



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.

Subject Pediatric Intensive Feeding Programs

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Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2010 CIGNA

Coverage Policy

CIGNA does not cover pediatric intensive feeding programs because they are considered experimental, investigational or unproven.

General Background

Pediatric intensive feeding programs are interdisciplinary programs that have been proposed to provide treatment for patients with impairment of oral intake. These programs combine medical and behavioral health techniques and provide these services on an intensive basis. The multidisciplinary services may include gastroenterology, behavior psychology, nutrition, social work, occupational therapy, sensory integration, and speech and language therapy. The website for one of these programs, the Marcus Institute feeding program, states that "a pediatric feeding disorder is diagnosed when children fail to consume an adequate quantity or quality of solids or liquids to sustain growth." Examples of feeding disorders that are treated in these programs include the following:

- oral motor dysfunction (e.g., dysfunctional, dysphagia, oral motor dysphagia)
- food refusal/selectivity
- failure to thrive

- short gut syndrome
- gastrointestinal disorders
- self-feeding deficits
- feeding tube dependent

These programs may be provided on an inpatient basis or daily outpatient basis, which is also referred to as a day feeding program. The inpatient programs are generally recommended for children with severe feeding difficulties who may require around-the-clock medical supervision. The Kennedy Krieger Institute website for their pediatric feeding disorders unit states that, "Inpatient services are recommended for children with severe feeding difficulties (e.g., failure-to-thrive, vomiting, G-tube dependence, total food refusal) so that close medical assessments, nutritional monitoring, oral motor assessments and intense behavioral interventions can be conducted." The day program is typically provided eight hours a day, five days per week, and involves feeding sessions of 3–5 meals a day. Between feeding sessions, the patient may be involved in other therapies if needed, playroom, naps or school activities. The day program typically lasts approximately 4–8 weeks.

Feeding Disorders

Feeding disorders may occur frequently in early childhood. There is a reported incidence of minor feeding problems ranging between 25% and 35% in normal children, with more severe feeding problems observed in 40–70% of infants born prematurely or children with chronic medical conditions (Rudolph and Link, 2002). Feeding and swallowing is a complex process that involves the mouth, pharynx, larynx and esophagus. In infants, the first phase also includes the sucking reflex. Oral skills such as sucking or chewing solids are learned only at certain ages. Infants who do not learn these skills at the specific times in their development may have difficulty mastering them at a later point, leading to feeding problems.

In infants and children, the feeding and swallowing process includes the following phases: pre-oral or oral preparatory phase; oral phase; pharyngeal phase; and, esophageal phase (Rudolph and Link, 2002; Rudolph, 2003; American Speech-Language-Hearing Association [ASHA]). Dysphagia and feeding problems are classified according to which phase of swallowing is affected. Oral dysphagia in children is seen most commonly in those with neurodevelopmental disorders (Darrow and Harley, 1998). These children will exhibit poor lingual and labial coordination. This will result in loss of food and a poor seal for sucking or removing food from a spoon. These children may also have difficulty with coordination of sucking, swallowing and breathing.

The most common signs and symptoms of feeding disorders and dysphagia are coughing or choking while eating, or the sensation of food sticking in the throat or chest. Signs and symptoms of dysphagia may also include (Palmer, 2000): difficulty initiating swallowing, drooling, unexplained weight loss, change in dietary habits, recurrent pneumonia, change in voice or speech, nasal regurgitation, and dehydration. Infants may exhibit a feeding disorder with signs and symptoms that include: refusal to eat or drink, failure to gain weight, aversions to specific food types or textures, recurrent pneumonias and chronic lung disease. Consequences of dysphagia and feeding disorders may be severe and may include: dehydration, malnutrition, aspiration, choking, pneumonia, and death.

Swallowing and feeding disorders in children and infants are complex and may have multiple causes. Underlying medical conditions that may cause dysphagia may include, but are not limited to (Palmer, 2000; Rudolph and Link, 2002):

- neurological disorders (e.g., cerebral palsy)
- disorders affecting suck-swallow-breathing coordination (e.g., bronchopulmonary dysplasia)
- structural lesions (e.g., neoplasm)
- connective tissue disease (e.g., muscular dystrophy)
- iatrogenic causes (e.g., surgical resection, medications)
- anatomic or congenital abnormalities (e.g., cleft lip and/or palate)

Evaluation of dysphagia and feeding disorders first includes performing a history and physical. A clinical dysphagia evaluation is usually completed by a speech-language pathologist. The examination will include assessment of posture, positioning, patient motivation, oral structure and function, efficiency of oral intake and clinical signs of safety. A variety of positions, feeding techniques and adaptive utensils may be used during the examination. In infants, the oral-motor assessment includes evaluation of reflexive rooting and non-nutritive

sucking (Darrow and Harley, 1998). Two scales that may be used in the evaluation of infants include: the Neonatal Oral-Motor Assessment Scale (NOMAS) and the Multidisciplinary Feeding Profile (MFP). Infants and children may require additional assessments, since growth, development, and changes in medical condition may affect the swallowing process.

The videofluorographic swallowing study (VFSS), also referred to as modified barium swallow, is the gold standard for evaluating the mechanism of swallowing (Palmer, 2000). This test is usually performed jointly by a physician and a speech-language pathologist. The study will demonstrate anatomic structures, the motions of these structures, and passage of the food through the oral cavity, pharynx and esophagus (Palmer, 2000). Additional diagnostic testing that may be employed includes (Palmer, 2000; Darrow and Harley, 1998): esophagoscopy; esophageal manometry and pH probe studies; electromyography; fibroptic endoscopic examination of swallowing (FEES): This test is performed with a transnasal laryngoscope to assess pharyngeal swallowing; and, ultrasound imaging.

When possible, initial treatment is aimed at the underlying cause of the feeding disorders or dysphagia. Depending on the underlying cause, surgery or pharmacological therapy may be used. However, the cause may not be amenable to these treatments as a result of behavioral contributors to impairment. In these cases, a referral to a professional, such as a speech pathologist, occupational therapist, or feeding clinic is appropriate. A child may continue with signs and symptoms of a feeding disorder even after correction of an underlying abnormality due to a learned aversion to feeding. In these cases, behavioral therapy may be considered.

Feeding therapy for infants and children may include the following strategies (Arvedson, 1998):

- Position and posture changes: Trunk and head control are closely related to development of oral-motor skills. Position changes need to be monitored closely for adjustments over time.
- Changes in food and liquid attributes: These changes may include volume, consistency, temperature and taste.
- Oral-motor and swallow therapies: These procedures are focused on developmental stages with goals to increase the range of textures children can handle in their diets.
- Pacing of feedings: Pacing is a technique that regulates the time interval between bites or swallows.
- Changing of utensils: The food bolus size can be controlled through spoons of different shapes and sizes. Occupational therapists may recommend adaptive equipment and utensils.

Specialized feeding techniques that are used for feeding infants with cleft lip and/or palate have been developed to overcome the lack of negative pressure developed during sucking; these strategies may include (American Cleft Palate-Craniofacial Association [ACPA], 2004): cross-cutting fissured nipples; squeezing a soft bottle to help with the flow of milk; and, pumping breast to deliver breast milk via bottle.

When a patient is unable to achieve adequate alimentation and hydration by mouth, enteral feedings through a nasogastric tube or a percutaneous endoscopic gastrostomy may be necessary. The presence of a feeding tube is not a contraindication of therapy. Removal of the feeding tube may be a goal of therapy.

Management of feeding and swallowing problems in children and infants is often handled through a multidisciplinary approach. Management of the condition may incorporate nutrition recommendations, medical and surgical decisions, position guidelines, oral-motor swallow practice and behavioral intervention (Arvedson, 1998). Therapy provided for feeding disorders should have a documented plan of care that includes specific measures that will be used to assess progress, and objective long- and short-term goals. Assessment of progress toward goals should be made on a regular basis, approximately every 4–6 weeks. Goals should be reevaluated and may be revised depending on progress and the patient's condition.

Literature Review

While a multidisciplinary approach may be needed in the management of feeding disorders in infants and children, there is insufficient evidence in the published medical literature to support the use of pediatric intensive feeding programs to treat swallowing and feeding problems in children.

Sharp et al. (2010) conducted a systematic review of the literature regarding treatment of pediatric feeding disorders. The review included 48 single-case research studies that reported outcomes for 96 participants. Most

children in the studies had complex medical and developmental concerns and received treatment at multidisciplinary feeding disorders programs. All of the studies involved behavioral interventions—no well-controlled studies that evaluated feeding interventions by other theoretical perspectives or clinical disciplines met inclusion criteria. Treatment settings included hospital inpatient units (43.8% of the studies) followed by home/school setting (29.2%), day treatment programs (16.7%), outpatient clinics (10.4%) and residential facilities (6.3%). The results of the review indicated that behavioral intervention was associated with significant improvements in feeding behavior. Percentage of non-overlapping data (PND) was utilized as the non-regression metric in this analysis—this statistic involves determining the percentage of treatment data not overlapping with baseline data. The overall mean PND for all outcome measures was 87.95% (SD = 29.54%), with a range of 0–100% which the authors determined fell into the effective range of treatment outcomes. This review evaluated behavioral interventions used in feeding disorder programs; however the settings for the treatment was not compared or evaluated.

A review of the literature was performed by Miller and Willging (2003) regarding research efforts for diagnostic and treatment strategies for pediatric dysphagia. It was noted that “there is little in the way of outcomes research regarding the effectiveness of diagnostic procedures and management techniques. “ It was noted that most pediatric dysphagia diagnostic and management protocols are based on assumptions and anecdotal evidence. The authors concluded that continued research is needed to prove the reliability and validity of evaluation and management techniques. In addition, they noted that patient outcomes differentiated by diagnosis needed to be tracked to establish evidence-based practice standards for management of pediatric dysphagia.

Byars et al. (2003) conducted a prospective clinical trial for the purpose of describing outcomes in nine children with Nissen fundoplication and feeding gastrostomy (G-tube) treated in a multicomponent intensive feeding program. Nine children with a history of behavioral feeding resistance and G-tube dependence were admitted for intensive treatment to an inpatient feeding program. The treatment included short-term behavioral treatment with a family-focused approach. A team of behavioral therapists managed all aspects of behavioral treatment. A gastroenterologist and registered dietician monitored and managed the medical and nutritional status. At discharge, it was reported that 44% of the sample had been successfully weaned from gastrostomy feedings. At follow-up, six of the nine patients (67%) were weaned from G-tube feeding and taking 100% of their nutritional needs by mouth. It was noted that range of inpatient treatment was 5–16 days. Follow-up assessment was obtained in a clinic visit scheduled 2–4 months after the child’s discharge from the program. Three families did not return for the follow-up visit due to distance from the facility. Weight gains were noted to be small. Limitations of the study included no control group, the small group size and the length of follow-up time after the study.

Summary

Dysphagia and feeding disorders in children and infants may be a result of a wide variety of medical conditions. Multidisciplinary care may be needed to treat these conditions. Dysphagia/feeding therapy has been a standard of care that is used to treat this condition. There is insufficient evidence in the published peer-reviewed medical literature to support the use of inpatient or outpatient comprehensive multi-disciplinary pediatric intensive feeding programs to treat swallowing and feeding problems in children. Impact on health outcomes has not been demonstrated through well-designed clinical trials. The role of these programs in the management of swallowing and feeding problems has not been established.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Experimental/Investigational/Unproven/Not Covered:

CPT* Codes	Description
99199†	Unlisted special service, procedure or report

†**Note:** When used to report pediatric intensive feeding programs

ICD-9-CM Diagnosis Codes	Description
307.50	Eating disorder, unspecified
307.59	Other and unspecified disorders of eating, Other
783.3	Feeding difficulties and mismanagement
783.41	Lack of expected normal physiological development in childhood, Failure to thrive
787.20-787.29	Dysphagia
	All other codes

***Current Procedural Terminology (CPT®) © 2010 American Medical Association: Chicago, IL.**

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Policy History

<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare	12/15/2008	0422	Pediatric Intensive Feeding Programs

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