

Memorial Hospital Belleville Ventilator Management

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Memorial Hospital Belleville, Illinois

Memorial Hospital Belleville

- Belleville, Illinois
 - 15min Southeast of Downtown St. Louis, Mo
 - Population~42,000
- Memorial Hospital
 - 220 beds - 95% single rooms
 - 21 bed ICU

Learning Objectives

- Communication
- VAE Prevention
- Extubation Readiness Testing (ERT)

Communication

- Intensivists
 - 24hr coverage
 - Rounding 10AM and 10PM
- RT Initiative
 - Providing feedback to RN's/MD's/team members
 - Using assessment skills to provide suggestions to RN's/MD's/team members

Communication - Continued

- Collaboration with Speech Language Pathologists
 - Increased use of Passy Muir Valve on tracheostomy patients
 - Communication sheet completed by RT on those patients who have tracheostomy or intubated for >72hrs.

Daily Respiratory Status as it Relates to Speech Therapy Referral

Patient Info (initials)	Respiratory Status (e.g., intubated, trach/vent, trach)	Date Intubated	Patient Info (initials)	Respiratory Status (e.g., intubated, trach/vent, trach)	Date Intubated
1			14		
2			15		
3			16		
4			17		
5			18		
6			19		
7			20		
8			21		
9			22		
10			23		
11			24		
12			25		
13					

VAE Prevention

- Oral Care
 - Initially, RN responsibility
 - Changed this to a shared responsibility with RT which increases communication
- ETT re-position Q2
 - Documented with ventilator checks
 - Shared responsibility between RT/RN which increases communication

VAE Prevention – cont.

- HOB $\geq 30^\circ$
 - Audited
- Communication with SLP's
 - More PMV trials for tracheostomy patients
- Extubation Readiness Test (ERT)

Extubation Readiness Test (ERT)

- ERT initiated by intensivists
 - Prior extubation was based on ABG results
 - Currently based on ERT/ABG's/pulmonary mechanics

Ventilator Length of Stay 2016-2018

Jan - Aug	#Vent	Avg
2016	429	3.2
2017	461	3
2018	439	2.6

2017/2018 Comparison

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
VENTS 2017	63	54	52	51	71	48	72	50	52	63	55	55	686
VENTS 2018	64	43	55	51	57	54	58	57	56				
AVG 2017	3.1	3.5	2.9	2.9	3.0	2.6	3.5	2.8	3.1	2.8	3.0	4.4	3.1
AVG 2018	2.5	2.0	2.7	3.1	2.4	2.0	3.1	3.1	2.2				

What else have we done?

- Bedside bronchoscopy initiated
 - RT assists intensivist
 - Immediate pulmonary needs recognized and treated
- Transport/MRI ventilator initiated
 - Consistent ventilation provided during transport/testing
- Aerogen initiated
 - Less ventilator circuit disconnects
 - Better deposition of medication

What else have we done?

- Respiratory Educator established
 - New Hire Orientation improvements
 - Education for RT's and additional departments
- Airway Team (in progress)
 - More tracheostomy education for increase in that patient population
 - New policies / procedures
 - Communication with staff / increased awareness

Awards / Recognition

- Healthgrades
 - Respiratory Failure Mortality
 - 4.41% / 6.55% (hospital)
 - 7.54% / 10.96% (30 days)
 - Pulmonary Embolism Mortality
 - 0% / 2.55% (hospital)
 - 1.05% / 5.15% (30 days)

Awards / Recognition

- Excellence in Healthcare 2018
Top Performer for Overall Quality of Care for Outpatient Services
- Includes:
 - PFT
 - ABG Lab
 - 6 Minute Walk Test
 - Pulmonary Mechanics

MHB outpatient respiratory care receives PRC Top Performer Award

Professional Research Consultants (PRC) awarded outpatient respiratory care services at Memorial the "Top Performer Award" for Overall Quality of Care for the first time in the department's history. The Top Performer Award recognizes health care outpatient services that score at or above the 100th percentile compared to PRC's national client database for the prior calendar year.

For outpatient service lines and outpatient clinics, this designation is based on the percentage of patients who rate the setting as "Excellent" for the Overall Quality of Care.

Services offered in outpatient respiratory care include testing for outpatient blood gases, six-minute walk test – stress O₂, and pulmonary function testing.

Congratulations to department members Sue Holcomb, Teri Wieduwilt, Robyn Klaver, Chris Arterburn, Niki Bell, Rachel Durley, Danyelle Faulkner, Danielle Orzechowski, Kelly Shute, Ciara Weiss, Lynn Bechtoldt, Sheila Henseler and Julie McCallister.



Memorial outpatient respiratory care team members celebrate their PRC Top Performer Award. They include, from left, front row, Niki Bell, Robyn Klaver, Teri Wieduwilt, Sue Holcomb and Danyelle Faulkner; and back row, Kelly Shute, Chris Arterburn, Danielle Orzechowski and Lynn Bechtoldt. | Photo by Andy Nicholson

Awards / Recognition

Memorial Hospital

Belleville, IL 62226-5399

▣ #5 in St. Louis

Memorial Hospital in Belleville, IL is not nationally ranked in any specialty.

🏆 HIGH PERFORMING in 4 Procedures/Conditions



Memorial Hospital

Belleville, IL 62226-5399

▣ #19 in Illinois

Memorial Hospital in Belleville, IL is not nationally ranked in any specialty.

🏆 HIGH PERFORMING in 4 Procedures/Conditions



Summary

- Communication is KEY
- Education is VITAL
- Teamwork is NECESSARY
- Empowering Staff is FUNDAMENTAL