

# On-Demand Clinical News

## Unique Routes of Administration in Hospice Care

*Brett Gillis, PharmD*

Various barriers to care may arise as goals shift from active treatment in chronically ill patients, to pain and symptom management in patients enrolled in hospice and palliative care programs. Difficulty with drug administration is one of the most prevalent barriers. Symptom management solutions often depend on safe and effective administration of medications by various routes. In hospice and palliative care, and especially in the final days of life, clinicians often face a clinical conundrum when a patient is unable or unwilling to take medications by previously preferred route(s). Moderately and severely obtunded patients are generally unable to tolerate extensive oral administration, so converting to an alternative route of administration permits the patient to be treated in his or her preferred setting and reduces hospice inpatient admissions.

**FINDING** and  
**IMPLEMENTING** appropriate  
**alternative** routes of  
administration for medications  
are **crucial** in developing a  
patient's  
**individualized**  
hospice plan of care...

## Upcoming Lunch and Learn Presentations

**May**

### **“Management of C. Difficile in the Hospice Patient”**

Presenter: Tracey Gordon, PharmD

Tuesday, May 10, 2016 at 3:00pm ET;

Wednesday, May 11, 2016 at 12:00pm ET

**June**

### **“Skin Care at End of Life”**

Presenter: Sheri Irvine, PharmD

Tuesday, June 14, 2016 at 3:00pm ET;

Wednesday, June 15, 2016 at 12:00pm ET

RSVP by contacting Suzanne Stewart, Lunch and Learn Coordinator, at:  
1-800-662-0586 ext. 3303 or  
[sstewart@procarerx.com](mailto:sstewart@procarerx.com).

### ***Miss a Lunch and Learn?***

Log onto PHC's website, click on “Resources and Education”, “Client Resources” and “Lunch and Learn” to listen to audio and view handouts from previous programs

<https://phc.procarerx.com/resource/edutools/1-1>.

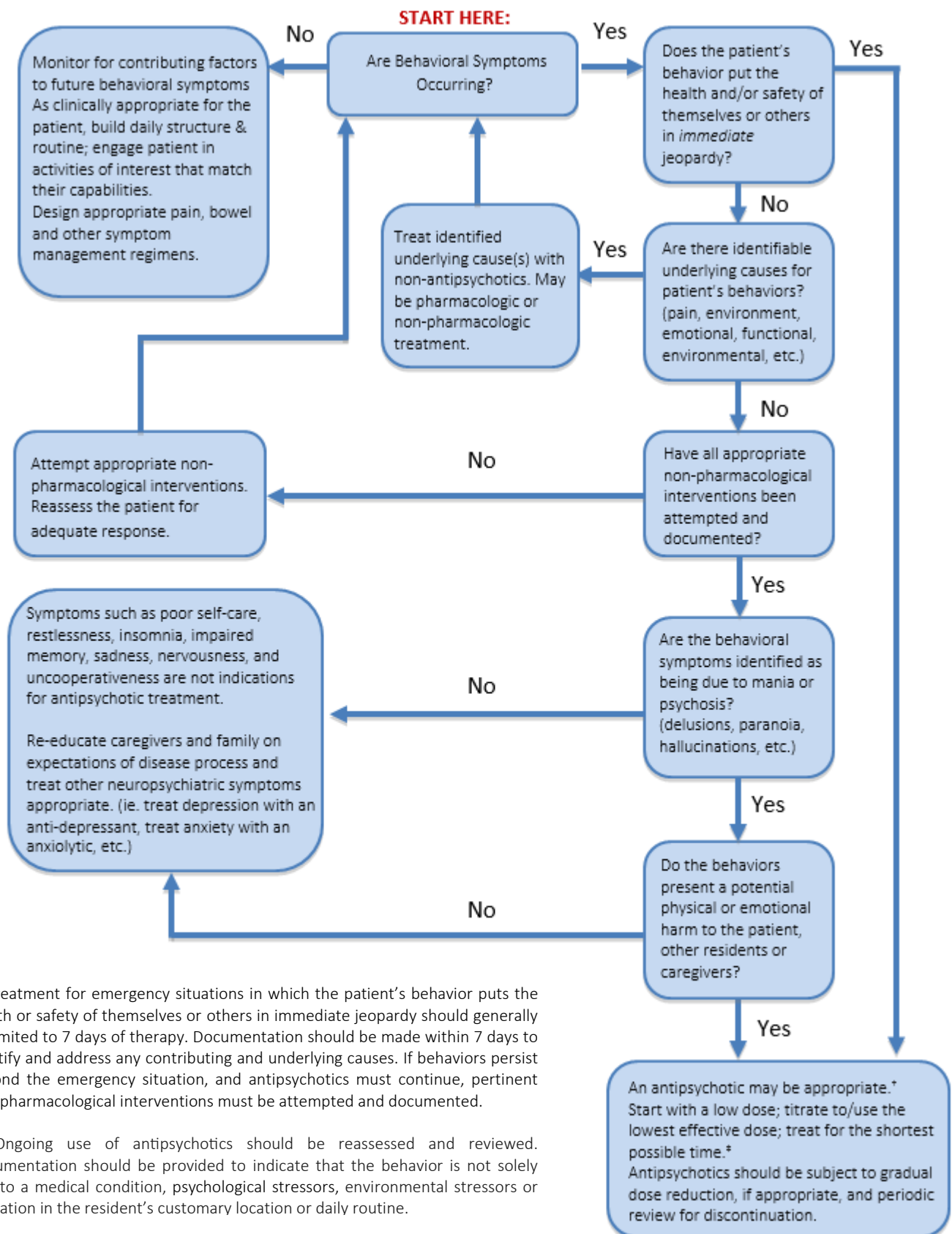


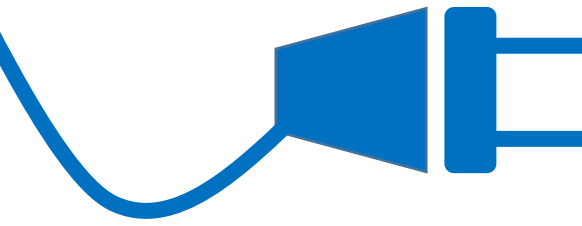
Considerations for the various routes of administration:

- Oral (PO) is generally the preferred and most common route of administration. Tactics to “prolong the PO route” include: identifying and treating dry mouth, taste disturbances, thrush, and any other factor impeding swallowing. Crushing medications and converting to another preferred dosage form (such as liquid) are two other methods to consider before converting to a different route or medication. Most solid, immediate-release (IR) medications may be crushed unless otherwise noted while most extended-release (ER, CR, CRT, ER, LA, SR, TR, TD, SA, XL, XR) medications should not be crushed. “Do Not Crush Lists,” package inserts, and product monographs are excellent resources to consult before crushing a medication.
- Sublingual (SL) and buccal administration may be utilized when swallowing is an issue but the patient is still moderately alert. The SL space and buccal cavity are not generally used as a primary site of absorption per se, but as a reservoir to slowly deliver the medication to the GI tract with the natural progression of saliva. However, highly lipophilic drugs such as methadone may be successfully absorbed SL and buccally. Up to 1ml of liquid is suitable to be administered SL or buccally with the patient’s bed generally positioned at 30 degrees to lessen the risk of aspiration.
- Administration via feeding tube (FT) is a preferred route of administration if the tube to be used is viable and already in place upon admission.
- Rectal (PR) administration is an option to consider when issues preclude PO/SL/buccal/tube administration and the drug is appropriate. Not all medications are absorbed adequately via the rectal route and it is important to keep the following information in mind when reviewing your patient’s medication regimen:
  - Lipid soluble and non-ionized drugs are ideal for PR absorption.
  - Drugs absorbed along the lower portion of the rectum may circumvent first-pass elimination.
  - ER medications should not be altered when given PR.
  - Enteric coated (EC) medications are not typically suitable for PR administration as they require an acidic environment.
  - Moistening medications with water and/or a water-based lubricant help to ease insertion.
  - Chill a suppository for 30 minutes in the refrigerator if too soft.
  - The target volume of liquids to insert PR is 10 to 25 ml.
  - If multiple tablets or capsules are required per dose, then consider enclosing these in a gelatin capsule prior to giving PR.
  - Examples of common medications that should **not** be given PR include Ampicillin, baclofen, gabapentin, nitrofurantoin, oxymorphone, penicillin, phenytoin, and tetracycline. This list is not all-inclusive and it is best to check with a pharmacist for patient-specific recommendations.
- Injectable routes (IV, subcut, IM, etc.) are generally avoided in hospice care due to less intensive plans of care and the discomfort and limitations associated with establishing lines and giving injections.
- Topical administration is preferred for medications commercially available in topical dosage forms. While appealing for ease of administration, topical compounds made from solid dosage forms are not preferred due to unreliable absorption and efficacy as well as difficulties with titration. Robust data to support compounded medications such as ABHR (a topical compound of oral Ativan, Benadryl, Haldol, and Reglan to apply topically) are lacking, and clinical experience has not demonstrated broad success.
- Off-label routes may be appropriate under certain circumstances, especially if other routes of administration are not feasible and/or the patient is in distress. Some medications may even be given via “novel” routes of administration—ketamine given nasally, methadone given vaginally, and lidocaine by inhalation. On the other hand, some novel routes such as inhaled opioids have shown modest if any benefit over short-acting opioids given in low doses over short intervals.

# Antipsychotic Use Algorithm for Dementia Patients within Facilities

Compiled by: Nate Hedrick, Pharm D, Priya Narula, Pharm D, CGP and Kristin Speer, PharmD, BCPS





ProCare's Preferred Drug List (PDL) highlights the preferred medications in hospice and palliative care. The versatility of routes by which these medications may be given is one aspect that favors their use. Overall, PO/SL/buccal/via tube are "moderately easy" to administer and are most cost effective. Injectables and topicals are "very easy" to administer but less cost effective and often not practical. PR administration is the "least easy" to administer but is cost effective. Whenever changing routes of administration, use the medication cautiously and monitor closely.

Finding and implementing appropriate alternative routes of administration for medications are crucial in developing a patient's individualized hospice plan of care and achieving symptom management. Although individual plans of care vary, some goals remain constant, namely, improving quality of life with effective and well-tolerated pain and symptom management.

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