



Stony Brook Medicine

Preventing CAUTI Workflow Using Electronic Medical Record

Insertion and Discontinuation of the Urinary Catheter Work Flow

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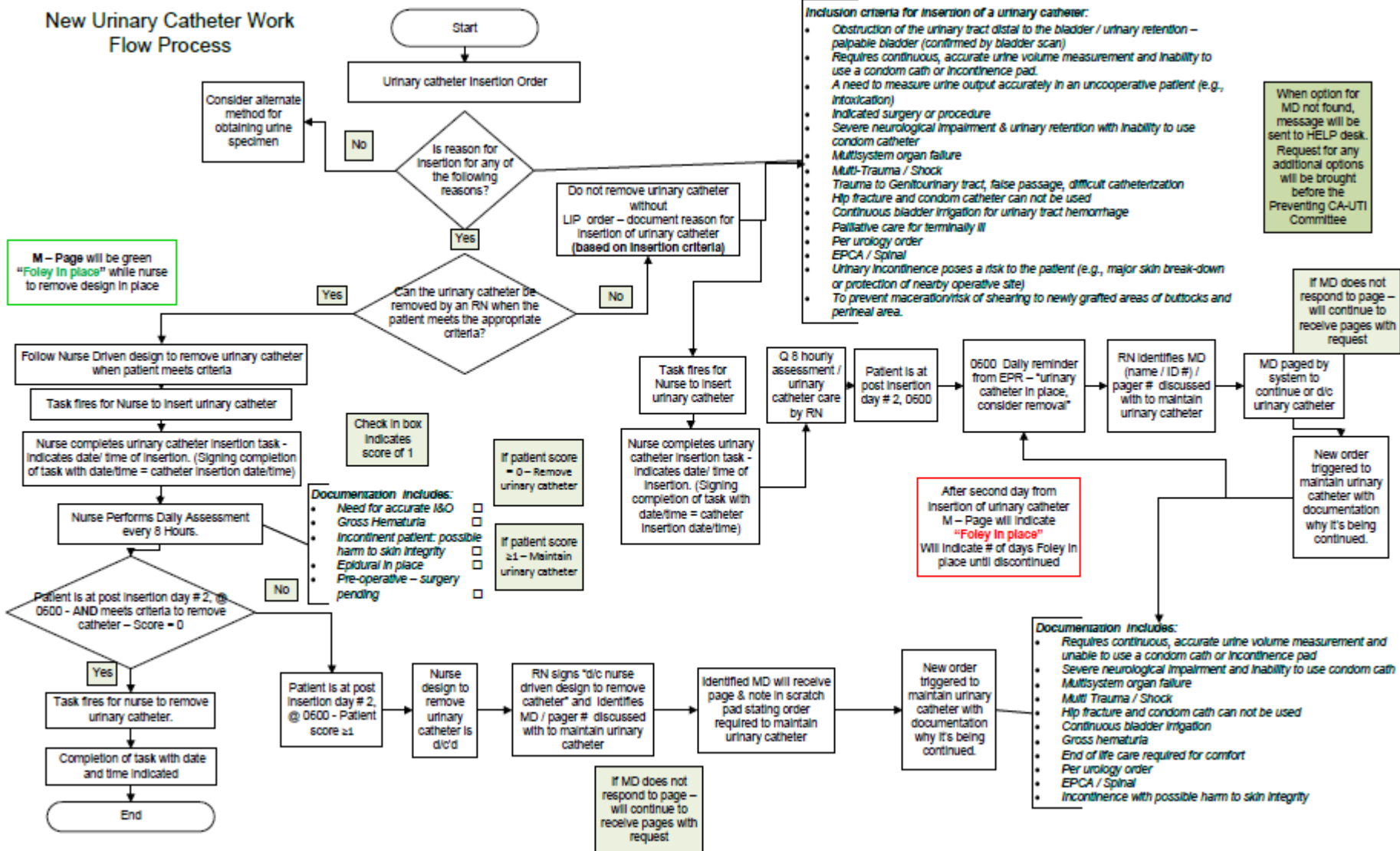
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- ❖ EPR underway – opportunity to create means of using EPR to prevent CAUTI's.
- ❖ CQO requested original team to meet and develop a “nurse driven protocol to remove the catheter”
- ❖ Determined need to include SCIP core measure – “d/c Foley in 48 hours or document reason for maintaining” within this new process
- ❖ Added correct – additional resources to the table
- ❖ Developed a work flow design within the insertion order a discontinuation order for the RN, when the patient met appropriate criteria
- ❖ Worked with IT to develop a process within EPR to mimic the work flow design

New Urinary Catheter Work Flow Process

New Urinary Catheter Work Flow Process



M - Page will be green "Foley In place" while nurse to remove design in place

- Inclusion criteria for insertion of a urinary catheter:**
- Obstruction of the urinary tract distal to the bladder / urinary retention - palpable bladder (confirmed by bladder scan)
 - Requires continuous, accurate urine volume measurement and inability to use a condom cath or incontinence pad.
 - A need to measure urine output accurately in an uncooperative patient (e.g., Intoxication)
 - Indicated surgery or procedure
 - Severe neurological impairment & urinary retention with inability to use condom catheter
 - Multisystem organ failure
 - Multi-Trauma / Shock
 - Trauma to Genitourinary tract, false passage, difficult catheterization
 - Hip fracture and condom catheter can not be used
 - Continuous bladder irrigation for urinary tract hemorrhage
 - Palliative care for terminally ill
 - Per urology order
 - EPCA / Spinal
 - Urinary Incontinence poses a risk to the patient (e.g., major skin break-down or protection of nearby operative site)
 - To prevent maceration/risk of shearing to newly grafted areas of buttocks and perineal area.

When option for MD not found, message will be sent to HELP desk. Request for any additional options will be brought before the Preventing CA-UTI Committee

If MD does not respond to page - will continue to receive pages with request

After second day from insertion of urinary catheter M - Page will indicate "Foley In place" Will indicate # of days Foley in place until discontinued

SCREEN SHOTS IN ELECTRONIC PATIENT RECORD

CHALLENGE: What if an order isn't written?

- In OR
 - OR electronic system does not link to Hospital Cerner system.
 - RN documents to “maintain urinary catheter” according to surgeon
- No order is written
 - RN documents in “ongoing physical” that urinary care is completed.

CHALLENGE: How can we ensure all SCIP patients are addressed in removing catheter in 48 hours post surgery or document why to continue?

- Included drop down to document reason for catheter upon insertion and daily maintenance

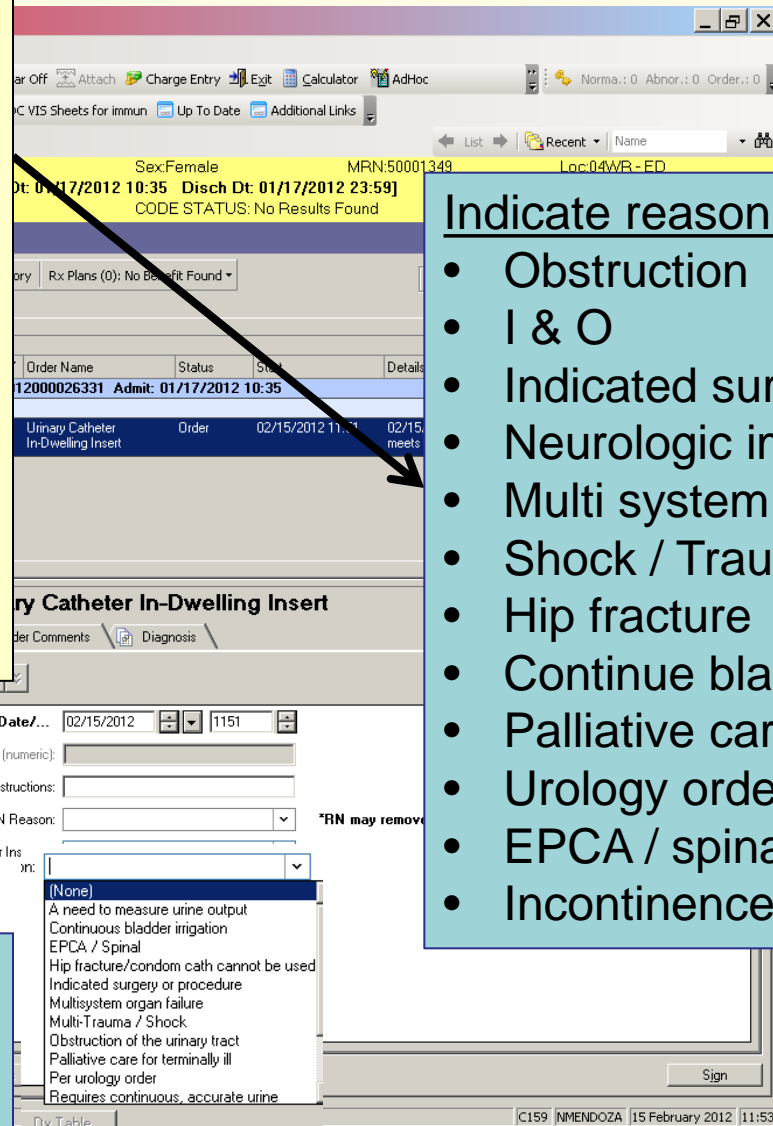
URINARY CATHETER INSERTION ORDER

1. Identify reason for inserting the catheter with drop down menu
2. Decide if urinary catheter can be removed by nurse over the following 48 hours when the patient is appropriately ready or only when the MD determines it can be done

Indicate reason for insertion:

- Obstruction
- I & O
- Indicated surgery procedure
- Neurologic impairment
- Multi system organ failure
- Shock / Trauma
- Hip fracture
- Continue bladder irrigation
- Palliative care
- Urology order
- EPCA / spinal
- Incontinence – skin damage

An order for Urinary Catheter In-Dwelling is placed Day 0 (day of insertion)



CHALLENGE: Do we have all the situations needed in the drop down for “reason to insert”?

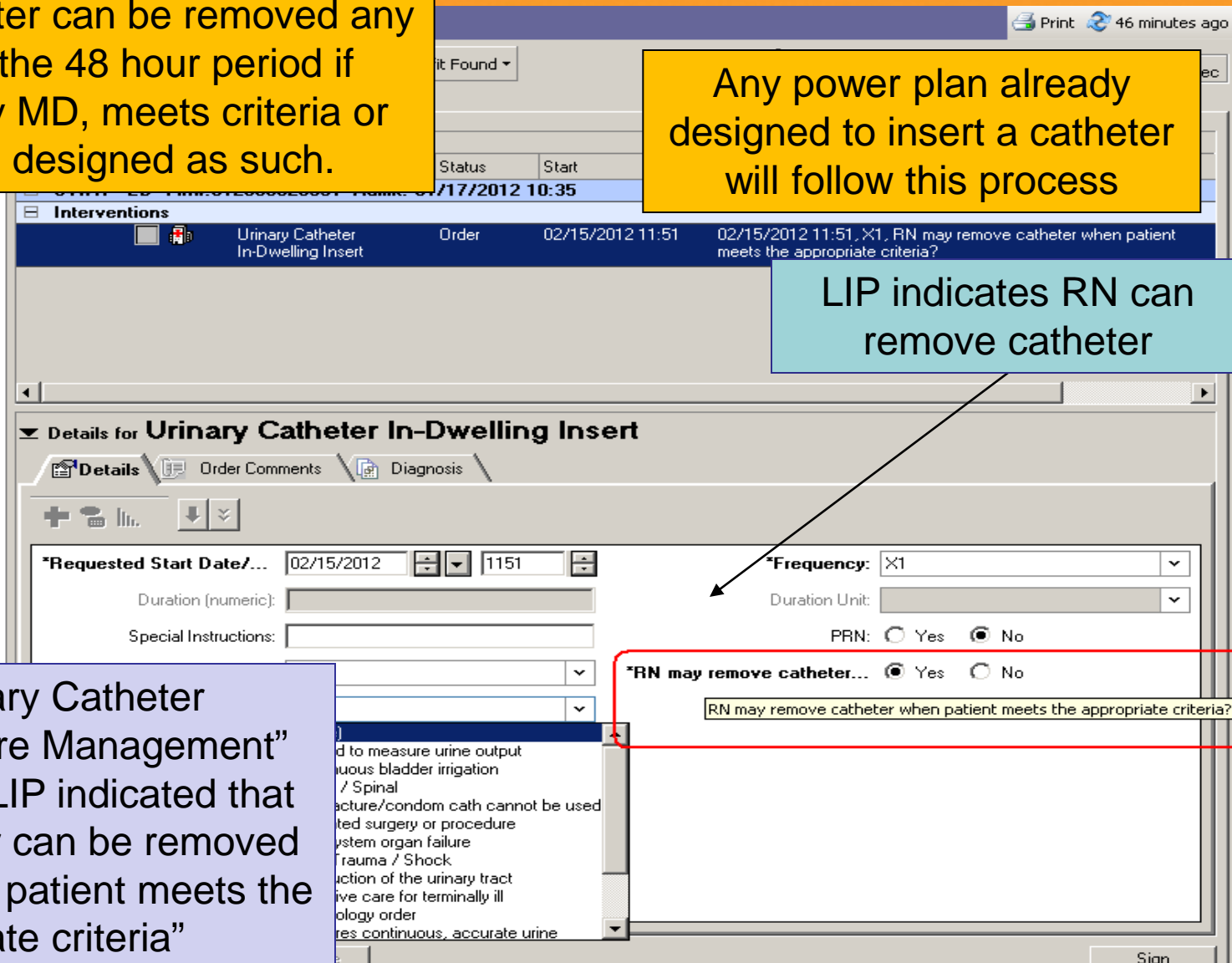
- Decided not to add free text box
- Residents instructed to contact our team if they can not identify the appropriate reason for insertion
- As additional reasons identified, team will determine if it they should be added

A urinary catheter can be removed any time before the 48 hour period if determined by MD, meets criteria or power plan designed as such.

Any power plan already designed to insert a catheter will follow this process

LIP indicates RN can remove catheter

The "Urinary Catheter In-Dwelling Care Management" order states: "LIP indicated that urinary catheter can be removed by RN when the patient meets the appropriate criteria"



The screenshot displays a medical order management interface. At the top, there is a navigation bar with a 'Print' button and a timestamp '46 minutes ago'. Below this, a table lists orders, with one selected: 'Urinary Catheter In-Dwelling Insert' with a status of 'Order' and a start time of '02/15/2012 11:51'. A comment for this order reads: '02/15/2012 11:51, X1, RN may remove catheter when patient meets the appropriate criteria?'. The main area shows the 'Details for Urinary Catheter In-Dwelling Insert' with tabs for 'Details', 'Order Comments', and 'Diagnosis'. The 'Details' tab is active, showing fields for 'Requested Start Date/Time' (02/15/2012 11:51), 'Duration (numeric)', 'Special Instructions', 'Frequency' (X1), and 'Duration Unit'. There are radio buttons for 'PRN: Yes' and 'No', with 'No' selected. A red box highlights the 'RN may remove catheter...' section, which has 'Yes' selected and a corresponding comment: 'RN may remove catheter when patient meets the appropriate criteria?'. Below this, a scrollable list of criteria is visible, including 'd to measure urine output', 'uous bladder irrigation', '/ Spinal', 'ecture/condom cath cannot be used', 'ted surgery or procedure', 'ystem organ failure', 'Trauma / Shock', 'action of the urinary tract', 'ive care for terminally ill', 'ology order', and 'res continuous, accurate urine'.

In-Dwelling Care Management



Mgt - FLINTSTONE, FRED

*Performed on: 05/31/2012 0730

Urinary Catheter

Urinary Catheter In-Dwelling Care and Ma

Strict I&O Yes No

Gross Hematuria Yes No

Incontinent Patient: Possible harm to skin integrity Yes No

Epidural in Place Yes No

Pre-operative, Pending Surgery Yes No

Urinary Catheter Assessment Score

*If score > 0, RN needs to discuss with LIP before removing

RN documents urinary assessment score when completing the below urinary catheter care management task

Criteria to maintain catheter on the nurse driven design;

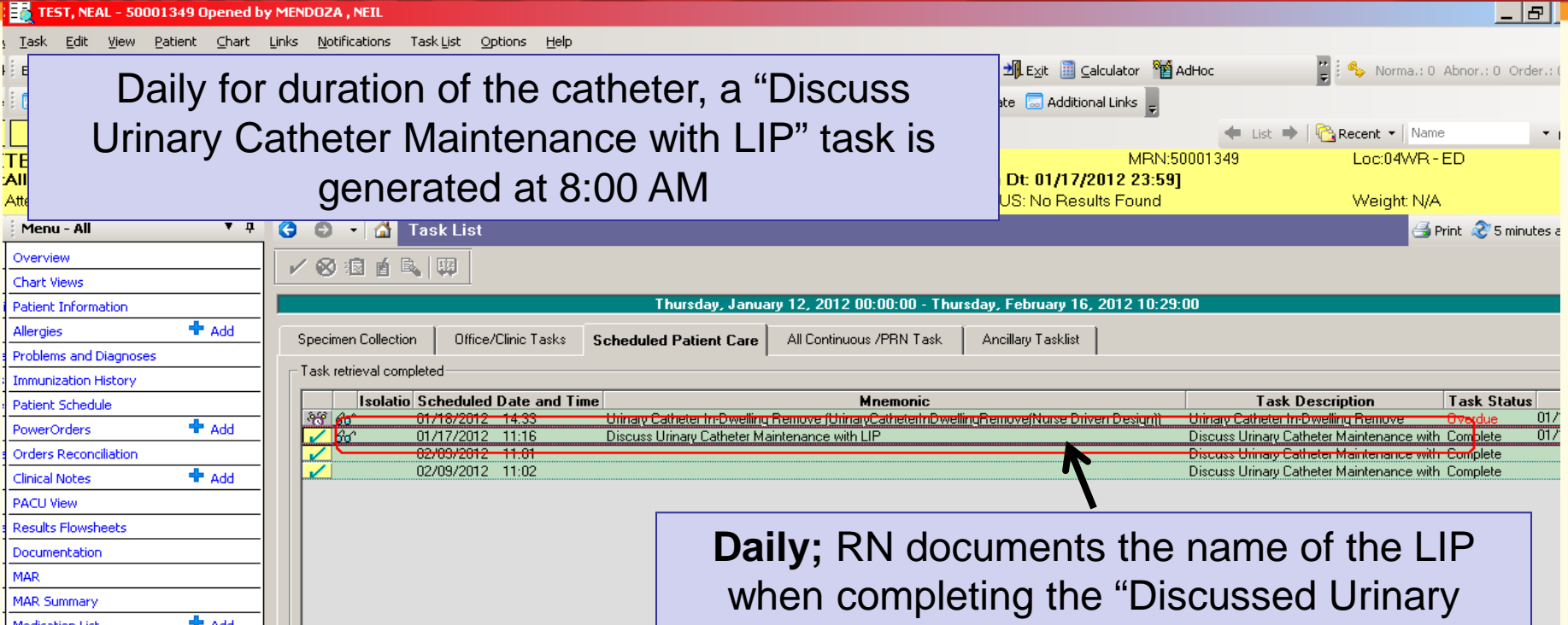
- Strict I&O
- Epidural in place
- Gross Hematuria
- Pre op / procedure pending
- Incontinent patient, possible harm to skin integrity

The "score" task:

- Fires every 8 hours
- Score = 0, the system will immediately fire a task for the RN to remove the catheter.
- Score is >0 on day 2, the patient will fall off the "nurse driven design".
- The patient will fall off the "nurse driven design" if no score is documented within 48 hours of insertion.

Day 0 = Day of Urinary Catheter Insertion

Daily for duration of the catheter, a "Discuss Urinary Catheter Maintenance with LIP" task is generated at 8:00 AM



TEST, NEAL - 50001349 Opened by MENDOZA, NEIL

Task List

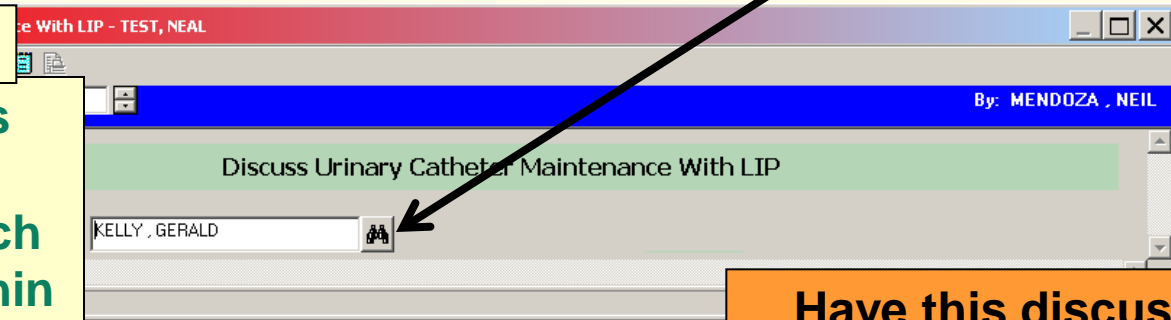
Thursday, January 12, 2012 00:00:00 - Thursday, February 16, 2012 10:29:00

Isolation	Scheduled Date and Time	Mnemonic	Task Description	Task Status
✓	01/16/2012 14:33	Urinary Catheter In-Dwelling Remove (Nurse Driven Design)	Urinary Catheter In-Dwelling Remove	Overdue 01/17/2012
✓	01/17/2012 11:16	Discuss Urinary Catheter Maintenance with LIP	Discuss Urinary Catheter Maintenance with LIP	Complete 01/17/2012
✓	02/09/2012 11:01	Discuss Urinary Catheter Maintenance with LIP	Discuss Urinary Catheter Maintenance with LIP	Complete 02/09/2012
✓	02/09/2012 11:02	Discuss Urinary Catheter Maintenance with LIP	Discuss Urinary Catheter Maintenance with LIP	Complete 02/09/2012

Daily; RN documents the name of the LIP when completing the "Discussed Urinary Catheter Maintenance with LIP" task

CHALLENGE

As name of MD is identified, the computer will attach the correct ID# within the system

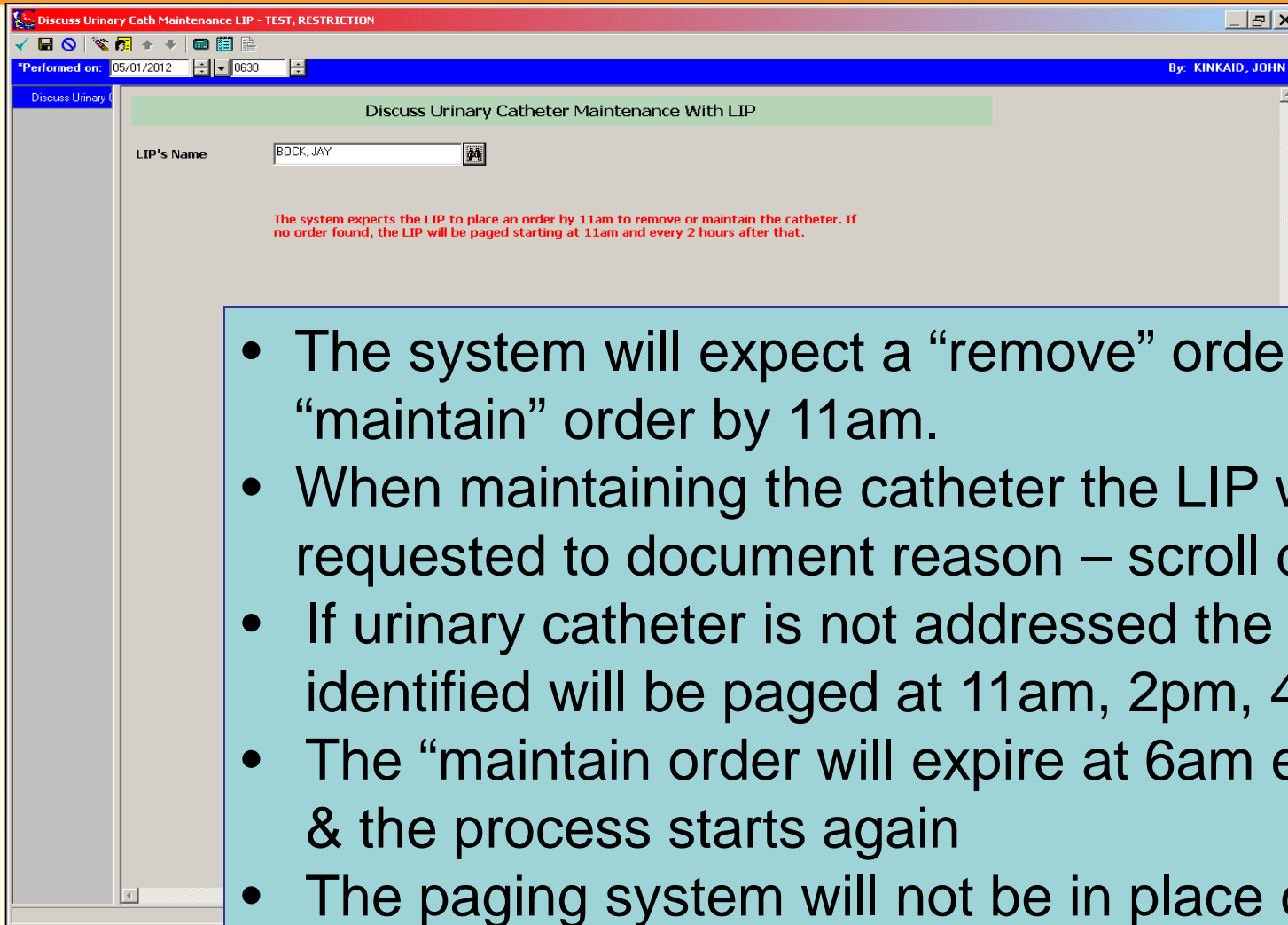


Discuss Urinary Catheter Maintenance With LIP

By: MENDOZA, NEIL

KELLY, GERALD

Have this discussion during morning rounds



Discuss Urinary Cath Maintenance LIP - TEST, RESTRICTION

Performed on: 05/01/2012 06:30 By: KINKAID, JOHN

Discuss Urinary Cath Maintenance With LIP

LIP's Name: BOCK, JAY

The system expects the LIP to place an order by 11am to remove or maintain the catheter. If no order found, the LIP will be paged starting at 11am and every 2 hours after that.

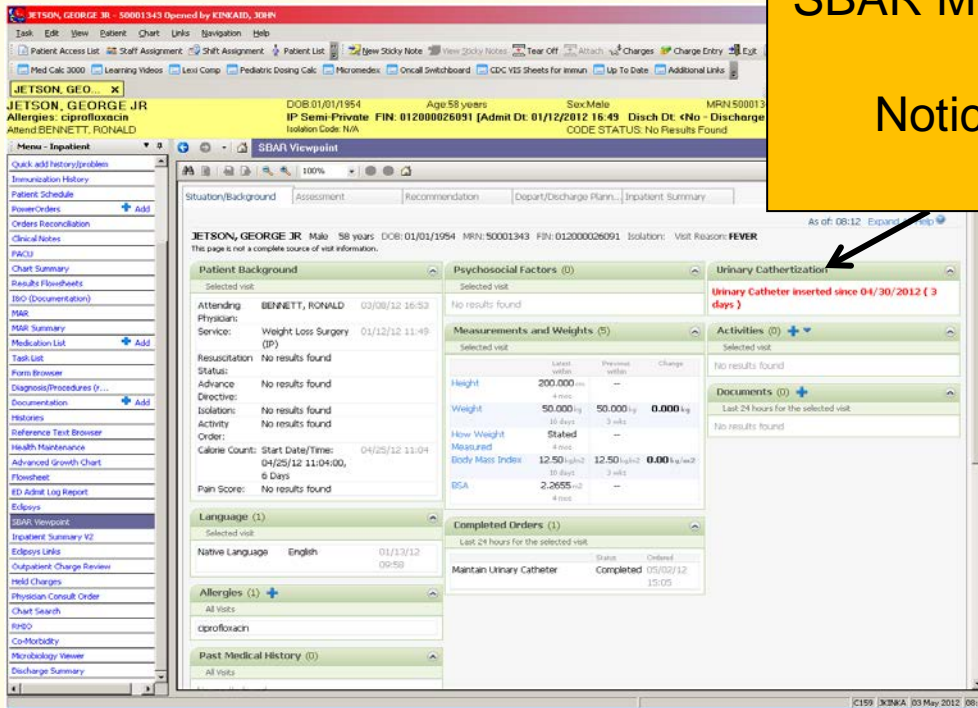
- The system will expect a “remove” order or “maintain” order by 11am.
- When maintaining the catheter the LIP will be requested to document reason – scroll down field
- If urinary catheter is not addressed the LIP identified will be paged at 11am, 2pm, 4pm, 6pm
- The “maintain order will expire at 6am every day & the process starts again
- The paging system will not be in place during off hours or weekends.

CHALLENGE: Should we include chronic urinary catheters?

- Yes
 - Evaluation of urinary catheter need – determine if this status can change
 - Ensure all are aware the urinary catheter is there
 - EPR system easy enough to navigate with drop down process

SBAR Page Function

SBAR M-page will turn **RED** if catheter insert is
> 48 hours
Notice will indicate number of days with
catheter in place



SBAR Viewpoint

JETSON, GEORGE JR - 50001343 (opened by KINKAD, JOHN)

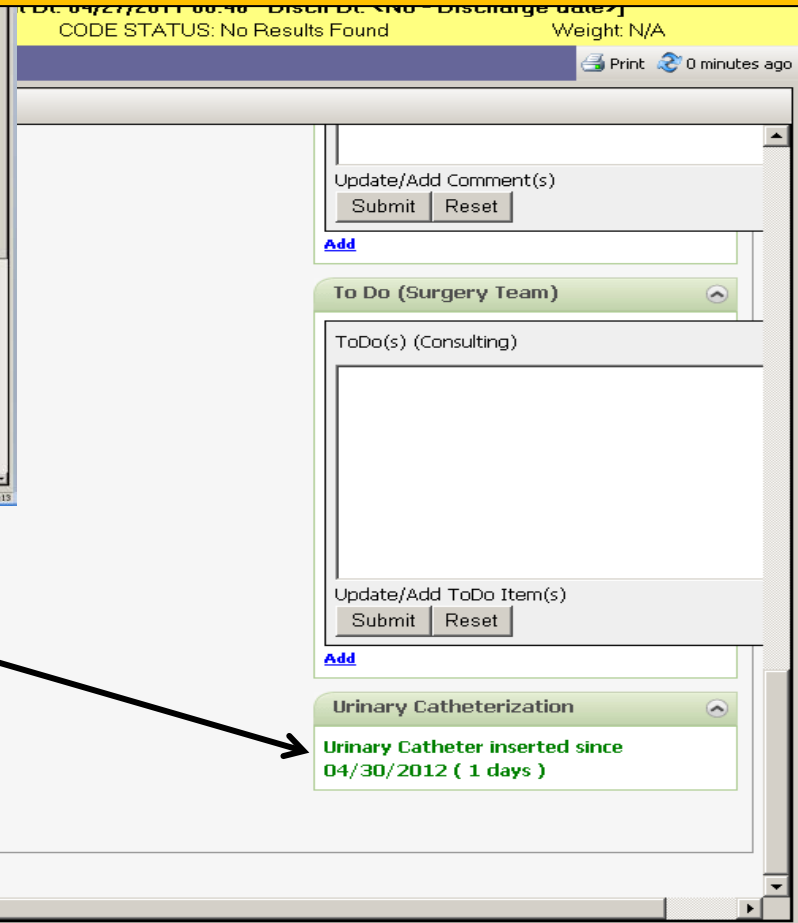
DOB: 01/01/1954 Age: 58 years Sex: Male MRN: 50001343
IP: Semi-Private FIN: 012000026091 [Admit Dt: 01/12/2012 16:49 Disch Dt: <No - Discharge
Isolation Code: N/A CODE STATUS: No Results Found]

Urinary Catheterization
Urinary Catheter inserted since 04/30/2012 (3 days)

Height	Weight	How Weight Measured	Body Mass Index	BSA
200.000	50.000	Stated	12.50	2.2655

Completed Orders (1)
Maintain Urinary Catheter Completed 05/02/12 15:05

M-page will remain **GREEN** for the first 48 hours



Update/Add Comment(s)
Submit Reset

To Do (Surgery Team)

ToDo(s) (Consulting)

Update/Add ToDo Item(s)
Submit Reset

Urinary Catheterization
Urinary Catheter inserted since 04/30/2012 (1 days)

CHALLENGE: “Going Live”

- Residents are learning new electronic documentation

CHALLENGE: Change from form based documentation to columnar view documentation (IVIEW)

- Ensuring an intact information level view across the organization (reports)

CHALLENGE: Creating an administrative policy in keeping with multidisciplinary work flow