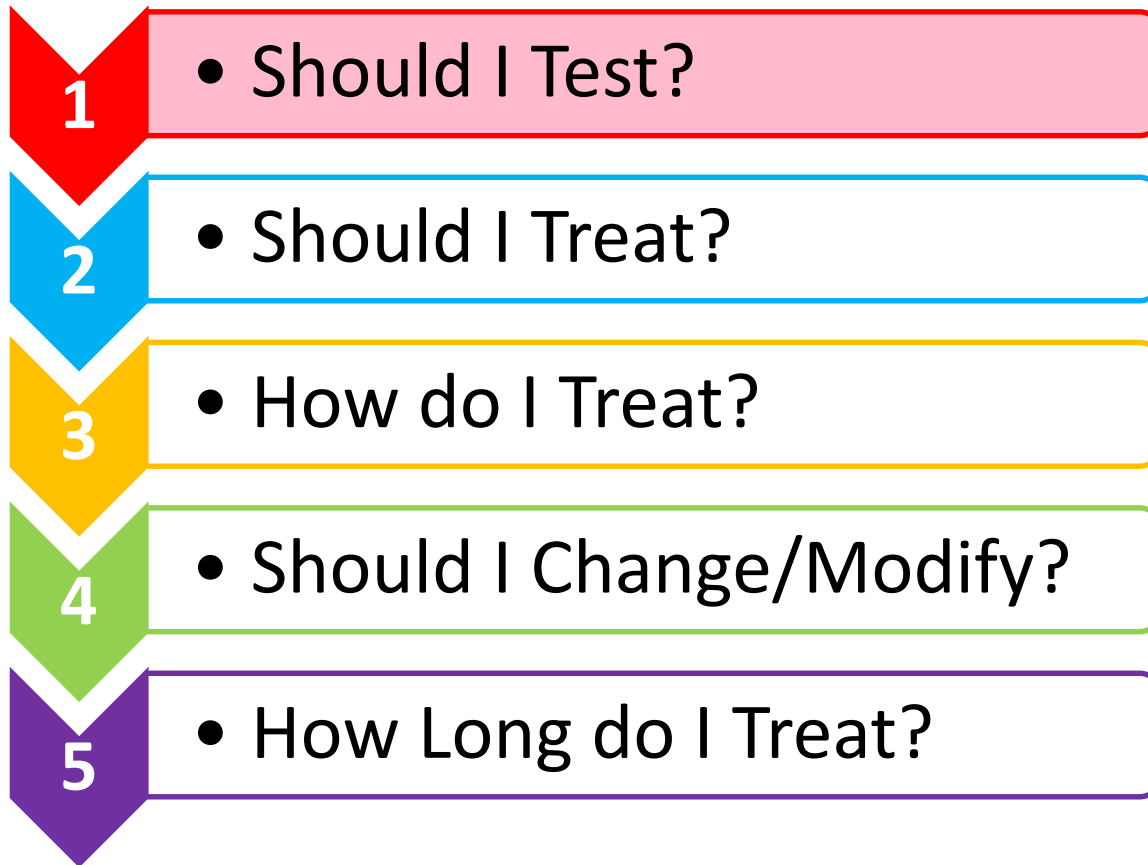


There are Five Moments of Antibiotic Decision-Making



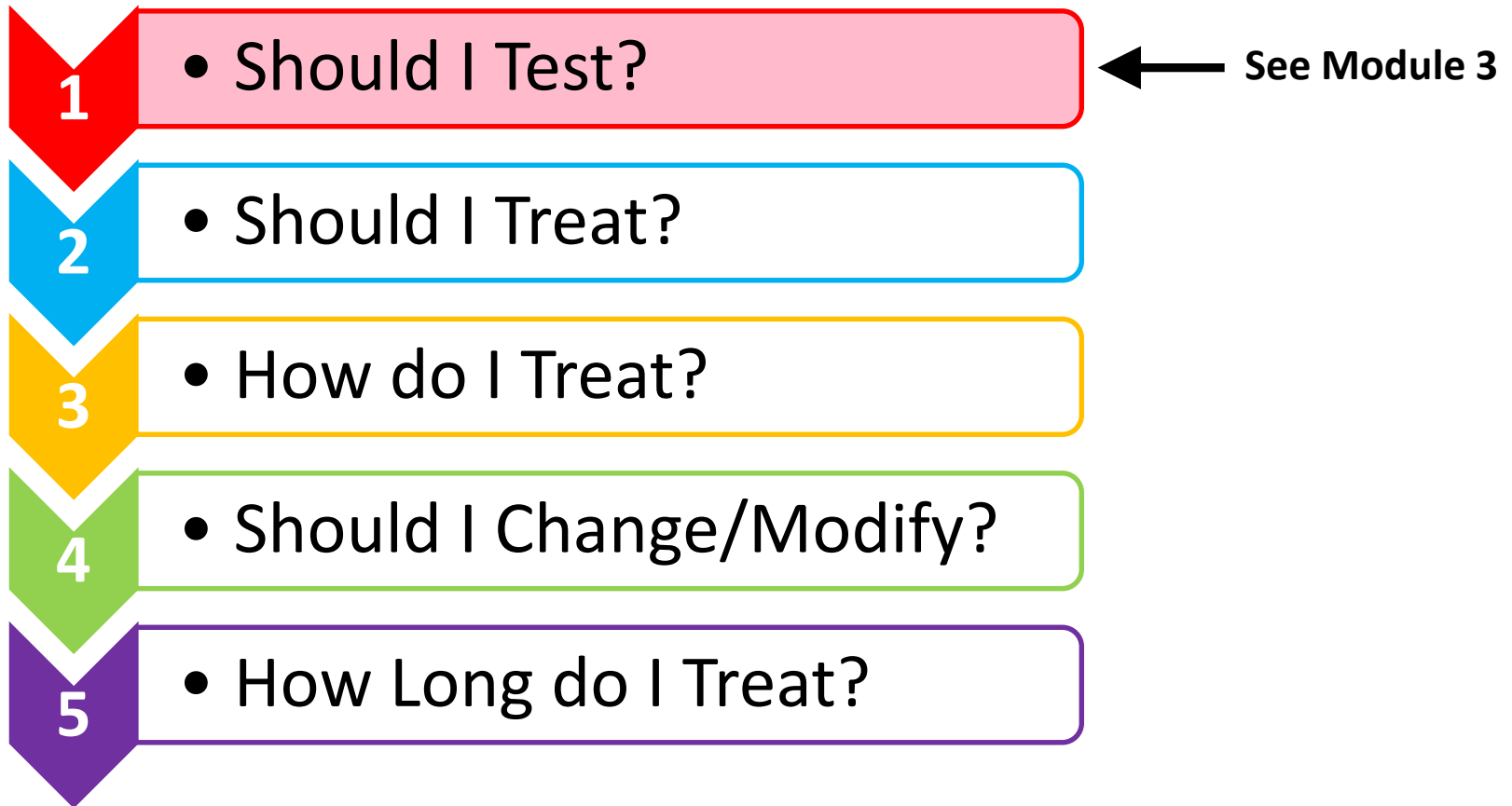


There are Five Moments of Antibiotic Decision-Making



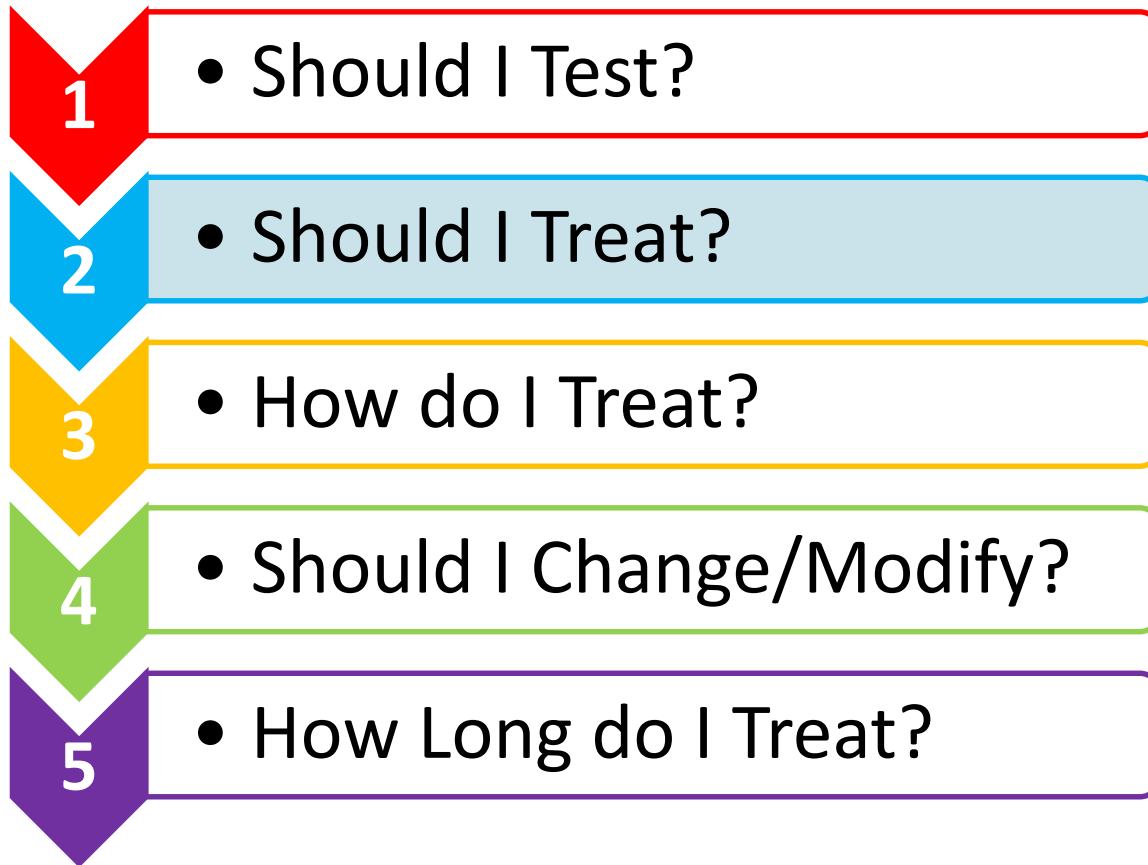


There are Five Moments of Antibiotic Decision-Making





There are Five Moments of Antibiotic Decision-Making





When to test?

It's the same clinical decision

When to Treat?





NO SYMPTOMS OF UTI

- Don't test or culture the urine
- Don't treat with antibiotics
- Don't treat even if urine tests are abnormal

ISOLATED NON-LOCALIZING SIGNS/SYMPTOMS

- Initiate active monitoring temporary care plan*
- Don't test the urine and don't treat with antibiotics initially
- Consider testing and treatment with antibiotics if symptoms not improving or localizing signs/symptoms develop

LOCALIZING SIGNS/SYMPTOMS

- Test if symptoms are severe or not resolving during monitoring
- Evaluate need for immediate antibiotic therapy and/or transfer to higher level of care if warning signs are present

NON-LOCALIZING SIGNS/SYMPTOMS

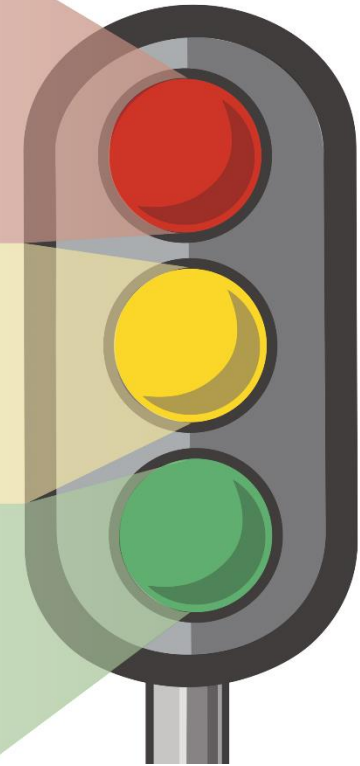
- Behavior changes
- Functional decline
- Mental status change
- Falls
- Restlessness
- Fatigue
- "Not being her-himself"

LOCALIZING URINARY SIGNS/SYMPTOMS

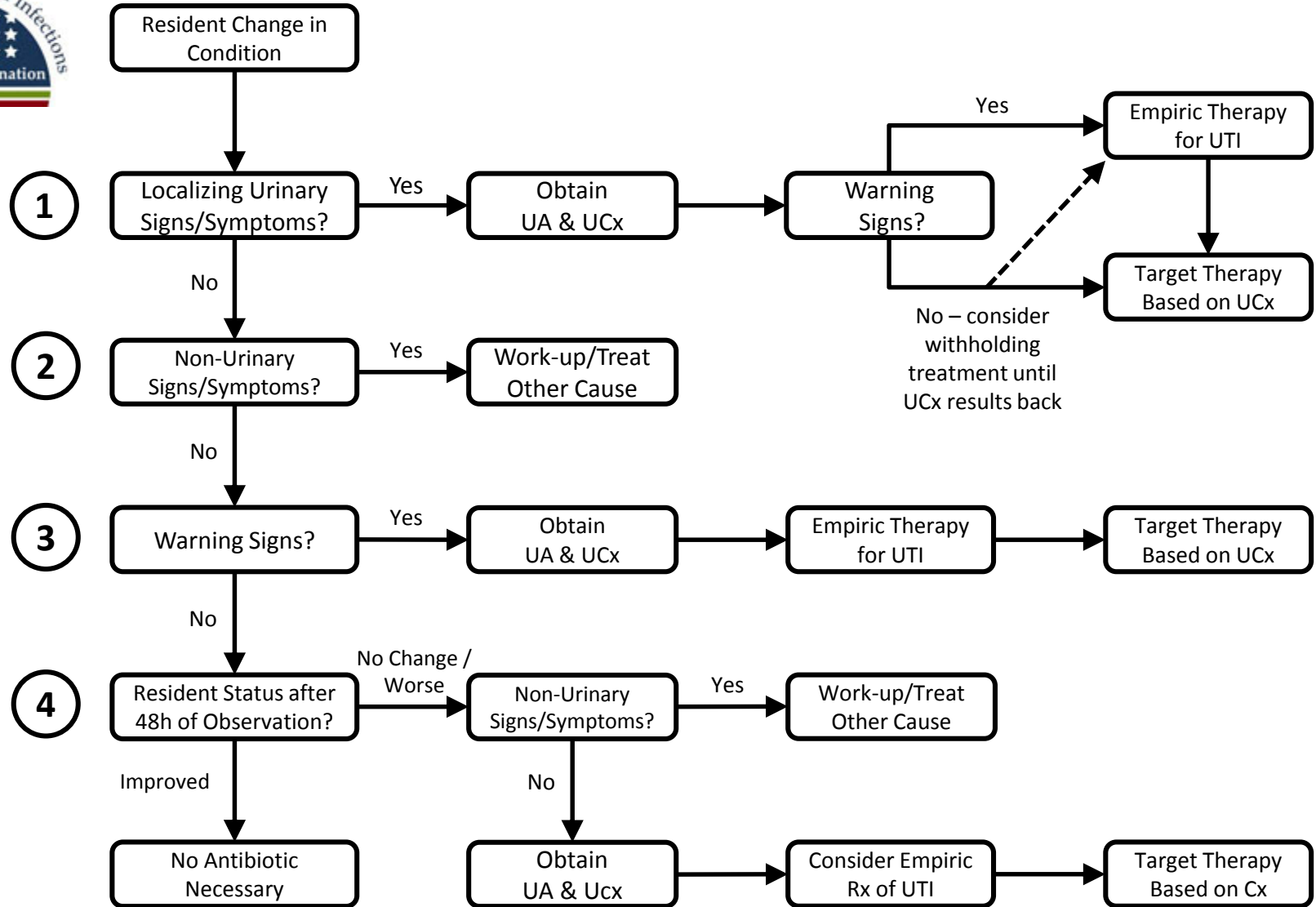
- Acute dysuria
- New or worsening urgency
- New or worsening incontinence
- Gross hematuria
- Suprapubic pain
- Costovertebral angle pain
- New scrotal/prostate pain
- Urethral purulence

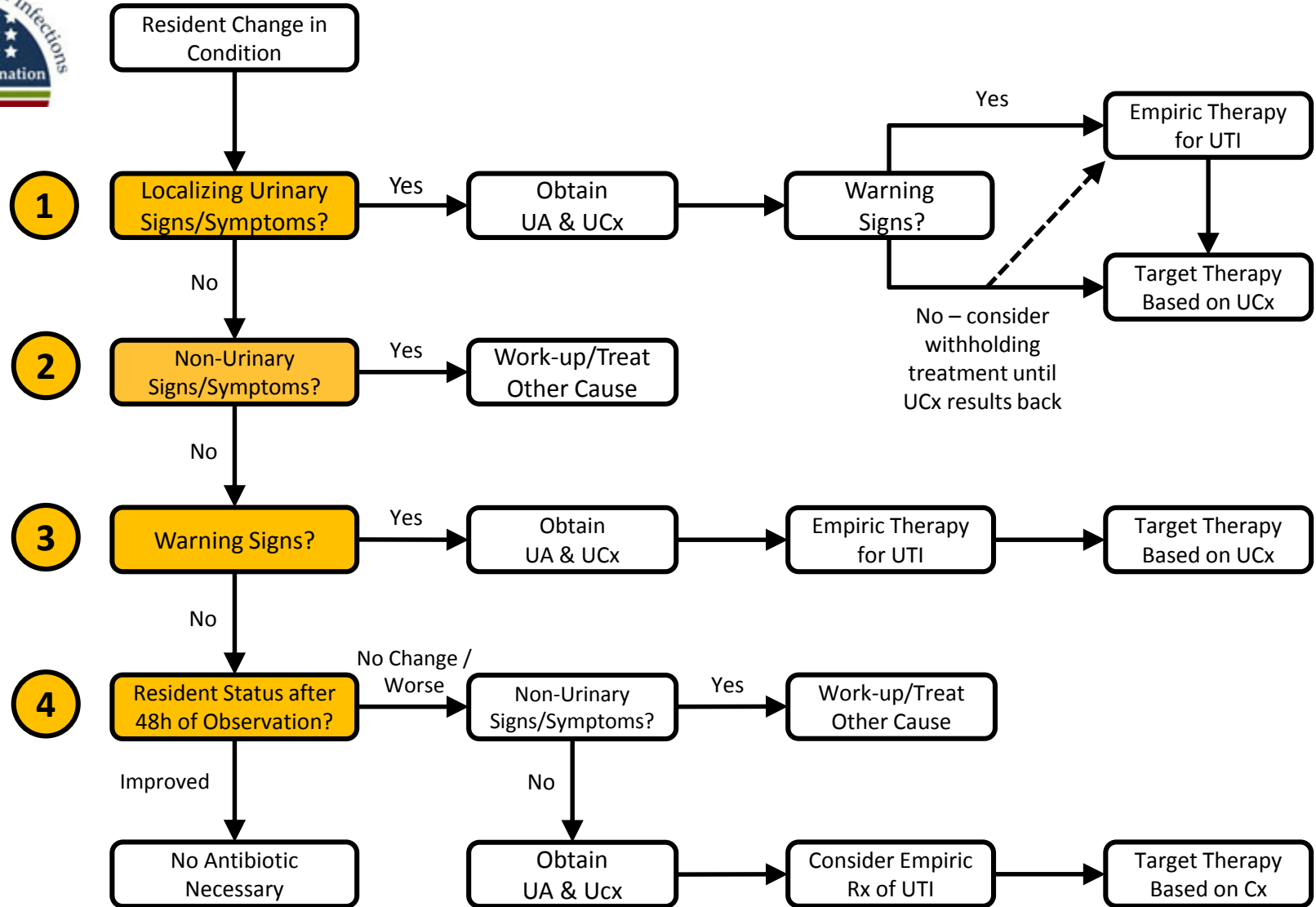
WARNING SIGNS

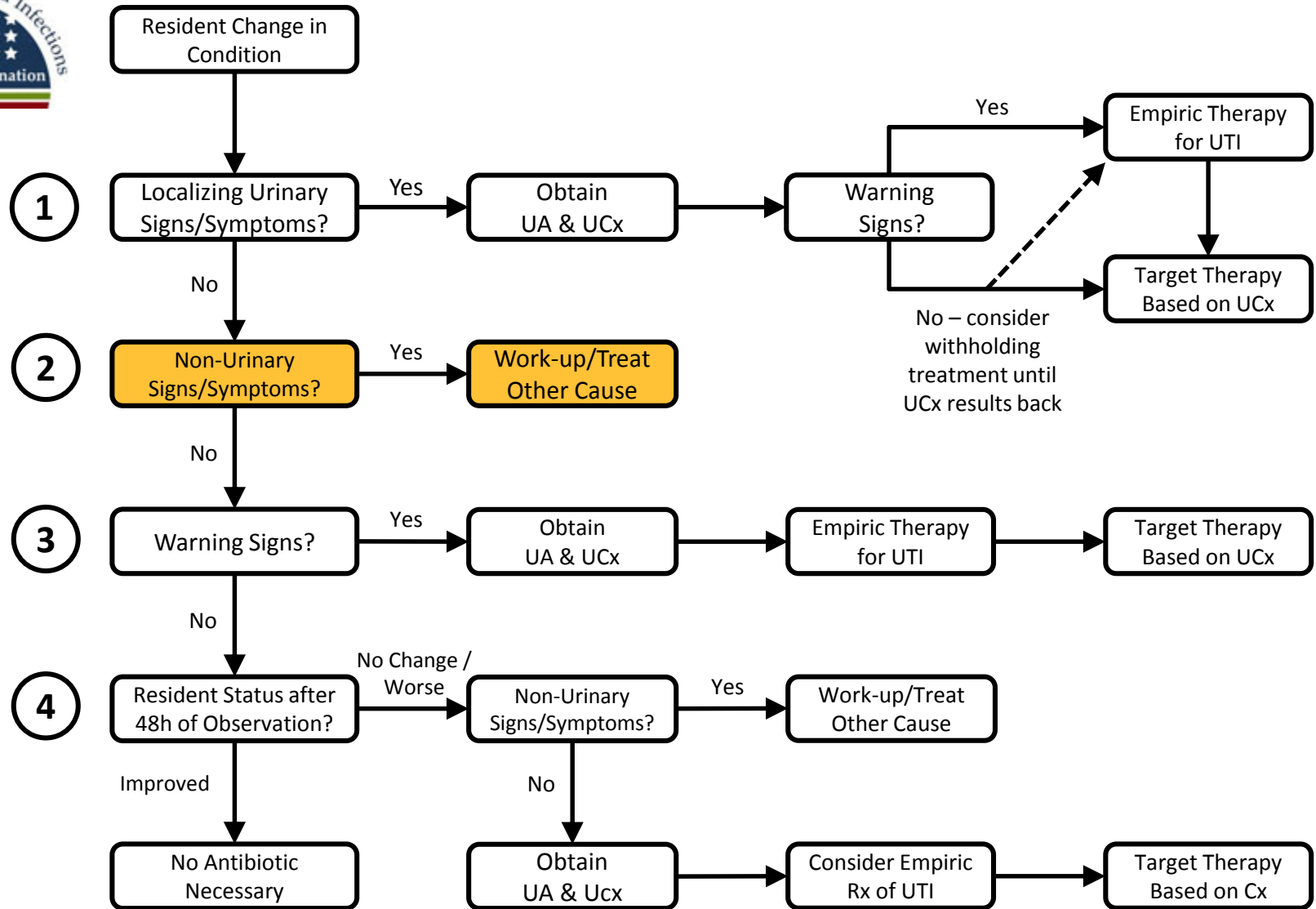
- Fever
- Clear-cut delirium (altered level of consciousness, disorganized thinking, psychomotor retardation)
- Rigors (shaking chills)
- Hemodynamic instability (hypotension)
- Tachycardia

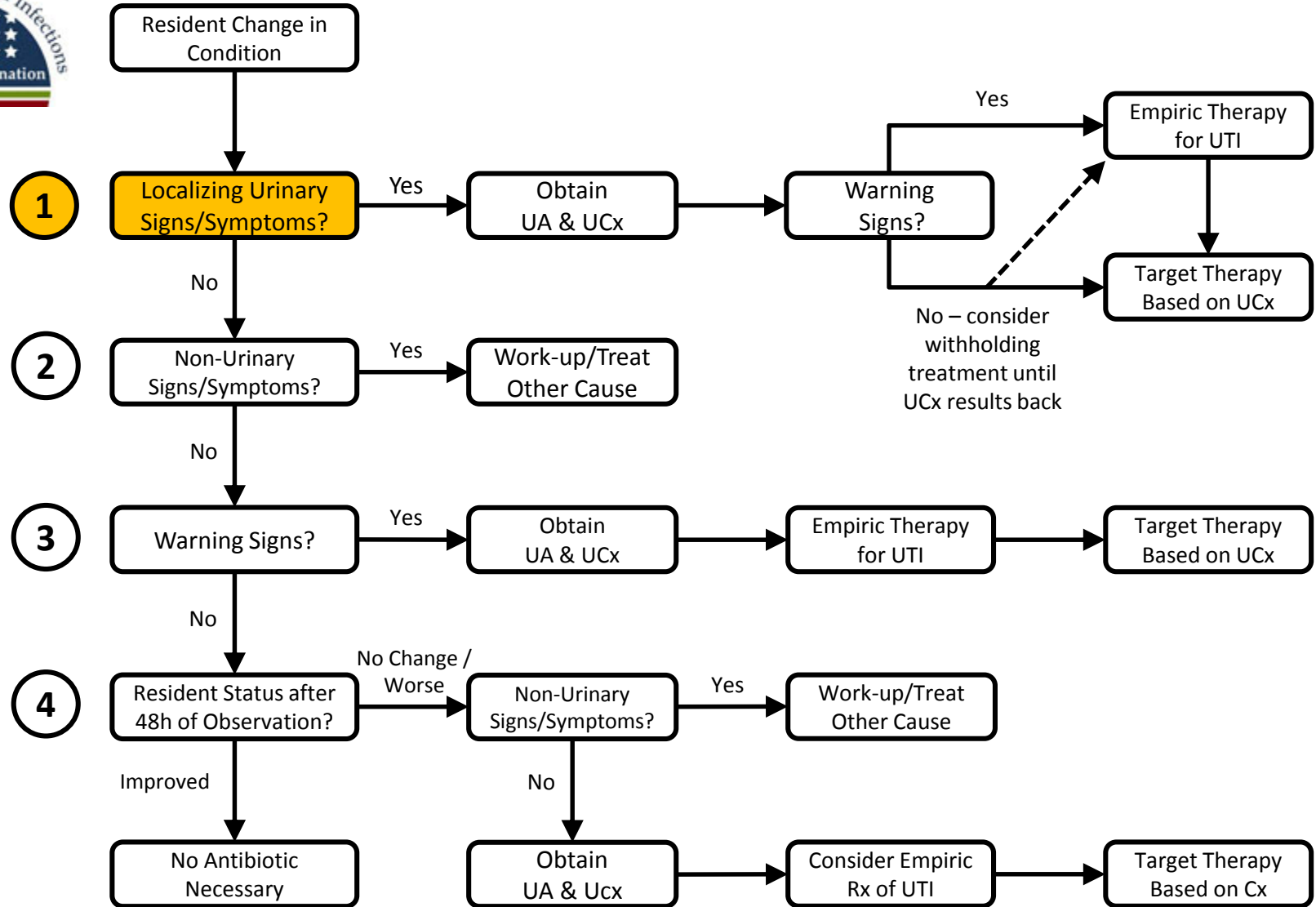


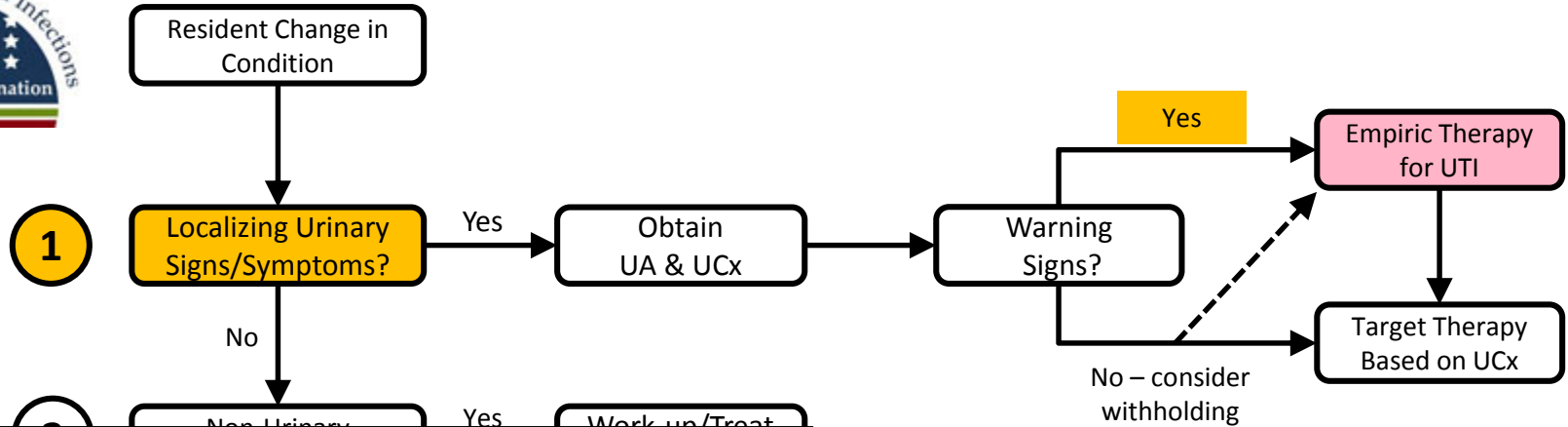
* See slide #20 for an example of an active monitoring temporary care plan.









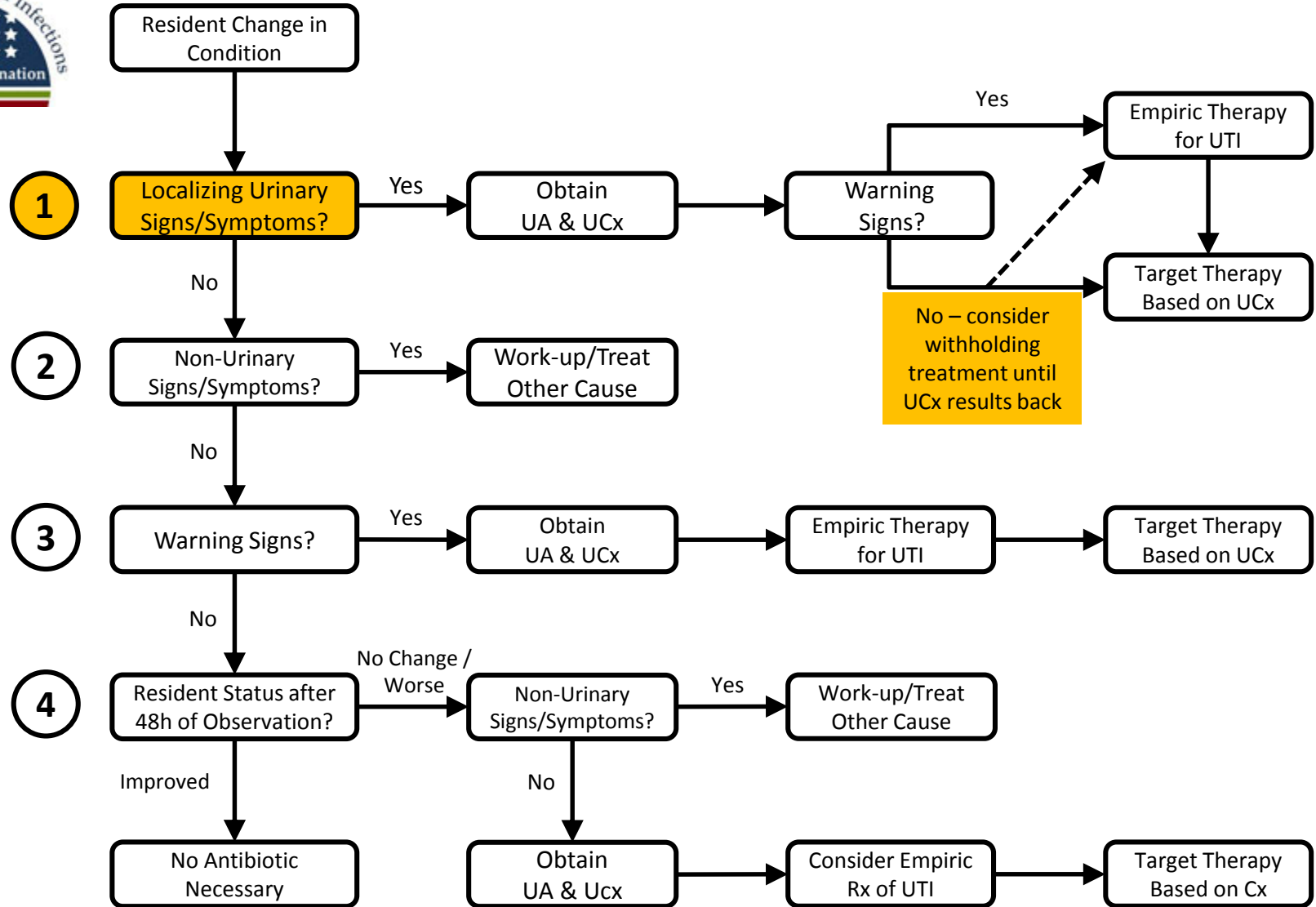


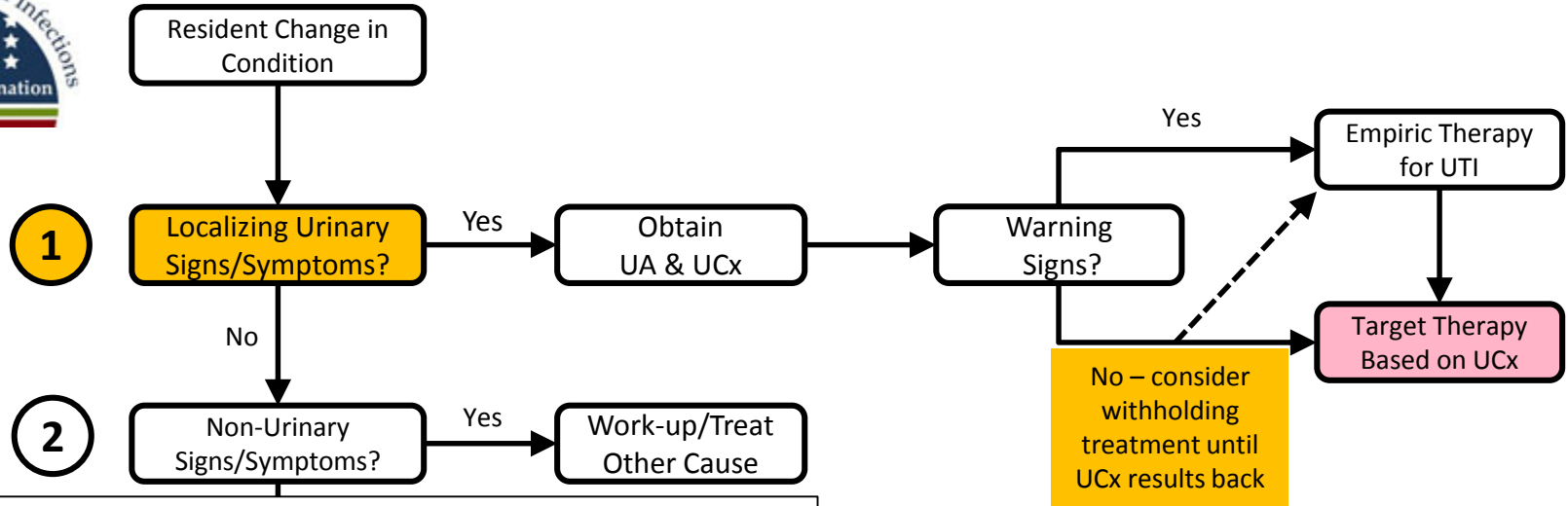
If a resident has:

- Localizing urinary symptoms AND
- Warning signs*

START ANTIBIOTICS IMMEDIATELY
 (change antibiotics based on results of urine culture when available)

- * Warning Signs**
- Fever
 - Clear-cut delirium (altered level of consciousness, disorganized thinking, psychomotor retardation)
 - Rigors (shaking chills)
 - Hemodynamic instability (hypotension)
 - Tachycardia
- Rx of UTI Based on Cx





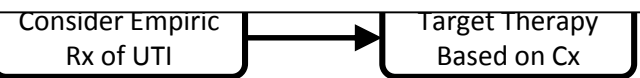
If a resident has:

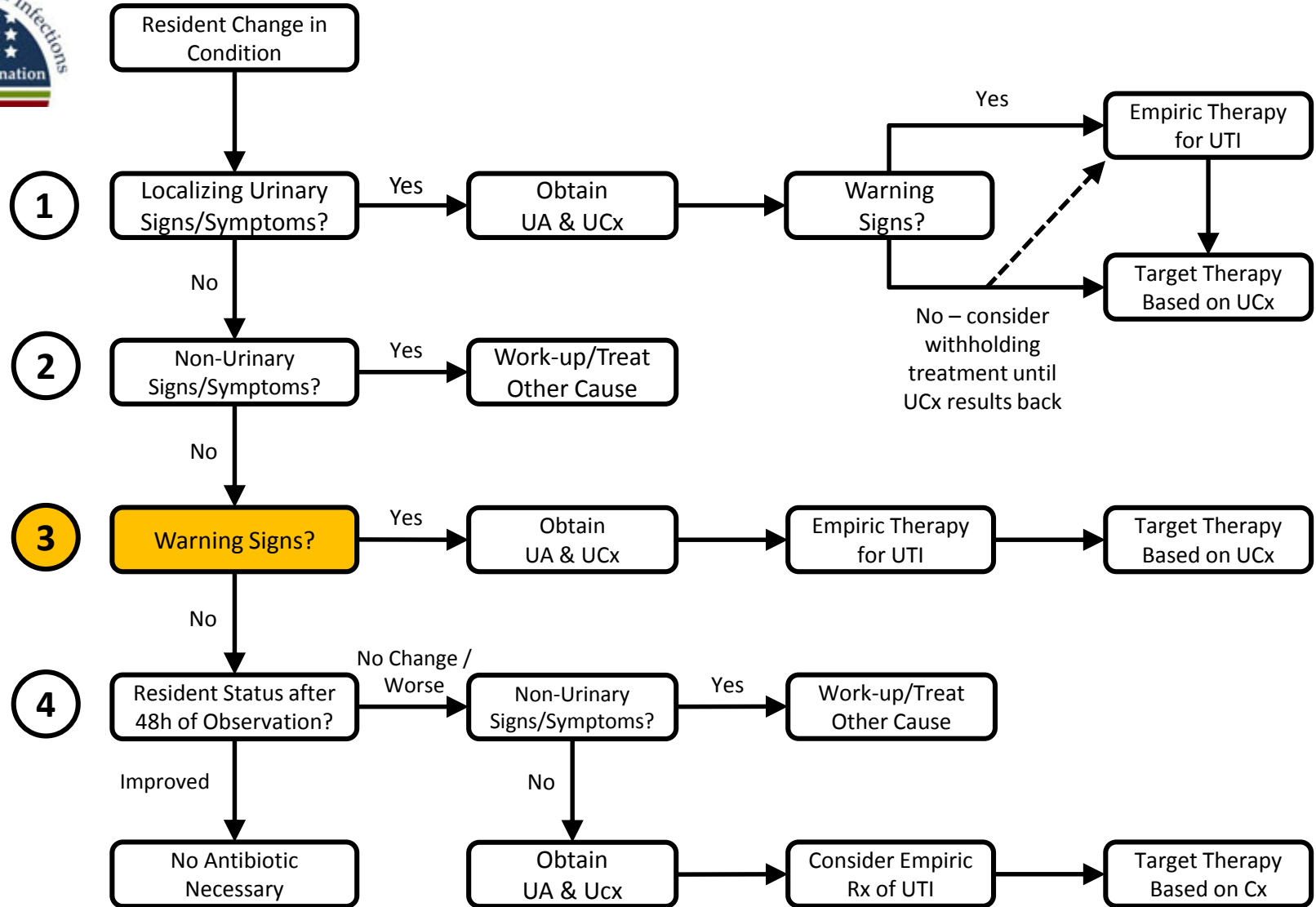
- Localizing urinary symptoms ONLY
- No Warning signs

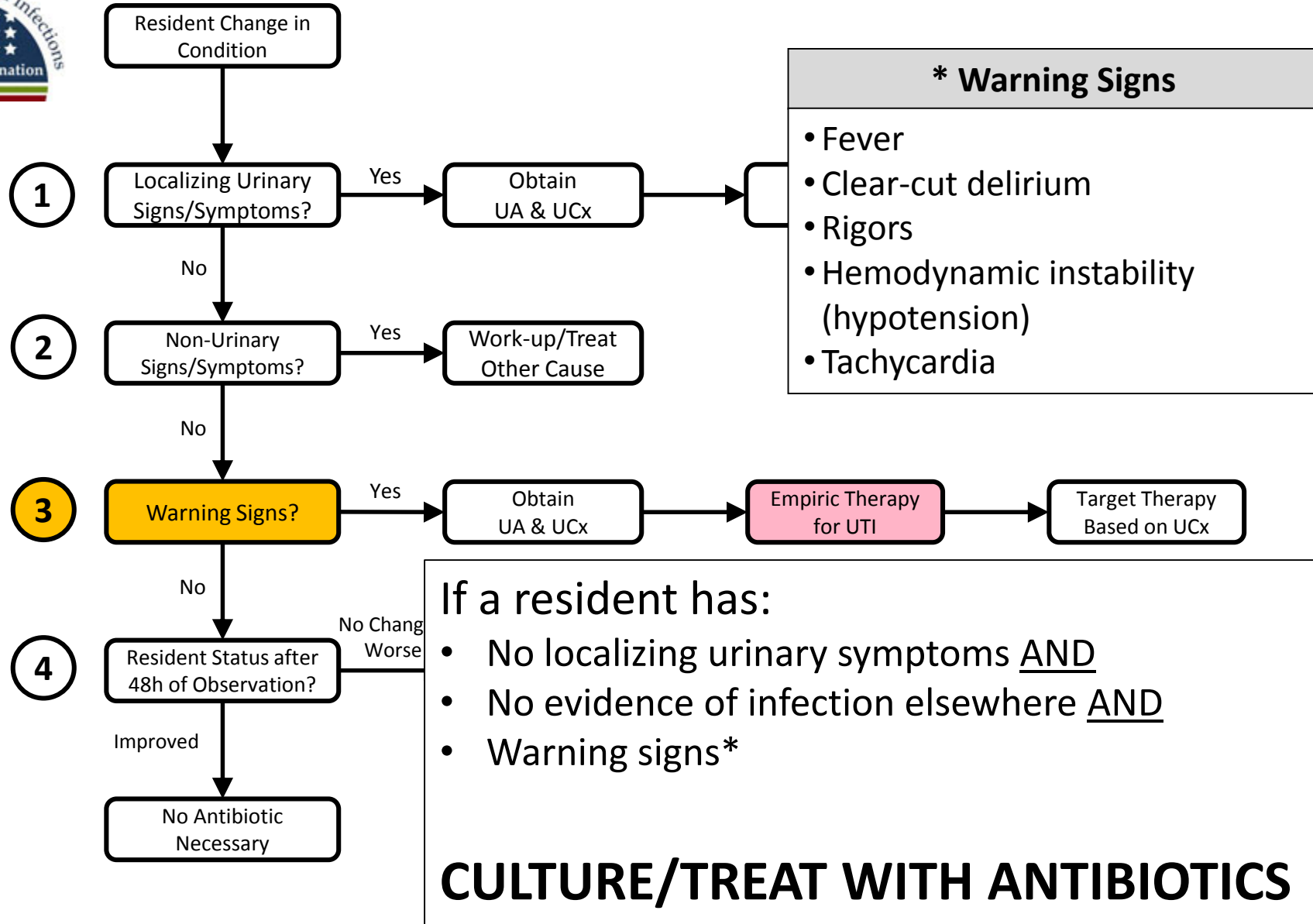
CONSIDER WAITING FOR CULTURE RESULTS BEFORE STARTING ANTIBIOTICS

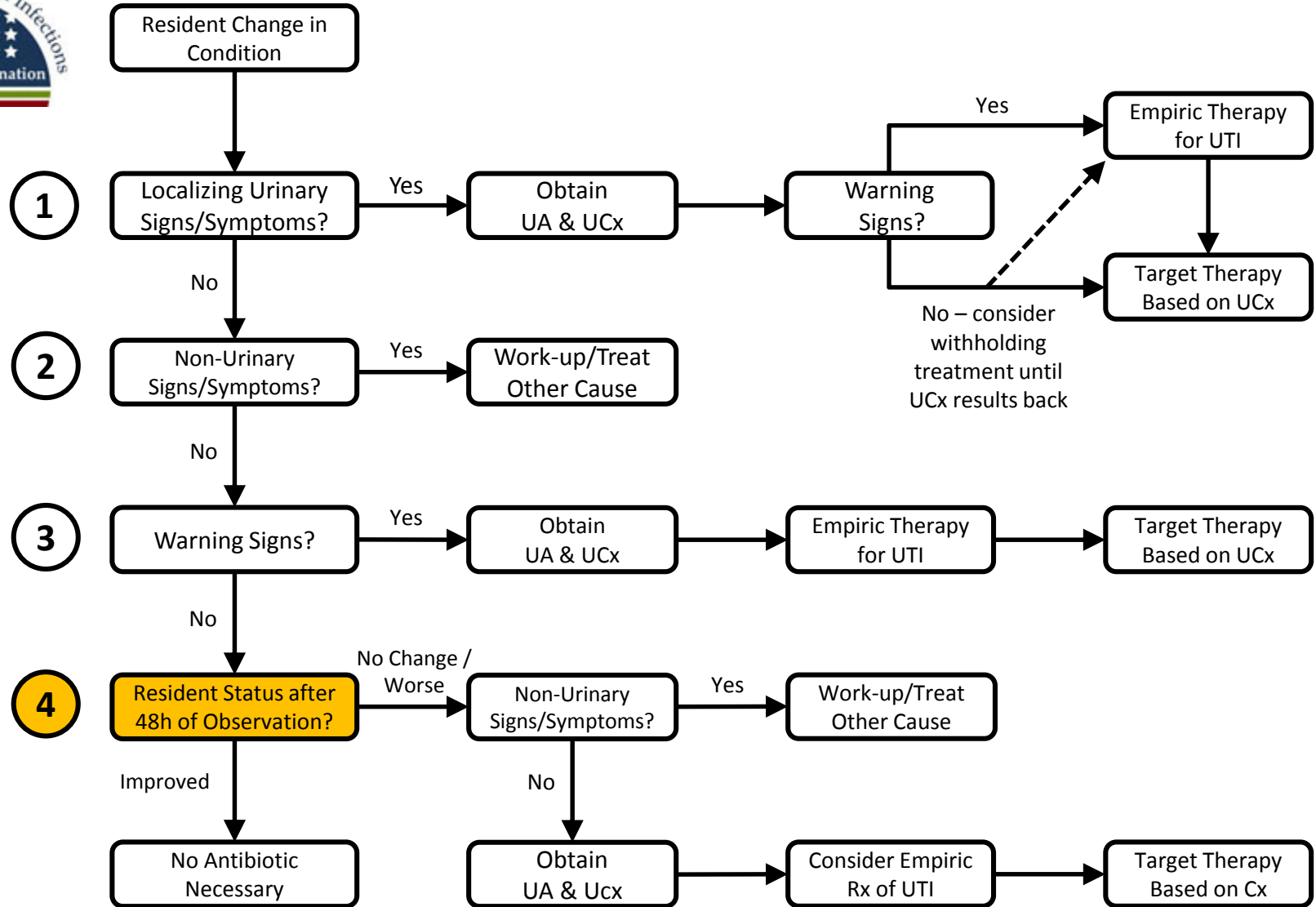
Benefits of Waiting

- Generally safe
- Avoids treatment with ineffective antibiotics (when resistance present)
- Allows use of narrow spectrum antibiotics (because you know what you are treating)









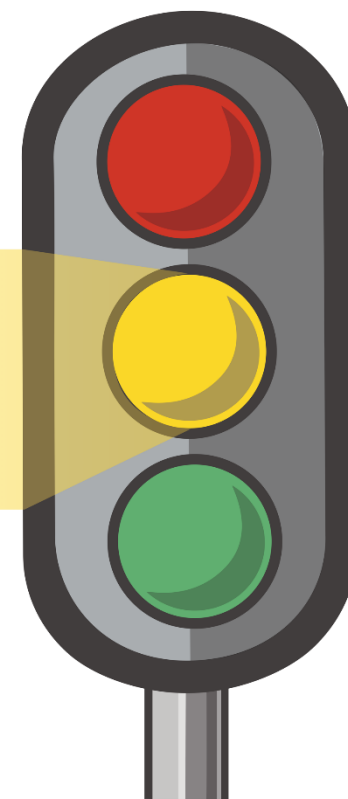


Isolated Non-Localizing Signs/Symptoms = Active Monitoring

NON-LOCALIZING SIGNS/SYMPTOMS	
• Behavior Changes	• Restlessness
• Functional Decline	• Fatigue
• Mental Status Changes	• “Not being her-himself”
• Falls	

ISOLATED NON-LOCALIZING SIGNS/SYMPTOMS

- Initiate active monitoring temporary care plan*
- Don't test the urine and don't treat with antibiotics initially
- Consider testing and treatment with antibiotics if symptoms not improving or localizing signs/symptoms develop



* See slide #20 for an example of an active monitoring temporary care plan.



What is an Active Monitoring Temporary Care Plan*

Active Monitoring Tracking Form

Resident Name _____ MRN _____

Facility _____ DOB _____ Room Number _____

- Obtain vital signs (BP, Pulse, Resp Rate, Temp, Pulse Ox) every ____ hours for ____ days.
- Record fluid intake each shift for ____ days.
- Notify physician if fluid intake is less than _____ cc daily.
- Offer resident ____ ounces of water / juice every ____ hours.
- Notify physician, NP, or PA if condition worsens, or if no improvement in ____ hours.
- Obtain the following blood work _____.
- Consult pharmacist to review medication regimen.
- Contact the physician, NP, PA with an update on the resident's condition on _____.

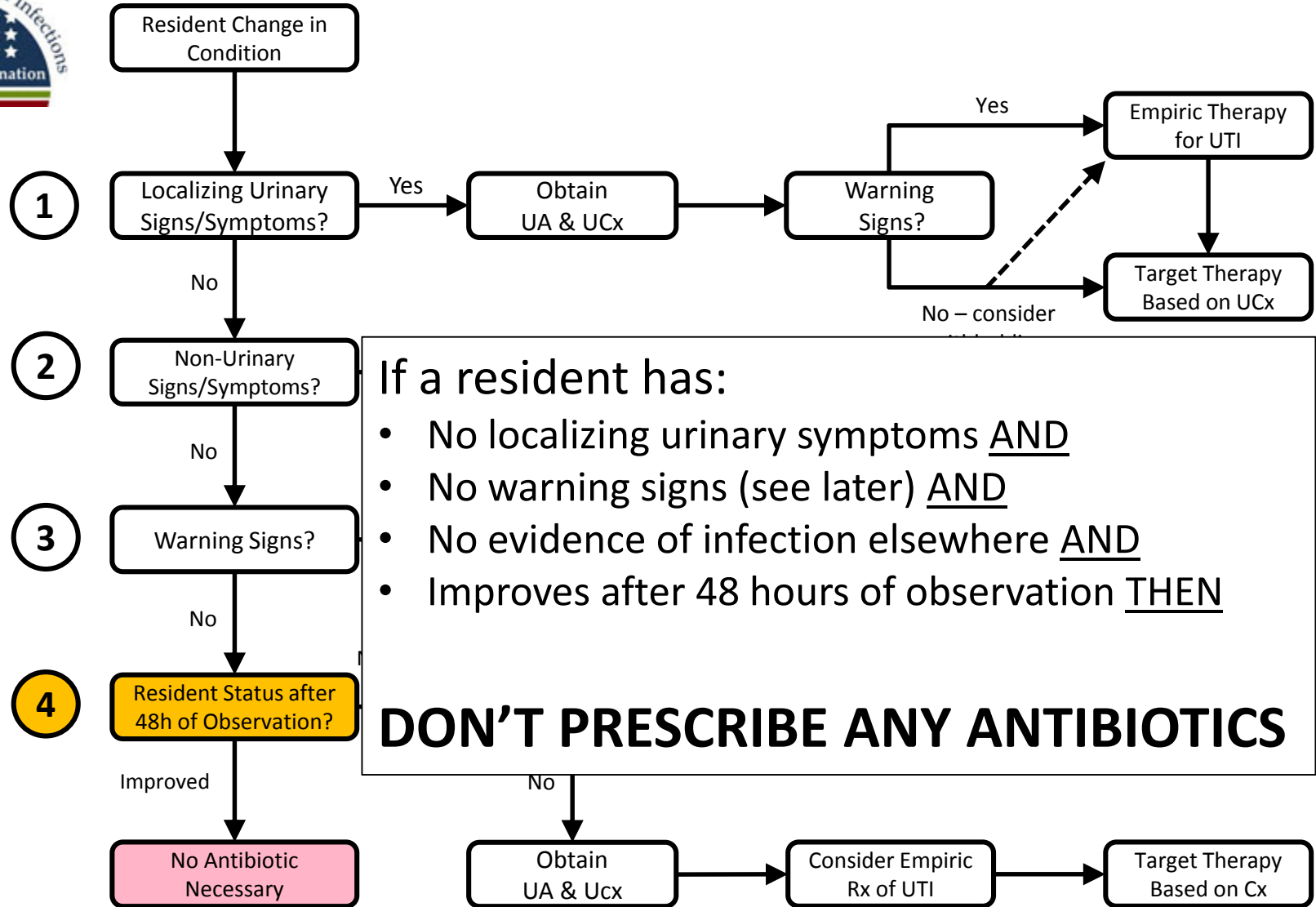
A. Warning Signs											
Symptoms or Signs	Date				Date				Date		
	D	E	N		D	E	N		D	E	N
Fever (single temperature 100 F or greater or multiple recurrent temperatures of 99 or greater [MAY SUBSTITUTE FACILITY CRITERIA IF THEY EXIST])											
Delirium											
Rigors											
Hypotension											
Tachycardia (elevated heart rate)											
Leukocytosis (WBC >14,000 cells/mm ³ or > 6% bands)											

B. Localizing Signs/Symptoms											
Symptoms or Signs	Date				Date				Date		
	D	E	N		D	E	N		D	E	N
Acute dysuria – burning / pain on urination											
Gross hematuria											
Suprapubic pain – either reported or noted when pressing on abdomen											
New urinary frequency or urgency											

C. Non-Localizing Signs/Symptoms											
Symptoms or Signs	Date				Date				Date		
	D	E	N		D	E	N		D	E	N
Change in behavior											
Functional decline (requires more assistance)											
Mental status change											
New fall											
Restlessness											
Fatigue/less interactive											
Not her-himself											
Other (specify:)											
Other (specify:)											
Other (specify:)											

Evaluate resident for symptoms/signs above each shift. Check appropriate box if present.

* Nace DA, Drinka PJ, Crnich CJ. Clinical uncertainties in the approach to LTC residents with possible UTI. *J Am Med Dir Assoc* 2014; 15(2): 133-9. PMID: 24461240





1

Resident Change in Condition

Localizing Urinary Signs/Symptoms?

No

2

Non-Urinary Signs/Symptoms?

No

3

Warning Signs?

No

4

Resident Status after 48h of Observation?

Improved

No Antibiotic Necessary

No Change / Worse

Non-Urinary Signs/Symptoms?

No

Obtain UA & Ucx

Yes

Work-up/Treat Other Cause

If a resident has:

- No localizing urinary symptoms AND
 - No warning signs (see later) AND
 - No evidence of infection elsewhere AND
 - Does not improve after 48 hours of observation
- THEN

Look for other causes again.

If no other causes found then consider treatment for UTI.

Yes

Consider Empiric Rx of UTI

Target Therapy Based on Cx