Inter-disciplinary Trach Team
WHERE DO I START???

General Outline

- Why do you need an airway management team?
- Facts – Figures – Complications of Tracheostomy Tubes & Cuffs
- The Team-getting it together, members and their roles
- Establishing and Implementing Collaborative Protocols
- Suggested Documentation
- Interdisciplinary Decannulation Protocol
- Resources, website links (upon request)

What's in the Name?

- Trach Team
- Airway Management Team
- Inter-disciplinary Trach Team
- Collaborative Trach Team
- Multi-disciplinary Trach Team
- TRAMS®

Why Do You Need a Trach Team?

- Ranks third in length of stay
- Ranks second in cost of care
- Communication
- Patient Safety
- Aspiration
- Infection Control
- Mechanical Ventilation
- Long-term Trach or Vent Placements
- Education
- Staff Confidence
- Plan of Care
- Continuity of Care
- Quality of Care
- Quality of Life

Why is this patient still trached?
We are ALL part of the rehab process
We are ALL responsible for the patient's safety and well-being
**Indications for a Tracheostomy**

- Prolonged intubation
- Need for long term mechanical ventilation
- Need for permanent tracheostomy tube
- Inability to intubate - trauma
- Airway protection/secretion removal
- Airway anomaly
- Pt comfort
- Improved weaning
- Options for oral feeding and communication
- A tracheostomy alone is not the treatment for aspiration

**Clinical Complications of a Tracheostomy Tube**

Cuff
- Trauma
- Laryngeal anchoring
- Reduced airway closure

No Airflow to the Upper Airway
- Reduced sensation
- Reduced taste/smell
- Loss of voice

Loss of Physiologic Positive Airway Pressures
- Peep
- Cough
- Swallow
- Valsalva

**Benefits of an Inter-disciplinary Trach/Airway Management Team**

- Patient
- Facility
- Staff
Where Do I Start???

- Identify the needs of your facility
  - Survey Staff Comfort Levels and Education Needs
  - Obtain Subjective Data from Patients and Satisfaction
  - Review Present Protocols
  - Review Statistics

- Team Members - “Strength lies in differences, not in similarities”
  - Nursing – at bedside, ADLs, Meds
  - RCP – MV, Weaning & BPH
  - SLP – Swallow eval and treatment/Speech
  - OT/PT – ROM, Rehab & Strength, ADLs
  - Case Manager – Discharge planning
  - Wound Specialist
  - Family – Emotional support
  - Physician – Orders/Consults
  - Ancillary Staff - anyone who cares for the patient
    Co-treat, Cross Train & Educate

Team Process

- Establish Team
- Develop Collaborative Protocols
- Educate Staff – Identify Barriers to Change
- Implement Protocols
- Continuing Education – Staff Competencies
- What are the Clear Goals of the Team
  - How will it function?
  - Who will lead the team?
  - How will it evolve?
  - Get help organizing and resolving conflicts

- Team Actions
  - Daily/Weekly Rounds-discuss goals/plan of care
  - Review – Record – Recommend-Implement
    - Daily rounds record
    - Documentation in medical record
    - Follow-up on plan of care implementation
      - Use data for QI tool
      - Surveys
      - Chart review
      - Incident reports
      - Use information to identify barriers and as teaching tool
      - On-going and retrospective case studies
Team Approach - Decannulation Protocol - PMV Use

**Step # 1**
- Initial Assessment by team
- Original process resolving
- Stable VS
- On MV, weaning
- Cognitive status
- Cough, secretions
- Medications
- Offer method of communication
- Reassess if necessary

**Step # 2**
- Can patient tolerate cuff deflation?
  - Aspiration status
  - Ventilatory status
- Cognitive status
- Long-term vent placement?
- Reassess as necessary
- Offer method of communication if unable to tolerate cuff deflation

**Step # 3**
- Deflate Cuff
  - Assess upper airway patency
  - Adequate air movement?
- Patent upper airway?
  - Assess need to downsize trach?
- Reassess as necessary
- Offer method of communication if unable to tolerate cuff deflation

**Step # 4**
- Tolerates complete cuff deflation
- Place PMV
  - Adequate Ventilation and Sync w/vent
  - Swallow assess/treat
- Co-treat to retrain, rehab, increase wear time and tolerance
  - RT-SLP-OT/PT-RN
- Enlist family involvement

**Step # 5**
- Weaned from MV
  - Continue PMV trials
- Assess secretion management
- Continue swallow evals and treatment
- Continue co-treatment and reassess as necessary

**Step # 6**
- Patient is tolerating PMV trials
  - Low risk of aspiration
  - Managing secretions
  - Stable, patent upper airway
- Decannulate
  - Continue swallow eval and treatment
  - Continue team evaluations as necessary and co-treatment/follow-up
Emergency Equipment to Have on Hand
(not used for routine trach changes)

- Trach Tubes – assorted sized
- Spare Inner Cannulae - assorted sizes
- Sterile Suction Catheters - assorted sizes
- Sterile Gloves - assorted sizes
- Trach tube securing device
- Saline Bullets/Sterile H2O
- 10 cc syringe
- Scissors/Kelly clamps/Dilator
- Cricoid Hook
- Oral suction
- Water soluble lubricant

Bedside Checklist
(on hand at all times)

✓ Resuscitation Bag and mask w/filter and cap
✓ Suction source
✓ Suction catheters
✓ Saline bullets/Bottle of Sterile H2O
✓ Spare Trach (*custom)
✓ Obturator
✓ 10cc syringe
✓ Suture removal kit
✓ Instructions for transport/O2 set-up

Key Points

The management of tracheostomy patients is multi-disciplinary and requires active collaboration by all health care professionals

Assessment and reassessment by the team is crucial for ensuring safe, effective weaning and decannulation

The strength of the team lies in the differences of the members, not the similarities

A team approach can significantly impact weaning, rehab, decannulation time, LOS, cost and quality of life of the tracheostomized/ventilator dependent patient
Suggested Collaborative Protocols

1. Timing and method of the tracheotomy procedure
2. Types of tubes and cuffs will be used
3. Communication method offered to match patients ability
4. Decannulation pathway
5. SLP consults
6. RT consults
7. OT/PT consults
8. Nutrition consults
9. Wound management
10. Trach changes and down-sizing
11. Cuff maintenance
12. Trach/Stoma/Oral care
13. Bed control-patient placement
14. Suctioning and BPH
15. Oxygen and humidity therapy and weaning
16. Discharge planning
17. Patient and family education
18. Aspiration/VAP prevention
19. Patient transport
20. Passy-Muir® Valve use
21. MD responsibilities
22. Staff competencies
23. Standard/standing orders
24. Emergency procedures
Suggested Resources for “Team” information

“Patients Requiring Mechanical Ventilation: A Model for Interdisciplinary Decision Making”
Madonna Rehab Hospital
_The ASHA Leader_ Jan 20, 2009

“Hospital and Long Term Outcome After Tracheostomy and Respiratory Failure”
Engoren, Arslanean-Engoren, Fenn-Buderer
_Chest._ 2004; 125:220-227

“Daily Cost of ICU Day: The Contribution of Mechanical Ventilation”
Dasta, McLaughlin, Mody, Peich
_CCMed._ 2005 Vol 33, No. 6, pp 1268-1271

“Facilitating Speech in the Patient with a Tracheostomy”
Hess, et al (Mass General Hospital)
_Resp Care._ April 2005 Vol 50 No 4

“Clinical Consistency in tracheostomy management”
_Journal of Medical Speech-Language Pathology_ 2007 (AU)
(Available on Goliath “business on demand”)

“An Annotated Biography on Recent Research on Healthcare Teamwork and Primary Care”
GiiC – Geriatrics Interprofessional Organizational Collaboration

Building Better Teams toolkit, available on-line at:
Association of Ontario Health Central – 128 pages, download free

“An Intensivist- Led Tracheostomy Review Team is associated with Shorter Decannulation Time and Length of Stay: A Prospective Cohort Study”
Tobin, Santamaria (St Vincent’s, Melbourne/AU)
_CritCare._ 2008:12(2)

“Developing a Multidisciplinary Weaning Unit through Collaboration”
Silipante- University of Rochester Medical Center, Strong Memorial Hospital-Rochester NY
_Critical Care Nurse_, 2002; 22:30-39
http://ccn.aacnjournals.org/cgi/content/full/22/4/30
Suggested Resources for “Team” information

“Tracheostomy tube manometry: evaluation of speaking valves, capping and the need for down-sizing”
Douglas Clark Johnson, Stacy Lynn Campbell and Judith Dawn Rabkin
Spaulding Rehabilitation Hospital, Boston MA; and Massachusetts General Hospital, Boston MA
Published in: The Clinical Respiratory Journal, 2009

HCUP 2006 Health Utilization Project (facts on LOS/cost)

“The Chronically, Critically Ill: Opportunities for the Palliative Care Team” Niki Ksesel
Journal of Hospice and Palliative Care Nursing Mar/Apr 2008

http://hopkinsmedicine.org/tracheostomy Written resources and video of procedures-some protocol information with email address for questions.

JCAHO Guidelines– 1995 Standards. Title 22 ~ 70707. Patients’ Rights
Several of these “rights” require an adequate level of communication to be achieved with appropriate intervention (e.g. speech-language pathologist consults).

Decannulation Algorithm

Onset of Respiratory Failure and Endotracheal Intubation

< 7 Days

Continue Endotracheal Intubation

On Day 1-3 - Anticipated Duration of Intubation

> 21 Days?

undetermined

Daily re-evaluation of Anticipated Duration of Intubation

Extubation
Probable in 7-10 Days of Intubation

YES

Extubation
Improbable within 21 days of Intubation

NO

Consider Tracheotomy

Convert to Tracheostomy if Benefits outweigh Risks

On Day 7 - Is Extubation probable within 5-7 days?

Consult Speech Pathology for Communication/Swallow

Can Patient Tolerate Cuff Deflation?

NO

Provide Alternative Means of Communication/Assess Swallow

YES

Is Patient Weaned off Vented?

NO

On Day 7: Patient has failed wean attempts, Probable LTACH placement. Initiate Transfer

Can patient tolerate cuff deflation?

YES

Evaluate for PMV, if NPO - Eval swallow. Continue Efforts to Decannulation

NO

Continue non-oral means of communication

NO

Evaluate for Decannulation

Downsize trach if indicated

Meets Decannulation Criteria?

YES

Decannulation

NO

Initiate PMV placement, Eval need to downsize trach. Continue efforts toward decannulation. Airway patency evaluation
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**Patient Information**

**Name:** (print include credentials)  **Name:** Signature  **Initials:**

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**Notes/Recommendation by Date**

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**Actions Taken/Documentation in Progress Notes**

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