LEAD AUTHOR: Ms. Blessy Alice Idiculla, Infection Control Practitioner
Team: Ms. Sybil Binu George, Senior Quality Reviewer
Ms. Antonia P Limpiada, AEDON, HHCS
Mr. Prince Rajan , Staff Nurse, HHCS
Dr Hanan Saleh, HHCS Physician
Ms. Tina Joseph, Nursing Supervisor, HHCS
Ms. Ritty Memana Varghese, Case Manager, HHCS
Ms. Beulah Ratnamoni, Staff Nurse, HHCS
Ms. Nahla A/Tawab Ahmed Aly, Patient Educator, HHCS
Ms. Asma Mohd Rehman, Patient Educator, HHCS

HAMAD MEDICAL CORPORATION
HOME HEALTH CARE SERVICES
QUALITY IMPROVEMENT PROJECT

خدمات الرعاية الصحية المنزلية
Home Healthcare Services
حمد Hamad

Safe With Foley's At Home – An Home Health Care Initiative

SUMMARY

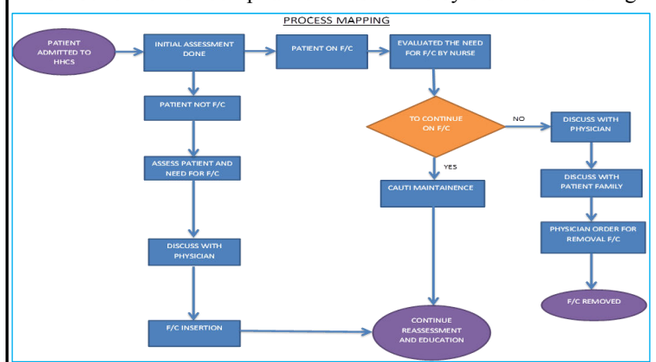
Home Health Care Services is a community based healthcare system with patients having comorbidities where primary care provider is caregiver/family. Catheter Associated Urinary tract infection accounts 40% of health care associated infections worldwide.10% of total HHCS patient census has Foley's catheter. Prevalence rate of CAUTI in HHCS was 0.5 with 15 infections in 2015.The project was piloted in District 1 having the highest number of patient on Foley's catheter and highest rate of CAUTI, 0.6.Implemented evidenced based measures which included education and training for staff and patient family/caregiver and monitoring compliance on care of Foley's catheter. Short term goal was achieved from 0.6 to 0.4 rate of infection by the end of 2nd Quarter 2016.

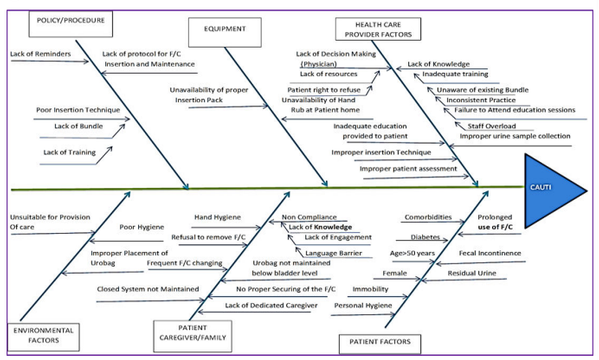
GOALS

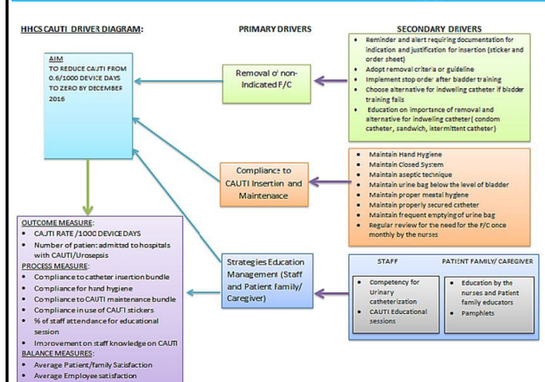
Prevention of CAUTI project was initiated in December 2015 with the goal to reduce prevalence of CAUTI in HHCS.
The 10% of the total patient census are with Foley's catheter. The 2014- 2015 Infection Prevention and control Surveillance report shows CAUTI as highest rated infection in HHCS, with patient going into the hospital as cases of Urosepsis secondary to CAUTI.
In 2015 there was 15 Catheter Associated Urinary Tract Infection, out of which 10 patients were admitted to Hospital and treated for Catheter Associated Urinary tract Infection.
The project was piloted in District 1.The prevalence rate for CAUTI in District 1 in 2015 was 0.6/ 1000 device days. The project goal is to reduce the CAUTI rate from 0.6 to 0.4 by end of 2nd Quarter 2016, 0.3 by end of 3rd Quarter 2016 and Zero by end of December 2016.

ACTIONS

The project initiated by analyzing current practice regarding care of patient with Foley's catheter in HHCS which provided visual display to widened the view for identifying risk factors of CAUTI as a Fish Bone diagram. Prioritizing risk factors and based on achievability and attainability, the driver diagram was prepared.
The 1st focus was on removal of non-indicated Foley's catheter as patients in HHCS were not reviewed regularly for need of Foley's catheter. The Foley's catheter decision making algorithm was prepared.
PDSA Cycles were used as Model for Improvement.
PDSA 1:To monitor compliance on CAUTI Insertion Bundle
PDSA 2:To monitor compliance on CAUTI Maintenance Bundle
PDSA 3:To monitor compliance on use of Foley's decision making Algorithm



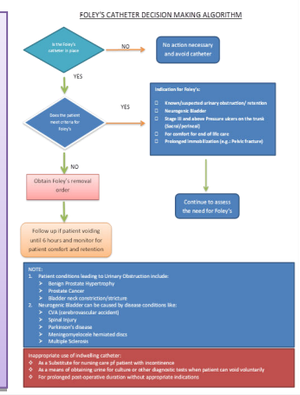


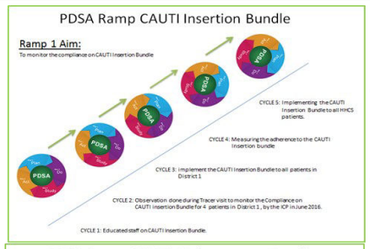


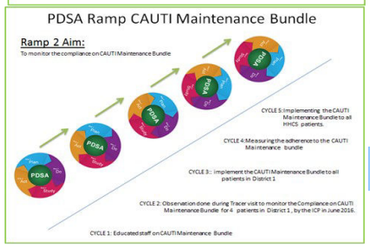
OUTCOME MEASURE:
- CAUTI Rate/1000 Device days
- Number of patient admitted to hospitals with CAUTI/Urosepsis

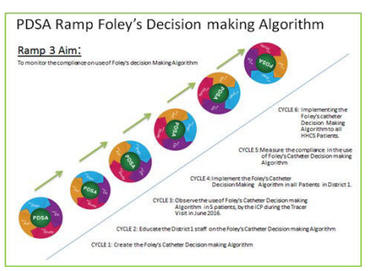
PROCESS MEASURE:
- Compliance to catheter insertion bundle
- Compliance for hand hygiene
- Compliance to CAUTI maintenance bundle
- Compliance in use of CAUTI stickers
- % of staff attendance for educational session
- Improvement on staff knowledge on CAUTI

BALANCE MEASURES:
- Average Patient/family Satisfaction
- Average Employee satisfaction





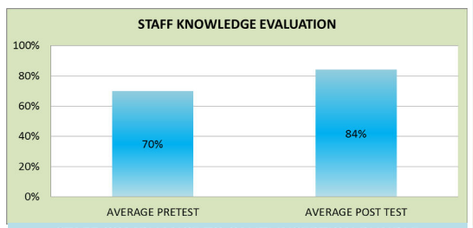


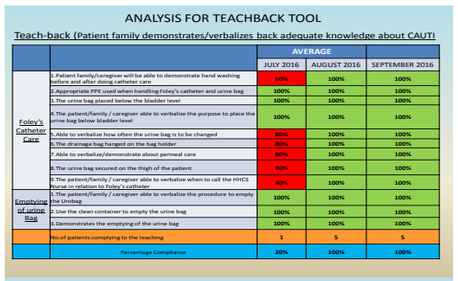


Staffs educated one to one patient caregiver at home in regards to Care of Foley's catheter from month of June 2016.Patient family educators did Teach Back for selected 5 piloted patients from July 2016.
The CAUTI maintenance bundle and insertion bundle was implemented and monitored for the compliance in the use of the bundle of staff during the home visits.
Education for patient family/caregiver focused on elements of bundle. Hand hygiene was emphasized by giving posters, pamphlets, provided hand rubs and demonstrated hand hygiene .Provided with urinals for emptying urine bag, to create a culture of using clean containers for emptying of urine. Focus was given on maintaining closed system to prevent any chance of infection. Importance was given to keep catheter secured to prevent urethral traction. Pamphlets for Care for Foley's catheter were provided
Posters and reminder on care of Foley's catheter were created for patient room and hanged beside Urine bag to improve care for patient as caregivers will be alert on the bundle elements.

RESULTS

Pretest and Posttest was done for evaluating the staff knowledge before and after the educational session, which showed 20% of increase in staff knowledge which in turn will help to improve patient care provided.
As per the project short term the CAUTI infection rates have reduced to 0.4/ 1000 device days for the 2nd Quarter, that's by the end of June 2016. District 1 has 26 patients on Foley's catheter, and only one patient developed CAUTI in the 2nd Quarter 2016.
Education is continued for the patient family/ caregiver . Teach back was done for the piloted patients . For July 2016, the patient family/caregiver knowledge assessed was 20% by the teach back method. For the month of August and September 2016, this was improved to 100%.



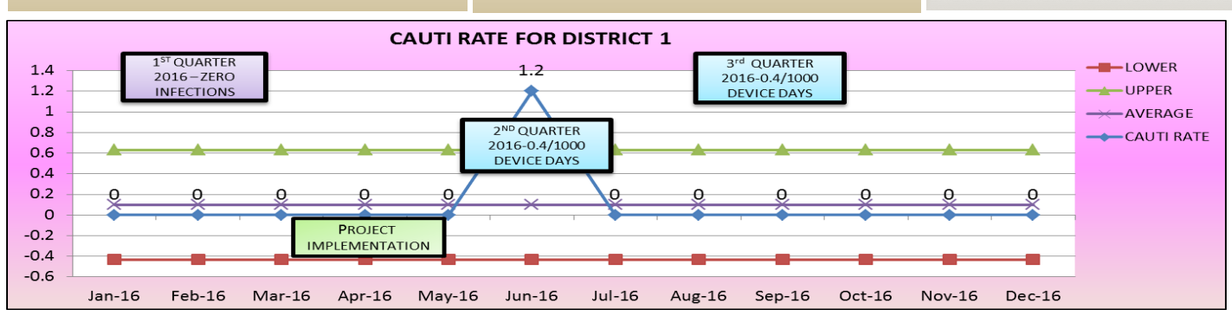


STAFF COMPLIANCE TO CAUTI INSERTION BUNDLE

CAUTI INSERTION BUNDLE ELEMENTS	NUMBER OF PATIENTS							
	JUNE 2016			JULY 2016	AUGUST 2016		SEPTEMBER 2016	
	1	2	3	1	1	2	1	2
1. The operator has been deemed competent in performing this procedure, or the procedure is being performed under the supervision of a competent person								
2. Put on clean apron, Perform hand hygiene, and sterile gloves								
3. Use a appropriate sterile catheterization pack								
4. Clean the urethral meatus with sterile saline or sterile water.								
5. Urine was allowed to drain before balloon was inflated.	100%	100%	100%	100%	100%	100%	100%	100%
6. The catheter was connected aseptically to a sterile drainage bag								
7.Secure catheter well after insertion, to prevent movement and urethral traction (tape the catheter to the thigh)								
8.Catheter Drainage bag is positioned below the level of the bladder on a holder to promote downhill flow of urine, to prevent return flow and to avoid the catheter drainage system coming in contact with the floor								
9. Perform hand hygiene								
AVERAGE	100%		100%	100%	100%		100%	

STAFF COMPLIANCE TO CAUTI MAINTANENCE BUNDLE

BUNDLE ELEMENTS	NUMBER OF PATIENTS							
	JUNE 2016		JULY 2016		AUGUST 2016		SEPTEMBER 2016	
	1	2	1	2	1	2	1	2
1. Perform assessment for the need for urinary catheter every 3 months								
2. Before manipulation, perform hand hygiene and put on non-sterile clean gloves								
3. Check that the catheter has been continuously connected to the drainage system do not disconnect the closed system for any reason (E.g. : specimen collection)								
4. Position drainage bag to prevent back-flow of urine and contact of bag with the floor	100%	100%	100%	100%	100%	100%	100%	100%
5. Empty the drainage bag frequently enough to maintain urine flow and prevent reflux								
6. Change urine bag only when necessary*								
7. Maintain daily meatal hygiene through routine bathing or showering								
8. On procedure completion, remove gloves and apron and perform hand hygiene again								
Average	100%		100%		100%		100%	



FUTURE ACTIONS

⇒ Focus group on education on Foley's catheter care is planned to bring in patient family/caregivers, where they can be educated using live demonstration, video clips and feedback where family can raise any concerns in regards to Foley's catheter care.