

# Nurse Driven Foley Catheter Removal

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## Background

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- 25 bed critical access hospital
  - AS, OP, IP, SB, OB
- Nurse Driven Protocol history
- IP daily rounding
- Data

# Nurse Driven Protocol History

- ✦ 2019 Data collected, drafted a protocol and discussed
- ✦ Competing priorities and did not move forward with formalized protocol
- ✦ Utilized the draft protocol and incorporated during IP rounds
- ✦ Worked with providers and staff with indications and continued need
- ✦ Updates within the electronic medical record
  - chart note template with ordering provider and indication



# Catheter Utilization Data

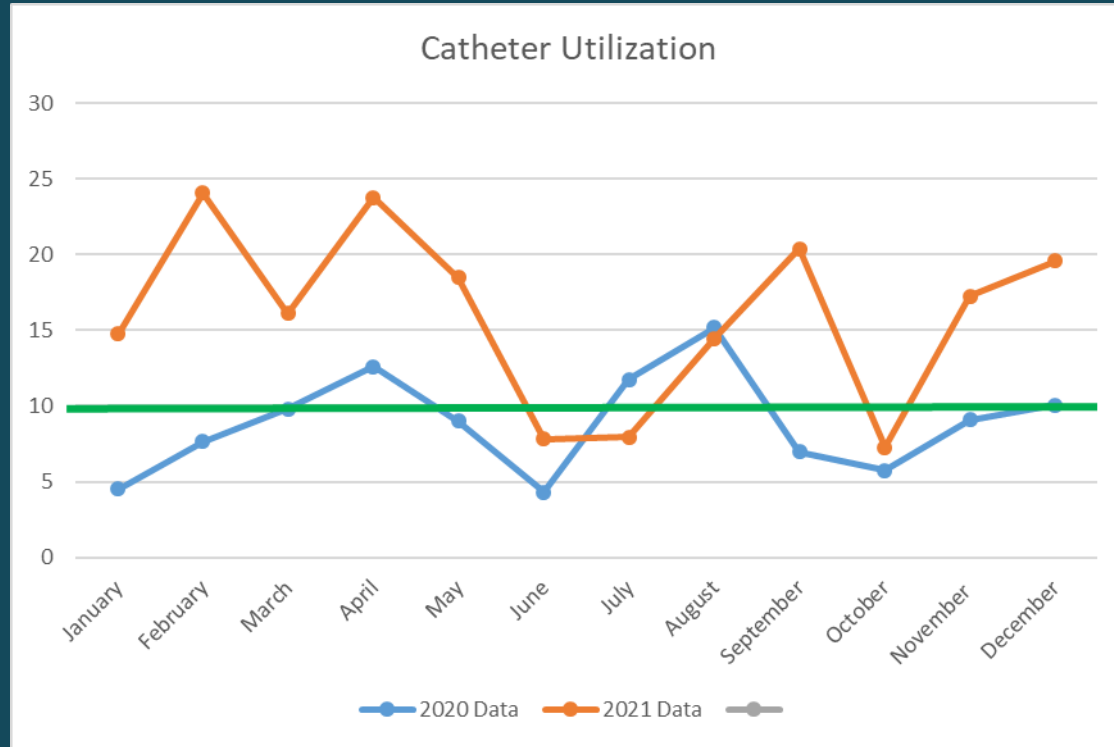
2019, 2020, 2021

2019	January	February	March	April	May	June	July	August	September	October	November	Decemeber	Total
<b>Foley Days</b>	41	33	44	39	18	25	25	31	42	32	18	14	362
<b>Patient Days</b>	217	215	189	174	174	190	176	137	164	210	105	144	2095
<b>Utilization Rate</b>	18.89	15.35	23.28	22.41	10.34	13.16	14.20	22.63	25.61	15.24	17.14	9.72	17.28

2020	January	February	March	April	May	June	July	August	September	October	November	Decemeber	Total
<b>Foley Days</b>	7	13	17	18	12	7	18	24	12	13	21	24	186
<b>Patient Days</b>	154	170	173	143	133	162	153	158	172	226	231	238	2113
<b>Utilization Rate</b>	4.55	7.65	9.83	12.59	9.02	4.32	11.76	15.19	6.98	5.75	9.09	10.08	8.80

2021	January	February	March	April	May	June	July	August	September	October	November	Decemeber	Total
<b>Foley Days</b>	26	51	34	44	60	17	9	40	55	20	40	48	444
<b>Patient Days</b>	168	169	209	180	157	141	113	232	270	265	202	245	2351
<b>Utilization Ratio</b>	14.77	24.05	16.11	23.78	18.47	7.8	7.96	14.46	20.37	7.27	17.24	19.59	18.88558

# Catheter Utilization Data



Goal 11.86

## Observations and Findings from Data

- 2020:
  - IP consistently did rounds and chart reviews
  - Utilized the draft protocol
  - Work with providers and nurses to discontinue catheters and/or try other options
- 2021:
  - COVID
  - Staffing shortages
  - Staff to a patient ratio
  - Increase in census
  - Increase in patient acuity
  - IP competing priorities



# Our Team

## — Key Stakeholders

- Front Line Staff
  - Charge Nurse
  - Floor Nurse
  - Surgery Nurse
  - OB Nurse
- CNO
- Infection Prevention Nurse
- Wound Nurse
- Quality
- Provider Champion



# Purpose & AIM Statement

- ✦ Update policies and guidelines in our facility to implement an evidence based protocol to nursing/provider staff to decrease the utilization of urinary catheters.
- ✦ Implement a Nurse Driven Protocol by March 2022.
- ✦ Reduce indwelling urinary catheters by 35% within the first year.
- ✦ Goal to meet the Nebraska goal of 11.86.







## Measures

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- Catheter Utilization Rate
  - Monthly Reporting
- Percentage of urinary catheter with documented protocol
  - Daily



# Selecting Changes

- Appropriate indication for indwelling catheter
  - educating staff → providers, nurses and assistants
    - Included risk of CAUTI, decreased mobility, risk of skin integrity issues
  - educating patients
  - educating family
- Work processes-EMR
  - Chart note templates
  - Nurse driven orders in the chart which populates daily tasks
  - Built the protocol as an assessment within the EMR
- Alternatives options
  - external female & male urinary devices
  - Education
    - Providers, Nurses and Assistants
    - Built a decision tree

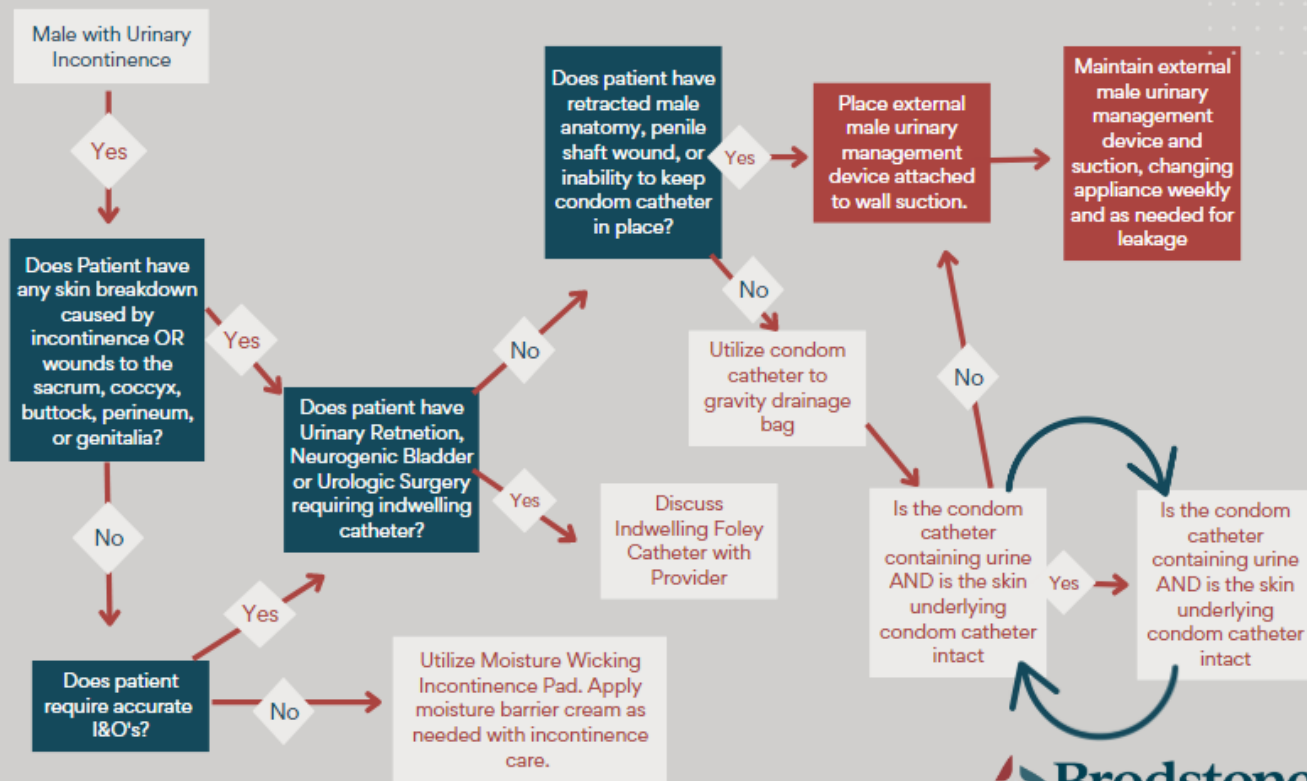
# PDSA Cycle

- PDSA #1: evidence-based foley catheter use
  - Created and published a list of approved indication for indwelling urinary devices.
    - Posted this on our local intranet and within our policy system
    - Staff meetings; Medical Staff, Nursing Staff, Assistant Meeting
    - To support this effort our nurse informatics built an assessment within the EMR
    - Feedback was used and helped facilitate refinement of process

# PDSA Cycle

- PDSA #2: Incontinent options
  - It was identified by PDSA #1, incontinent was a main theme
  - Revisited the incontinent protocol options
  - Feedback was used to refine those established process
    - Ex: no longer needing a provider order for those devices.
- PDSA #3: Work Flow Process
  - Electronic build of the protocol
  - Worked with front line staff
  - Feedback was used to make many adjustments to best fit work flow process
  - Change in EMR system in Spring of 23'- look for opportunity

# URINARY INCONTINENCE DECISION TREE- MALE



Implement at the beginning of every shift

Initial Indication: \_\_\_\_\_

Date of Catheter Placed: \_\_\_\_\_

**STEP 1:** Is patient assigned to Urology/Genitourinary Service or have a Urology Consult? ☐ Yes ☐ No

Neurogenic Bladder? ☐ Yes ☐ No

IF YES, DO NOT PROCEED WITH PROTOCOL

Nurse Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

**STEP 2: Which criteria for continued use of a urinary catheter does the patient meet?**

Urinary retention/obstruction

☐ Yes ☐ No

Continuous bladder irrigation

☐ Yes ☐ No

End of life care

☐ Yes ☐ No

To assist in healing of open sacral or perineal ulcers/wounds if needed

☐ Yes ☐ No

Strict intake and output (I&O)

☐ Yes ☐ No

Less than 48 hours after initiation of diuretics

☐ Yes ☐ No

Hemodynamically unstable

☐ Yes ☐ No

OB - 12 hours post Cesarean

☐ Yes ☐ No

Provider has ordered not to follow Foley removal protocol

☐ Yes ☐ No

- Provider Reason for not removing Foley Catheter: \_\_\_\_\_

If any of the above responses are yes, STOP - do NOT remove Foley Catheter

Nurse Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

**STEP 3: If all of the above responses are No, CALL provider to discontinue catheter per protocol and proceed to STEP 4**

Foley Catheter Removed: Date: \_\_\_\_\_ Time: \_\_\_\_\_

**STEP 4: 1. Monitor closely until patient voids >300 ml within 8 hours of catheter removal**

2. Bladder scan patient if:

- Patient voids <300 ml within 8 hours of catheter removal
- Patient complains of bladder discomfort
- Spontaneously voids in 8 hours, but incontinent

A. If scanned volume <500 ml:

- Provide toileting every 2 hours
- Rescan in 2 hours, discontinue scanning once patient has adequate output

B. If scanned volume >500 ml: straight cath within 8 hours and resume monitoring as above

- May repeat once
- If still unable to void after 2 straight caths, reinsert foley and notify provider during next rounds. Provider notified: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Encourage fluids to increase output when clinically appropriate

**NOTE: Patient with Epidurals are at a high risk for Urinary Retention and should be Monitored Closely.**

Nurse Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

# Implementing Change

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- PDSA Cycles and refining
  - Nurse Driven Foley Removal Protocol was rolled out facility wide in January 2022.
    - PDSA cycles
    - OB unit
    - ER



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<b>Utilization Rat</b>	4.545455	7.647059	9.82659	12.58741	9.022556	4.320988	11.76471	15.1899	6.9767442	5.752212	9.090909	10.08403	8.80265

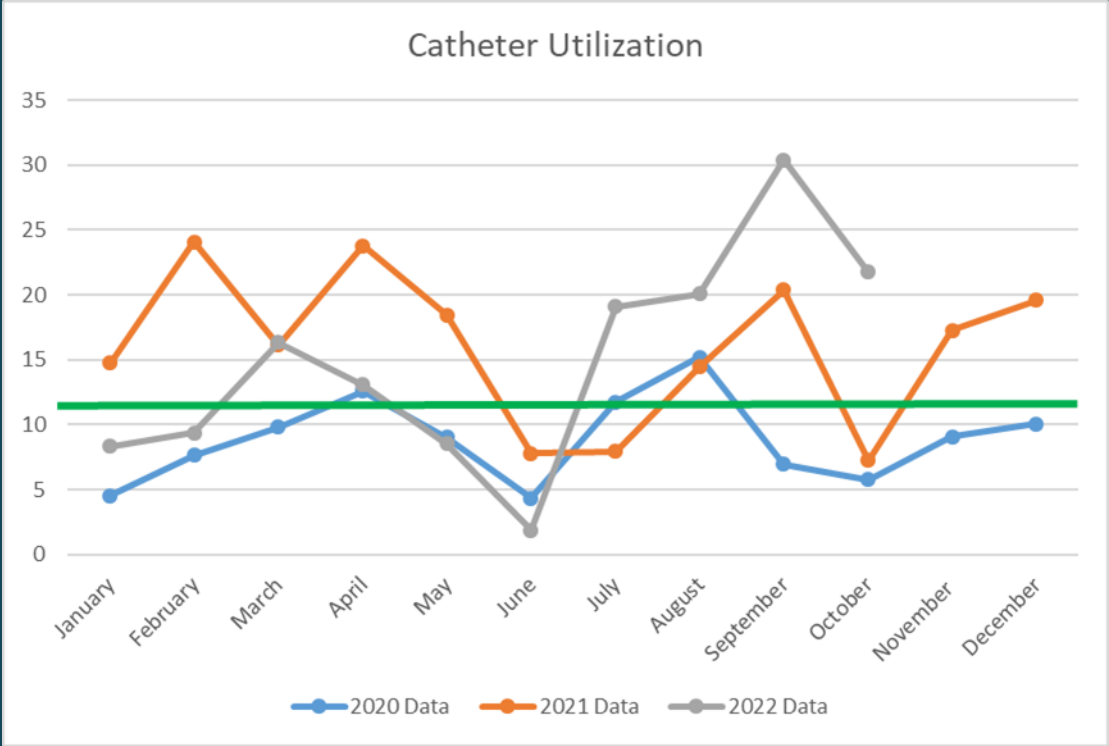
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2022	January	February	March	April	May	June	July	August	September	October	November	Decemeber	Total
<b>Foley Days</b>	20	16	34	29	14	3	38	39	67	45			305
<b>Patient Days</b>	240	171	208	222	164	158	199	188	220	207			1977
<b>Utilization Ratio</b>	8.33	9.35	16.34	13.06	8.53	1.89	19.09	20.07	30.4	21.73			15.43





# Catheter Utilization Data



Goal 11.86

# Spreading Change

- Next Steps & Identified Opportunities
  - Work with the ED for appropriate indications
  - Staffing changes
  - Incorporate into the orientation process and annual competency
  - Continue to push out data, training and education to frontline staff
  - Provider Order
    - Indication as a hard stop
  - Device Options
  - Evaluate timing of assessment (handoff)
  - Team approach
    - IDT, IP Rounding



# References

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# Questions?

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