Essential Oils

The use of essential oils as a nonpharmacological treatment for dementia behaviors is increasing, with some success in some individuals. The use of aromatherapy expands beyond behavior management and has been around for a long time. It may be viewed as controversial due to lack of scientific evidence. However, for some people—especially individuals with dementia, it can be an effective treatment. When aromatherapy or essential oils are used, there are some safety implications that need to be considered, particularly when used in a health care setting and with elderly patients.

Education and Training

The Alliance of International Aromatherapists (AIA) and the National Association of Holistic Aromatherapy (NAHA) are two organizations that provide standards of practice, ethical guidelines, and require education and training hours for certification. Practitioners should understand the effects of the oils, how they are absorbed (topically, inhalation), and potential medication interactions. Practitioners should also know how to source quality essential oils and how to avoid adulterated or incorrectly labeled products on the market.

Safety Issues

Many essential oils are extremely concentrated products and can cause harm if used inappropriately. A practitioner
using aromatherapy should understand the physiologic effects of each oil and when its use would be contraindicated for a patient. For example, certain oils can increase sensitivity to the sun (cumin, lemon, lime) and it would be important to avoid these oils in the sunny months or if a patient is on medications that already increase sun sensitivity (like tetracycline). Oils should not be applied to broken skin or mucus membranes and many should not be added to full-body baths for that reason.

Practitioners should also be aware of potential drug interactions between medications and oils and consult with the patient’s pharmacist or doctor about possible issues. For example, peppermint essential oil has methyl salicylate, which can be absorbed topically and would be contraindicated in a patient on aspirin or with an allergy to salicylates.

**Surveyor Message**

Safety is the main message. Storing essential oils safely to avoid inappropriate use or accidents is a concern. Regulations do not explicitly require specific methods of storage, but regulations pertaining to patient/resident protection and accidents could be used to evaluate safe storage of aromatherapy oils. Another safety concern is adverse effects. Evaluation of allergies and response to any adverse effects is another area surveyors may wish to look at if there are concerns when aromatherapy is being used.

### Drug Shortages

The dynamics of medication shortages are challenging. Shortages may be due to several different reasons, such as natural disasters affecting drug manufacturers (e.g., the hurricane in Puerto Rico); a manufacturer leaving the market or being shut down for poor manufacturing standards; or, the lack of raw materials. Whatever the reason for the shortage, it is unlikely that it matters to patients in need of medication.

Currently, one of the acute drug shortages involves intravenous (IV) saline solutions. The Food and Drug Administration (FDA) is working to resolve this shortage. In most cases, manufacturers are allocating IV saline products to health care providers based on historical need until supply is improved. That means that until there is more product in the supply chain, individual providers may find that they are unable to order excess supply above the volumes they’ve purchased in the past. Surveyors should be aware that facilities may be consolidating their supplies to better track what they have on hand, which may mean that some IV fluids are being stored in alternate locations.

In some cases of drug shortages, manufacturers and the FDA may work to provide extended dating so that medications can be used beyond their expiration date. For example, last month Baxter Healthcare and the FDA issued an alert to health care professionals regarding the extended shelf life of some IV solutions manufactured by Baxter Healthcare Corporation.

Surveyors should be aware that the FDA and/or the manufacturer may release information to extend dating for specific lots of medications. In some instances, facilities may have relabeled these products or may have implemented some procedure to ensure the medications are used within new allowable time frames.

Surveyors can check drug shortages on the [FDA Drug Shortages web page](https://www.fda.gov/Drugs/Shortages/or-Surveys/DrugShortages).
The Division of Quality Assurance (DQA) has observed instances in facilities where facility staff have not adhered to the standards of practice to prevent patient-to-patient transmission of bloodborne pathogens when using glucose meters. Patient-to-patient transmission of bloodborne pathogens is a well-known risk when lancets, needles, and syringes are reused between patients. However, patient-to-patient transmission of pathogens facilitated through the use of devices such as glucose meters may not be as well known.

The Centers for Disease Control and Prevention (CDC) has published recommendations for infection control and safe injection practices to prevent patient-to-patient transmission of bloodborne pathogens. Facility staff should evaluate practices related to glucose meter, lancet, and needle use, especially related to insulin administration, as these constitute practices for which DQA staff have observed problems.

CDC recommendations include:
• Prepare medications, such as insulin, in a centralized medication area; multiple dose insulin vials should be assigned to individual patients and labeled appropriately.
• Never reuse needles, syringes, or lancets.
• Restrict use of fingerstick, capillary, and blood sampling devices to individual patients.
• Consider selecting single-use lancets that permanently retract upon puncture.
• Dispose of used fingerstick devices and lancets at the point of use in an approved sharps container.
• Environmental surfaces and equipment, such as glucose meters, should be decontaminated regularly and at any time contamination with blood or body fluids occurs or is suspected.
• Glucose meters should be assigned to individual patients. If glucose meters are shared between patients, the devices should be cleaned and disinfected between each patient use.
• Maintain supplies and equipment such as fingerstick devices and glucose meters within individual patient rooms, when possible.
• Any trays or carts used to deliver medications or supplies to individual patients should remain outside patient rooms.
• Do not carry supplies and medications in pockets. Because of possible inadvertent contamination, unused supplies and medications taken to a patient’s bedside during fingerstick monitoring or insulin administration should not be used for another patient.
• Wear gloves during fingerstick blood glucose monitoring, administration of insulin, and any other procedure involving potential exposure to blood or body fluids.
• Change gloves between patient contacts and after every procedure that involves potential exposure to blood or body fluids, including fingerstick blood sampling.
• Perform hand hygiene with soap and water or alcohol hand sanitizer immediately after removing gloves and before touching medical supplies used on other patients.

A good reference tool for surveyors is DQA publication P-01907, Glucose Meters and Infection Control.

Consultant Corner

**Q:** Do liquid oral medications need the date the medication was opened on them to determine if they are expired?

**A:** Some oral liquid medications are reconstituted at the pharmacy. Many of these liquid medications are antibiotics and will need to be refrigerated. These medications will have beyond use dates on
For liquids that were not mixed by pharmacy, they are most often good to the stamped date from the manufacturer and the need for an open date is not necessary.

**Q:** Do court-ordered, as needed (PRN) antipsychotic or psychotropic medications affect the 14-day evaluation period rule for PRNs in nursing homes?

**A:**

PRN ANTIPSYCHOTICS: CMS has no exceptions to this rule. If the order is PRN and it is for an antipsychotic, nursing homes need to have the person evaluated every 14 days and a new order must be written.

PRN PSYCHOTROPICS: For other psychotropic medications, if the physician provides justification and documented length of treatment, the PRN may be extended beyond 14 days. For example, when admitted, a resident is on PRN lorazepam and the order is continued in the nursing home. That PRN order is good for 14 days. In those 14 days, if the physician documents rationale and a length of treatment, the order can be extended beyond 14 days.

**Q:** Is it legal for staff to borrow medications from another resident to administer to a resident whose medications have run out and until a new supply comes from the pharmacy?

**A:** Depending on the setting and the medications involved, there can be legal violations, not only of the facility regulation but of pharmacy law and even Federal Drug Enforcement Administration (FDEA) laws. In November 2012, CMS issued S&C-13-02, Nursing Homes - Clarification of Guidance Related to Medication Errors and Pharmacy Services, which addresses the issue of borrowing medications.

In addition to legal issues, there are safety and liability concerns that facilities would need to consider. A good reference for liability concerns or “at risk behavior” can be found on the Institute for Safe Medication Practices (ISMP) webpages at:

- [https://www.ismp.org/Newsletters/acutecare/articles/20041007.asp](https://www.ismp.org/Newsletters/acutecare/articles/20041007.asp) (Part I),
- [https://www.ismp.org/Newsletters/acutecare/articles/20041007.asp](https://www.ismp.org/Newsletters/acutecare/articles/20041007.asp) (Part II), and
- [https://www.ismp.org/newsletters/acutecare/articles/AtRisk_behaviors.pdf](https://www.ismp.org/newsletters/acutecare/articles/AtRisk_behaviors.pdf)

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