CAUTI Prevention

We are accountable!

Did You Know?

- Catheter Associated Urinary Tract Infections (CAUTI) are the most common hospital acquired infection (HAI)
  - CAUTI's account for 40% of all HAI's
  - > 1 million cases annually (hospitals and nursing homes)
- Indwelling urinary catheters are responsible for approx. 80% nosocomial UTI's in acute care settings
- 12-25% of all hospitalized patients receive a urinary catheter – **HALF** of these found to not have valid indications

Did You Know?

- Urinary catheters in place > 6 days is most important risk factor for acquiring UTI's
- **Risk increases <u>every day</u> with a catheter in place**

Did You Know?

- CAUTI's can increase length of stay to 24 days
- DRG adjusted loss per CAUTI is **$3,560** and this is not reimbursable because it is considered ***preventable***!
- According to CMS, CAUTI's cost health care systems up to $450 million annually.
- Complication of CAUTI: may lead to bacteremia and death

FOLEY DAYS VS PATIENT DAYS AND CAUTI'S

		Jan '13	Feb '13	Mar '13	Apr '13	May '13	Jun '13	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13
ICU	Foley Days	84	70	96	82	84	59	60	51	81	107	79	104
	PD	190	146	171	169	165	182	156	133	163	187	152	187
	CAUTI	0	0	0	0	0	1	0	0	0	0	0	0
2W	Foley Days	54	35	68	29	28	38	33	24	26	45	39	32
	PD	498	413	374	384	396	408	391	360	376	470	395	461
	CAUTI	0	0	0	0	0	0	0	0	0	1	0	0
3E	Foley Days	51	55	46	70	43	54	51	71	38	45	39	32
	PD	579	435	411	456	443	462	459	453	435	511	392	409
	CAUTI	0	0	1	2	0	0	0	0	1	0	0	0
3W	Foley Days	45	56	86	39	31	35	29	46	61	69	52	47
	PD	664	539	544	572	546	571	557	535	532	569	491	529
	CAUTI	0	0	0	0	0	0	0	0	0	0	0	0

FOLEY DAYS VS PATIENT DAYS AND CAUTI'S

		Jan '14	Feb '14	Mar '14	Apr '14	May '14	Jun '14	Jul '14	Aug '14	Sep '14	Oct '14	Nov '14	Dec '14
ICU	Foley Days	94	75	108	136	84							
	PD	181	158	191	179	173							
	CAUTI	0	0	0	0	0							
2W	Foley Days	38	90	86	62	58							
	PD	510	507	501	519	524							
	CAUTI	0	0	1	1	0							
3E	Foley Days	39	51	45	58	36							
	PD	481	482	452	478	513							
	CAUTI	0	0	0	1	0							
3W	Foley Days	37	53	53	28	32							
	PD	575	525	552	534	580							
	CAUTI	0	1	1	0	1							

CAUTI's 2013

Unit	Date CAUTI	Foley Dwell Time	Adm. DX	Organism	Sympto matic vs Asympto matic	Causative Factors?
ICU	6/27	6 days	Recurrent DVT	E.Coli	sympt	DI transf. 6/19, 6/20, dwell time
2W	10/8	2 days	Abd. pain	Coag Neg. Staph	asympt	DI transf. 10/6, 10/7, 10/8
3E	3/3	5 days	Altered mental status	E. Coli	sympt	Inc. mult. loose stools, dementia
	3/28	2 days, then 3 days	Fx femur	Enterococcus Faecalis & corynebacterium (suggests contam)	sympt (started 3/28)	Insertion technique in ED based on sx
	4/30	4 days	Prostate Ca, kidney failure	Proteus Mirabilis	sympt	DI transf. 4/25 twice
	9/28	4 days, then 2 days	Urinary retention	Coag neg staph	Sympt	DI transf. 9/23, 9/25
3W	NONE					

CAUTI 2014

Unit	Date CAUTI	Foley Dwell Time	Adm. DX	Organism	Symptomatic vs Asymptomatic	Causative Factors?
ICU	NONE					
2W	3/21	50 days	Leg cellulitis, Diabetes	Enterococcus faecalis	Sympt	Anatomy, refused cares
	4/15	11 days	Appendicitis, urin. ret.	Coag neg staph	sympt	Dwell time. Foley care. DI transf. 4/14.
3E	4/20	16 days	Gangrene with leg amput	Pseudomonas aeruginosa	sympt	Anatomy, inc. loose stools 4/16-4/19, DI 4/9 twice
3W	2/9	10 days	Pleural effusion	Klebsiella pneumonia	sympt	Came in with UTI, but cult not sent
	3/23	5 days	Altered mental status	E. Coli	sympt	Inc. loose stool. DI transf 3/17
	5/31	3 days	Encephalopathy	Staph aureus	sympt	MRI x1

Review/Opportunities

- 7 of the 12 patients who developed CAUTI's last 1 ½ years had at least one transfer to DI, most were either CT or MRI.
- Reviewed Foley care with transfer techs – bag ALWAYS below level of bladder
- Impossible when on CT or MRI table because the table moves
- Foley bags to be emptied before leaving the unit and placed between legs on table for test only
- Ongoing patient and staff education

Guidelines for Prevention of CAUTI's

- **Avoid unnecessary urinary catheters**
  - Use of portable ultrasound to assess urine volume
  - Utilize insertion criteria
  - Intermittent straight catheterization preferable to Foley insertion
  - Remove ASAP based on nursing protocol
- **Aseptic technique for catheter insertion, in addition to soap and H20 cleanse of perineum prior to all catheterizations**
- **Maintenance of Foley catheter per guidelines**:
  - Hand hygiene
  - Maintain closed drainage system
  - Obtain samples aseptically
  - Secure catheter to prevent movement and traction
  - Bag never touches floor
  - Avoid dependent loops in tubing
  - Clean technique emptying urine from drainage bag
  - Drainage bag NEVER above bladder
  - Soap and H2O cleanse of meatus and catheter daily
  - EMPTY FOLEY BAGS BEFORE THE PATIENT LEAVES FLOOR