Objectives

- Identify care delivery tools currently in practice at St. Cloud Hospital to standardize end-of-life care
- Describe the concept of palliative sedation and identify ethical issues related to its use
- Describe the use of low-dose Ketamine for treatment of refractory pain

Disclosure

- Discussion of off-label use of Ketamine

Summary of Key Findings from Literature Review

- 29 articles and 2 clinical guidelines were included in the literature review.
- Majority of literature reviewed was Grade C or E.
- EOL care experience varies depending on setting of care, physician or provider, and nursing EOL experience.
- Top Ranked EOL competencies by nurses were: symptom management; communication about death/dying; and understanding comfort care/palliative care
- Literature on standard end of life education supported use of ELNEC curriculum.
- Consensus supports the effectiveness of standardized order sets in improving adherence to accepted Palliative Care principles for pts at EOL.

Practice Change—Phase 1

3 Main Components to Standardizing End-of-Life Care
- Care Identification (Future Phase)
- Care Delivery Tools
- Education
Myths and Facts about Comfort Care

- **MYTH:** Comfort Care means we are giving up.
  - **FACT:** Comfort Care is another option in medical care where goals shift to focus on comfort, quality, and dignity.

- **MYTH:** Comfort Care means we stop all medical care.
  - **FACT:** Medical care continues but is a more simplified form of care.

- **MYTH:** Comfort Care means we stop all medications.
  - **FACT:** Medications under Comfort Care are focused on providing comfort and benefit, which may mean continuing some chronic medications.

Comfort Care Logistics

- NCB
  - Reminder to pt/family that this does not limit our efforts at comfort
  - ICD deactivation

- Medications reviewed and non-essential medications discontinued

- Symptom management medications initiated

- Discontinue further labs, imaging, therapies, and vitals

- Diet based on patient preference and ability

- Discussion about possibility of leaving hospital if appropriate

Comfort Care Policy

- SCH Definition of Comfort Care:
  - Treatment provided by an interdisciplinary team to provide comfort and support for patients and families when a life-limiting illness no longer responds to cure-oriented treatment or for patients who have declined life-sustaining treatment. Comfort care is aimed at relieving symptoms, enhancing the quality of remaining life, and easing the dying process for patients with a life expectancy of hours to days.
We know that the last hours and days have been difficult and full of many decisions. This is a hard time and we want to make this journey as easy as possible for you and your family.

With the decision to change your loved one to comfort care, our focus has changed to giving peace and comfort. Part of this change may involve moving to a different unit in the hospital. While it may be difficult to leave a unit you've become used to, the care on the new unit will provide a more peaceful setting. The staff caring for your loved one now will talk with the nurses on the new unit to tell them about your loved one, their needs, and to make sure the transition is smooth. Once in their new room, care focused on ensuring their comfort will continue.

Often, people on comfort care can receive this type of care outside of the hospital. Each situation is looked at to determine if this is possible. If leaving the hospital is an option, the staff will provide your family with options and assist in making plans, ensuring the move is as easy and comfortable as possible.

If you have any questions or concerns, please ask to speak with the charge nurse.

Patient & Family Education Document

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- If you have any questions or concerns, please ask to speak with the charge nurse.

10 minute CBT
- Released July-September 2014
- Educational flyer with reminders of Comfort Care Changes
- 90 minute live education for Medicine Care Center
  - Based on ELNEC curriculum
  - September 2014 Annual Education Days
  - Rose & Hummingbird Magnet

Implementation Strategies

- 10 minute CBT
  - Released July-September 2014
- Educational flyer with reminders of Comfort Care Changes
- 90 minute live education for Medicine Care Center
  - Based on ELNEC curriculum
  - September 2014 Annual Education Days
  - Rose & Hummingbird Magnet

- Live presentation to providers at Department meetings
  - July-September 2014
- Tip Sheet
- Email reminders of Comfort Care changes

Evaluation Phase 1

Pre and Post Outcome Measures

Practice Change Phase 2

End of Life Experience
- Comfort Cart
- Comfort Rounding
- Policy Development
- Palliative Sedation
- Low-dose Ketamine

Pre and Post Outcome Measures

Manual review of medical records for patient deaths
- October-December 2013, N=154
- October-December 2014, N=154

* # of patients who died and were transitioned to comfort care
  - 2013: 60% (N=84)
  - 2014: 77% (N=118)

* # of patients with actual “Comfort Care” order
  - 2013: 14% (N=19)
  - 2014: 60% (N=93)
End of Life Experience

- Clustering of patients
- Gift of Hope Boxes
  - Provide general information on the dying process and bereavement resources
  - Given to all patients/families transitioned to comfort care
- Contents: Journal, Come From My Sight Booklet, Grief Resources, and Staff Checklist
- Bereavement Support
  - Handprints
  - Unit Based Bereavement Program Model
  - Bereavement cards 2 months and 1 year following death

Comfort Kits

- Provide comfort to families of patients who are keeping vigil at the bedside of imminently dying patients.
- Contents: Personal care kit, blanket, water, coffee, and snacks
- Implemented hospital wide Feb 1, 2016

Comfort Rounding

- Offered to families of patients on comfort care
  - Generated by EPIC order
  - Specially trained volunteers round daily
  - Provide distraction such as books, music, or conversation and support
  - Offer respite breaks

Quality of Death and Dying Nurse/Family Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre (n=29)</th>
<th>Post (n=29)</th>
<th>Pre (n=11)</th>
<th>Post (n=11)</th>
<th>Total (n=40)</th>
<th>Total (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>92%</td>
<td>Yes</td>
<td>91%</td>
<td>Yes</td>
<td>90%</td>
</tr>
<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>88%</td>
<td>Yes</td>
<td>90%</td>
<td>Yes</td>
<td>88%</td>
</tr>
<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>86%</td>
<td>Yes</td>
<td>84%</td>
<td>Yes</td>
<td>84%</td>
</tr>
<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>84%</td>
<td>Yes</td>
<td>83%</td>
<td>Yes</td>
<td>82%</td>
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<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>82%</td>
<td>Yes</td>
<td>81%</td>
<td>Yes</td>
<td>80%</td>
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<tr>
<td>Do you feel our patients and families are supported in preparing their loved ones to die?</td>
<td>Yes</td>
<td>80%</td>
<td>Yes</td>
<td>79%</td>
<td>Yes</td>
<td>78%</td>
</tr>
</tbody>
</table>

Evaluation Phase 2

- Pre & Post Outcome Measures

Process & Policy Development

- Palliative Sedation
- Ketamine Administration
What is Palliative Sedation?

Definition:
- The use of sedative medications to relieve refractory symptoms by reducing consciousness in imminently dying patients.
- Intent to provide comfort and alleviate suffering, not to hasten death

Palliative Sedation
- Offered to relieve patient suffering due to refractory symptoms
- Only used when traditional therapies and interventions have failed to provide adequate relief or suffering at end of life.
- Consciousness should be maintained whenever possible, although some clinical circumstances and patients’ preferences will require deeper sedation

Refractory Symptom
- Definition:
  - A symptom that cannot be adequately controlled in a tolerable time frame or at a tolerable level despite aggressive use of usual therapies and seems unlikely to be adequately controlled by further invasive or noninvasive therapies without excessive or intolerable acute or chronic side effects/complication.
  - Most common symptoms are delirium and/or terminal restlessness, dyspnea, pain, nausea/vomiting, and seizures

Ethical Principles in Palliative Sedation
- Respect for human dignity
- Beneficence
- Non-maleficence
- Double effect
- Proportionality

Requirements
- Patient is imminently dying (hours to days)
- Symptoms are refractory to treatment
- Intent of sedation is to control patient suffering and not to hasten patient’s death
- Decision to offer palliative sedation involves the interdisciplinary team, attending provider, and patient and/or family
- Palliative consultation is required
- DNR/DNI order and Comfort Care order

Palliative Sedation Does Not Hasten Death

<table>
<thead>
<tr>
<th>Palliative Sedation</th>
<th>Euthanasia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent is to relieve suffering by sedation</td>
<td>Intent is to relieve suffering by ending life</td>
</tr>
<tr>
<td>Death not intended</td>
<td>Death caused by action of another individual</td>
</tr>
<tr>
<td>Informed consent from patient or health care agent</td>
<td>Illegal in all states</td>
</tr>
<tr>
<td>Involves interdisciplinary team</td>
<td>Inadequately treated symptoms may be the motivation</td>
</tr>
<tr>
<td>Ethically and legally sanctioned</td>
<td>Ethically and legally sanctioned</td>
</tr>
</tbody>
</table>
Drugs Used in Palliative Sedation
- Benzodiazepines (Midazolam)
- Barbiturates (Phentobarbital)
- Choice of medication is made by palliative care provider based on patient situation and drug properties

Case Example
- 39 year old WM
- Diagnosed with renal cell carcinoma 4 years prior
- Progressing despite aggressive treatment now with pulmonary and bony involvement
- Admitted for increased pain and possible infection
  - R sided chest discomfort–steady and constant but controlled
  - R lower abdominal pain, radiating to R hip–episodic
  - Palliative Care consulted for symptom management

Outpatient Regimen
- OxyContin 150 mg po tid for last month
- Oxycodone IR 150 mg po every 3 hours as needed
- Gabapentin 600 mg tid
- Previously tried:
  - Fentanyl–caused nausea
  - IV Morphine–inadequate pain relief
  - Cryosurgery of tumor
  - Steroid injections
  - Intrathecal

Inpatient Regimen
- Diluadid PCA 1 mg/hr basal and 1 mg every 30 minute bolus dose
- OxyContin 180 mg po tid
- Oxyl 150 mg every 4 hours as needed
- Lorazepam 0.5 mg tid prn
- Naproxen 375 mg bid
- Discharged on Methadone 10 mg tid, Oxycodone Intensol, and hospice

Readmission
- 2 weeks after hospitalization–Increased pain
- Methadone increased to 20 mg po tid
- Switched to Diluadid PCA 100 mg/hr basal
- Maintaining on this regimen for about 1 month
- 1 month later: Readmitted with increased chest, back, and shoulder discomfort
- Diluadid PCA titrated to 145 mg/hr with 30 mg every 10 minute boluses available
- Noting increased myoclonic jerking, spasms in feet, and seizure activity
What is Ketamine?

- General anesthetic
- Lower doses can be effective for pain control when opiates have reached their ceiling effect
- Ideal for management of refractory neuropathic or acute/chronic pain that is unresponsive to high doses of opiates
- Can be given oral or IV

Low-Dose Ketamine Administration

- Ordered and managed by Palliative Care
- Administration limited to ICU/CCU, MPCU, and Medical & Oncology

Nursing Considerations for Ketamine

- Most common side effect is mild sedation
- Hallucinations and cognitive impairments can occur but at a much lower rate than with higher doses
- Goal is to reduce opiate use
- Precautions: HTN, cardiac failure, seizures, pts receiving MOA-Is, delirium, CVAs
- Pts at highest risk for adverse psychological side effects include pts who are 16 yrs and older, female and/or a history of psychiatric disorders

Case Example Outcome

- Day 2 of Hospital Admission
  - More comfortable, requesting to discharge
  - Precedex stopped
  - Started low dose Ketamine with loading dose then 2mg/hr continuous infusion IV
  - Diluadd decreased from 100mg/hr to 75 mg/hr
- Day 3 of Hospital Admission
  - Ketamine increased to 3 mg/hr
  - Continue Diluadd at 75 mg/hr with 30 mg bolus doses
  - Decreased dexamethasone to bid
  - Did not require Haldol or lorazepam
  - Discharged home with hospice
  - Died peacefully at home 3 weeks later

Family members will always remember the last days, hours, and minutes of their loved one's life. Healthcare professionals have a unique opportunity to be invited to spend these precious moments with them and to make those moments memorable in a positive way.