Comfort Care Order Set

F. Amos Bailey MD
Director, Safe Harbor Palliative Care
Birmingham VAMC
Professor
Division of Geriatrics, Gerontology and Palliative Care
University of Alabama at Birmingham
Birmingham, Alabama
The Comfort Care Order Set should be placed in one or more locations so that it can be readily used. Most facilities place it in the section “Write Orders” for the use of all providers that have the authority to write orders.

From this location you could

Open the CCOS and use orders to start symptom control for a patient that will continue to be cared for on that unit.

You may also want to use the CCOS to write delayed orders for a patient that will be transferred to a new unit in the VAMC or is being admitted to the VAMC.

If you have Palliative/Hospice Beds, orders can be copied into delayed orders and the option to change bed section to TS 96 in the CLC or to 1F for Hospice in Acute Care in the acute care section may be chosen.
At this point the provider may choose to open the CCOS and select orders that are needed by the patient.

A provider can write orders for immediate use and at the same time write a complete admission order set for the patient in the delayed order set that would be used if the patient is being moved to a different location (such as transfer out for the ICU to a CLC/Hospice in Acute Care Bed) that is a location different from the current one.

A provider could also use the Delayed Order set if changing the bed section but not changing location geographically.

The next slide will demonstrate the Delayed Order Writing Option.
Opening Delayed Orders

Choose to have patient admitted to VAMC under the appropriate bed section such as TS 96 or 1F.

If the patient has already been admitted to the VAMC and you want to change the bed section you can use the Transfer to option at the top of this window. Please note that you may be changing the bed section designation but not changing the location of the bed geographically. In that case you **do** have to enter new orders and using the Delayed Orders is the best option to do this without having the patient have a break in orders that could cause poor symptom control.
This is the appearance of the Comfort Care Order Set when you select the option in the “Write Orders” tab. At this point you could start at the top and work your way through the list. It is recommended that a provider work through all of the sections a few times to become familiar with the CCOS. After using the CCOS for 3-5 times a provider can write a complete set of orders in about 5 minutes.

It is encouraged to go through all of the parts of the order sets so that some important aspect of care is not inadvertently overlooked. Also it is a good practice to place an order for medication for pain, for delirium or other symptoms preemptively, so that if the patient develops delirium later during the night the staff is able to respond quickly.

On other occasions you may want to select only a few options for a specific problem, such as management of secretions, and go to that section of the order set directly.
This prompts you to remember which sections you have already completed. If you change your mind and want to go back into that section to modify your orders you can do that without having to close the CCOS and reopen it.

Below is a navigation tool that is placed at the end of each section. Note that the “Done” button intuitively seems like the button to use to continue but it actually closes the order set. This set of instructions and the construction of the order set allows the clinician to go back to the option page or progress to the next option in the list.
If you are admitting a patient to the VAMC and desire to use the CCOS you select the Admission and Initiate option. The initiation of CCOS is a marker to the staff in the hospital that the patient has special needs. You could conceive of this as a marker such as “Falls Risk” or “Wandering Risk.”

The provider is prompted to select the date and time.

The provider is prompted to select a bed section. You may want to include TS 96 if you have a CLC and Hospice/Palliative Care, Hospice in Acute Care is also an option (1F). In the Birmingham VAMC example we have General Medicine as an option since we do have a mixed unit with some patients in an Acute Care for the Elderly Track with the General Medicine Bed section.
Diagnosis

There is an administrative requirement to have a diagnosis for the admission. This prompts the provider to fulfill this requirement.
Condition

This is also an administrative requirement to be declared at admission. This option has a pull down and point and click option. A facility that is choosing to use the CCOS should populate this with the conditions that the facility uses by policy.
Transfer Option

This is used when transferring the patient from one location or service to another after admission. It does require selecting the attending and in this slide gives you an option to select the appropriate bed section.

This option is followed by the Diagnosis and Condition prompt as noted on the previous example for an admission.
Designation of Resuscitation Status

It is not mandatory that a patient must have a DNAR order to utilize and benefit from using the Comfort Care Order Set. However, if use of the CCOS is being considered then a discussion regarding resuscitation status is almost always appropriate. This prompt allows you to more easily document.

Additional Notes

The Comfort Care Order Set usually uses CPRS orders already in use in your institution so this section may appear different depending on your hospital policy. This demonstrates using the DNAR (Do Not Attempt Resuscitation) which is the preferred nomenclature in the VHA.

The Office of Ethics is developing a Template Note for Documentation of Preferences for Life Sustaining Therapy that will become a POLST Document and Orders. The timeline for the launch of this plan is not determined. However this can be substituted here if this process is adopted at your VAMC.

In addition the position of this item can vary and some centers have chosen to place it at the end of the CCOS. The exact sequence of items can be varied but it is recommended that all items be included.
Diet Orders

This slide illustrates the decision support aspect of the Comfort Care Order Set. The bolded black text is an educational note to the providers.

This order section reflects that comfort and pleasure eating is often appropriate. Most patients on home hospice are allowed to eat or drink small amounts as desired. These same patients are often designated as NPO in the hospital and this is frequently not necessary and causes distress to patient and family. The default diet that is recommended is the Full Liquid Diet since this is usually safer to swallow and is much more palatable with ice cream and other soft foods as an option.

If the provider wishes to order a standard diet the option is available.

It is recommended that the order “May have food brought in by family” and “Allow patient to sit up to eat. Assist with meals” be placed. Patients are not supposed to eat food other than that provided by the facility unless there is an order and families may need prompting and assistance to learn to help their family member sip or eat safely if they desire food.
Diet Orders

This slide illustrates the default option that may be selected by clicking the “Accept Order” button.
Diet Orders

This slide illustrates that if the provider needs to order a diet other than the full liquid default diet that they can choose from all the options that the particular facility offers.
Nursing Orders

This section allows for a quick selection of orders for patient comfort. In addition you can use the offered orders and a decision support tool to implement care plans for environmental modification for specific issues, such as care of the actively dying patient or for delirium.

This is the menu

This page is broken up into two parts so that the content will be easily understood
Part 1 Tips For Comfort and Safety

This is a list of potential orders to reduce unneeded interventions and for patient comfort. Examples include not using IM injections, changing routes of medications, discontinuing telemetry, SCD’s and subcutaneous heparin as well orders for turning that are oriented for comfort.

If there is an arrow for this then the order can go in directly to the order sheet. If not, a dialogue box will come up that may require some further information or customization.
Part 2
Tips For Comfort and Safety
Avoid Restraints

The following orders 9-14 are all part of the environmental modification for management of delirium and agitation.

Assisting Family is decision support to help remind the providers to assess family needs and the potential need to refer to other members of the IDT such as Social Work or Pastoral Care, for assistance.

“Preparing for Your Loved One’s Loss” is a pamphlet that describes the dying process for family education. This can be provided to families and the clinicians can review with family to help them cope with sitting in vigil with a patient.
Vital Signs

Monitoring often increases in intensity at the end-of-life in hospital settings and this can be uncomfortable for the patient and distracts both family and staff from symptom needs.

Vital signs may be placed at minimum for unit policy such as once a shift in the Acute Care and once a day in CLC. It may be appropriate to stop doing vital signs particularly in the actively dying patient. However, taking vital signs is a potent symbol of medical care. Patients and families may misunderstand not taking vital signs as not caring or even abandonment. If this issue is discussed and decision to stop doing vital signs is made then this could be ordered instead.

See notification on the next page

Also an opportunity to assess constipation. Daily review of bowel regimen effectiveness by noting of BM in last 24-48 hours help reduce painful constipation or obstipation.
These notifications are based on patient symptom burden as opposed to a set of vital sign reports.

Examples
Pain not controlled with medications
Labored breathing not controlled with medications
Delirium/Agitation not relieved with medication
Family present and need to speak with clinician

These reflect the comfort care order plan and need to modify the treatment if it is not effective.

In the next sections treatment for each of the symptom clusters are presented to the clinician.
Activity

This is an example of another option for an activity page that could prompt clinicians to consider orders that allow patients to get into a position that is comfortable and least restrictive. Patients at end-of-life have often had restrictive orders such as strict bed rest that are not consistent with goals and usually not necessary or even helpful for patients.
IV Considerations

IV fluids at end-of-life in the hospital can be both beneficial but also burdensome for patients. Patients on home hospice programs do not commonly receive IV Fluids. However, in the hospital they are potent symbols of care and “doing something”. For some patients hydration with IVF may be helpful to manage a reversible delirium or bridge declined oral intake until a time of recovery. In addition there are some medications, such as antibiotics, or other treatment such as a blood transfusion, that may be helpful in palliation of specific symptoms.

However, IV access is often difficult to maintain, which leads to patient discomfort due to multiple attempts to start an IV. There is also significant risk of line associated infection. In addition many patients may have IVF infusing in the last few days of life and this contributes to edema and fluid overload which is distressing in and of itself.

Patients on maintenance IVF are also tethered by this line and may be restrained to protect the line.

Most medications for comfort can be given through a subcutaneous line which is easy to place and maintain, is not painful, has low risk of infection. Medication that can be administered include opioids, lorazepam, haloperidol, and dexamethasone. The medications are often given intermittently but the subcutaneous line can also be used for continuous infusion of opioids.
Please see details of the IV decision support education

Options
Insert IV if IVF or IV medications would be an appropriate palliative treatment.

Default IVF is one 1000ML of D51/2 NS over 6 hours. This illustrates the idea of ordering fluids as needed and also of using intermittent fluids. This could be customized; however, most patients could tolerate this rate for 6 hours if they truly needed fluids. The patient is then liberated from the IV line so that it does not interfere with comfort, position or struggling to prevent the line from being dislodged.

If you want to choose a different fluid can choose Infusion to go to CPRS chooses.

Consider a Remove IV Order. Frequently, the patient has an IV and it may not be needed. It should be removed since there is a risk of infection. Also in many facilities IV’s are automatically replaced on a 3 day interval which is a burdensome procedure for patients.
Subcutaneous Line

This section provides decision support to use subcutaneous line and therapy.

Frequently the subcutaneous line is placed and is used for intermittent injection of opioids, or other comfort medications. There are significant pharmacological advantages to SC opioids since the length of effect of the opioid is longer.

The subcutaneous line could also be used for continuous infusion via a PCA pump. These pumps are usually for morphine or hydromorphone infusion but could be used in select patients for benzodiazepines.

In some cases it may be appropriate to place more than one SC line if a continuous infusion is needed and the second for the intermittently administered medication.

Hyperdermoclysis is the infusion of fluid with a SC line. Please see the next page for more details.
Hyperdermoclysis is the infusion of parental fluids into the subcutaneous tissue. This process can take longer to get the fluids in, but can be effective and is often a much less invasive procedure than placing a central line or IV in a hospice or palliative care patient.

The default is for a lower 30 or 50 cc per hour infusion. As mentioned earlier IVF are potent symbols of care and caring. Some families even after discussion and teaching may feel uncomfortable with stopping IVF in patients who are clearly not benefiting or even in patients who may be having distress related to the ongoing fluids. In these rare cases low flow rate hyperdermoclysis may meet the families need for symbolic care and reduce the burden of the therapy on the patient.

However, hyperdermoclysis can be an effective rehydration strategy. The SC line for hyperdermoclysis should be placed on the abdominal wall to give more space for diffusion of the fluid. If two lines are placed, one on each side of the abdomen and a flow rate of 50ml each, a liter could be infused in 10 hours and up to 2 1/2 liters in a 24 hour period, which could significantly rehydrate a patient that might benefit from this.

In the appendix for this manual, an example of policy and procedures for subcutaneous line placement and for subcutaneous medicine administration and hyperdermoclysis is provided.
Respiratory Therapy

Oxygen may be an effective treatment for hypoxia and dyspnea. However, oxygen is also a potent symbol of medical care. In home hospice settings oxygen via nasal prong and A/A Nebulizer are commonly provided and seem to help relieve symptoms. Many patients may wear the oxygen for part of the time but also use environmental modifications such as using a fan or air conditioner to blow air on the face, sitting up and leaning forward or pursed lip breathing, which are all techniques to allow for better expansion of lung, auto-peep and reduction of dead space.

Patients in the hospital who have severe dyspnea/hypoxia may have much more invasive procedures such as face mask, BiPAP, CPAP or ultimately MV. This is often very appropriate if aligned with patient goals of care and as a trial of treatment to bridge to time of recovery. However, for many patients at end-of-life in the hospital setting these treatments are burdensome and not effective in relieving symptoms. On the other hand environmental modifications described above are often not utilized, not available and/or patients are prevented from modifying their personal environment for their comfort.
Oxygen therapy is a potent symbol of medical treatment.

In addition, oxygen therapy may reduce dyspnea by correcting hypoxia. However in many patients at end-of-life corrections of hypoxia is not necessarily feasible and is not closely correlated with dyspnea. This means that many patients who have dyspnea may not be hypoxic, others have dyspnea even if hypoxia has been corrected. Oxygen therapy by nasal cannula may have a placebo effect, also some evidence from studies indicate that air moving over the airways may relieve dyspnea in some patients as effectively as oxygen.

However, many patients at end-of-life do not tolerate an oxygen mask as it makes them feel smothered even if it does in part correct the hypoxia. If the mask or more intrusive oxygen therapy such as BiPAP or CPAP is a bridge to a time of recovery then trial of treatment may be indicated.

The default order here is for Oxygen 2 l/m Nasal Cannula and to titrate to comfort. This is in line with how oxygen supplementation is used in home hospice and most patients at end-of-life find it most useful.

This is coupled with the order to have a fan at bedside to blow air on patient for comfort.
Albuterol and ipratropium nebulization are commonly provided to patients with respiratory distress. Many patients have some component of reactive airway disease even if it is not the primary cause of their illness. Many patients also report subjective benefit from A/A nebulization, particularly if they are too weak to be able to effectively use the MDI. Therefore the order sets allows the provider to quickly order these treatments. Either one, or the other or both may be ordered. Some patients may find anxiety associated with the albuterol treatment.

The orders are set at default of Q4 hours but note that they are while awake. Modifications can be made such as ordering QID so that sleep is not disrupted or the clinician could use the order twice to set up a QID routine and the second time to provide for a PRN option.

Please see the next slide for the ipratropium order.
See discussion of this option on the previous slide.
This option is the standard respiratory therapy order menu for your facility. Patients referred to hospice and palliative care programs may benefit from one or more of these additional options. For example, a significant number of patients have a change in goals of care after a period of prolonged MV which has lead to the placement of a tracheotomy. In that case, tracheotomy care options will be helpful in safely and comfortably managing the care of a specific patient.
Pain and Dyspnea

Since pain and dyspnea are such common symptoms at the end-of-life this section is critical and all patients should have some medications from this panel selected to ensure that patients have access to opioids for pain and dyspnea.
Pain and Dyspnea

The dark and bold section is the decision support to guide the clinician in choosing treatment options listed below. Common barriers to adequate opioids for patient at end-of-life include route, patients not able to swallow pill or tablet and needing sublingual or parental route. A second problem is that patients are weak and not able to request PRN medication so having scheduled “offer may refuse” or “based on symptoms” helps. The default doses for morphine sulfate are set at 5mg PO/SL or 2mg SQ which would be equal in potency to a “Lortab 5” or “Percocet”.

Morphine is set as the default because it can be administered PO/SL/SQ and IV; it is an effective analgesic and is the best documented opioid for treatment of dyspnea.

A clinician could choose to use a higher dose if the patient has been on opioids and has developed tolerance, however, our research revealed that >80% of patients had received no opioids in the last 72 hours of life so were for practical purposes opioid naïve. These orders should be seen as a dose finding for the next 12-24 hours and will provide guidance on choosing effective dosing regiment for those patients who do not have adequate control with the default setting.

If a patient has an established and effective opioid regiment such as fentanyl patches or hydromorphone and will be able to continue the regiment then it would be appropriate to choose this.
General Review of opioid orders:

Default is set to lower doses, such as in this case, morphine 5mg SL. The provider does have the option to choose a higher dose.

These medications are scheduled q 2 hours. This may seem frequent but they are meant to be an initial dose finding to achieve pain relief in a 4-8 hour period. If a patient is not achieving pain control with this dose finding, the clinician can use the amount administered to choose a higher dose for breakthrough or start a continuous infusion.

Also these medications are not ordered PRN. PRN medications are not effective at end-of-life when patients have difficulty requesting medications. The nursing staff will assess every 2 hours if the pain medication is needed. If the patient can respond at all the staff member could offer with the patient being able to decline, for non-verbal patients the staff should use the non-verbal pain assessment and clinical judgment or if the patient has a respiratory rate of greater than 20/ minute this could be indication of dyspnea that could benefit from opioids.

This is actually easier for nursing staff documentation then PRN opioids. When a PRN medication is administered a follow-up assessment of effectiveness is required. With this method the nurse only has to document if the medication is given and does not have to do double documentation.
Morphine Concentrate

Morphine Concentrate is 20mg/ml and can be administered sublingual. This formulation and route for morphine are commonly used in the Home Hospice setting. Even patients who are not alert or able to swallow can be effectively treated for pain or dyspnea with this medication.

Although morphine SL has been used at home there has been some barriers to use in the VA inpatient setting. In general, there seems to be a preference for parental medications, IV/SQ, among both physicians, nursing and patient and families as this is perceived as more “effective” and also more inline with culture of using injections or parental medications. We have seen that the SQ options is commonly used in many of the hospitals where this CCOS has been implemented.

Another barrier is pharmacy and dispensing of medication. It is not possible to use the bottle and dropper that is used at home and meet standards for control of the dispensing of the morphine SL. Some pharmacies have drawn the MS concentrate up in Insulin syringes so that there is a unit dose. Other have purchased unit doses that come in 1 ml ampules that have 20mg of MS and this often leads to needing to waste a medication each time the ampules are opened.
Morphine solution

Morphine solution is a 10mg/5ml concentration which may make it easier to administer in some patient populations. If a patient has a PEG tube present (patients with history of cancers of the oro-pharynx often have had a PEG tube placed during active treatment) it is often easier to administer this concentration and flush the tube than to try to administer the more concentrated and very small volume of the MS concentrate.

The orders regarding dose, timing and scheduling is the same as described for all opioids in the dose finding and titration phase.
Morphine Sulfate 2mg SQ q 2hour schedule offer patient may refuse or RR >20/minute.

This order has been the most commonly used opioid order in the dose finding and titration process in facilities that have adopted the CCOS. MS 2mg SQ is comparable to the MS 5mg SL/PO dose in potency using the 3:1 ratio of potency for oral to parental morphine.

It should be noted that morphine IV is not recommended routinely in the CCOS. Problems encountered with morphine IV include: a) short half life of less than 10 minutes means that the effect wanes quickly when given intermittently with reoccurrence of pain well before the next dosing interval. If morphine is going to be used IV it is best administered as a Patient Control Analgesia (PCA) with or without a basal rate. However, many patients at end-of-life are not alert enough to use the PCA function and almost all will lose capacity to use the PCA function before death b) loss of the IV line is a common occurrence which results in interruption and delay of administration of opioids when symptoms are often most problematic and c) the pain and distress of maintaining and restarting IV lines in patients at the end-of-life.

For these reasons SQ administration is recommend since the half life is longer, providing better analgesic control, and the SQ line can be easily inserted and replaced if need be, reducing the interruption and delay in administration of opioids.
Morphine PCA

This is set as a default and prompts for ordering a basal rate and the PCA function. For relatively opioid naïve patients able to use the PCA function you could set the PCA and then after 8-12 hours use the number of demands and dose given as a guide to set a basal rate.

For patients who have been on oral opioids and are not able to continue taking the oral medications please use the Opioid Analgesic Dosing Card to convert to Morphine equivalents and then use the 3:1 Po : IV/SQ ratio to convert to total parentral dose for 24 hours; which when divided by 24 hours will give the hourly rate.

It is usually recommended to start with 75% of the calculated dose and titrate up unless the patient is in a pain crisis and clearly will need a higher dose.

Also note that if a patient is not able to use PCA function and basal dose is set that you can use the previous MS 2 mg (or higher dose if needed) q 2hour offer may refuse as the breakthrough for the pump.
Some programs may have access to the portable CADD or infusion pumps for patients who need a chronic opioid infusion. The advantage of this form of subcutaneous infusion is that the morphine is concentrated and this will allow the patient to go much longer between morphine reservoir exchanges. This is particularly helpful if the hourly rate is greater than 5mg hours. For many standard PCA pumps the syringes only contains 60mg of morphine and will need to be changed every 12 hours. The other advantage is that the pump is smaller, not connected to a pole and allows the patient to be more easily ambulatory if they are able to get up.

The experience of the teams using the CCOS is that this modality is needed for a small number of patients but can be very helpful to control pain and improve quality of life for that select group.
Other Opioids

For hospice and palliative medicine clinicians there are a number of other opioid medications that are helpful and may be preferred in individual patients.

However, listing too many options often confuses the primary care provider who may need to use the CCOS protocol. It is important to remember that oral tablets like this oxycodone may be a barrier to adequate opioid therapy in patients as they decline and are no longer able to swallow tablets. It would be important to have a sublingual or subcutaneous rescue available so that response to patient distress with pain is not unduly delayed.

Other Opioids
Methadone. This is an excellent option for some patients but dosing may be more difficult and many facilities do have parenteral methadone options available. This is an opioid for which guidance by the experienced palliative care team is needed and it is not safe to offer as a default medication.

Hydromorphone. This is an excellent option for some patients. There is currently no hydromorphone concentrate so sublingual therapy is not an option. This medication can be given subcutaneously both intermittently or as part of a PCA pump. This is a much more potent medication and an experienced palliative care team should supervise therapy.

Fentanyl Patch: This may be appropriate but should be prescribed only after a dose finding is completed. Would recommend supervision by experienced providers.
Constipation

This section for constipation appears in the CCOS as its own section. If choices for laxatives have already been chosen when an opioid was ordered, the clinician may skip this section. This is placed here because it is important that a bowel regiment always be ordered when patients are prescribed opioids.

The constipation section appears later under its own heading so that if a modification of the bowel regiment is needed the CCOS can be opened and the clinician can easily select that section to place orders.

The first step is a nursing text order to check for impaction. Unless a rectal exam has been done that day by the team it is almost always good practice to check for impaction.
There are two large bowel stimulants, bisacodyl and senna; one of these laxatives should be used to prevent constipation when opioids are prescribed. There is not strong evidence for the superiority of one large bowel stimulant over the other. However, senna may require a larger number of tablets and pill burden may be a consideration.

The default is for one tablet BID but can be escalated easily.
Senna is an effective laxative for constipation and may be the preference of the patient or clinician. The default dose is 2 tablets BID since this comparable to the bisacodyl dose in the previous slide.
Docusate

This is a stool softener and not a laxative. It is commonly given with a senna or bisacodyl to aid with elimination. Docusate only is not adequate for opioid constipation prophylaxis. Unfortunately many providers seem to think this is a laxative and do not understand that it
Bisacodyl Suppository

In patient very near the end-of-life the ability to take oral laxatives often declines. Although oral intake also may decline patients can still experience discomfort. Checking for impaction and using a suppository is a first response. Obviously in an actively dying patient this may not be required.
Fleets Enema

Some selected patients may benefit from a small enema as opposed to the suppository. This is an option for nursing staff to use at their discretion for patient safety.

Other treatments for constipation are available:

The hospice and palliative care team may need to recommend the addition of other medications for constipation. The relative merit of including them on a CCOS is to weigh the need for simplicity and present what would normally be the first line management that you would think appropriate for most patients and guide clinicians.

1) Polyethylene Glycol (Miralax) is an effective laxative and may be a good adjuvant as part of a laxative plan.

2) MethylNaltrexone injection is an opioid antagonist for mu receptors in the large bowel and can stimulate a bowel movement in patients on opioid with opioid induced constipation. This is a rescue medication and is needed when inadequate attention to a laxative program has occurred leading to obstipation or more rarely when there is unrelieved constipation in intractable case.

3) There is limited information on the relative merits of various types of enemas. With limited evidence available it has been our practice to use tap water with castile soap as opposed to lactulose, molasses or other mixtures.
Nausea and Delirium (Phenothiazines)

Part of the goal of the CCOS is to encourage a Portmanteau approach to treatment of symptoms. This means to use a relatively small number of medications that may benefit a number of symptoms and have flexibility in administration.

The options for treatment of both delirium and nausea/vomiting are many. It would be the role of the hospice and palliative care team to provide expertise to choose wisely, however, it is ideal to have a first line treatment option.

Haloperidol was chosen for this role because it is effective for both delirium and nausea/vomiting, can be given both PO/IV/SQ so can always be administered and if not adequately effective the palliative care team can adjust after 12-24 hours.

The Cochrane Library review of the treatment of delirium concluded that low dose haloperidol was safe and effective when compared to other medication options. Haloperidol is also closely related to droperidol; both work through the dopamine receptors in the CTZ. This medications have similar modes of action as proclorperazine (Compazine) or metoclopramide. Therefore haloperidol is helpful for two common symptoms.
Nausea and Delirium (Phenothiazines)

Haloperidol orders have 4 simple choices. There are haloperidol orders based on age with higher doses for younger patients (less than 65) and dose reduction for older patients. The medication can also be ordered PO or SQ; the dose SQ is half the oral dose since it is more potent in this form. It is advised that an order be placed so that if problematic symptoms do arise that staff can respond quickly.

The observation of BEACON research team has been that the SQ route is most commonly used. Delirious patients are often unable to take an oral medication safely and that taking an oral medication when nauseous or when vomiting is difficult.

If a different medication is desired there is an option to go to the pharmacy menu directly.
The following four pages are examples of the four order options for the management of delirium or nausea and vomiting.

Please note the following features of the haloperidol order.

Haloperidol is ordered as a PRN (as needed medication) and is not scheduled. The order is for an initial dose to be administered and the q 2hours for no more than a total of 3 doses or until settled. This means that if a single dose relieves the distressing symptoms of delirium then additional doses may be given every 8 hours as needed.

Many patients may need 2 or less commonly, 3, doses to control distressing symptoms of delirium. The order allows for a dose finding and titration to customize the medication to the patient’s symptoms at the lowest effective dose while at the same time achieving control of distressing symptoms in 4-6 hours. If a patient does not have adequate control of symptoms in this time frame, recommendation from the hospice and palliative care team for treatment plan modifications will be needed.

It may be desirable to place a lock out order to prevent exceeding a maximum dose over a 24 hour period.
This is the example for the oral haloperidol order for patients less than 65 year of age
Example haloperidol subcutaneous route with geriatric dosing

The haloperidol orders are dose adjusted for geriatric patients (65 years of age and older). These lower doses may be appropriate for younger patients if they have debility or have low body weight.

All of the operational aspects are the same for all of the haloperidol order options. Some providers will order both an oral and subcutaneous route to provide flexibility to nursing staff.
Example haloperidol oral route geriatric dosing

The haloperidol orders are dose adjusted for geriatric patients (65 years of age and older). These lower doses may be appropriate for younger patients if they have debility or have low body weight.

All of the operational aspects are the same for all of the haloperidol order options. Some providers will order both an oral and subcutaneous route to provide flexibility to nursing staff.
If you need to order a different medication for delirium or nausea you can do so without leaving the order set.
Anxiety and Seizures

Anxiety and Seizures are distressing symptoms that can occur to patients at the end-of-life. Using the Portmanteau medication guideline, lorazepam is a good choice for a benzodiazepine since it can be given both PO/IV/SQ and is effective also as an anticonvulsant. The use of benzodiazepines at end-of-life must be carefully monitored due to the risk of mistaking delirium for anxiety and the risk of inducing delirium with this medication. Nonetheless many patients are anxious related to their illness and/or experience worsening anxiety due to other treatments. A good example of this is COPD in which dyspnea is commonly a cause of anxiety and albuterol may contribute as well.

Note that lorazepam is an effective anticonvulsant when given IV/SQ not PO. Patients with history of seizures or who have disease process, such as brain metastases, may develop seizures when they are no longer able to take oral anticonvulsants, making this a good option.

There are four order options with either oral or parental routes and dose adjustment for older patients.
Lorazepam for anxiety and seizures

Lorazepam 1mg PO q 6HR PRN

Please note the following features of these orders

Lorazepam is always ordered as a PRN (as needed) medication as the default. If a patient has been on scheduled benzodiazepines then changing the order to scheduled by clicking off the PRN button may be appropriate to prevent withdrawal.

There is always a warning to nursing staff to consider delirium as cause of anxiety and agitation and consider if treatment for delirium may be indicated first.

There are orders for both oral and parental forms of the lorazepam. Please remember that only parental forms should be used to treat seizures.
Lorazepam 1mg IV/SQ q 6HR PRN

Lorazepam is always ordered as a PRN (as needed) medication as the default. If a patient has been on scheduled benzodiazepines then changing the order to scheduled by clicking off the PRN button may be appropriate to prevent withdrawal.

There is always a warning to nursing staff to consider delirium as cause of anxiety and agitation and consider if treatment delirium may be indicated first.

There are both orders for oral and parental forms of the lorazepam. Please remember that only parental forms should be used to treat seizures.
Lorazepam 0.5MG PO q 6HR PRN

Example lorazepam subcutaneous route with geriatric dosing

The lorazepam orders are dose adjusted for geriatric patients (65 years of age and older). These lower doses may be appropriate for younger patients if they have debility or have low body weight.

All of the operational aspects are the same for all of the lorazepam order options. Some providers will order both an oral and subcutaneous route to provide flexibility to nursing staff.
Lorazepam 0.5MG IV/SQ q 6HR PRN

Example lorazepam subcutaneous route with geriatric dosing

The lorazepam orders are dose adjusted for geriatric patients (65 years of age and older). These lower doses may be appropriate for younger patients if they have debility or have low body weight.

All of the operational aspects are the same for all of the lorazepam order options. Some providers will order both an oral and subcutaneous route to provide flexibility to nursing staff.
Corticosteroids are helpful adjuvant medications for many patients at the end-of-life. This class of medication can help with pain by reducing inflammation. For patients with dyspnea, corticosteroids may help reactive airway disease. Many patients may see an improvement in appetite and energy level although the effects are usually short lived lasting for a few weeks to a month.

There are some relative contraindications to corticosteroids, such as infection, increase in serum glucose, delirium and insomnia, however for many patients the benefits are likely to be greater than the burden of a trial of treatment.

The CCOS advocates for the use of dexamethasone as a corticosteroid of choice in this setting. Dexamethasone has flexibility in that it can be given PO/IV/SQ and is of equivalent strength in oral and parental forms. No other commonly used corticosteroid has this flexibility. Since dexamethasone has little mineral corticoid effects, fluid retention may be less common. Dexamethasone is relatively more likely to cause increases in serum glucose than some other forms, but in clinical practice has not seemed to be a common issue.
Please note the following features of this order

The orders for dexamethasone call for 4 or 8mg twice a day at breakfast and noon.

Dexamethasone 4mg is approximately equivalent to prednisone 15mg. Therefore dexamethasone 16mg a day is equivalent to prednisone 60mg/day which will provide nearly the maximum anti-inflammatory effect.

Dexamethasone has a very long half life and could probably be given as a daily dose with equivalent effects. It is clear that giving corticosteroids in the evening may lead to insomnia and potentially more risk of delirium. Although dexamethasone is often given in multiple daily doses such as q 6 hours and at much higher doses such as a total of dexamethasone 40-100mg/day, the benefit of these strategies is not clearly demonstrated.

This order plan of dosing breakfast and lunch was chosen because providers did not feel comfortable with once a day dosing and this takes advantage of a potent potential placebo effect by administering the medication with meals.
Dexamethasone SQ/IV

This order is the parental version of the oral and may be used if the oral route is compromised. It is easy to convert back to oral if desired and adjust the dose up or down as needed.

This order plan of dosing breakfast and lunch was chosen because providers did not feel comfortable with once a day dosing and this takes advantage of a potent potential placebo effect by administering the medication with meals.

If the medication is effective the provider will want to adjust to the lowest dose to maintain the desired effect. If not as effective after a few days can escalate the dose and if still not effective then discontinue.

This medication is particularly helpful if the patient has been on corticosteroids and loses the oral route and needs to have the medication maintained. If should be noted that dexamethasone has little mineral corticoid effect and if this effect is desired a different medication, such as fludrocortisone may be needed.
Constipation

Note that this has been discussed in relationship to the prompt to order a bowel regimen when ordering opioids. However, since some patients may not be on opioids or because a clinician may want to open the CCOS and to modify the treatment plan for constipation it has its own branch point.

All of the options are the same as was discussed previously.
Management of Secretions

Loud moist breathing at the end-of-life can be very distressing for families and staff. Patients usually seem to have a lowered level of consciousness and do not seem very distressed. However, the loud noises are distressing to families concerned that their loved one is suffering.

Repositioning, stopping fluids and tube feedings can be helpful, however, frequent deep suctioning does not seem very helpful and certainly can appear to be uncomfortable for the patient.

The following menu offers a number of options for management of secretions. The relative superiority of one approach to another has not been determined. However, all of the medications work by drying the mouth and throat. These medications do contribute to decreased level of consciousness and delirium. Not all patients need these medications. It is important to not start these medications before they are needed due to their potentially troubling side effects.
Scopolamine Patches

This medication has often been used in the home hospice setting. One advantage is that the patch can be placed and for most patients will not need to be replaced due to relatively short life-expectancy of patients who have a “death rattle”. On the other hand the medication could take considerable time to take effect due to absorption and if there is a need to discontinue the medication the scopolamine may linger in the subcutaneous depot.

For these reasons some providers will want to use one of the more rapid onset medications following this option until the secretions are adequately controlled or in lieu of scopolamine.

In some VA pharmacy this medication is listed as non-formulary and extra steps may be involved to procure.
Atropine Eye Drops

Atropine is well known to dry oral secretions. This treatment plan has also been used in the home hospice setting and is convenient since it can be given orally.

It is important to note that these are Atropine ophthalmic solution and the directions are to use in the back of the throat. If you are using this approach it is important to in-service family, nursing staff and pharmacy to the non-standard use of this medication.

Note in this order it alerts nursing staff that use of atropine is particularly important as an intermittent measure if a scopolamine patch has been placed.
Glycopyrrolate

Some providers prefer to use glycopyrrolate for management of secretions. This medication is given by a parental route and fortunately can be given either subcutaneously or by IV. The subcutaneous route has been used most often in the BEACON program since it is easier to maintain access.

For patients with very difficult to control secretions an increase in frequency to q 4 and/or the dose may be considered.
Mouth Care

Patient at the end-of-life often need and benefit from mouth care. All patients who receive medications for secretions are likely to have a dry mouth and lips and benefit from mouth care.

This slide demonstrates the two mouth care orders.

One is for a Yankauer suction set up. Although deep suctioning is discouraged patients cough or spit up material into the front of the mouth and a Yankauer is helpful with clearing this material.

Spongettes with water can be use to clean and moisten the mouth. Patients often may benefit from this more often than the order of Q 4hours. Therefore the order suggests that if family would like to participate in care, that mouth care is something that they can be instructed in.
Additional Comfort Medications

When the CCOS and the BEACON project was first developed this was not an option that was in use. However, it became clear that many of the orders of the CCOS were good options for both patients who were actively dying as well as patients earlier in their hospital or CLC course. Therefore this menu option was created to remind providers of other medications that might be helpful and save time of having to enter the orders through the pharmacy menu.
Menu option demonstrated

All of these options open to a default of the lower dose and most common route and frequency. This can be accepted or the order can be customized easily by the clinician.
Additional Comfort Medications

Fever
1) Tylenol PO
2) Tylenol PR

Insomnia
3) Trazodone 25mg q HS PRN

Dry Eyes
4) HYPMELLOSE 0.4% W/BAK OPHTH SOLN,OPH 2 drops q 6 hours
5) Lacri Lube Ointment to eyes q 6hours

Sore Mouth
6) MYLANTA/BENADRYL/XYLOCAINE VISC SUSP,ORAL q AC PRN
7) CETYLPYRIDINIUM MOUTHWASH PRN MOUTH PAIN, SWISH AND SWALLOW

Thrush
8) NYSTATIN ORAL TAB,ORAL 1000000UNT PO QID SWISH AND SWALLOW

Sore Throat
9) PHENOL SPRAY, ORAL QID PRN PRN DYSPHAGIA
Additional Comfort Medications (Continued)

Cough
10) Guaifenesin 5ml q 6 hours PRN

Hiccoughs
11) Baclofen 10mg PO TID PRN
12) Chlorpromazine 25mg PO q 6 hours PRN

Dyspepsia
13) Maalox plus extr str 30ml PO q 6 hours PRN
14) Ranitidine 150mg PO bid
15) Omeprazole 20mg PO qd

Diarrhea
Call MD for and Clostridium Difficile orders
16) Pepto Bismol 262mg qid prn

Dysuria
17) PHENAZOPYRIDINE HCL TAB 100MG PO TID
Hospice and Palliative Care patients are best served in an interdisciplinary team approach. Frequently there are multiple needs so that it is prudent to consult one or more supporting services.

One of the consult options is Palliative Care. Since any clinician may encounter patients at end-of-life they will want to consider the orders in the CCOS. On some occasions these providers could use the CCOS to begin palliation of symptoms immediately and place a consult to the Palliative Care Consult Team to assist, refine or potentially transfer the patient if it is appropriate.
When a consult is selected the clinician is prompted to fill out the consult with the additional information that that service may need in order to respond appropriately.

After placing all of the needed consults the CCOS is completed. Additional orders such as laboratory studies, radiology studies other medications or any other needs can be placed using the usual order tabs in you system.
In some Palliative Care patients some laboratory studies may be helpful and still can order and use CCOS.
In some Palliative Care patients some other medications may be helpful and still can order and use CCOS.
In some Palliative Care patients some radiology studies may be helpful and still can order and use CCOS.