Walker Methodist Health Center ASB and UTI Committee

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Presentation objective
- Demonstrate how good form design can contribute to the value of an EHR through:
  - Increasing efficiency and work capacity of each individual worker
  - Automating and aiding in the enforcement of P+P
  - Collecting, organizing, and storing data for reporting needs and easy retrieval

Background/Aim

- Facility wide QI project to implement a targeted UTI antibiotic stewardship protocol to improve accurate:
  - Assessment
  - Identification
  - Documentation
  - Management of ASB and UTI among TCU and LTC residents
  - Long term goal to reduce inappropriate use of antibiotics and minimize potential adverse effects in residents

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Data and Measures

- **Process measures**:
  - 3 month retrospective data collection
  - UTI symptom documentation
  - Building UTI SBAR tool into PCC
  - Nursing and OT staff education completion
  - Provider education
- **Outcome measures**:
  - Improved nursing knowledge
  - Completion of the Suspected UTI SBAR tool
  - Symptom documentation
  - UTI incidence
  - Appropriate UTI testing and diagnosis

AHRQ Suspected UTI SBAR Tool

STOP Don't Test OR Treat; without specific UTI signs and symptoms!

Suspected UTI SBAR

Complete this form *before* contacting the resident's physician/NP/PA.

Date/Time________

Resident Name________ Date of Birth________

Nurse________ Phone________

S SITUATION

I am contacting you about a suspected UTI for the above resident.

Vital Signs BP____ /____ HR ____ Resp. rate ____ Temp. ____

B BACKGROUND Active diagnoses ________

□ No	□ Yes	The resident has an indwelling catheter
□ No	□ Yes	Patient is on dialysis
□ No	□ Yes	The resident is incontinent **If yes**, new OR worsening? □ No □ Yes
□ No	□ Yes	Advance directives. Specify
□ No	□ Yes	Medication Allergies. Specify
□ No	□ Yes	The resident is on Warfarin (Coumadin®)

A ASSESSMENT (check all boxes that apply)

Resident WITH indwelling catheter

The criteria are met to initiate antibiotics if one of the below are selected

No Yes
- □ □ Fever of 100°F (38°C) or repeated temperatures of 99°F (37°C)*
- □ □ New back or flank pain
- □ □ Acute pain
- □ □ Rigors /shaking chills
- □ □ New dramatic change in mental status
- □ □ Hypotension (significant change from baseline BP or a systolic BP <90)

Resident WITHOUT indwelling catheter

Criteria are met if one of the three situations are met

No Yes
- □ □ 1. Acute dysuria alone

OR

- □ □ 2. Single temperature of 100°F (38°C) **and** at least one new or worsening of the following:
  - □ urgency
  - □ suprapubic pain
  - □ frequency
  - □ gross hematuria
  - □ back or flank pain
  - □ urinary incontinence

OR

- □ □ 3. No fever, but two or more of the following symptoms:
  - □ urgency
  - □ suprapubic pain
  - □ frequency
  - □ gross hematuria
  - □ incontinence

Nurses: Please check box to indicate whether or not criteria are met

□ **Nursing home protocol minimum criteria ARE met.** Resident may require UA with C&S or an antibiotic.

□ **Nursing home protocol criteria are NOT met.** The resident does NOT need an immediate antibiotic, but may need additional observation. According to best practice and facility protocol, information insufficient to indicate active UTI.

R REQUEST for Physician/NP/PA Orders

Orders were provided by clinician through □ Phone □ Fax □ In Person □ Other________

- □ Order UA
- □ Urine culture
- □ Encourage ____ ounces of liquid intake ____ times daily until urine is light yellow in color.
- □ Record fluid intake.
- □ Assess vital signs for ____ days, including temp, every ____ hours for ____ hours.
- □ Notify Physician/NP/PA if symptoms worsen or if unresolved in ____ hours.
- □ Initiate the following antibiotic
  - Antibiotic: ________ Dose: ____ Route: ____ Duration: ____
  - □ No □ Yes Pharmacist to adjust for renal function
- □ Other ________

Telephone order received by ________ Date/Time________

Physician/NP/PA signature________ Date/Time________

Form modified to one page from:

AHRQ Agency for Healthcare Research and Quality

HAIs

www.ahrq.gov/NH-ASPGuide - June 2014
AHRQ Pub. No. 14-0010-2-EF

- **S**ituation
  - Suspected resident UTI
  - Vital signs
- **B**ackground
  - Pertinent resident history and information
- **A**ssessment
  - Indwelling catheter: y/n
  - Specific UTI s/s
  - Protocol -Loeb's criteria
- **R**equest/**R**ecommendation

Suspected UTI SBAR Tool

- Built into Assessments in Point Click Care

Suspected UTI SBAR

Client: Effective Date: Location:
Initial Admission: Admission: Date of Birth:
Score: NA Category: NA Physician:

S. Situation

2. Most Recent Blood Pressure — Blood Pressure: ____ Date: ____ Position: ____
3. Most Recent Pulse — Pulse: ____ Date: ____ Pulse Type: ____
4. Most Recent Respiration — Respiration: ____ Date: ____
5. Most Recent Temperature — Temperature: ____ Date: ____ Route: ____

B. Background

1. Active diagnoses
2. The resident has an indwelling catheter — A. Yes / B. No
3. Patient is on dialysis — A. Yes / B. No
4. The resident is incontinent — A. Yes / B. No
4a. **If yes** new or worsening? **(S)** — A. Yes / B. No
5. Advance directives — A. Yes / B. No
5a. Specify **(S)**
6. Allergies
7. The resident is on Warfarin (Coumadin) — A. Yes / B. No

A. Assessment

Check all boxes that apply

C1. The criteria are met to initiate antibiotics if one of the following are selected **(S)**

- A. Fever of 100F (38C) or repeated temperatures of 99F (37C)*
- B. New back or flank pain
- C. Acute pain
- D. Rigors / shaking chills
- E. New dramatic change in mental status
- F. Hypotension (significant change from baseline BP or a systolic BP <90)

Criteria are met to initiate antibiotics if one of the three situations are met

S1. Acute dysuria alone **(S)**
S2. Single temperature of 100F (38C) **AND** at least one new or worsening of the below symptoms: **(S)**
S2a. S&S **(S)**
A. Urgency / B. Frequency / C. Back or flank pain / D. suprapubic plain / E. Gross hematuria / F. Urinary incontinence
S3. No fever, but two or more of the below symptoms **(S)**
S3a. S&S **(S)**

Suspected UTI SBAR

Client:

A. Urgency / B. Frequency / C. Suprapubic pain / D. Gross hematuria / E. Urinary incontinence

2. Nurses: Please indicate whether or not criteria are met
   - A. **Nursing home protocol minimum criteria ARE met.** Resident may require UA with C&S or an antibiotic.
   - B. **Nursing home protocol criteria are NOT met.** The resident does NOT need an immediate antibiotic, but may need additional observation. According to best practice and facility protocol, information insufficient to indicate active UTI.
3. Was provider notified — a. Yes / b. No
4. Was family notified — a. Yes / b. No

R. Response / Recommendation

Any orders from the provider must be documented below and transcribed into the physician orders.

1. Orders were provided by clinician through — A. Phone / B. Fax / C. In Person / D. Other

1a. Describe: **(S)**
2b. Encourage fluid intake if no fluid restriction is in place
2b1. Describe: **(S)**
2c. Record fluid intake
2d. Assess vital signs for X days, including temp, every X hours for X hours
2d1. Describe: **(S)**
2e. Notify provider if symptoms worsen or if unresolved in X hours
2f. Order UA
2g. Urine culture:
2h. Initiate antibiotics
2h1. Describe: **(S)**
2i. Other:
2i1. Describe: **(S)**

Monitoring Antibiotic Prescribing Trends (facility diagnosed UTI)

- Weekly antibiotic prescription & chart audits
  - Type, dose, duration, indication, symptoms
  - Whether protocol was met to prescribe (appropriate vs. inappropriate)
  - Direct feedback to nursing staff related to use of the Suspected UTI SBAR tool
- Medical Director support
  - Feedback to prescribing clinicians at Walker
  - Facility specific E. Coli antibiogram
- Consultation with retired Infectious Disease physicians

Preliminary Findings

- July UTI QM score decreased from 4.87 in 2016 to 4.04 in 2017.
- August QM score decreased from 4.89 in 2016 to 3.57 in 2017.
- Program has brought forth educational opportunities amongst both providers and nursing staff at our community.

Future

- Data collection on-going through October 2017
- Likely extending the project for 1 year to evaluate additional goals
- Identifying barriers and solutions to project implementation to be shared with larger organizations

References

- Agency for Healthcare Research and Quality. (2016b). *Toolkit 1: Suspected UTI SBAR toolkit.* Retrieved from https://www.ahrq.gov/nhguide/toolkits/determine-whether-to-treat/toolkit1-suspected-uti-sbar.html
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