A Clinical Practice Guide for Pediatric Feeding Disorder

Pediatric Eating And Swallowing (PEAS) Provincial Project





Welcome

Introductions & Objectives





Dr. Bev Collisson

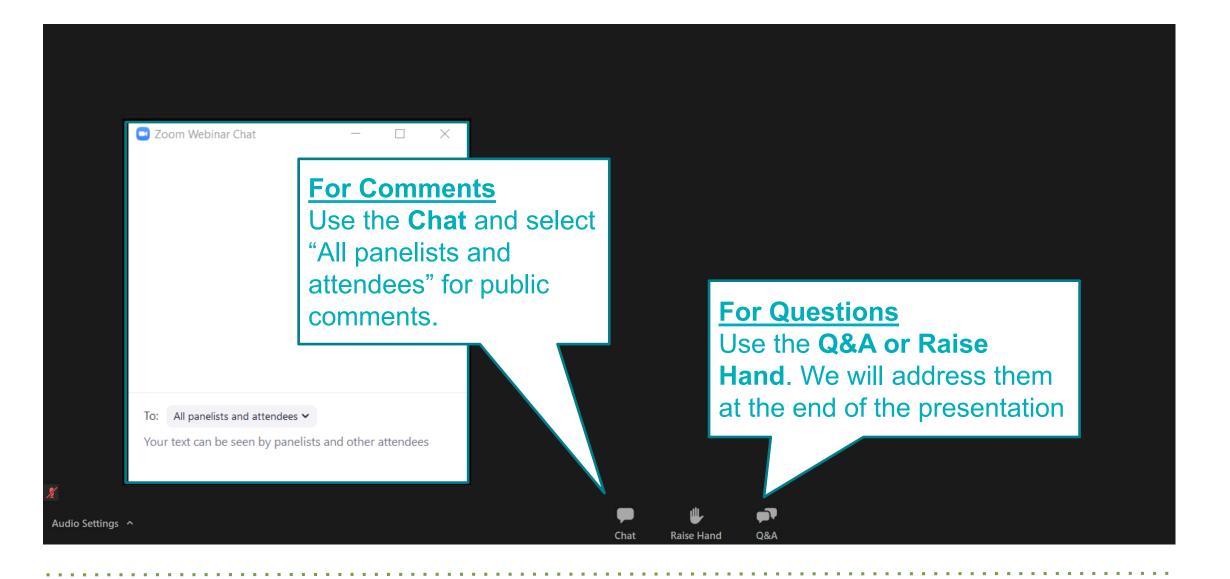








PEAS Provider Training: Overview & New Tools



Project Scope

The Pediatric Eating And Swallowing (PEAS) Project is a provincial **quality improvement** initiative with the purpose of developing a provincial eating, feeding, and swallowing **clinical pathway** to standardize and improve care for children with a **pediatric feeding disorder**.¹

Target population: Patients receiving care from provincial Outpatient Clinics, Home Care, or Community Rehabilitation

¹ Goday PS et al. *Pediatric Feeding Disorder: Consensus Definition and Conceptual Framework*. J Pediatr Gastroenterol Nutr. 2019 Jan;68(1):124-129.

Pediatric Feeding Disorder

- A) A disturbance in oral intake of nutrients, inappropriate for age, lasting at least two weeks and associated with one or more of the following:
 - 1) Medical dysfunction
 - 2) Nutritional dysfunction
 - 3) Feeding skill dysfunction
 - 4) Psychosocial dysfunction

B) Absence of the cognitive processes consistent with eating disorders and pattern of oral intake that is not due to a lack of food or congruent with cultural norms (Goday, et al., 2019).

Family Story Mona Dhanda



Eisha – Age 8

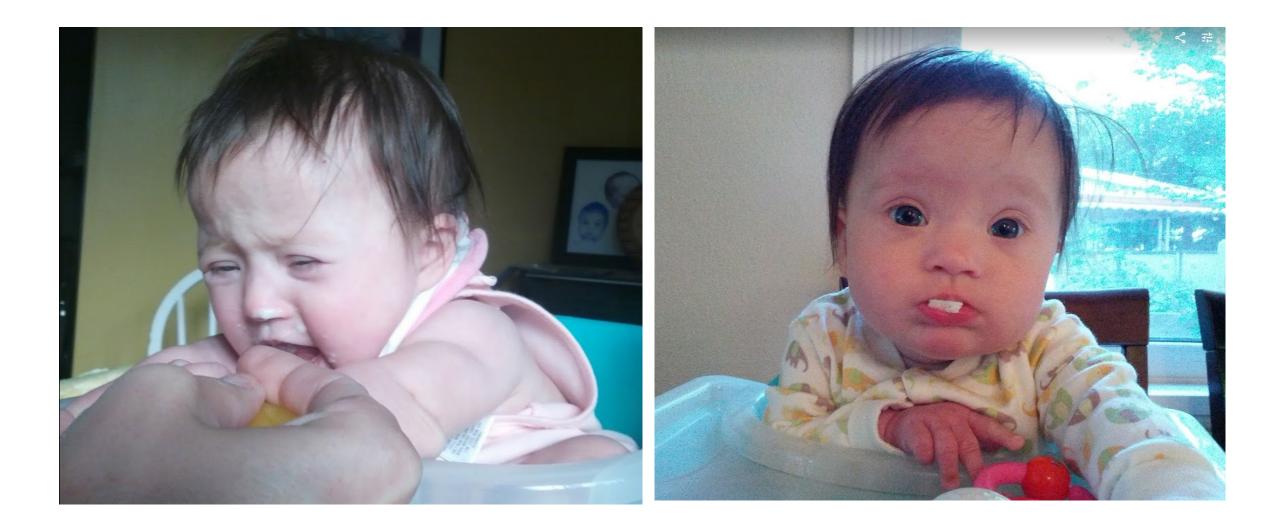


Eisha – Birth Story

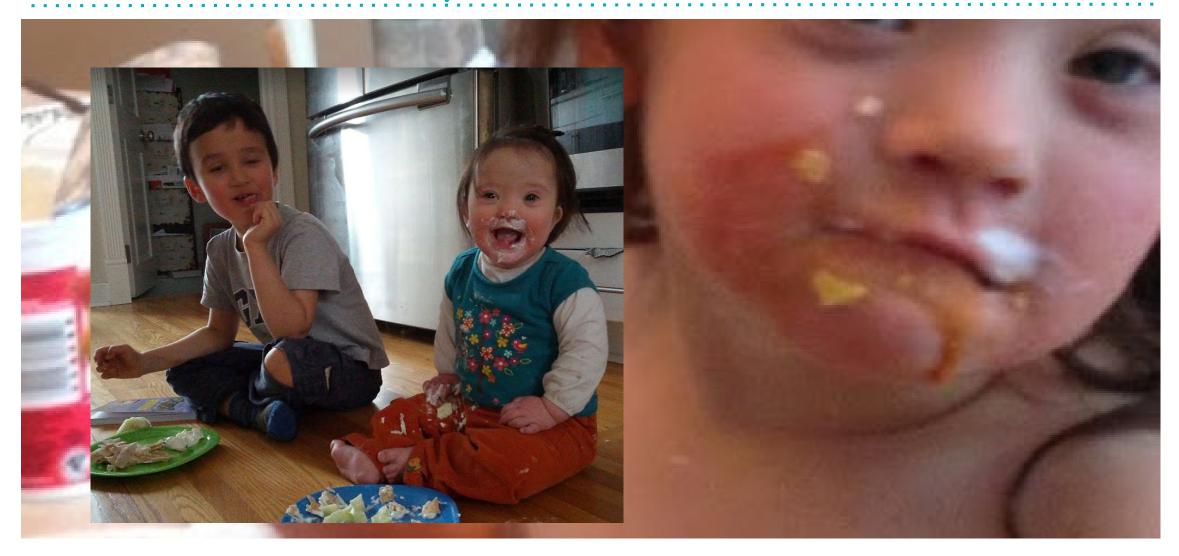




Eisha –	The	first	year
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Eisha - Transition to solid food - Daycare and School

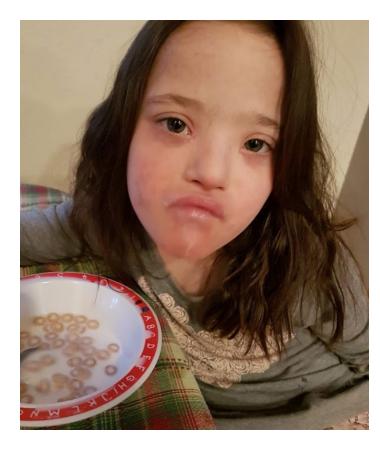


Eisha – Education, Interventions & Supplies

TOP SPOONS FOR FEEDING THERAPY



Eisha – Appropriate eating and non food items







Eisha – Specialized Services and taking chances on food







Eisha – Still working hard – This meal took 90 mins to complete



PEAS Clinical Practice Guide



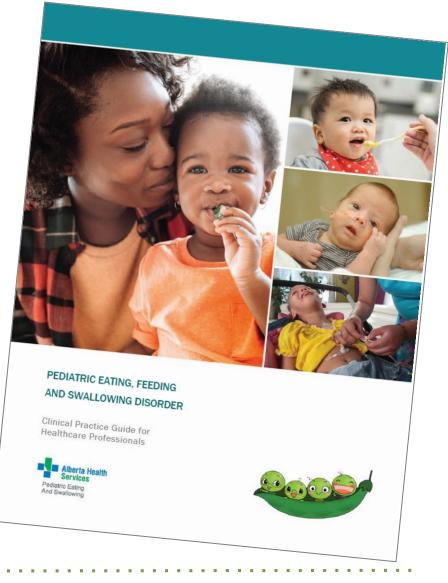
Clinical Practice Guide for Healthcare Professionals

Provides information, guidance and recommendations, to support health care professionals in making clinical decisions regarding the screening, assessment and management of children with pediatric feeding disorder.



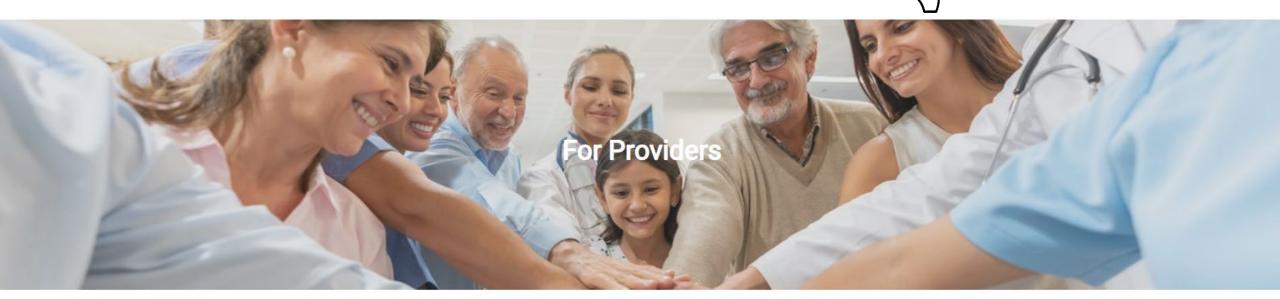
Oral & Enteral populations

- Online or downloadable version
- CPG Quick Reference of Tables & Figures





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FOR PROVIDERS

CLINICAL PRACTICE GUIDE CLINICAL TOOLS & FORMS COLLABORATIVE PRACTICE PROFESSIONAL DEVELOPMENT COMMUNITY OF PRACTICE

For Providers

The following are an array of evidence-based resources for healthcare providers in Alberta to support your work in serving children and families with the safest care, in a collaborative team, wherever possible.

Clinical Practice Guide



Clinical Tools & Forms

- Screening Tool
- Assessment Tools and Questions
- Food Record
- Collaborative Goal Wheel



For Providers / Clinical Practice Guide / Summary

SUMMARY

CPG QUICK REFERENCE

INTRODUCTION

SCREENING

ASSESSMENT

DIAGNOSIS AND GOAL SETTING

MANAGEMENT: ORAL FEEDING

MANAGEMENT: ENTERAL NUTRITION THERAPY

MONITORING AND EVALUATION

TRANSITION

APPENDICES

BIBLIOGRAPHY

Summary

Pediatric Eating, Feeding and Swallowing (EFS) Disorder: A Clinical Practice Guide (CPG) for Healthcare Professionals

Click to download CPG

Pediatric Eating, Feeding and Swallowing (EFS) Disorder – A Clinical Practice Guide for Healthcare Professionals provides information, guidance and recommendations, to support healthcare professionals in making clinical decisions regarding the screening, assessment and management of children with eating, feeding and swallowing disorder. The guide was prepared for Alberta Health Services (AHS) by an expert clinical reference group under the auspice of the Maternal Newborn Child & Youth Strategic Clinical Network TM (MNCY SCN) and is aimed at achieving the best possible pediatric care throughout the province.

Key Principles

The guide reflects what is currently regarded as a safe and appropriate approach to the screening, assessment and management of children with eating, feeding and swallowing (EFS) disorder. This document should be used as a guide, rather than as a complete authoritative statement of procedures to be followed in respect of each individual presentation. It does not replace the need for the application of clinical judgement to each individual presentation.

As in any clinical situation, and due to the heterogeneous nature of EFS disorder, there are factors that cannot be covered by a single guide. Clinicians need to assess and develop individual treatment plans tailored to the specific needs and circumstances of the child and family. This guide should be read in conjunction with other relevant guidelines, position papers, codes of conduct, and policies and procedures, at professional, organizational and local levels.

Use of Guide

Senior Operating Officers and Directors should ensure:



Is Feeding a Struggle? Find Services Equipment & Supplies FAQs For Families

s For Providers

Q

CPG QUICK REFERENCE

INTRODUCTION

Key Principles of Practice Conceptual Framework and Definitions

How to Use this Guide

SCREENING

ASSESSMENT

DIAGNOSIS AND GOAL SETTING

MANAGEMENT: ORAL FEEDING

MANAGEMENT: ENTERAL NUTRITION THERAPY

MONITORING AND EVALUATION

TRANSITION

APPENDICES

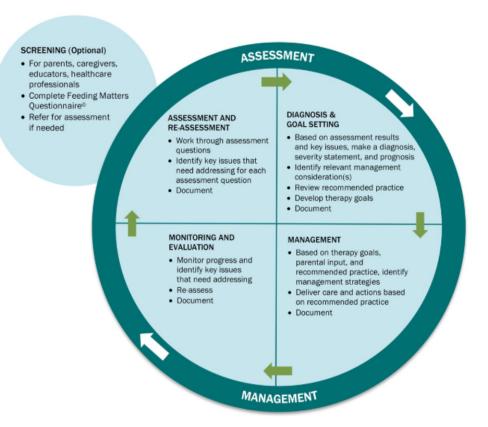
BIBLIOGRAPHY

How to Use this Guide

Assessment and management of EFS disorder in children is an ongoing, cyclical process (see Figure 2). The inner quadrants depict the four distinct, but interrelated steps in the Pediatric Feeding Care Cycle. Detail regarding the necessary actions are recommended in each quadrant. The outer ring identifies the components of the guide that relate to the steps.

Figure 2: Pediatric Feeding Care Cycle

(NSW Office of Kids and Families, 2016)



Conceptual Framework Consensus Definitions



Consensus Definition

- Eating
- Feeding
- Swallowing
 - Oral Preparatory
 - Oral Transit
 - Pharyngeal
 - Esophageal
- Pediatric Feeding Disorder
- Pediatric Swallowing (Dysphagia) Disorder

PEAS Provider Training

Children with Complex Care Needs

Figure 1: Definitional Framework for Children with Complex Care Needs Specific to Eating, Feeding and Swallowing

Family Needs

- Family identified with substantial service needs, including mental health
- Significant impact on family e.g. Social, financial burden, extensive time required for care of child, including medical visits or health/rehabilitation visits

Chronic Condition(s)

- Diagnosed (e.g. complex chronic conditions) or disorders undiagnosed but suspected
- Often severe and/or associated with medical or developmental concerns

dependence or dependency on others for surveillance and to achieve activities of everyday functioning

Healthcare Use

High resource utilization

Functional Limitations

· Often associated with technology

 Necessitating the involvement of multiple service providers in multiple settings including language/cultural

.

Pediatric Feeding Disorder: PFD is defined as impaired oral intake that is not age-appropriate, lasting at least 2 weeks, and associated with one or more disturbance of: medical, nutritional, feeding skill, and/or psychosocial function

Adapted from:

(Goday, et al., 2019)

Complex Needs Specific to Eating, Feeding, and Swallowing

- Multisystem involvement (gut, respiratory, cardiac, renal, metabolic, neurological)
- Technological dependency (feeding tube, tracheostomy, etc.)
- Non-technological dependency on supports for feeding or other activities of daily living

Needs

- Significant anatomical abnormalities
- Risk of aspiration/known aspiration
- Oral feed refusal and/or poor endurance causing suboptimal nutrition intake, dehydration and/or malnutrition
- Medically unstable
- Regulation issues which impact family dynamics
- Social/Mental health issues that compromise safety of the child or ability of the child/family to function at home, school or work

Non-Complex Needs Specific to Eating, Feeding, and Swallowing

- Healthy Neonate requiring minimal guidance with breast or bottle feeding
- Infants with challenges with breast or bottle feeding or texture progression
- Isolated disturbances in oral intake that do not significantly impact intake of nutrients or growth or daily function (examples can include: sensory issues, mealtime management issues)
- · Isolated cleft lip or palate

Relational Approach

Responsive feeding



- Responsive feeding environment
- Responsive feeding intervention

Screening

Pediatric Feeding Disorder and Dysphagia



PEAS Provider Training

Figure 3: Pediatric Feeding Care Cycle

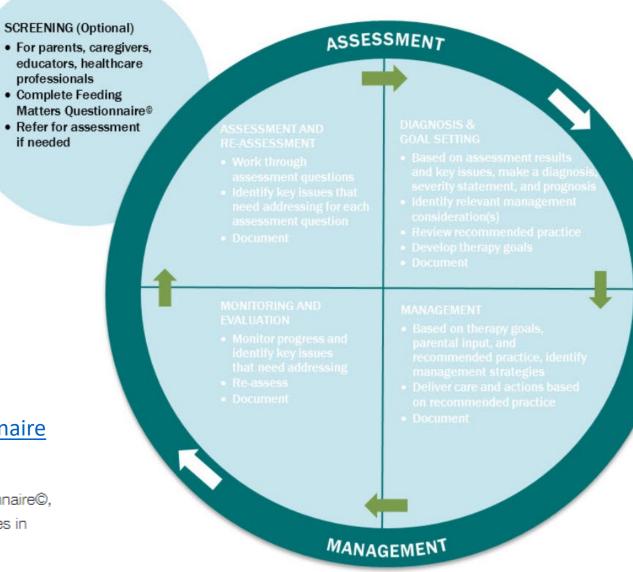
(NSW Office of Kids and Families, 2016)

Screening

START QUESTIONNAIRE

http://questionnaire.feedingmatters.org/questionnaire

Note: this link will direct you to Feeding Matters in the United States. After completing the Feeding Matters Infant and Child Feeding Questionnaire©, please return to this website and click on **Find Services** to locate services in Alberta



Assessment

4 Domains of PFD 5 Key Questions of PFD

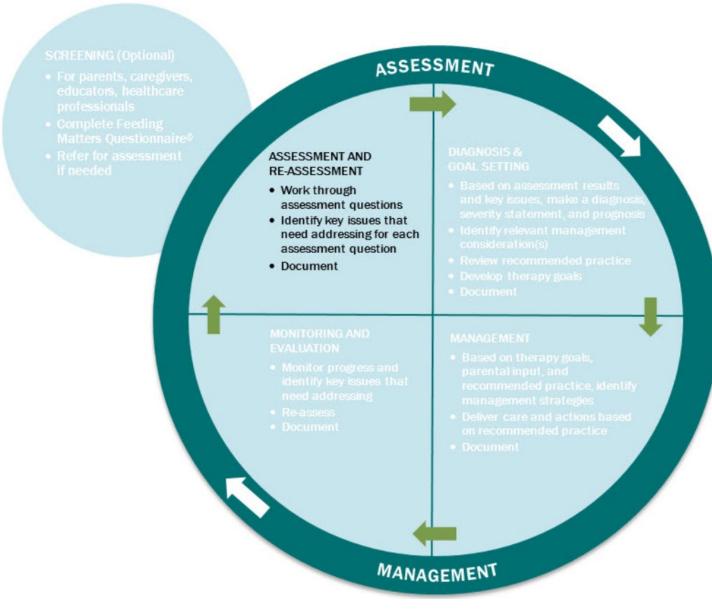


PEAS Provider Training

Figure 4: Pediatric Feeding Care Cycle

(NSW Office of Kids and Families, 2016)

Assessment



4 Health Domains of PFD

Medical Domain

Nutrition & Hydration Domain

Feeding Skill Domain

Psychosocial Domain



Question 1: Is the Current Method of Feeding Safe?

Question 2: Is Feeding Adequate?

Question 3: Is Feeding a Positive Experience for Child and Parent?

Question 4: Is Feeding Appropriate for the Child's Developmental Capacity?

Question 5: Is Feeding Efficient?



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Assessment Dysphagia 1 Key Question



1 Key Question of Dysphagia

Is swallowing safe?

- Are there signs and symptoms of decreased airway protection?
- Can physiological and respiratory stability improve safe oral feeding?
- Can compensatory strategies, rehabilitation interventions, or diet modifications improve safe and swallowing?

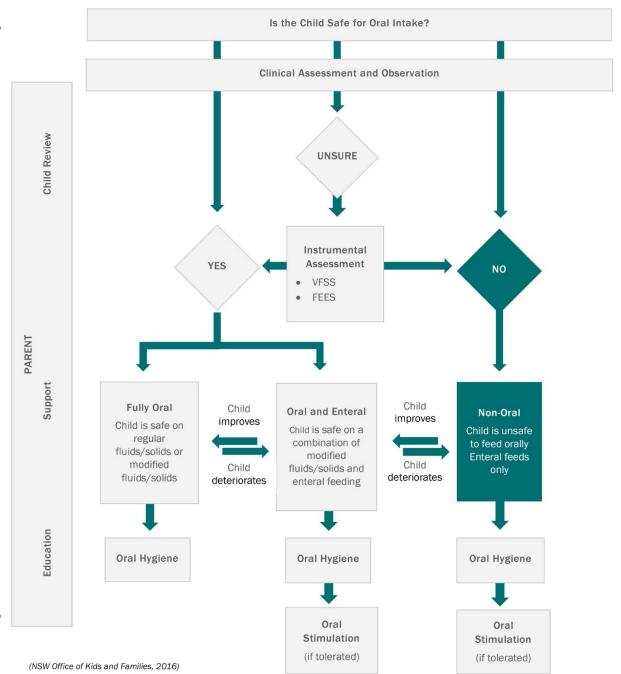


Figure 8: Safe Swallowing Decision Flow Chart

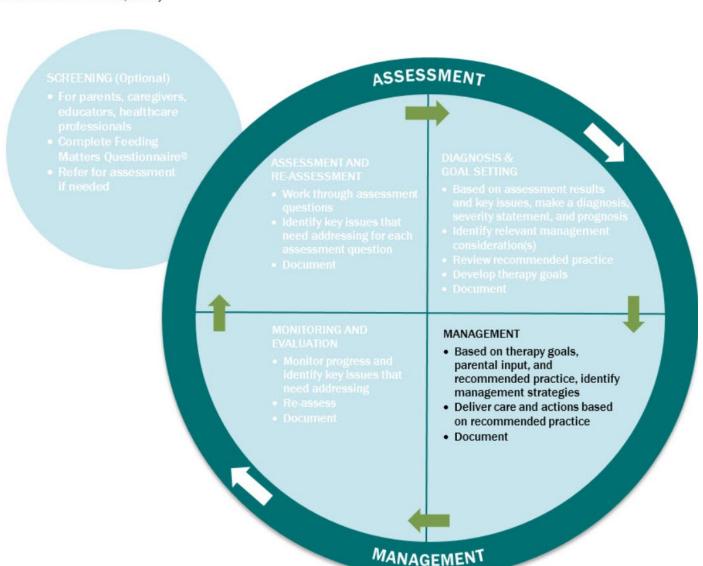
WHEN TO CONSIDER VFSS	CONTRAINDICATIONS OF VFSS		
 Patient cooperation is maximized Some exposure to oral intake – a minima necessary to obtain enough diagnostic instudy 	al amount is compromised pulmonary fun		
Fatigue with feeding	WHEN TO CONSIDER FEES	CONTRAINDICATIONS OF FEES	
 ABLE 3: ADVANTAGES AND DISADVANTAGE O ADVANTAGES OF VFSS Defines oral and pharyngeal stages of swa Provides dynamic imaging of oral, pharyng esophageal phases of swallowing Non-Intrusive (although, for some the con considered intrusive) Assesses various consistencies 	 bottle or breastfeeding poor or questionable secretion management stertor stridor suspected laryngeal abnormality fatigue with feeding 	 aluation for anatomic conditions such as choanal atresia and nasal or pharyngeal stenosis 	
 Provides ongoing view of airway protection swallows 	TABLE 5: ADVANTAGES AND DISADVANTAGES OF FE	EES	
 Verifies outcomes of modifications 	ADVANTAGES OF FEES	DISADVANTAGES OF FEES	
Logemann, 1991)	 it is possible to complete if non-oral or limited of assesses secretion management visualizes pharyngeal and laryngeal anatomy visualizes the vocal cords 	 intrusive actual swallow is obscured (white out) cannot assess esophageal phase operator dependent and open to subjective interpretation 	

Management Oral Feeding



Management

Figure 6: Pediatric Feeding Care Cycle (NSW Office of Kids and Families, 2016)



Management: Oral Feeding Overview

- 1. Medical stability
- 2. Facilitating safe swallowing
- 3. Nutrition management to improve nutritional intake
- 4. Seating and positioning
- 5. Feeding skill development
- 6. Feeding environments and routines
- 7. Sensory processing
- 8. Oral hygiene and dental health

Medical Stability

- Medically stable as per a physician
- At least 30 weeks gestation
- Off ventilation for at least 24 hours
- Able to maintain a resting respiratory rate of 60-70 breaths per minute or less with no respiratory distress cues
- Maintaining wakeful periods quiet alert state
- Managing secretions (oral and pharyngeal)
- Tolerating enteral feeds
- Displaying hunger cues (preferred for feeding trials)

Facilitating Safe Swallow

- Goal is to facilitate oral intake while minimizing risk of airway compromise
- Should involve a team approach
- Reassessment with changes in health
- Compensation strategies and rehabilitation techniques

Facilitating Safe Swallow

- Pacing and nipple flow rates
- Method of bolus delivery
 - -i.e. Appendix 6, Equipment List
- Texture modification, progression, and nutrition
- Thickener considerations (Table 9)

Nutrition Management

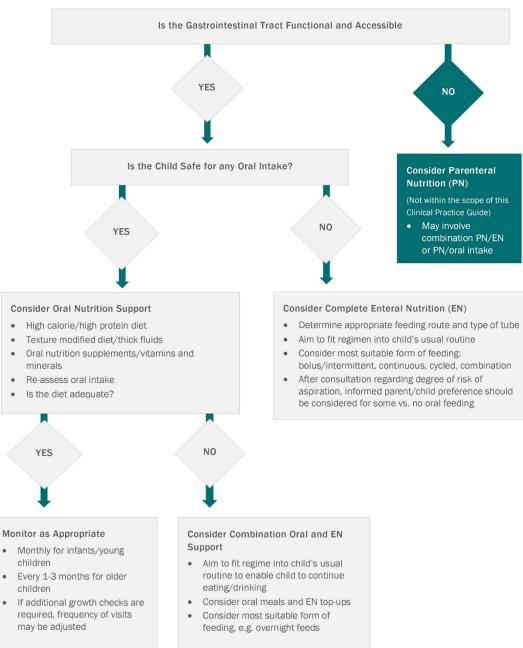
- Children with PFD are at greater risk of malnutrition
- Goal is to support growth and optimal health
- Strategies may vary based on age, medical condition, skill, psychosocial factors and current intake
- Enteral nutrition support may be considered when oral intake cannot be well supported.

Nutrition Management

- High calorie high protein diet, texture modification, oral nutrition supplements, vitamins/minerals
- Enteral nutrition
 considerations
- A combination of oral and enteral feeds

Figure 7: Nutrition Support Decision Making Tree (Modality Algorithm)

For use when oral intake has been assessed as inadequate or inefficient



Seating and Positioning

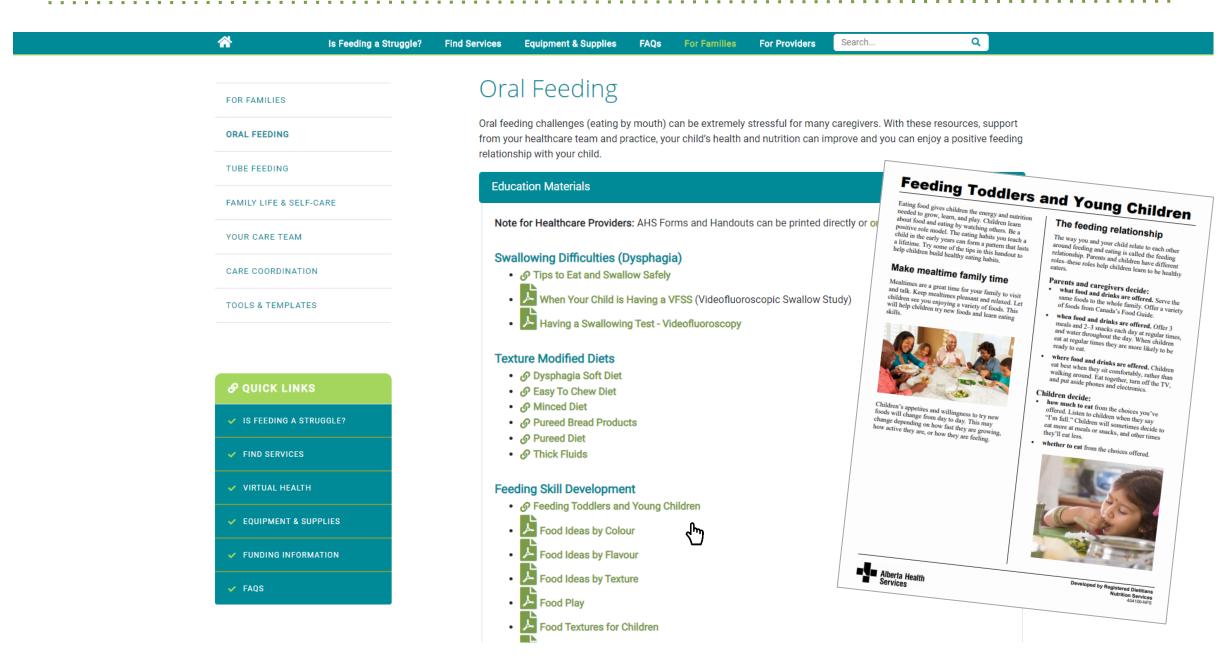
- Stability-mobility patterns for coordination of suck-swallow-breathe
- Positioning intervention for functional sitting
- Guidance for infants and children, use of highchairs and boosters, and significant postural needs
- Equipment considerations

TABLE 10: POSITIONING FOR INFANTS, CHILDREN AND YOUTH WITH SIGNIFICANT POSTURAL NEEDS

POSTURAL NEED PICTURE Pelvic Stability pelvic stability provides the base foundation of support in a sitting position. Pelvis should be positioned at neutral or with slight anterior tilt, with 90 degrees hip flexion Feet Support · support feet on a stable surface as this will influence pelvis and hip stability Trunk Control · poor trunk control can lead to poor upper extremity and head control. Lateral supports may assist with providing adequate trunk stability for those children that cannot independently maintain a midlin position of the trunk monitor the effect of lateral supports on a child's respiratio Head Support · head support, e.g. a chair with a high back or a head rest may be required if adequate head control has not yet been achieved the more upright the seated position the more the head and neck need to work therefore tilt or recline may reduce the amount of effort involved in keeping the head and neck in midline tilt is preferable as it does not change the position of the pelvis Trav Access initially provides extra trunk support and stability, and later

> provides a place for forearms and elbows as the child begins to attempt to self-feed

PEAS Provider Training: Clinical Practice Guide | Feeding Skill Development



Feeding Environments & Routines

- Supporting Mealtime Routines
- Supporting Mealtime Environments
- Considering Communication and Behaviour
- Supporting a Positive Feeding Relationship with Positive Mealtime Interactions



Sensory Processing/Regulation

- Informed by assessment through parent interview and observations
- A child' response to sensory information may impact their feeding development and mealtime experience
- Achieve and maintain a calm but alert state
- Adjustments to accommodate sensory needs is more likely to result in a positive feeding experience

Management Enteral Feeding



Management: Enteral Feeding

- Early discussions with family are important
- Consider long term tube placement when enteral feeding is expected over 4-12 weeks
- Recommendations based on expert guidelines and safety concerns

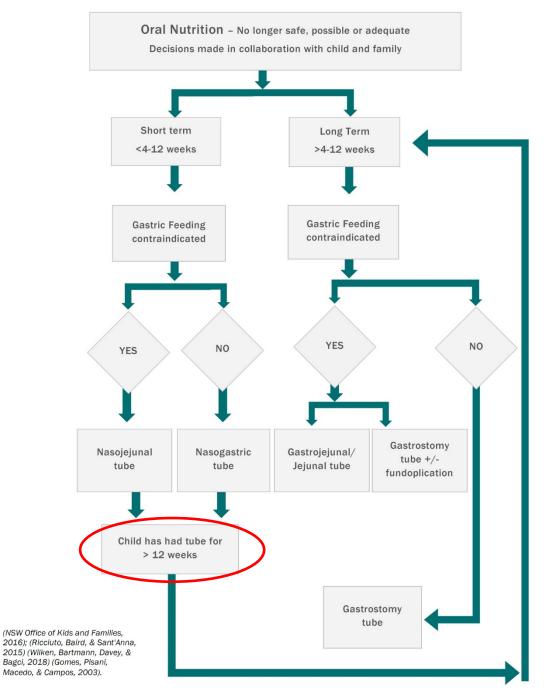


TABLE 13: FEEDING PUMP CRITERIA

Medical Indications for Feeding Pump Use	 continuous feeds – day and, or night feeds jejunal feeds (given continuously) physiologically required (continuous feeds are required, e.g. inborn errors of metabolism) bolus feeds provided over >60-90 minutes or unacceptable length of time for patient age or size, e.g. due to: high volume of feed increased risk of aspiration/pneumonia requiring slow feeds gravity feeds not tolerated, e.g. dumping syndrome, chronic diarrhea or vomiting 	_
Indications for Feeding Pump Discontinuation	 gravity feeds are tolerated continuous feeds are discontinued, e.g. jejunal feeds are discontinued 	
Requests for Feeding Pump that are not Medically Supported (and Suggestions for Response)	 formula is too viscous to run by gravity use large bore feeding bags, dilute formula (in consultation with a dietitian), or push feed with syringe family is familiar with pump use provide education family preference without supporting rationale must be a truly exceptional and short-term circumstance, e.g. palliation families may source feeding pumps and funding privately 	

10 C 10 C

Monitoring Enteral Nutrition

Quarterly assessment (ASPEN):

- Physical exam
- Medication review
- Growth evaluation
- Tolerance of feed type and delivery
- Oral feeding readiness and/or progression

Transition from Enteral to Oral Feeding

Supporting eating skills:

- Assess readiness
- Set achievable goals
- Oral preparation

*The entire oral management section of the CPG!

Preparing to wean:

- Hunger provocation
- Support eating skills
- Exposure to food
- Reduce stress
- Acknowledge and respond to the child's cues
- Avoid force feeding

Monitoring & Evaluation

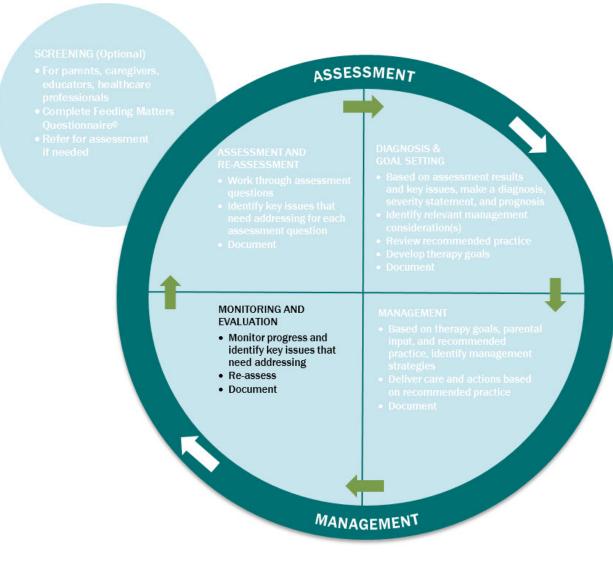


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Monitoring & Evaluation

Figure 11: Pediatric Feeding Care Cycle

(NSW Office of Kids and Families, 2016).



Transition



Transition

- Transition Home and from Program when on Oral Feeds
- Transition Home and from Program when on Enteral Feeds
- Feeding Care Plans
- Transition from Pediatrics to Adult Service

Oral Feeding Care Plan

- Having a clearly defined feeding care plan is an important part of safely managing pediatric EFS disorder.
- It is an essential part of communicating, and implementing safe and successful strategies across multiple care settings, e.g. grandparents, daycare and school.

	Last Name (Legal)		First Name (L	ecal)
Alberta Health	(roga)			-9-7
Services	Preferred Name	□Last □ First	DOB(dd-M	fan-yyyy)
Pediatric Oral Feeding Care Plan	PHN	ULI⊡Sa	measPHN MF	RN
-	Administrative Ge	ender 🗆 Ma fer not to dis	ale 🗆 I sclose (X)	Female
Developed And Shared with (Name of family Member) Date (dd-Mon-yyyy)				
Child's Preferred Name (Last name, first name)				
Medical Condition(s)				
Food Restrictions or Allergies				
Francisco Contract (a)				
Emergency Contact (s)				
Diet/Food Preparation				
□ Liquidised (Level 3) □ Extremely Thick Fluids (Level 4) Food Texture* For examples of each, please click on the □ Pureed (Level 4) □ Minced and Moist (Level 5) □ Soft and Bite Sized (Level 6) □ Regular Easy to Chew (Level 7) □ Regular (Level 7) □ Transitional Foods (Meltables) □ Mixed Consistency Allowed	links provided below			
Oral Feeding Recommendations and Precautions				
Safe for oral medication				
Level of Independence with Eating and Drinking, e	e.g., supervision require	d, assistan	ce required	
Feeding Techniques and Precautions Amount of food per bite: Food placement: Pacing: e.g.,				
□ Offer drink after bites □ Other Typical Intake:				
21587(2020-03) White - Chart Car	nary - Patient/Parent			Page 1 of 2
21587(2020-03) White - Chart	Canary - Patient/Par	rent		Pa

Enteral Feeding Care Plan

- Having a clearly defined feeding care plan is an important part of safely managing pediatric EFS disorder.
- It is an essential part of communicating, and implementing safe and successful strategies across multiple care settings, e.g. grandparents, daycare and school.



Conclusion



Provider Training Dates

Торіс	Audience	Dates & Times (Choose 1 of each)	
Overview & New Tools	Managers & Healthcare Providers	 ✓ Jul 21 11-12 pm 	✓ Oct 21 3-4 pm
Clinical Practice Guide	Healthcare Providers	✓ Jul 23 3-4 pm	 ✓ Oct 28 3-4 pm
Collaborative Practice & Roles	Healthcare Providers	✓ Jul 30 3-4 pm	Nov 5 2-3 pm

Online recordings: <u>https://peas.albertahealthservices.ca/Page/Index/10176</u>

Contact Us



Email: PEAS.Project@ahs.ca



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COMMUNITY OF PRACTICE

CONTACT US

Contact Us

We welcome you to contact us to learn more about the PEAS project or to provide your feedback about this website. Please do **not** include any personal health information. If you have a health concern, contact **Health Link** at **811** or see our other **O contact options**.

Close this note from the top right corner.

First Name

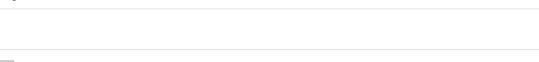
Last Name

Email



Subject

Message



Send

About PEAS

Pediatric Eating And Swallowing (PEAS) is a quality improvement initiative to standardize services and improve care for children with an eating, feeding and swallowing disorder in Alberta.

Learn more...

Quality Improvement About PEAS

Other

Quality Improvement

QI Dashboard

Family Survey

Order Forms & Handouts Glossary

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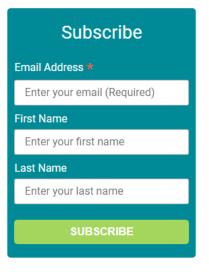
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NEWS AND EVENTS

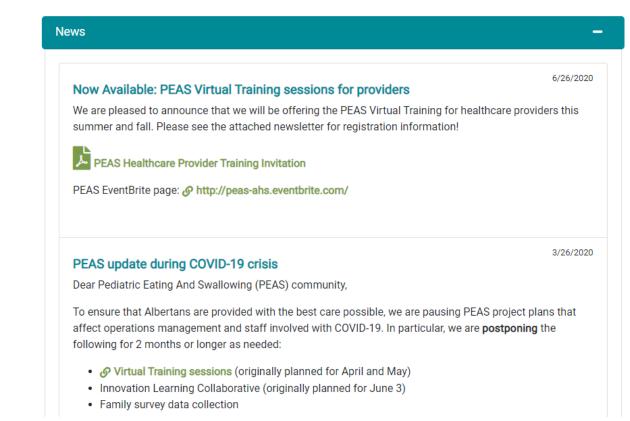
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News and Events



About PEAS

Pediatric Eating And Swallowing (PEAS) is a quality improvement initiative to standardize services and improve care for children with an eating, feeding and swallowing disorder in Alberta.

Learn more...

Quality Improvement QI Dashboard Family Survey

Quality Improvement

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FOR PROVIDERS

CLINICAL PRACTICE GUIDE

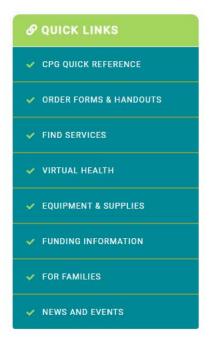
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PROFESSIONAL DEVELOPMENT

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FAMILY RESOURCES



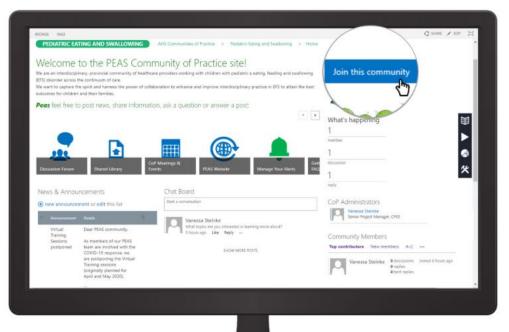
Community of Practice

We have just launched the Pediatric Eating And Swallowing Community of Practice (CoP) for healthcare providers who work with children with a pediatric eating, feeding and swallowing (EFS) disorder. This virtual CoP is an interdisciplinary community of healthcare providers across the continuum of care in Alberta. The goal of this CoP is to capture the spirit and harness the power of collaboration to enhance and improve interdisciplinary practice in EFS to attain the best outcomes for children and their families.

To join the PEAS Community of Practice:

- You must be a healthcare provider with an AHS account.
 *See below for information on how to obtain an AHS account.
- 2. Go to the PEAS CoP website here: *https://extranet.ahsnet.or/teams/CoP/PEAS/SitePages/Home.aspx* If prompted, enter your AHS account name and password.

3. Click "Join this community" as shown below. That's it!



Family Quotes

66 I can hold my knife and spoon like my 'teachers' do! Ice cream is my favorite! 99

– Eisha Dhanda





Thank You

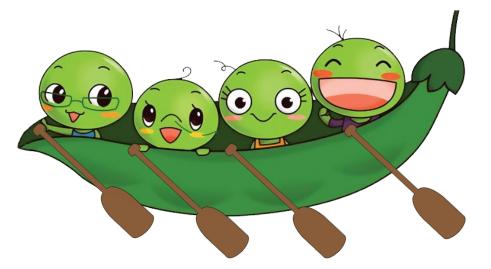
PEAS Standardized Practice & Education Working Group!

- Allison MacDonald, SLP ACH
- Amanda Pack, SLP Home Care & GRH
- Dr. Beverly Collisson, SLP Lead, ACH (PEAS Co-Chair)
- Breanne Black, OT North Zone
- Dr. Carole-Anne Hapchyn, Child Psychiatrist, Edmonton Zone
- Christine Gotaas, SLP EFS Coordinator, GRH
- Christine Pizzey, OT Team Lead, Central Zone
- Cynthia Pruden, SLP Clinical Lead, North Zone
- Donna Dressler-Mund, OT ACH
- Dr. Heather Leonard, Associate Professor, Community Pediatrics
- Jennifer Oliverio, RT Clinical Educator, ACH (PEAS Co-Chair)
- Joanne Kuzyk, Program Manager, Community Rehabilitation
- Julia Giesen, SLP RAH
- Dr. Justine Turner, Professor, Pediatric Gastroenterology
- Karen Hill, RN ACH
- Kristina Van Nest, RD ACH
- Liz Mathew OT Team Leader, Edmonton Zone

- Lori Woods, SLP Calgary Zone
- Megan Terrill, Senior Practice Consultant, HPSP
- Dr. Melanie Loomer, Psychologist, ACH
- Melissa Lachapelle, RD Provincial Practice Lead (PEAS Co-Chair)
- Mini Kurian, SLP Stollery
- Rachel Martens, Family Advisor
- Rachel Williamson, NP ACH
- Rachelle Van Vliet, PCM ACH (PEAS Co-Chair)
- Shobha Magoon, OT Team Lead, Edmonton Zone
- Stacey Dalgleish, NP Calgary
- Tania Vander Meulen, RD GRH
- Tina Nelson, SLP ACH
- Todd Farrell, OT Clinical Lead, North Zone
- Vanessa Steinke, Provincial Project Manager
- Wendy Johannsen, SLP Stollery
- Yolan Parrott, OT Clinical Practice Lead, GRH



Questions & Comments?



PEAS.Project@ahs.ca

Thank You!



PEAS.Project@ahs.ca https://survey.albertahealthservices.ca/peas.webinar2