The SLP’s Role in Pediatric Feeding Disorder

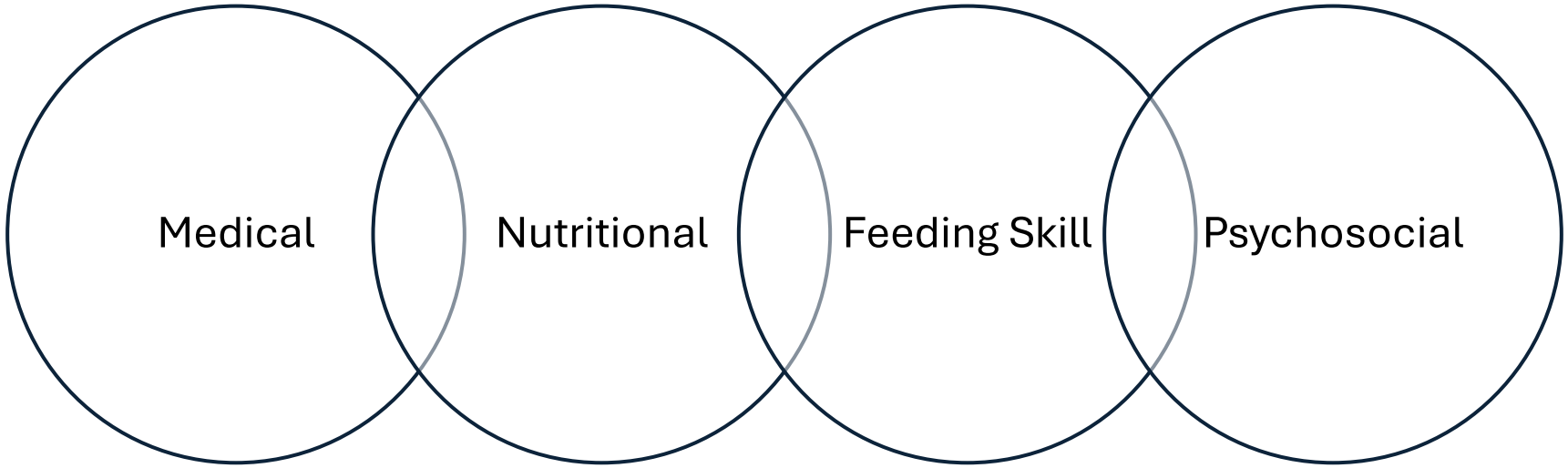
Inservice Presentation

Agenda

- Pediatric feeding disorder (PFD) and dysphagia
- Signs and symptoms, PFD domains, causes
- SLP roles and responsibilities
- Clinical feeding assessment
- Instrumental swallowing assessments (MBSS / VFSS, FEES)
- Interventions
- ASHA resources and finding an SLP

What Is Pediatric Feeding Disorder (PFD)?

Goday and colleagues (2019) define **pediatric feeding disorder** (PFD) as impaired oral intake that is not age appropriate and that is associated with dysfunction in the following domains:



Swallowing Disorders (Dysphagia)

- **Dysphagia** is a swallowing disorder involving difficulty processing and/or moving liquid and/or food boluses through the oral cavity, pharynx, esophagus, or gastroesophageal junction.
- Consequences of dysphagia can include **compromised respiratory status, dehydration,** or **weight loss.**
- Dysphagia is referred to as “feeding skill dysfunction” in Goday et al.’s (2019) PFD consensus definition.

Incidence and Prevalence of PFD

- Incidence of PFD is increasing due to improved survival rates of medically complex children.
- The overall annual prevalence of PFDs in the United States is estimated to be between 2.7% and 4.4%.

Prematurity 43%	Cerebral Palsy 53%	Congenital Heart Disease 43%	Laryngomalacia 72%	Autism 69%

Signs and Symptoms: Medical and Nutritional Factors

Medical Factors

- Slowed motility, vomiting, constipation
- Stridor, congestion during or after eating
- Frequent respiratory illness, apnea, tachypnea
- Cyanosis, bradycardia
- Neurological impairment, developmental delay

Nutritional Factors

- Malnutrition
- Restricted dietary diversity or the quality, quantity, and/or variety of beverages and foods consumed
- Macronutrient or micronutrient deficiencies
- Weight loss

Signs and Symptoms: Feeding Skill Factors

Oral Sensory

- Limited tolerance for age-appropriate textures and viscosities—associated with specific flavors, temperatures, tastes, size, or appearance
- Lack of awareness of food within the mouth, poor bolus formation, anterior loss
- Gagging with specific textures or bolus sizes, excessive chewing, and limited variety of intake

Oral Motor + Pharyngeal

- Poor bolus control and manipulation—resulting in anterior loss or gagging and coughing
- Inefficient intake
- Slow, ineffective mastication
- Oral residue
- Poor secretion management
- An uncoordinated suck–swallow–breathe sequence
- Audible or gulping swallows
- Wet, gurgly voice/vocalizations
- Throat clearing, coughing, chronic congestion

Signs and Symptoms: Psychosocial Factors

Psychosocial Factors

- Learned feeding aversions
- Stress and distress during mealtimes
- Disruptive behavior during mealtimes
- Food overselectivity or picky eating
- Failure to advance to age-appropriate diet
- Grazing
- Caregiver use of maladaptive strategies to increase intake

Causes

- Oral feeding requires coordination of the central and peripheral nervous systems, the oropharyngeal mechanism, the cardiopulmonary system, and the gastrointestinal (GI) tract, with support from craniofacial structures and the musculoskeletal system.
- Because of how these systems interact, an impairment in one area can lead to a disruption or dysfunction in another, resulting in PFD (Goday et al., 2019).
- PFD may be caused by any singular factor or a combination of factors across the four domains (detailed on the very next slide).

PFD Domains

Medical Factors
GI conditions
Laryngeal anomalies
Pulmonary disease
CHD
Neurological impairments

Nutritional Factors
Metabolic disorders

Medication side effects that influence appetite

Conditions that affect growth

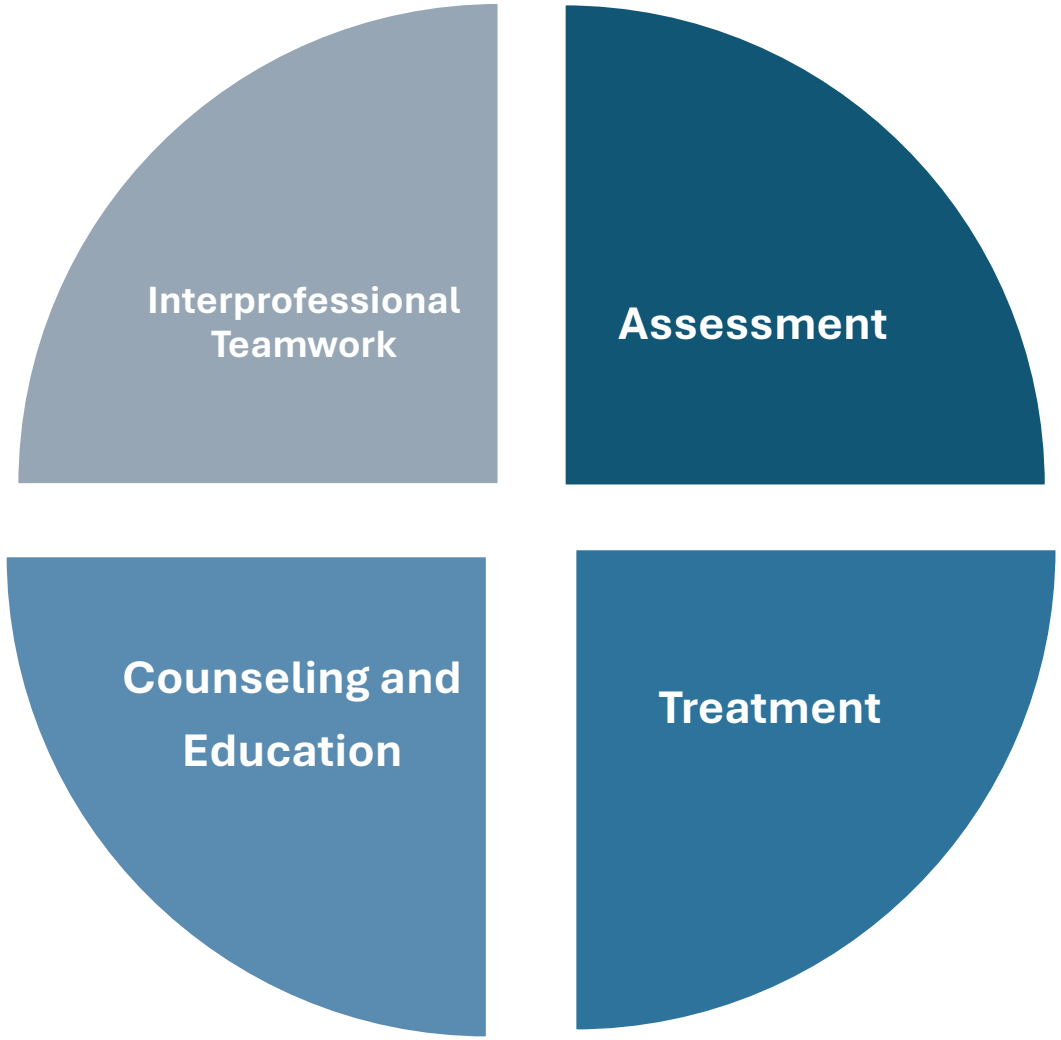
Feeding Skill Factors
Oral sensory impairments

Oral motor impairments

Pharyngeal swallowing impairments

Psychosocial Factors
Mood disorders
Anxiety
Stress
Distracting environment
Inappropriate social influences

SLP Roles and Responsibilities



Settings Where SLPs Work

- NICU
- Acute Care Hospitals
- Inpatient Rehabilitation Hospitals
- Early Intervention or Home Health
- Schools
- Specialty Clinics or Feeding Teams
- Outpatient Clinics

Team Approach

- Family/Caregiver
- Registered Dietitian
- Nurse
- OT/PT
- IBCLC
- Physicians
- Mental Health Professional
- Social Worker
- Teachers

Clinical Feeding Assessment

- Eating and drinking
- Secretion management
- Oral hygiene
- Sensory status
- The ability to accept food
- The amount of diversity in diet
- Management of oral medications
- The caregiver’s competence and confidence while feeding their child
- The psychosocial impact of feeding and swallowing difficulties on the family-and-child dynamic

Clinical Assessment: Infants

- Case history and physical exam
- Oral feeding readiness
- Non-nutritive sucking
- Breast/chestfeeding and bottle feeding
  - Positioning, bottle/nipple, latching
- Physiologic stability and efficiency, quality of intake
- Stress cues
- Spoon feeding (6+ months)
- Forming a plan:
  - Are further referrals needed?
  - Have nutrition and hydration needs been met?
  - Are interventions functional for the infant and for their family/caregivers?

Clinical Assessment: Toddlers + Children

- Case history and physical exam
- Replicate home environment:
  - Highchair or seating system
  - Offering textures and consistencies that are preferred or familiar
  - Trying novel or nonpreferred textures and consistencies
  - Assessing stimulability for sensory-motor based interventions, trialing different utensils
  - Caregiver coaching, psychosocial support
- Forming a plan:
  - Further referrals?
  - Meet nutrition and hydration needs?
  - Are interventions functional for child and family/caregivers?

Instrumental Assessments

- Determining the appropriate procedure to use depends on what the team needs to visualize and which procedure the child will best tolerate.
  - VFSS
  - FEES
- Examinations should be completed for infants or children **only** when
  - there are documented or suspected oropharyngeal swallowing impairments;
  - the patient is medically stable and has the skills needed to participate; and
  - the findings are needed to determine the plan of care (Martin-Harris et al., 2020).
- These points should also be considered when planning for repeat instrumental exams.

Repeat Instrumental Assessments

- Repeat instrumental exams **should not be completed at arbitrary time intervals.**
- Rather, they should be dictated by
  - a change in status or
  - the need for new information.
- Clinicians should administer instrumental assessments with a thorough understanding of the **cumulative effects of radiation exposure** over the lifespan for infants and young children (Martin-Harris et al., 2020).

How can an SLP help?

Support safe and adequate nutrition and hydration

Determine the optimum feeding methods and techniques to maximize swallowing safety and feeding efficiency

Incorporate dietary preferences by collaborating with caregivers

Help individuals achieve age-appropriate feeding skills in the most normal setting and manner possible

Minimize the risk of pulmonary complications

Maximize the quality of life

Support caregiver–child interactions and encourage child and caregiver autonomy and independence

Prevent future feeding issues with positive feeding-related experiences to the maximum extent possible, given the child's medical situation

Compensatory Treatment

Positioning

Diet Modification

Equipment and Utensils

Direct Interventions

Swallowing maneuvers

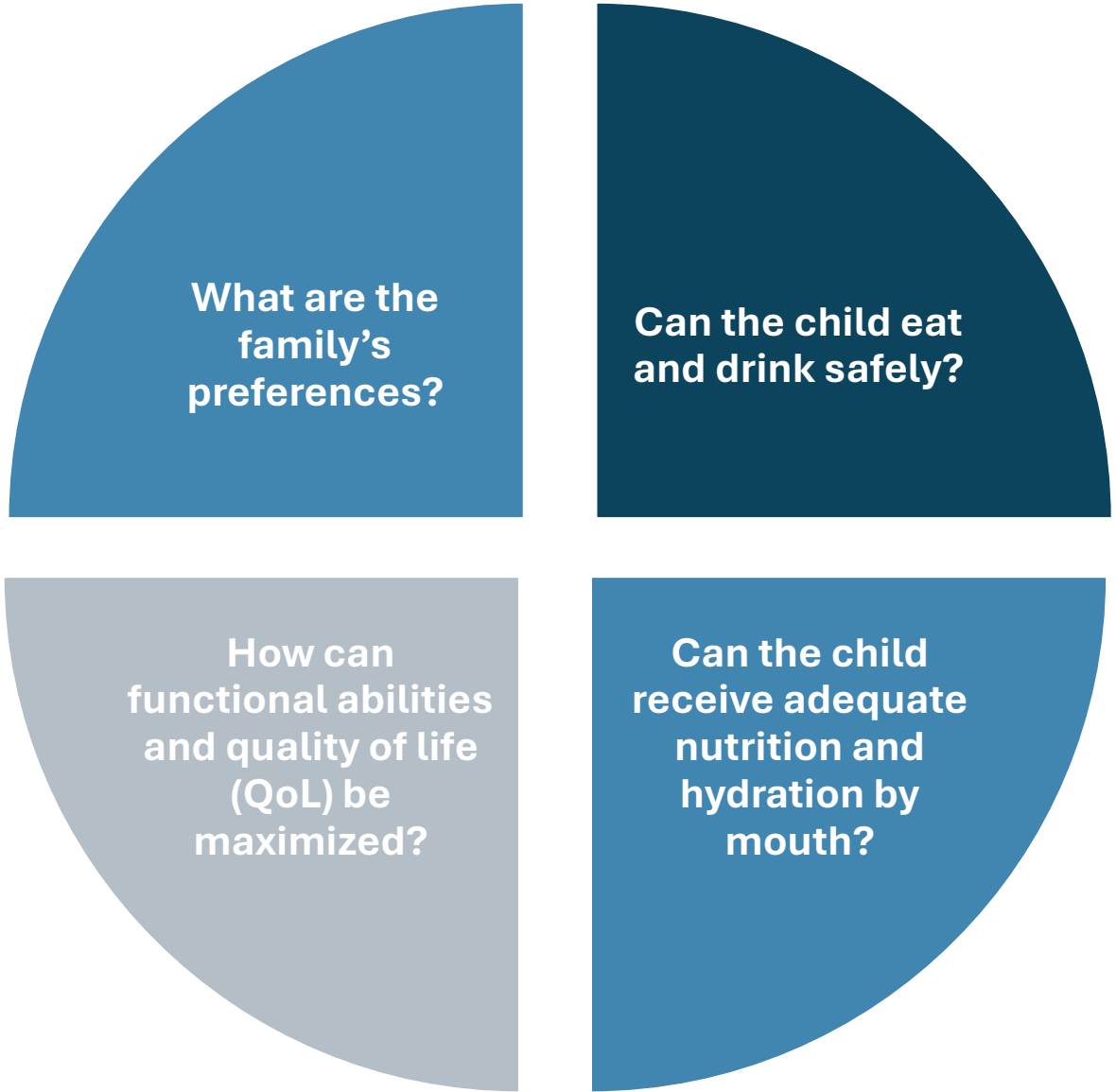
Oral motor and sensory techniques

Biofeedback

NMES*

Responsive feeding

Developing a Treatment Plan



ASHA Resources

- Pediatric Feeding and Swallowing Practice Portal Page
- Developmental Milestones: Feeding and Swallowing, Birth–3 Years
- Public Page on Pediatric Feeding Disorder

Questions? Email healthservices@asha.org, and let us know how we can support you.

For More Information

Find an SLP:

- Go to the ASHA website—**www.asha.org**— and click on “Find a Professional” at the top of the page.
- Contact ASHA:
  - Call: **800-638-8255**
  - Email: **actioncenter@asha.org**

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