

Medical Coverage Policy

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Pediatric Intensive Feeding Programs

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Related Coverage Resources

<u>Nutritional Support</u> <u>Occupational Therapy</u> <u>Sensory and Auditory Integration Therapy -</u> <u>Facilitated Communication</u> <u>Speech Therapy</u>

INSTRUCTIONS FOR USE

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Page 1 of 11 Medical Coverage Policy: 0422 benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This Coverage Policy addresses inpatient and outpatient pediatric intensive multidisciplinary feeding programs.

Coverage Policy

Under many benefit plans, coverage for outpatient speech and occupational therapy is subject to the terms, conditions and limitations of the Short-Term Rehabilitative Therapy benefit as described in the applicable benefit plan's schedule of copayments.

Services provided by a psychiatrist, psychologist or other behavioral health professionals may be subject to the provisions of the applicable behavioral health benefit.

Outpatient therapy is the most medically appropriate setting for these services unless the individual independently meets coverage criteria for a different level of care.

If coverage is available for a pediatric intensive feeding program, the following conditions of coverage apply.

Treatment of feeding disorder in an outpatient pediatric intensive multidisciplinary feeding program is considered medically necessary when ALL of the following criteria are met:

- Individual has a significant feeding disorder associated with a medical condition (e.g., failure to thrive, prematurity, neurologic conditions, developmental disability, gastrointestinal disorders, gastrostomy tube).
- Adequate treatment for any contributing underlying medical conditions, if present, has occurred without resolution of the feeding problem.
- Conventional outpatient treatment has not succeeded. A two month trial of conventional treatment must be documented.
- The treatment plan includes active participation/involvement of a parent or guardian.
- The treatment includes a transition from one-to-one supervision to outpatient therapy on discharge.

Treatment of feeding disorder in an inpatient pediatric intensive multidisciplinary feeding program is considered medically necessary when ALL of the following criteria are met:

- individual meets above criteria for an outpatient pediatric intensive multi-disciplinary feeding program
- there is documented failure or contraindication for an outpatient intensive multidisciplinary feeding program
- individual is stable medically and is capable of participating in an inpatient multidisciplinary intensive feeding program

Note: Regular documentation supporting significant progress toward treatment is required to determine the medical necessity of continuation of a pediatric intensive multidisciplinary feeding program.

A pediatric intensive multidisciplinary feeding program is considered not medically necessary for any of the following:

- maintenance or preventive treatment provided to prevent recurrence or to maintain the patient's current status
- treatment intended is to improve or maintain general physical condition
- when a home feeding program can be utilized to continue therapy
- therapy that duplicates services already being provided as part of an authorized therapy program through another therapy discipline
- swallowing/feeding therapy for food aversions that are meeting normal growth and developmental milestones

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 but are not limited to:

- gastroenterology
- behavior psychology
- nutrition
- social work
- occupational therapy
- speech therapy

A pediatric intensive, multidisciplinary feeding program 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."

An outpatient day feeding 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. It is estimated that pediatric feeding disorders (PFD) affects more than 1 in 37 children under the age of five in the United States each year (Kovacic, et al., 2020). 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 difficultly 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 (American Speech-Language-Hearing Association [ASHA], 1997-2023; Rudolph, 2003; Rudolph and Link, 2002). 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: difficulty initiating swallowing, drooling, unexplained weight loss, change in dietary habits, recurrent pneumonia, change in voice or speech, nasal regurgitation, and dehydration (Palmer, 2000). 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 (Rudolph and Link, 2002; Palmer, 2000):

- 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

Page 4 of 11 Medical Coverage Policy: 0422 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 (Miller, 2011; 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.

When a patient is unable to achieve adequate nutrition 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

A multidisciplinary approach may be needed in the management of feeding disorders in infants and children and in most situations outpatient therapy will meet the need for therapy. While the evidence regarding a pediatric intensive multidisciplinary feeding program is not robust, a specific subset of children with significant feeding problems may benefit from an outpatient intensive or inpatient intensive feeding program.

Sharp et al. (2020) conducted a retrospective review to assess outcome results of young children (n=83) receiving intensive multidisciplinary intervention day treatment for chronic food refusal and feeding tube dependence after an eight week, five days a week (40 days) program. Oral

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Williams et al. (2017) conducted a retrospective cohort controlled study design to compare outcomes of outpatient multidisciplinary intensive feeding therapy (IFT) program (n=23) who completed the 5-week IFT program to traditional therapy (TT) (n=22) of single-discipline, once weekly feeding therapy to reduce enteral tube nutrition (ETN) dependence in medically complex young children. The children in the IFT cohort experienced a median reduction in ETN dependence of 49% (34.5-58.5%) compared with a median reduction of 0% (0-25%) for TT (p>0.0001) by the conclusion of the 5-week program.

Sharpe et al. (2017) reported on a systematic review and meta-analysis of program outcomes for children receiving intensive, multidisciplinary intervention for pediatric feeding disorders. The review included 11 studies involving 593 patients with nine retrospective articles and two studies with randomized controlled trials. All samples involved children with complex medical and/or developmental histories who displayed persistent feeding concerns requiring formula supplementation. Behavioral intervention and tube weaning represented the most common treatment approaches. The core disciplines included in the care included psychology, nutrition, medicine, speech-language pathology and occupational therapy. The overall effect size for percentage of patients successfully weaned from tube feeding was 71% (95% CI 54%-83%). Treatment gains continued following discharge, with 80% of patients (95% CI 66%-89%) weaned from tube feeding at last follow-up. Treatment also was associated with increased oral intake, improved mealtime behaviors, and reduced parenting stress. The authors concluded that results indicate intensive, multidisciplinary treatment holds benefits for children with severe feeding difficulties.

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.

Silverman et al. (2013) reported on a retrospective study of a cohort of 77 children diagnosed as having a feeding disorder, gastrostomy tube (GT) feeding dependence (>1 year), and an inability to maintain acceptable growth via oral feeding that completed a tube weaning protocol in an inpatient behavioral feeding program. In the inpatient program, children received treatment from a pediatric psychologist at each meal three times per day, seven days per week, until discharged

with at least one parent was required to be present at all mealtimes. Measures for analysis included About Your Child's Eating, the Mealtime Behavior Questionnaire, and the Parenting Stress Index Short Form. The mean duration of hospitalization was 10.9 days. At discharge, 51% of patients needed no GT feeding, and after one year after discharge an additional 12% needed no GT feeding. Limitations of the study include the retrospective data collection and incomplete ascertainment of follow-up data resulting in a decreasing sample size through 12 months of follow-up, heterogeneity of the patient populations and the psychological measures were dependent upon parent report.

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.

Professional Societies/Organizations

The North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition in their position paper for nutrition support for neurologically impaired children notes that, "Early involvement by a multidisciplinary team of physicians, nurses, dieticians, occupational and speech therapists, psychologists, and social workers is essential to prevent the adverse outcomes associated with feeding difficulties and poor nutritional status." (Marchand, et al., 2006).

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD		No National Determination found	
LCD		No Local Determination found	

Note: Please review the current Medicare Policy for the most up-to-date information.

(NCD = National Coverage Determination; LCD = Local Coverage Determination)

Coding Information

Notes:

- 1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare and Medicaid Services (CMS) code updates may occur more frequently than policy updates.
- 2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Considered medically necessary when used to report pediatric intensive feeding programs:

CPT®* Codes	Description
92526 ⁺	Treatment of swallowing dysfunction and/or oral function for feeding
99199 ⁺	Unlisted special service, procedure or report

Revenue Codes**	Description
0113	Room & Board-Private (One Bed)-Pediatric
0123	Room & Board-Semiprivate (Two Beds)-Pediatric
0133	Room & Board-Three and Four Beds-Pediatric
0143	Room & Board-Deluxe Private-Pediatric
0153	Room & Board-Ward-Pediatric
0430-0439	Occupational Therapy
0440-0449	Speech Therapy-Language Pathology
0515	Clinic-Pediatric Clinic
0931	Medical Rehabilitation Day Program-Half Day
0932	Medical Rehabilitation Day Program-Full Day

[†]<u>Note:</u> Considered Not Medically Necessary when used to report pediatric intensive feeding programs for the treatment of swallowing/feeding therapy for food aversions

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Revision Details

Type of Revision	Summary of Changes	Date
Annual review	 No changes to policy statement 	12/15/2023

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