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F693

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§483.25(g) Assisted nutrition and hydration.

(Includes naso-gastric and gastrostomy tubes, both percutaneous endoscopic gastrostomy and percutaneous endoscopic jejunostomy, and enteral fluids). Based on a resident's comprehensive assessment, the facility must ensure that a resident—

§483.25(g)(4)-(5) Enteral Nutrition

§483.25(g)(4) A resident who has been able to eat enough alone or with assistance is not fed by enteral methods unless the resident's clinical condition demonstrates that enteral feeding was clinically indicated and consented to by the resident; and

§483.25(g)(5) A resident who is fed by enteral means receives the appropriate treatment and services to restore, if possible, oral eating skills and to prevent complications of enteral feeding including but not limited to aspiration pneumonia, diarrhea, vomiting, dehydration, metabolic abnormalities, and nasal-pharyngeal ulcers.

DEFINITIONS §483.25(g)(4)-(5)

"Bolus feeding" is the administration of a limited volume of enteral formula over brief periods of time.

"Continuous feeding" is the uninterrupted administration of enteral formula over extended periods of time.

“Enteral feeding” (also referred to as “tube feeding”) is the delivery of nutrients through a feeding tube directly into the stomach, duodenum, or jejunum.

“Feeding tube” refers to a medical device used to provide liquid nourishment, fluids, and medications by bypassing oral intake. There are two basic categories, naso-grastric and gastrostomy. The type of feeding tube used must be based on clinical assessment and needs of the resident since there are various kinds of feeding tubes within each category.

“Gastrostomy tube” ("G-tube") is a tube that is placed directly into the stomach through an abdominal wall incision for administration of food, fluids, and medications. The most common type is a percutaneous endoscopic gastrostomy (PEG) tube

“Jejunostomy tube” (a.k.a. “percutaneous endoscopic jejunostomy” (PEJ or “J-tube”) is a feeding tube placed directly into the small intestine.

“Naso-gastric feeding tube” ("NG tube") is a tube that is passed through the nose and down through the nasopharynx and esophagus into the stomach.

“Transgastric jejunal feeding tube” (“G-J tube”) is a feeding tube that is placed through the stomach into the jejunum and that has dual ports to access both the stomach and the small intestine.

GUIDANCE §483.25(g)(4)-(5)

A decision to use a feeding tube has a major impact on a resident and his or her quality of life. It is important that any decision regarding the use of a feeding tube be based on the resident’s clinical condition and wishes, as well as applicable federal and state laws and regulations for decision making about life-sustaining treatments

CONSIDERATIONS REGARDING THE USE OF FEEDING TUBES

The regulations at §483.25(g)(4) require that a feeding tube is not used unless there is a valid, clinical rationale, and the resident or if applicable, his/her representative has consented to its use. Consent implies that a discussion has occurred between the resident or representative and the physician, or other member of the treatment team, explaining the process of receiving the tube, and the risks and benefits.

Several factors may be involved in the decision to use a feeding tube including medical conditions that impair the resident’s ability to maintain appropriate nutritional parameters (e.g., cerebrovascular accident, esophageal cancer, delirium, reconstructive facial or oral surgery). The need to improve the resident’s nutritional status or level of comfort are also factors that may be involved in the decision to use a feeding tube. The duration of use of a feeding tube may vary, depending on the clinical situation and resident choice.

The interdisciplinary team, with support and guidance from the physician, is responsible for assuring the ongoing review, evaluation and decision-making regarding the continuation or discontinuation of all treatments, devices or approaches implemented to care for the resident. Involving the resident, family, and/or the resident's representative in discussions about the indications, use, potential benefits and risks of tube feeding, types of approaches, and alternatives helps support the resident's right to make an informed decision to use or not use artificial nutrition and hydration.

A clinically pertinent rationale for using a feeding tube includes, but is not limited to:

- An assessment of the resident's nutritional status, which may include usual food and fluid intake, pertinent laboratory values, appetite, and usual weight and weight changes;

- An assessment of the resident's clinical status, which may include the ability to chew, swallow, and digest food and fluid; underlying conditions affecting those abilities (e.g., coma, stroke, esophageal stricture, potentially correctable malnutrition that cannot be improved sufficiently by oral intake alone); factors affecting appetite and intake (e.g., medications known to affect appetite, taste, or nutrition utilization); and prognosis;
- Relevant functional and psychosocial factors (e.g., inability to sufficiently feed self, stroke or neurological injury that results in loss of appetite, psychosis that prevents eating); and

- Interventions attempted prior to the decision to use a feeding tube and the resident's response to them.

The use of a feeding tube may potentially benefit or may adversely affect a resident's clinical condition and/or psychosocial well-being. Examples of some possible benefits of using a feeding tube may include:

- Addressing malnutrition and dehydration;

- Promoting wound healing; and

- Allowing the resident to gain strength, receive appropriate interventions that may help restore the resident's ability to eat and, perhaps, return to oral feeding.

Examples of some possible adverse effects of using a feeding tube may include:

- Diminishing socialization, including, but not limited to, the close human contact associated with being assisted to eat or being with others at mealtimes;

- Not having the opportunity to experience the taste, texture, and chewing of foods;

- Causing tube-associated complications; and

- Reducing the freedom of movement related to efforts to prevent the resident from pulling on the tube or other requirements related to the tube or the tube feeding.

In order to assure that the resident being fed by a feeding tube maintains the highest degree of quality of life possible, it is important to minimize possible social isolation or negative psychosocial impact to the degree possible (e.g., continuing to engage in appropriate activities, socializing in the dining room). Because of the possible side-effects and discomfort associated with the use of nasogastric tubes, there should be clinically pertinent documentation for extended use of nasogastric tubes (e.g., greater than 30 days).

Nutrition and feeding issues and their underlying causes in the resident with advanced dementia or other chronic neurological disorders such as Parkinson's disease present a particular set of issues and considerations that are discussed in F692. The extended use of enteral feeding tubes in individuals with advanced dementia does not necessarily extend life and remains controversial. The literature regarding enteral feeding of these individuals suggests that there is little evidence that enteral feeding improves clinical outcomes (e.g., prevents aspiration or reduces mortality).

CONSENT

A feeding tube should not be placed unless consented to by the resident or if applicable, appropriately authorized resident representative. The resident has the right to make an informed decision about the treatment they receive. If a resident had a feeding tube placed prior to admission or in another care setting the physician and interdisciplinary care team must review the basis (e.g., precipitating illness or condition change) for the initial placement of the feeding tube and the resident's current condition. This is to determine if there is a continued rationale for its use and to ensure that its continued use is consistent with the resident's treatment goals and wishes. Decisions to continue or discontinue the use of a feeding tube are made through collaboration between the resident (or a representative for a resident who lacks capacity to make and communicate such decisions), the physician, and the interdisciplinary care team. This includes a discussion of the relevance of a feeding tube to attaining a resident's goals (e.g., whether the nutritional intervention is likely to have a significant impact on the individual's underlying condition or overall status).

TECHNICAL AND NUTRITIONAL ASPECTS OF FEEDING TUBES

It is important that staff providing care and services to the resident who has a feeding tube are aware of, competent in, and utilize facility protocols regarding feeding tube nutrition and care. These protocols are required to be developed with the medical director in order to assure staff implement and provide care and services according to resident needs and professional standards of practice.

Facility policies and procedures regarding the technical aspects of feeding tubes must be developed and implemented, which address:

Monitoring the feeding tube

How to verify that the tube is functioning before beginning a feeding and before administering medications, which may include:

- Checking gastric residual volume (GRV)
    - Not recommended for individuals who are alert and able to report symptoms that indicate a feeding is not well tolerated.
    - May be appropriate when initiating tube feedings or for individuals who are unable to report symptoms such as bloating, nausea, or abdominal pain.
    - Actions to take based upon the amount of GRV vary depending on the individual and the clinical condition.
    - pH of GRV may indicate correct placement i.e. pH < 5 generally indicates gastric contents versus intestinal contents but medications and feeding formulas can alter pH levels.
    - Changes in GRV appearance may also be helpful in confirming placement but should not be used in isolation.
    -
- Observing changes in external length of tubing may indicate a change in position but can only be used if the exit site was marked upon initial placement; this method does not apply to low profile G tubes (tube that sits at skin level).

NOTE: Auscultation is no longer recommended for checking placement of the feeding tube. Movement of air would likely be heard whether the tube was in the correct or incorrect location. X-ray confirmation is the most accurate method for verification of tube placement when concerns arise regarding dislodgement or placement. Additional information regarding monitoring of feeding tubes may be found at, https://www.ismp.org/tools/articles/ASPEN.pdf

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Care of the feeding tube

- Securing a feeding tube externally;

- Providing needed personal, skin, oral, and nasal care to the resident;

- Examining and cleaning the insertion site in order to identify, lessen or resolve possible skin irritation and local infection;

- Using infection control precautions and related techniques to minimize the risk of contamination; for example, in connecting the tube and the tube feeding; and

- Defining the frequency of and volume used for flushing, including flushing for medication administration, and when a prescriber's order does not specify.

Feeding tube replacement. Direction for staff regarding the conditions and circumstances under which a tube is to be changed, such as:

- When to replace and/or change a feeding tube (generally replaced either as planned/scheduled or as needed such as when a long-term feeding tube comes out unexpectedly or a tube is worn or clogged);

- How and when to examine a feeding tube and the infusion plug to identify splits or cracks that could produce leakage;

- Instances when a tube can be replaced within the facility and by whom;
- Instances when a tube must be replaced in another setting (e.g., hospital, ambulatory surgery center); and

- Notification of the practitioner when the need for a tube change arises unexpectedly.

Nutritional Aspects of Feeding Tubes

When a resident is receiving nutrition via a feeding tube, the practitioner and the interdisciplinary team identify the resident's nutritional needs and facility procedures that direct staff in providing care and services to the resident. The practitioner's orders related to tube feeding typically include the following components: kind of feeding and its caloric value; volume, duration, and mechanism of administration (e.g., gravity or pump); and frequency of flush.

Facility procedures regarding the nutritional aspects of feeding tubes include, but are not limited to:

Enteral nutrition. Direction to staff regarding the nutritional product and meeting the resident's nutritional needs such as:

- Types of enteral nutrition formulas available for use;

- How to determine whether the tube feedings meet the resident's nutritional needs and when to adjust them accordingly;

- How to balance essential nutritional support with efforts to minimize complications related to the feeding tube;

- Ensuring that the selection and use of enteral nutrition is consistent with manufacturer's recommendations;

- Ensuring that the administration of enteral nutrition is consistent with and follows the practitioner's orders; and

- Ensuring that the product has not exceeded the expiration date;

- Ensuring that additional water ordered for flushes or for additional hydration is administered per orders.

Flow of feeding. Direction for staff regarding how to manage and monitor the rate of flow, such as:

- Use of gravity flow;

- Use of a pump;

- Periodic evaluation of the amount of feeding being administered for consistency with practitioner's orders;

- Calibration of enteral feeding pumps to ensure that pump settings accurately provide the rate and volume consistent with the resident's care plan; and

- Periodic maintenance of feeding pumps consistent with manufacturer's instructions to ensure proper mechanical functioning.

Complications Related to the Feeding Tube

An enteral feeding tube may be associated with significant complications, including aspiration, leaking around the insertion site, abdominal wall abscess, or erosion at the insertion site including the nasal areas. Feeding tubes can perforate the stomach or small intestine, with resultant peritonitis. Esophageal complications of feeding tubes may also occur including esophagitis, ulcerations, strictures, and tracheoesophageal fistulas. The use of tubes not designed or intended for enteral feeding may increase the risk of complications.[16, 17]

Tubes may clog for various reasons, including plugging by formula, pill fragments, or the precipitation of medications incompatible with the formula.[18] Flushing feeding tubes regularly and in association with medication administration, as indicated by current

professional standards of practice and provided in the resident care policies, can help reduce the risk of clogging.

Complications Related to the Administration of the Enteral Nutrition Product

The administration of an enteral nutrition product may be associated with other complications including, but not limited to, nausea, vomiting, diarrhea, abdominal cramping, inadequate nutrition and aspiration. Additionally, interactions between the formula and various medications can affect the absorption and/or effectiveness of the medication. For example, the effectiveness of phenytoin sodium (Dilantin, Phenytek) may be reduced by the drug binding with the enteral feeding's protein component, leading to less free drug availability and possibly inadequate therapeutic levels.

Metabolic complications related to tube feeding may include inadequate calorie or protein intake, altered hydration, hypo- or hyperglycemia, and altered electrolyte and nutrient levels. These risks may be reduced by calculating the nutritional needs of the resident, taking into account comorbid conditions and medications that affect these balances, monitoring for adequate nutritional status and complications, and adjusting the tube feeding accordingly.

While a feeding tube may be initiated with the intent to address certain medical conditions, the use of a feeding tube does not necessarily decrease the risk of aspiration for individuals with other risk factors, such as moderate or less severe swallowing abnormalities. Aspiration risk may potentially be affected by factors such as diminished level of consciousness, improper positioning of the resident during administration of the feeding, and failure to assure the feeding tube is correctly positioned within the stomach or intestine. The evidence is inconsistent and conflicting regarding any connection between gastric residual volume (GRV) and the risk or occurrence of aspiration.[19]

Risk of aspiration should be assessed individually and appropriate interventions (e.g., proper positioning, rate of flow) implemented accordingly. There may be situations where other coexisting factors influence decisions about elevating the head of the bed; for example, a resident being fed by a tube who may be at risk for shearing by sliding down the sheets when the head of the bed is elevated to a recommended angle.

Complications Management

The facility is expected to identify and address actual or potential complications related to the feeding tube or tube feeding and to notify and involve the practitioner in evaluating and managing care to address these complications and risk factors.

PROCEDURES §483.25(g)(4)-(5)

Use the Tube Feeding Critical Element (CE) Pathway along with the above guidance when determining if the facility utilized a feeding tube only after adequate assessment of

the resident's clinical condition to ensure this intervention is medically necessary and with the resident's consent.

The surveyor(s) should use the following: observations, interviews and record reviews to determine if a feeding tube is utilized only if the resident's clinical condition makes this intervention medically necessary and with the resident's consent. The surveyor must determine if a feeding tube is utilized in accordance with current professional standards of practice and if services are provided to prevent complications to the extent possible. Additionally, for a resident whose goal is to restore normal eating skills to the extent possible, the surveyor must determine if the necessary care and services were provided to reach this goal. If there are concerns regarding the facility's use and care of feeding tubes, review facility policies and practices with regard to the use and care of feeding tubes.

NOTE: In addition to actual or potential physical harm, always *observe for visual cues of psychosocial distress and* consider whether psychosocial harm has occurred when determining severity level (See *guidance on Severity and Scope Levels and* Psychosocial Outcome Severity Guide *located in the Survey Resources zip file located at https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/nursing-homes*).

KEY ELEMENTS OF NONCOMPLIANCE

To cite deficient practice at F693, the surveyor's investigation will generally show that the facility failed to do one or more of the following:

- Ensure enteral feeding was clinically indicated; or
- Ensure enteral feeding was consented to by the resident; **or**
- Ensure a resident receiving enteral feeding received appropriate care and services to restore oral eating skills, if possible, **or**
- Ensure a resident receiving enteral feeding received appropriate care and services to prevent complications of enteral feeding.

DEFICIENCY CATEGORIZATION

An example of Severity Level 4 Noncompliance : Immediate Jeopardy to Resident Health or Safety, includes but is not limited to:

- The facility failed to properly set up the tube feeding pump and to monitor a cognitively impaired resident receiving the tube feeding, resulting in the resident receiving too much liquid nourishment at a rate too fast to be absorbed. The