Best Practices

The Interdisciplinary “VENT” Team

- MD (PCP/Pulmonologist)
- Respiratory Therapist
- Rehabilitation Therapists (SLP/OT/PT/TR)
- Social Worker
- Registered Dietician
- Nurse
- Psychologist, Clergy, Consulting MD

The Interdisciplinary “VENT” Team

“Vent Team” members meet regularly to

- Identify patient specific needs.
- Update care plans and establish appropriate treatment goals.
- Problem solve difficult cases and prioritize intervention strategies.
- Establish a mission statement for facility regarding the care of these complex patients.
- Identify the needs for specific policies and procedures.
- Introduce new clinical concepts and equipment.
The Interdisciplinary “VENT” Team: Respiratory Therapist (RRT)

- RRT driven weaning protocol
  - MD order for wean as tolerated begins weaning process.
  - RRT switches resident from AC support to SIMV.
  - RRT monitors resident clinically as well as with noninvasive monitoring tools.
  - Noninvasive monitoring tools are used to measure oxygen saturation and exhaled carbon dioxide levels (SpO2, EtCO2).
  - RRT determines when to change levels of ventilator support and settings based on resident assessment of weaning parameters.
  - MD orders are obtained when resident is ventilator liberated or officially weaned.

Ventilator Settings

- Modes of ventilation
- Respiratory Rate
- Tidal Volume / Minute
- Volume
- FIO2
- Trigger sensitivity
- PEEP
- Ventilator Alarms
Ventilator Outcome Data 2003 - 2010

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The Interdisciplinary “VENT” Team: Speech Language Pathologist (SLP)

- “How can people on ventilators talk and eat??”

- SLP’s primary role to is to facilitate communication and swallowing. This improves the quality of life for the individual, even those who cannot be weaned and who require supplemental tube feeding.
  - Swallowing safety is a primary goal.
Artificial Airways

- Tracheostomy tubes are selected based on patient weight and height, any special anatomical requirements, and physician preference.
- Ventilator dependent individuals require a cuffed tracheostomy tube to assure delivery of preset tidal volume from the ventilator to the lungs.

Artificial Airways

- Placement of a tracheostomy tube impedes normal flow of air to the larynx (voice box).
  - Because the tube is placed below the vocal cords (folds), most air bypasses the larynx.
  - Cuff inflation prevents air from positive pressure ventilation from escaping through the upper airway.
  - This insures adequate ventilation, however results in a voice disorder (aphonia).
  - Some patients can tolerate partial or full cuff deflation for communication.

Artificial Airways: A review

- Cuffed tracheostomy tubes
  - The purpose of the cuff is to prevent air escape around the tube from the lower to upper airway.
**Artificial Airways: Redirection of air**

- SLP works to facilitate airflow from the lower airway to the upper airway with cuff DE-flation.
  - SLP first obtains an MD order for restorative speech intervention for the purposes of voicing and swallowing.
- The SLP begins with PARTIAL cuff DE-flation to begin upper airway flow to the vocal folds while the RRT may adjust tidal volume settings to compensate for the leak of air through the upper airway (mouth and nose).
- Voicing begins, although often with low volume and hoarseness.

**Artificial Airways:**
Orientation of cuffed tracheostomy tube relative to the vocal folds

**Artificial Airways: Redirection of air**

- Once PARTIAL cuff DE-flation is achieved, FULL cuff DE-flation is attempted.
- The RRT works closely with the SLP to make any necessary changes to the ventilator to compensate for leakage of air through the upper airway.
- Non-invasive monitoring tools coupled with clinical observation are used throughout the evaluation to determine tolerance of any changes.
  - Cooperative relationship b/w the RRT and SLP is essential for this process.
Artificial Airways: Redirection of air

- One-way speaking valve (Passy-Muir)
  - Used frequently due to its ability to be used ON and OFF the ventilator.

Speaking valves re-direct air through the upper airway, creating more normalized airflow.

- Speaking valves can never be used with inflated cuffs.
  - This also applies to caps, plugs, corks.
**Artificial Airways: Inability to tolerate upper airway flow**

- Some residents are medically too fragile to tolerate any leakage of airflow to the upper airway.
  - These individuals cannot tolerate the loss of tidal volume from the ventilator.
- Specialized “talking tracheostomy tubes” such as the BLOM tracheostomy tube allow upper airway flow, despite FULL cuff inflation.

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**Blom Speech Cannula**

- Used only with Blom Fenestrated Cuffed Tracheostomy Tube
- Intended for ventilator dependent patients
- Allows cognitive patients with an intact unobstructed upper airway to speak
- No cuff deflation required (diminishes risk of aspiration of secretions)
- Silicone with surface treatment
  - Smooth finish for easy insertion
  - Reduces potential areas for infection
- USE UNDER QUALIFIED SUPERVISION ONLY
Speech Cannula Features

How it Works

Inhalation
- Bubble Valve Expands
- Flap Valve Opens
- Air delivered to lungs

Exhalation
- Flap Valve Closes
- Bubble Valve Collapses
- Air goes through fenestration to vocal cords allowing phonation

Artificial Airways: BLOM Trach tube
JESSICA

- 33 y/o C2 Fx, s/p MVA on full ventilatory support with no ability to tolerate cuff deflation.
- Intact cognitively and has normal ability to produce speech but is aphonie due to lack of airflow to the vocal folds.

Videotape clip here

Nonverbal/Nonvocal Communication Options

- For some residents, producing speech is not possible due to severe neurological impairment.
- Alternative communication options provide the ability to communicate basic needs and intentions.
- Communication systems can be simple non-electronic alphabet or message boards, or sophisticated computer based devices.
  - Communication options should be available in a variety of languages.
Augmentative Communication Options

NICK
- 42 y/o male, s/p CVA requiring tracheostomy.
- Put videoclip here
The Interdisciplinary “VENT” Team: Speech-Language Pathologist (SLP)

- Swallowing Assessment
  - Important to understand the ability to manage secretions and food/liquid as the resident moves through the weaning process.
  - Clinical Bedside Swallowing
    - Blue dye assessments used for screening trach/vent residents.
    - Only provides information if “positive” for aspiration of secretions.

- Fiberoptic Endoscopic Swallowing Evaluations (FEES)
  - This more objective assessment provides a visual picture of where the food and liquid goes once it leaves the mouth.
  - Allows SLP to determine treatment strategies to improve swallowing safety.
  - Assists in determining candidacy for the decannulation (removal of the tracheostomy tube once weaned) process.
  - ?? Put clip here????

The Interdisciplinary “VENT” Team: Rehabilitation

- Team determines resident’s stability and candidacy for rehabilitation during the weaning process.
- Rehabilitation therapists (PT/OT/SLP) initiate an evaluation following an MD order and determine ability to participate in restorative intervention.
  - Individuals who are not candidates for restorative therapy may receive maintenance or unit based programs, targeted at maintaining range of motion or standing/ambulation programs.
The Interdisciplinary “VENT” Team

Rehabilitation Therapy
- Skilled program must address functional, achievable goals.
- Physical/Occupational therapists address locomotion, transfer, and bed mobility and ADLs.
- Increased mobility and correct posture help maintain a patent airway through improved cough, secretion management, postural drainage.
- Improved mobility also helps maintain skin integrity.
- Less infections mean fewer hospital transfers.

The Interdisciplinary “VENT” Team

Maintenance and Rehabilitation Programs
- Address maintenance of “skills” learned in therapy.
- PT/OT may provide assistive devices, and assist with seating (wheelchair/gerichair).
- Rehabilitation nursing crucial in providing unit-based programs to those individuals not candidates for restorative programs.

The Interdisciplinary “VENT” Team:

Therapeutic Recreation
- Coordinates leisure activities with the clinical team (on and off unit).
- Designs and implements individualized TR programs that facilitate optimal wellness and decrease anxiety, stress and depression.
- Provides age-appropriate activities that focus on cognitive, physical, emotional, social and spiritual domains.
### The Interdisciplinary “VENT” Team: Registered Dietician (RD)
- The RD conducts an assessment for caloric needs based on ideal body weight, skin condition (e.g., pressure ulcers) and any other co-morbidities.
- Provides a diet that is appropriate for both therapeutic concerns (pulmonary, renal, cardiac diets) and texture restrictions (puree, thickened liquids).
- Modifies and liberalizes diet as resident progresses in the weaning protocol and in their ability to tolerate an oral diet.
- Assists in weaning from tube feeding as feasible.

### The Interdisciplinary “VENT” Team: Nursing
- Integral, daily hands-on caregivers
- Nutrition, wound care, and medication crucial to success in the weaning process.
- Assess resident status daily.
  - As residents move through the weaning protocol, nursing provides the tracheostomy care, respiratory treatments, etc.

### Quality Indicators and Measures
- **MDS QUALITY MEASURES**
  - Restraint Use
  - Infections
  - UTI
  - Pressure Ulcers
- **INTERNAL MEASURES**
  - Ventilator Weaning Outcomes
  - Unplanned Decannulation
  - Infections
    - Ventilator Associated Pneumonia
    - Sepsis
Discharge Planning: Ventilator Dependent Residents

- Discharge planning starts on the day of admission.
  - Determine what the resident and family’s expectations are regarding return to the community vs. long term placement.
  - Due to the need for extensive skilled services (RN, RRT) and equipment, there is additional planning needed prior to discharge of ventilator dependent residents.

Discharge Planning: Ventilator Dependent Residents

- Residents CAN and DO go home.
  - Discharge from SCNR has been accomplished after extensive family/patient education.
  - However, many times residents and family members chose not to pursue discharge while on the ventilator due to difficulty in obtaining 24/7 coverage of caregivers.
    - Potential for emergency situations most concerning for family members.

Steps to Return a Ventilator Dependent Resident to the Community

- Must be medically stable.
- Invite community RRT or respiratory company representative to the Care Plan Meeting with family, resident and pertinent team members.
- Respiratory company will complete a home assessment.
- Home assessment may entail adding electrical outlets and making other physical modifications in order to fit ventilator equipment and supplies.
  - E.g., where can oxygen be stored safely?
Social Work/Nursing role in Discharge Planning of Ventilator Patient

- Educate family regarding the responsibility of involved family members.
  - Several individuals must agree to act as back-up caregivers to supplement whatever the home care agency approves. An understanding of potential emergency situations is especially crucial.
- Individuals must also agree to come in to SCNR to be trained and to show return demonstration of his/her competency in use of a manual resuscitation bag, tracheostomy care, suctioning, medication administration, tube feeding, basic wound care and turning/positioning.

End of Life Issues

- In 2010, 53% of our ventilator dependent admissions were determined to have weaning potential, although they had previously failed weaning attempts in the hospital setting.
- Historically only 30-45% residents entered into the protocol are actually weaned from ventilator support at SCNR.
- Complex medical co-morbidities coupled with lack of reasonable goals of care by family members and residents often result in frequent and recurrent hospitalizations.
- Surprisingly, there is a dramatic lack of advance directives in this population.

Palliative Care Information Act

- Became Public Health Law on February 9, 2011
  - Requires MD and NP to provide terminally ill patients with information and counseling concerning palliative care and end of life options.
  - Palliative care is defined as "health care treatment, including interdisciplinary end-of-life care, and consultation with patients and family members, to prevent or relieve pain and suffering and to enhance the patient’s quality of life, including hospice care."
- The law covers all health care settings and must be provided to patients with a "terminal diagnosis or condition, reasonably expected to cause death within six months, whether or not treatment is provided."
Palliative Care vs. Hospice Care

- Hospice is a well-defined Medicare benefit for patients with a terminal medical diagnosis and a life expectancy of six months or less.
- In the LTC setting there is significant overlap between the care provided by palliative and hospice programs.
- Formal hospice programs are able to provide a companion 3 hours a day and extended bereavement services for the family.
  - A LTC palliative program could not typically provide these benefits, although efforts must be made to address quality of life issues.

End of Life Care (Palliative or Hospice)

- Emphasizes a team effort to educate the resident and family about the medical condition when the medical condition is no longer curative but palliative.
  - "Care not cure."
- Team works to educate and honor resident and family wishes—particularly the resident.
- Much education and support is provided regarding the diagnosis and prognosis.
- Discussion includes treatment options or the withholding of treatment during palliative care or if hospice eligible.

End of Life Care (Palliative or Hospice)

- Most common requests involve withholding life sustaining interventions:
  - Do not weigh
  - Diet liberalization
  - No blood work
  - No antibiotics (unless related to comfort)
  - Eliminating medications (unless related to comfort care)
  - No initiation of artificial nutrition and hydration (no tube placement)
  - Do Not Hospitalize

- Requests are honored when the patient meets the criteria for palliative or hospice care and the request does not violate accepted medical standards.
End of Life Care: Withdrawal of Life Sustaining Treatment

- Requests include:
  - Withdrawal of ventilator support
  - Withdrawal of artificial nutrition and hydration

- If the resident is capable of making his/her own decision or there is a clearly executed Health Care Proxy (HCP), the process is relatively straight forward.
- When there is concern about the next step or any family conflict, the Ethics Committee is consulted.

End of Life Care: Withdrawal of Life Sustaining Treatment

- At SCNR we typically have less than 5 requests for withdrawal of ventilator support a year.
- Residents often survive ventilator withdrawal for varying lengths of time (families often anticipate and plan on instantaneous death).
- Withdrawal of tube feeding (including water) typically results in death in 10-14 days.
- Residents at SCNR have expired while awaiting planned day of ventilator removal.

Ethics Committee

- In the absence of properly executed HCP or surrogate, the Ethics Committee reviews pertinent issues when needed (e.g., terminal weaning, removal of feeding tube) and provides counseling and education to family members and staff.
- Committee assists in resolving conflicts (e.g., determination of incapacity or the choice of a surrogate) especially when family members cannot agree.
- Committee acts as an advisory body to the primary care physician.
Ethics Committee

Interdisciplinary Team
- Director Social Work (Chair)
- Director Speech Language Pathology (Co-Chair)
- Medical Director
- AVP Rehabilitation
- VP Nursing
- Assistant Director Nursing
- Legal Counsel
- Hospice Representative
- Clergy
- Community Representatives
- Director Respiratory Therapy (ad hoc)

Ethics Committee: Prior to Family Health Care Decision Act (FHCDA)

- Committee was consulted usually in the absence of advance directives/HCP.
- Committee reviewed case and identified family members relevant to decision making.
- Met with family members who were asked to bring supportive materials demonstrating clear and convincing evidence of the resident's prior expressed wishes.
- Met with clinical staff involved with resident's care.
- Provided a written consultation and recommendation to the physician.

Family Health Care Decisions Act (FHCDA)

- This act sets out the current guidelines regarding requests for the withdrawal and withholding of life sustaining treatment, outlining the priority status of family members in decision making.
- FHCDA “fills the gap” for resident's without capacity and without a Health Care Proxy (HCP).
- A previously designated HCP remains effective.
- In the absence of the HCP, the FHCDA determines the order of surrogacy.
Ethics Committee: After the Family Health Care Decisions Act (FHCDA)

- What is different under the FHCDA?
  - Allows authorized surrogate to make decisions that in the past he or she was not permitted to make without clear and convincing evidence.
  - Decisions to withdraw or withhold life sustaining treatment can be made by the surrogate.
- If there is no HCP, but a surrogate makes the decision to withdraw/withhold life sustaining treatment, certain conditions must be met in order to proceed with the request.

End of Life Care: Withdrawal of Life Sustaining Treatment

- The surrogate believes that the provision of treatment would involve such pain, suffering or other burden that it would reasonably be deemed inhumane or extraordinarily burdensome under the circumstance
- The Primary Care Physician (PCP) determines that the patient has an irreversible or incurable condition.
- A second physician makes an independent determination concurring with this finding, and the Ethics Committee may determine if the request meets the standards for surrogate decisions.

End of Life Care: Withdrawing Life Sustaining Treatment

- In the event of a dispute or disagreement between surrogates, or if the decision does not seem consistent with the resident's prior expressed wishes as best known, requests to withdraw life sustaining treatment are brought to the attention of the Ethics Chair, Medical Director and Administrator.
- An Ethics Committee will be convened and include an Ethicist Consultant without any governance, employment or contractual relationship with the Nursing Home.
**End of Life Care: Withdrawing Life Sustaining Treatment**
- Resident must have an order for DNR.
- Team provides emotional support and comfort care plan is initiated.
- Pain management provided PRN.
- Family visits supported as needed.
- Resident may be transferred to a private room.
- Organ donation may be discussed and education provided (resident may be moved to another setting in order to accommodate organ donation).
- Resident typically referred to Pastoral Care.

**End of Life Care**
- The primary goal is to respect the resident’s previously expressed wishes for their care at the end of their life.
- The team strives to provide the best care to give the resident quality of life in their time at Silvercrest.

**Questions? We are all ears!**