"Pediatric Feeding in a World of Medical Necessity: Outcomes that Matter"

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AOTA BASC Board Member

Director of Strategic Initiatives

Mealtime Connections, LLC

IPRC

International Pediatric Rehabilitation Collaborative

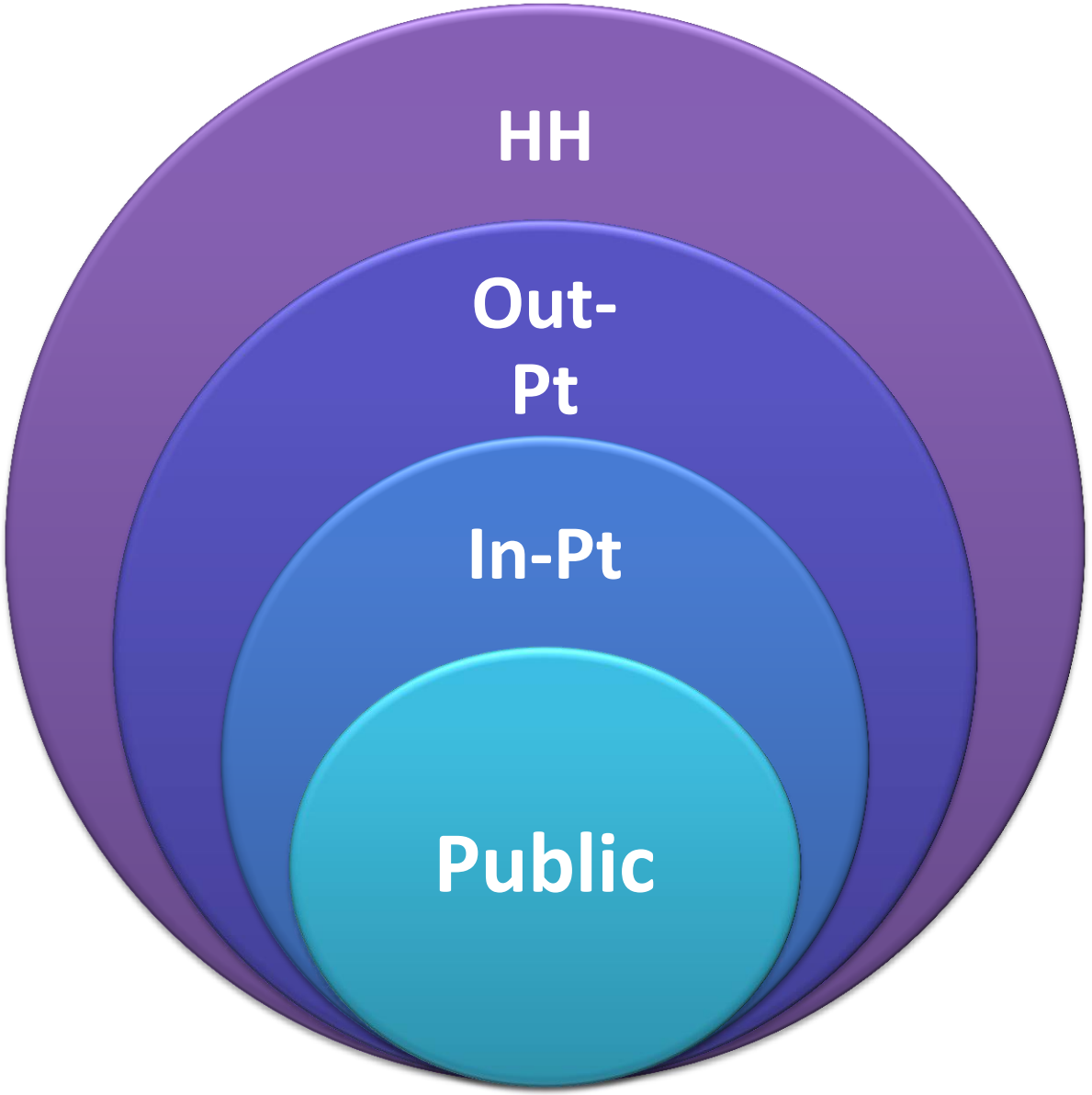
Describe feeding, eating and swallowing (FES) dysfunction according to the ICF model,

Justify service dosage for feeding, eating, and swallowing dysfunction,

Identify current qualification standards for assessment documentation based on medical necessity,

List at least 3 criterion referenced assessment tools for determining FES dysfunction.

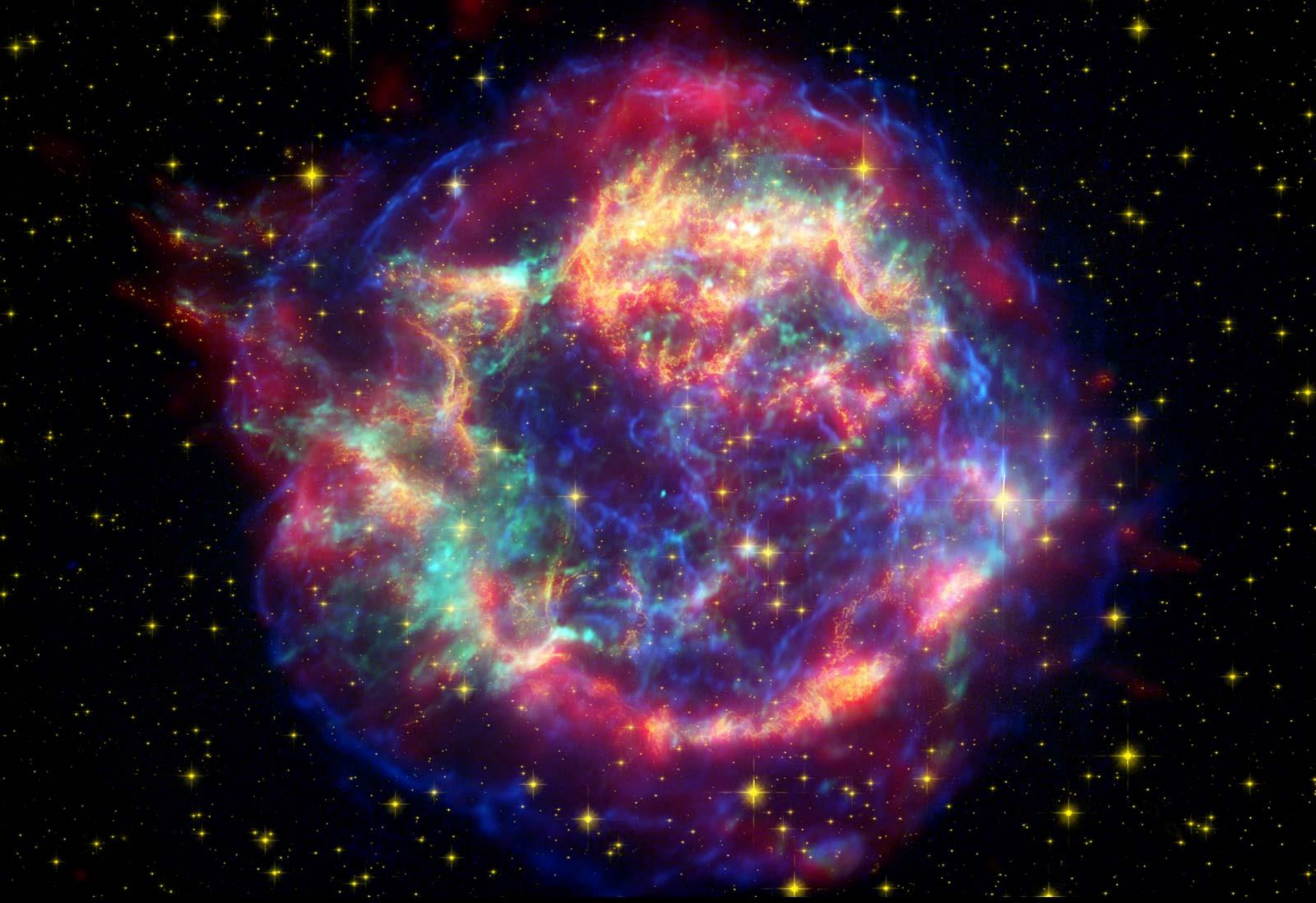

Sharon Spall


HH
Out-
Pt
In-Pt
Public

Dynamics of Healthcare

"The US health care system is the most costly in the world, accounting for 17% of the gross domestic product with estimates that percentage will grow to 20% by 2020."

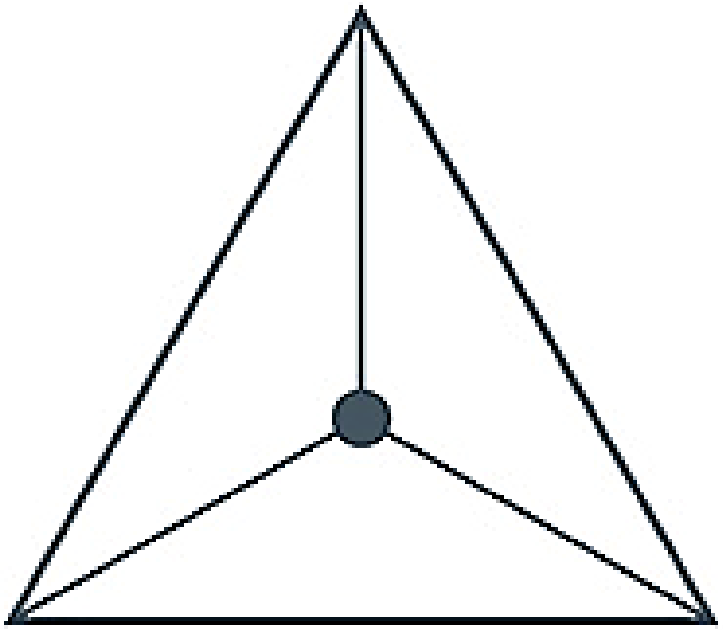
National Healthcare Expenditure Projections, 2010-2020, CMS



www.jpl.nasa.gov

The IHI Triple Aim

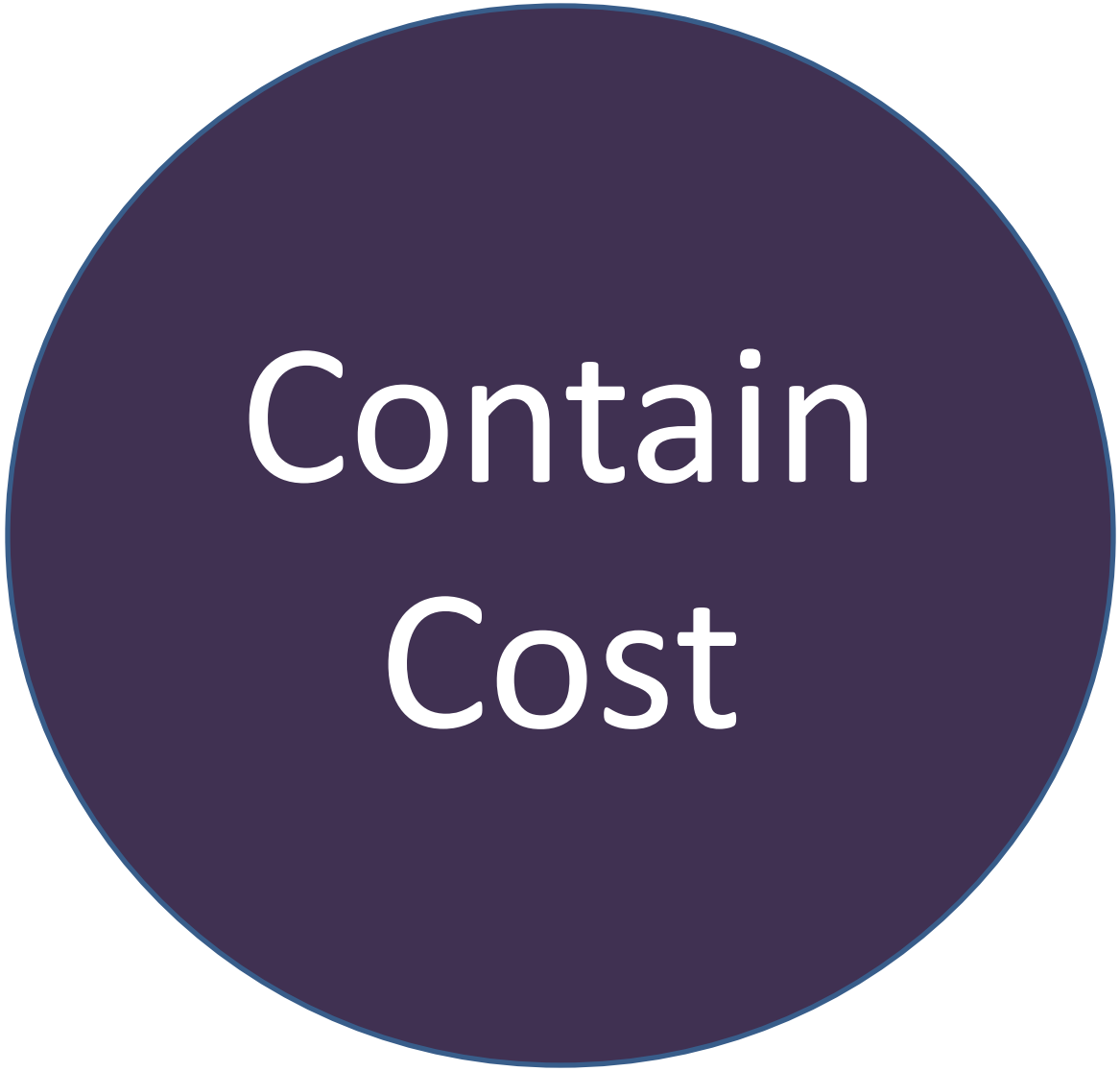
Population Health



Experience of Care

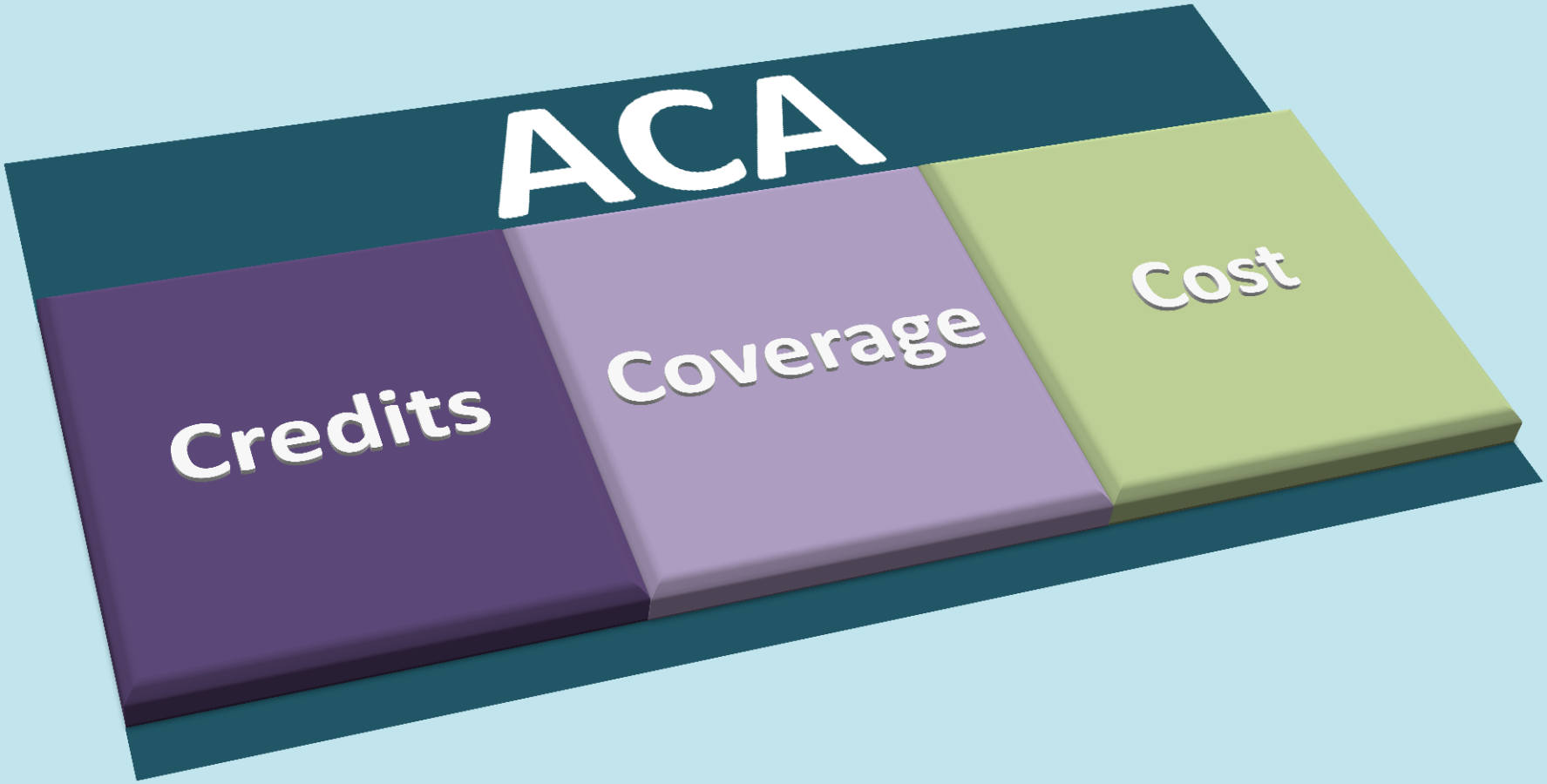
Per Capita Cost

www.ihi.org


Contain
Cost


Improve
Outcomes


Increase
Satisfaction



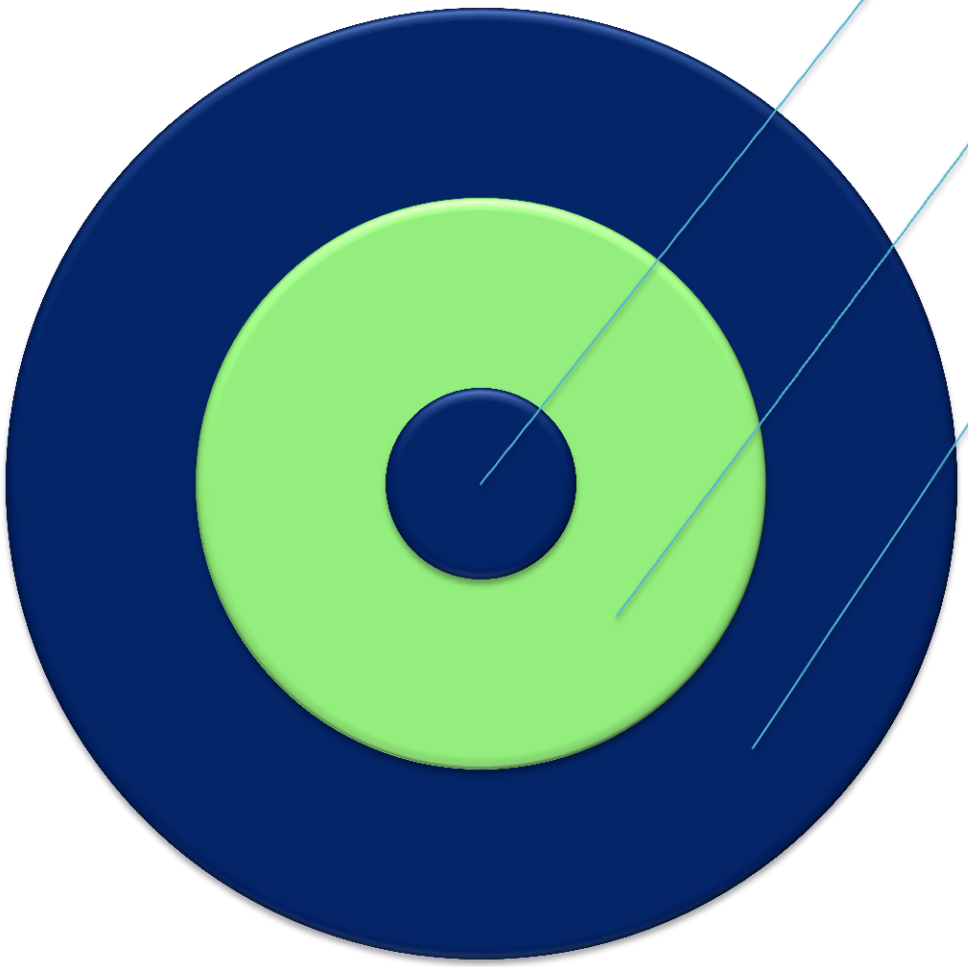
www.cms.gov; www.hhs.gov; Kaiser Family Foundation 2014

Medical Necessity

"[services] which are reasonable and necessary for the treatment of illness or injury or to improve the functioning of a malformed body member."

Title XVIII of the Social Security Act, section 1862 (a)(1)(a)


Eligibility
2
Ethics



Medically necessary for coverage

Medically indicated

Beneficial to health and well-being

Standards of medical practice

Clinically appropriate

Not of convenience, not more costly

Standards of medical practice

- Credible scientific evidence published in peer-reviewed medical literature
- Consistent with standards for clinical judgement

Clinically appropriate

- Type
- Frequency
- Extent
- Site
- Duration
- Effective for dx

Not of convenience; not more costly

- Patient
- Provider
- At least as likely to produce equivalent results

Equality

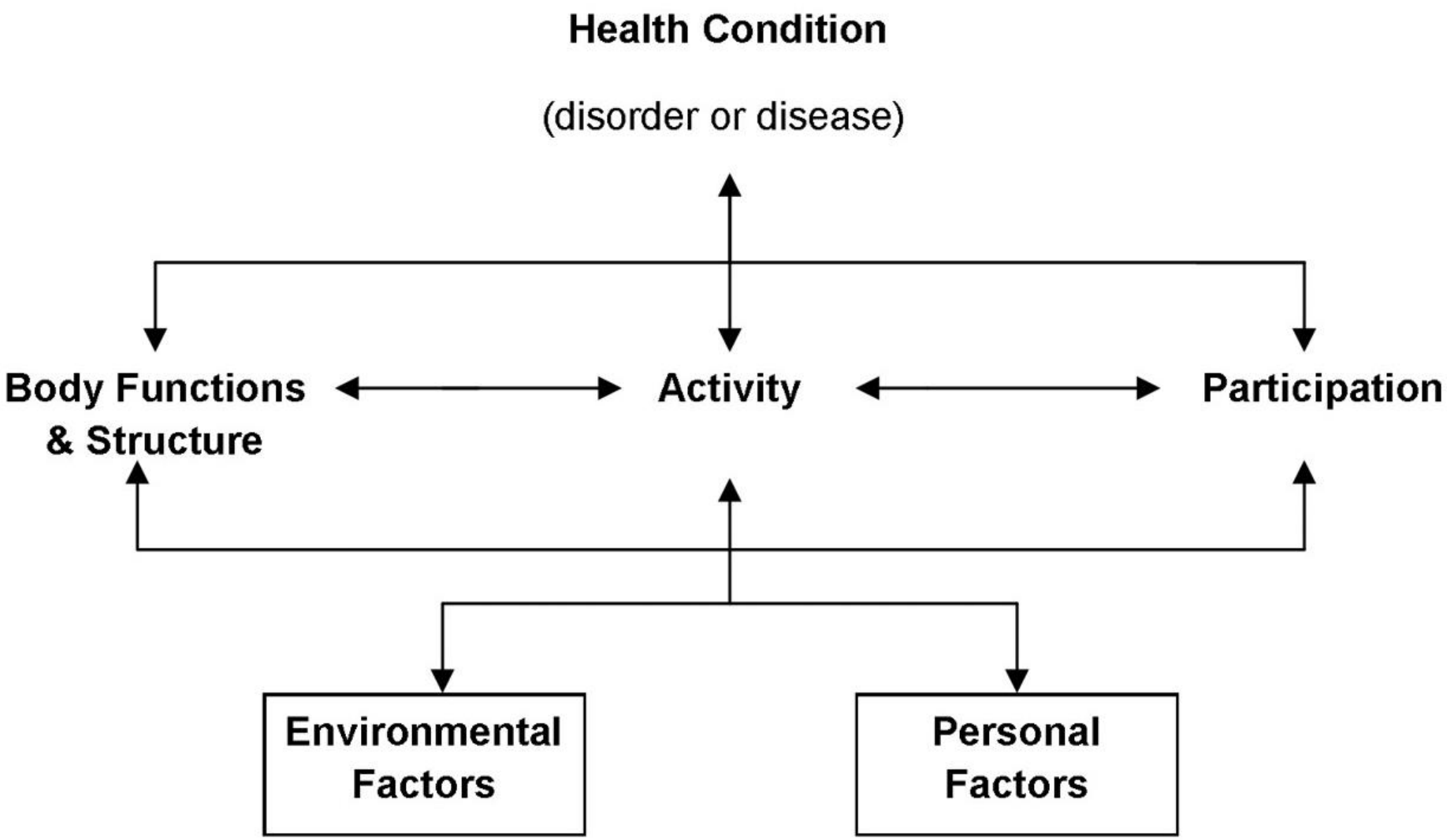
Equality

Justice

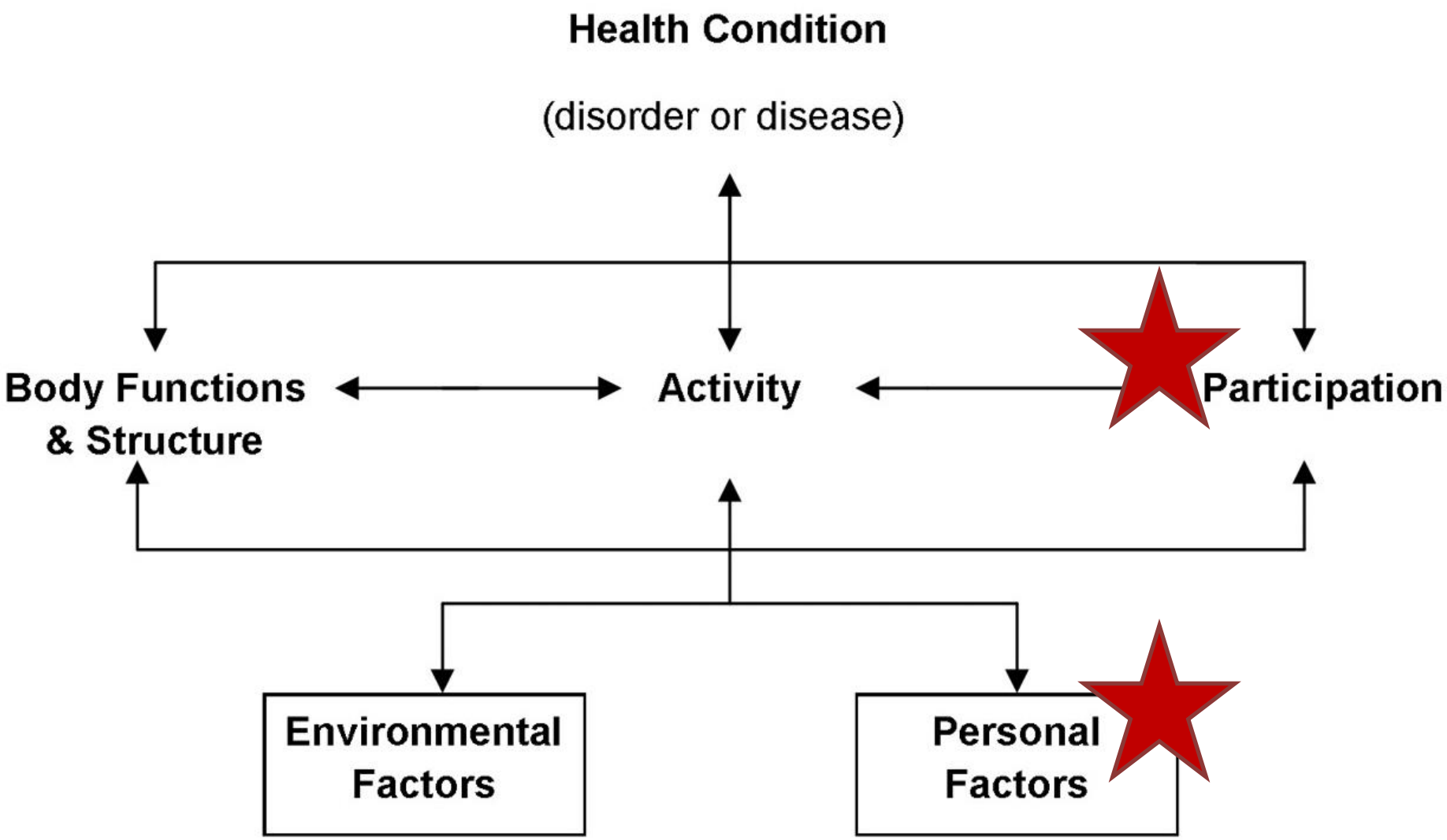
ICF

"Participation is regarded as a chief indicator of child health, regardless of diagnosis or functional ability."

The World Health Organization



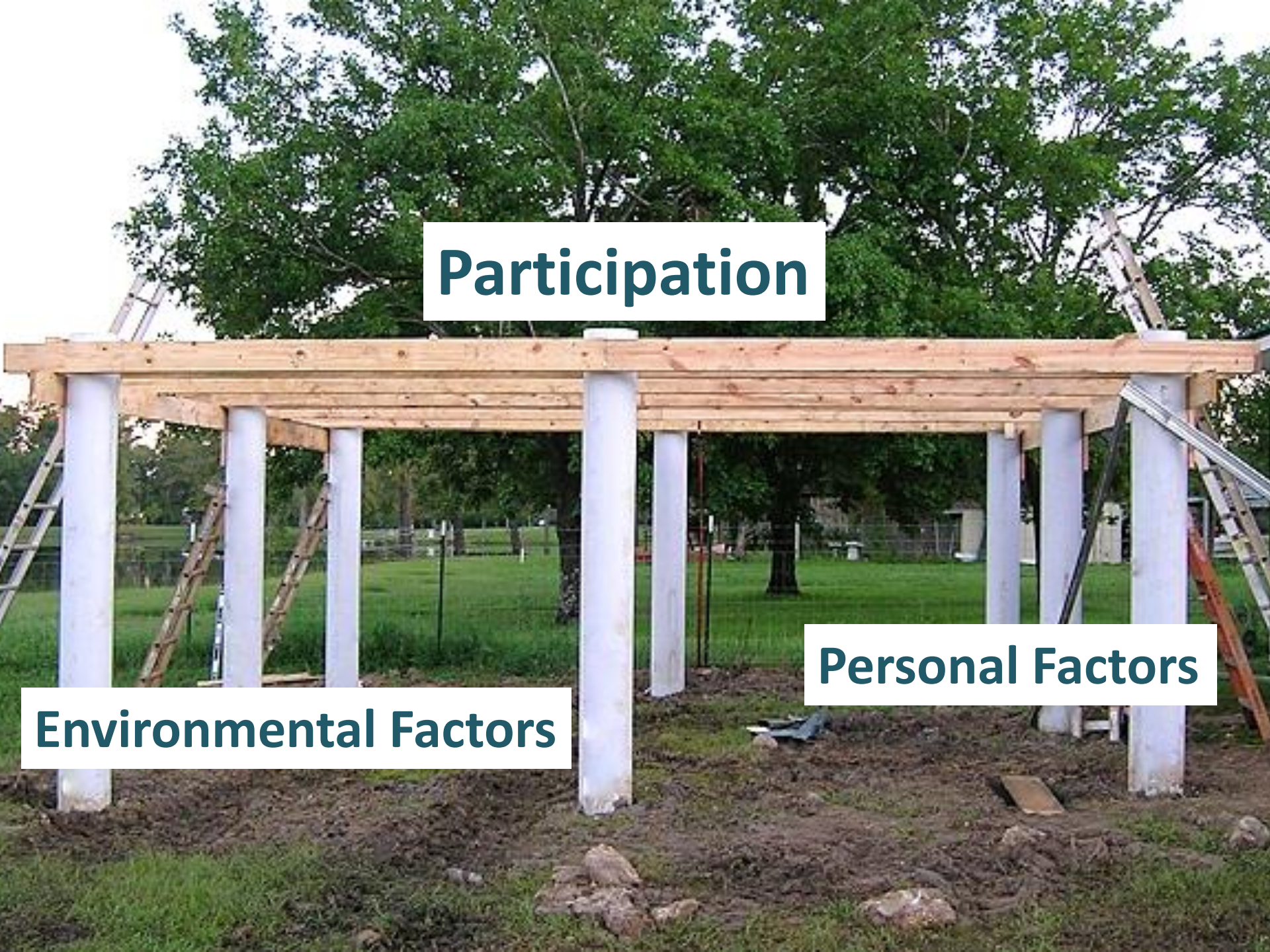
WHO, 2002; AOTA 2008; Moore & Baum, 2014



WHO, 2002; AOTA 2008; Moore & Baum, 2014

What information matters most?

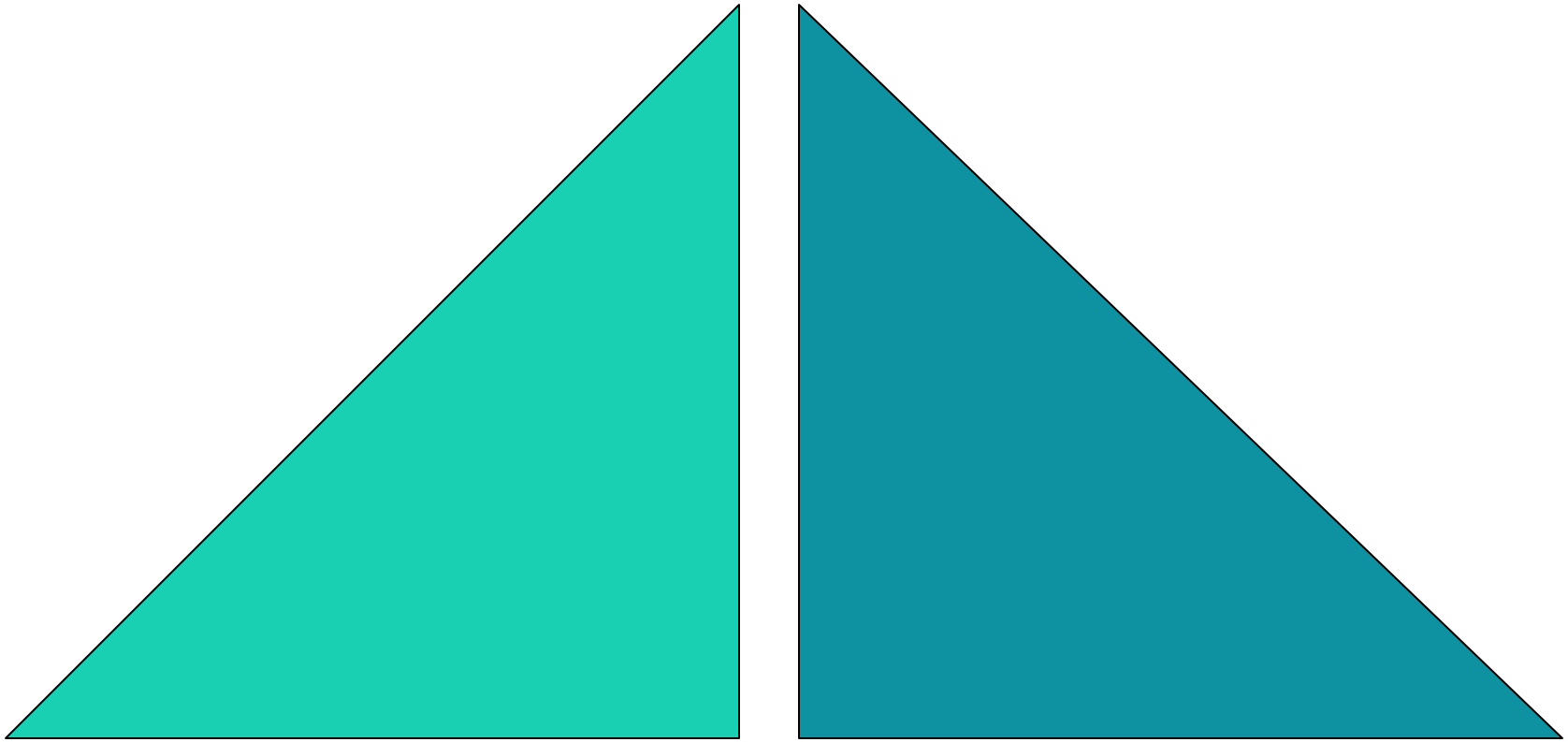

Participation


Participation
Personal Factors
Environmental Factors

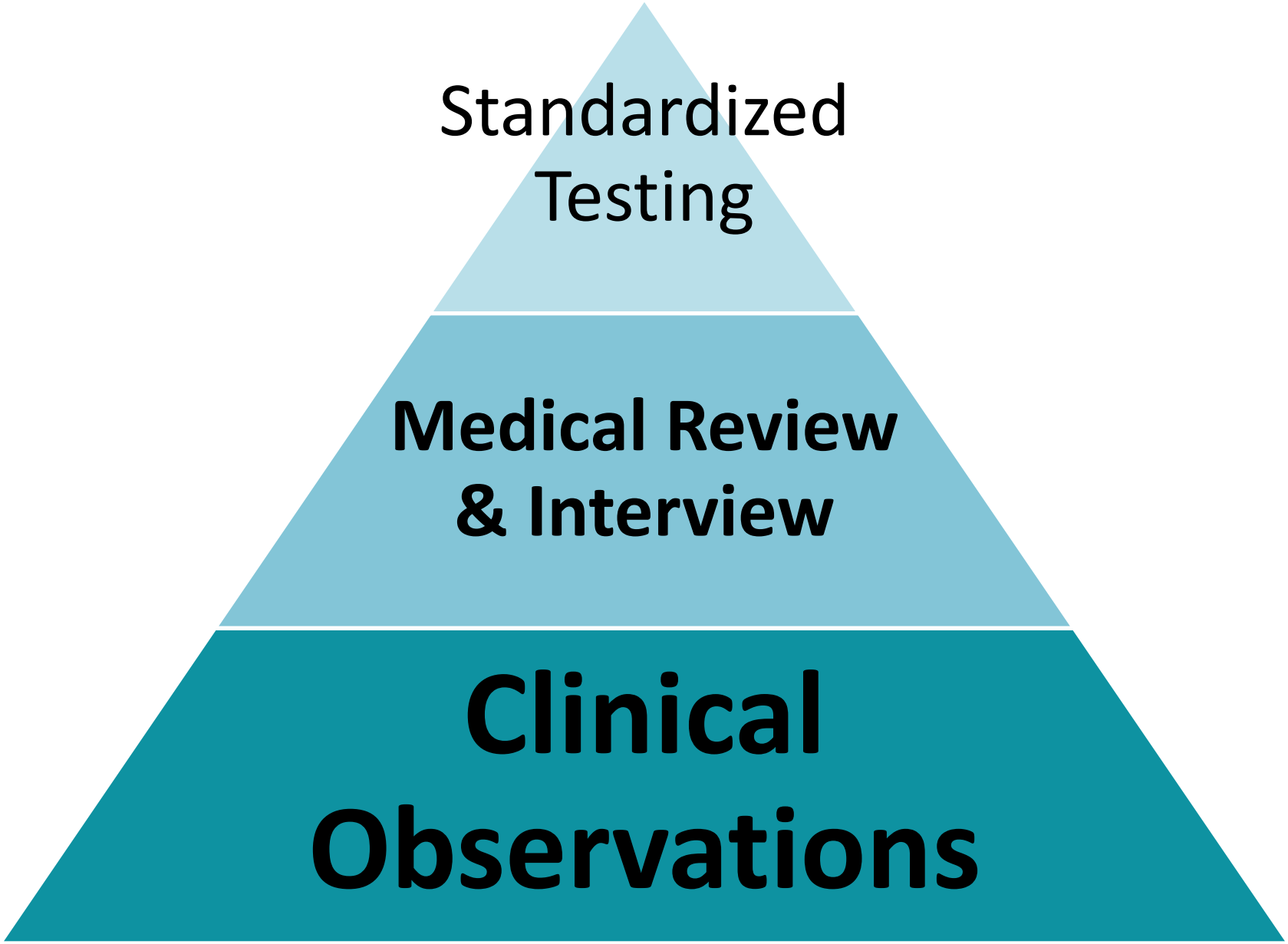
Assessment in FES

"The professional responsibility of the clinician is to determine the appropriate allocation of . . . services that best serve the child and family."

APTA



Romano et al., 2014; Korner-Bitensky et al, 2008


Standardized Testing
Medical Review & Interview
Clinical Observations

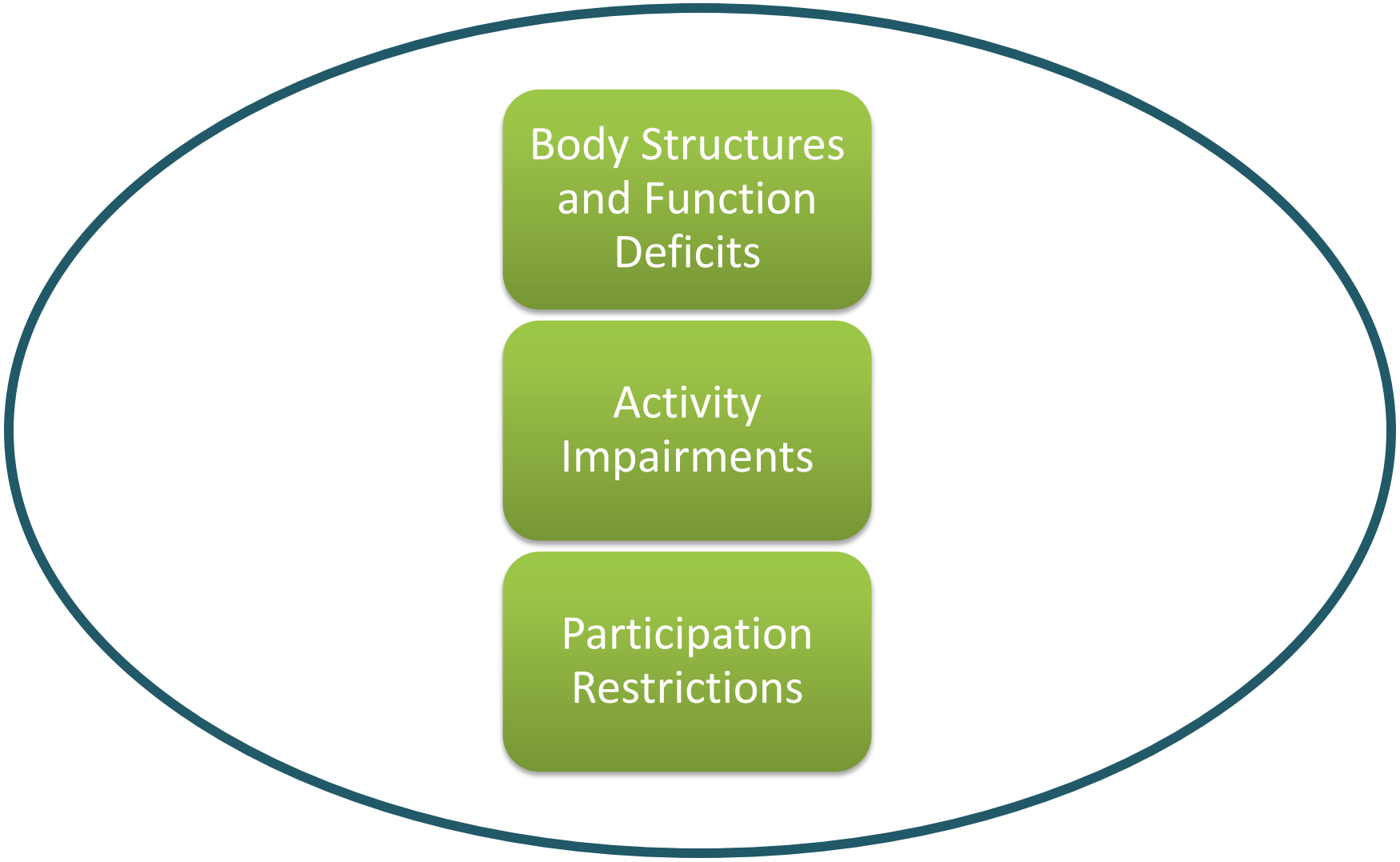



ER THE TER
ARTER


ER THE TER
ARTER


Medical
Necessity
or Risk

Contextual Factors



Body Structures and Function

Physiological Measures

- RR
- Reflex response
- State regulation
- Activity and sleep logs
- Intake and output logs
- Weight and height: growth velocity

Tools Utilized

Interview Guides

- Pre-Feeding Skills Questionnaire

Physical Measures

- RR, HR
- State
- Reflex testing

Growth Charts

- WHO
- CDC

Activity & Participation

- Caregiver led feeding trial
- Skilled feeding trial
- Modified bedside
  - Cervical Auscultation
- Feeding and motor testing

Assessments Utilized

Pre-Feeding Skills Checklist

- Global Approach
- Birth-24 months
- Norm referenced

AIMS

- Motor
- 0-18 months
- Standardized

GMA

- Motor
- Pre-term to 4 months
- Criterion referenced

Pre-Feeding Skills Checklist: A Global Approach

Skill	Spontaneous	Facilitation	Age Equivalency
Positioning			
Food Type			
Quantity/ Volume			
Oral Motor Pattern			
Swallow			

Environmental Factors

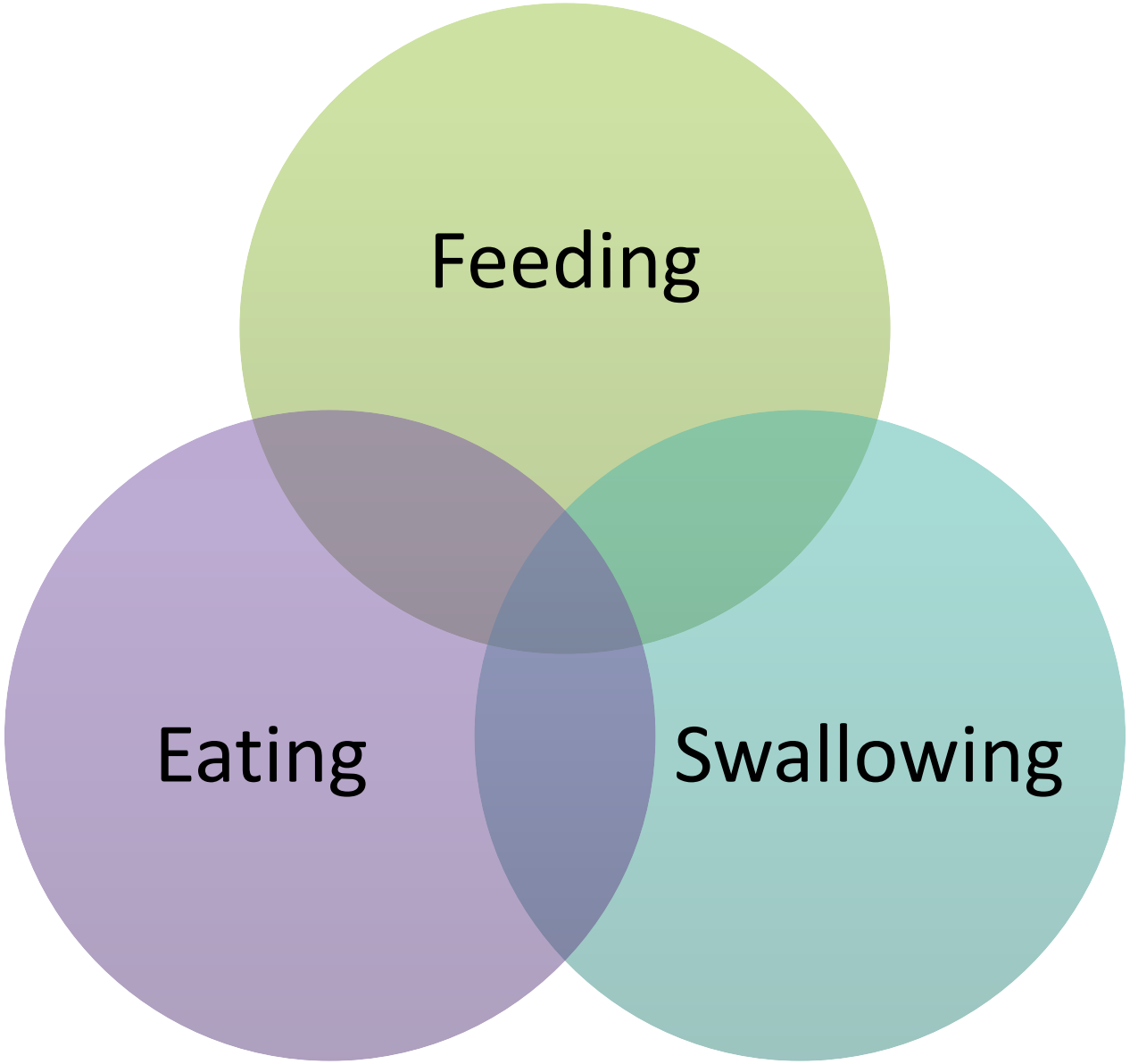
- Affordance in the Home Environment for Motor Development-Infant Scale (AHEMD-IS)
  - 3-18 months
- Affordance in the Home Environment for Motor Development-Self-Report (AHEMD-SR)
  - 18 months-3 years

AHEMD-IS

Physical Space	Characteristics
Outside	
Inside	

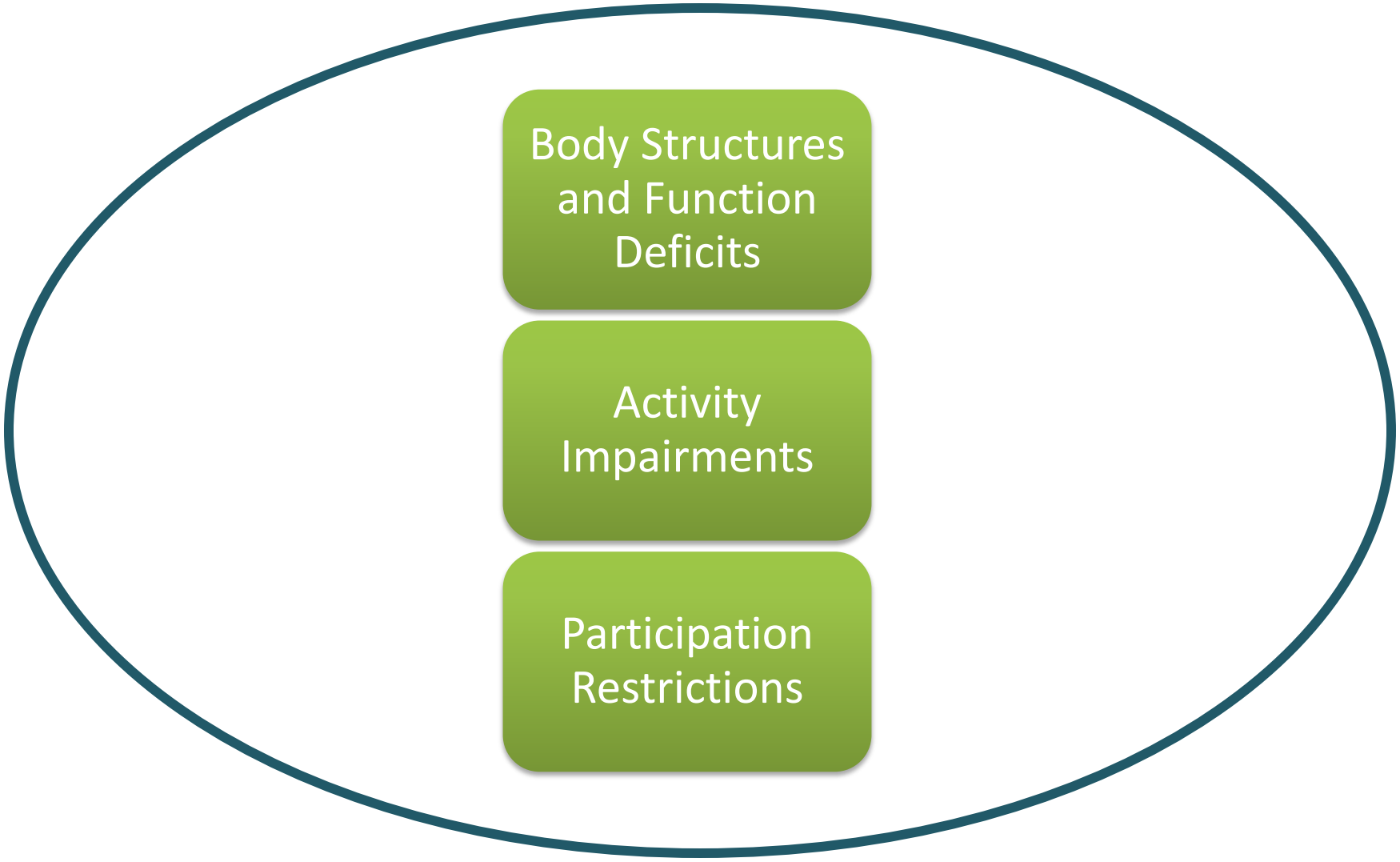
Daily Activities	Time Spent	Comments
Interacting with Caregivers		
Interacting with Others		
Awake in carrying device		
Awake in seating device		
Awake in walking device		
Awake in pen, crib or bed		
Awake on tummy		
Free to move		

Play Materials	Description	Quantity
Suspended toys		
Hand toys		
Plush and water toys		
Swings, exersaucers, jumpers		
Toys for pushing/pulling		
Pop-up, spinning, and Roly-poly toys		
Blocks		
Books		
Balls		
Locomotion support		
Musical instruments and toys		



Howe and Wang, 2013; Preedy et al., 2011;
WHO, 2002; Gannotti et al.

Contextual Factors



Defensible Documentation

"Documentation tells others about the unique and valuable services you provide…"

Web PT

ICF Clinical Summary

Child is a 42 week AGA female with hx of premature delivery at 30 weeks gestation. Diagnoses include RD, ROP, grade 4 IVH, feeding difficulties and increased tone on neurological exam. Child was referred for risk of weight plateau/loss and poor neurodevelopmental outcomes due to medical complications.

According to the Pre-Feeding Skills Checklist by Morris and Klein, child presents with feeding skills below normative gestation of 40 weeks. Her feeding pattern is marked by high respiratory recovery need creating inefficiency in the feeding pattern. Feeding risk is confirmed by analysis of her growth chart as infant places in less than the 7^{th} percentile for age and family relies on unsafe constipation management practices to drive hunger. Furthermore standardized testing administration (AIMS) revealed scoring in less than the 5^{th} percentile indicating increased risk of poor neurodevelopmental advancement.

This child's body structure/function deficits for the activity of feeding include lack of suction generation, poor oral seal maintenance, excessive jaw excursions 2/2 instability and utilization of a NNS pattern. Due to these oral phase deficits, infant also is at risk of penetration/aspiration if not fed appropriately. Unfortunately her motor strength and endurance especially in gravity impacted positions, further compounds her difficulty in eating efficiently and regulating her state as is needed for social-emotional and cognitive growth.

Environmental risk factors also are present which threaten the family's ability to participate in safe mealtimes with their child. The caregiver presents with skilled training needs as well as need for support to execute safety improvements across feeding, sleeping and play routines. Medical risk/comorbidities are seen in risk of weight loss/plateau, nutritional deprivation, dehydration, and illness/injury risk due to environmental factors.

Overall, child presents with a HIGH (SEVERE) need for skilled therapeutic intervention.

Clinical Summary

- Age
- Diagnosis
- Referral reason/risk
- Testing results (Standardized)
- ICF impairments
- Medical necessity clarification
- Severity determination

EOC and Dosage Statement

This child qualifies for a **progressive** episode of care with focus on the following ICF domains: body structures/functions, activity, and environmental factors in order to maximize participation in safe family mealtimes and developmentally appropriate routines. All domains will be addressed or incorporated into treatment through: caregiver training, skilled activity selection, activity modification/grading, home programming, and direct intervention.

Dosage: Intervention 2 x week for 4 weeks to allow comprehensive training of caregiver, followed by intervention 1 x week for 3 months for developmental following; visits not to exceed 20 occurrences.

EOC and Dosage Statement

- EOC type
- ICF focus
- Intervention focus
- Dosage
  - Frequency
  - Duration
  - Length
  - Occurrence maximum

Tools to Consider

"Man is a tool-using animal. Without tools he is nothing, with tools he is all."

Thomas Carlyle

Additional Assessments

- Dysphagia Disorders Survey (DDS)
  - Dysphagia Management Staging Scale (DMSS)
  - Choking Risk Assessment (CRA)
  - Pneumonia Risk Assessment (PRA)
    - Standardized
    - 2 years through adulthood
    - Requires certification
    - www.nutritionalmanagement.org

Additional Assessments

- Schedule for Oral-Motor Assessment (SOMA)
  - 8-24 months
  - Reilly
- Oral-Motor Feeding Rating Scale
  - 1 year-adulthood
  - Jelm
  - www.amazon.com
- Multidisciplinary Feeding Profile (MFP)
  - Age 6-18 years
  - For severe feeding disorders
  - Kenny

Additional Assessments

- Neonatal Oral-Motor Assessment Scale (NOMAS)
  - Palmer 3 day certification, renewal every 2 years
  - www.nomasinternational.org
- Early Feeding Skills (EFS)
  - Training required
  - Thoyre, Shaker, and Pridham
  - www.Shaker4SwallowingandFeeding.com
- Behavioral Pediatrics Feeding Assessment Survey (BPFAS)
  - Crist and Napier-Phillips
- CEBI
  - Archer, Rosenbaum, and Streiner

Outcomes

"better care, smarter spending, and healthier people"

CMS


83+38=121
56+78
83
+38
121
56
68+52=
68
+52
120

Standardized or Criterion Referenced Retesting

- Reliability: Test-Retest

Intervention Impact

- GAS & AusTOM
- Goal Graphing (EMR)

EOC Parameters

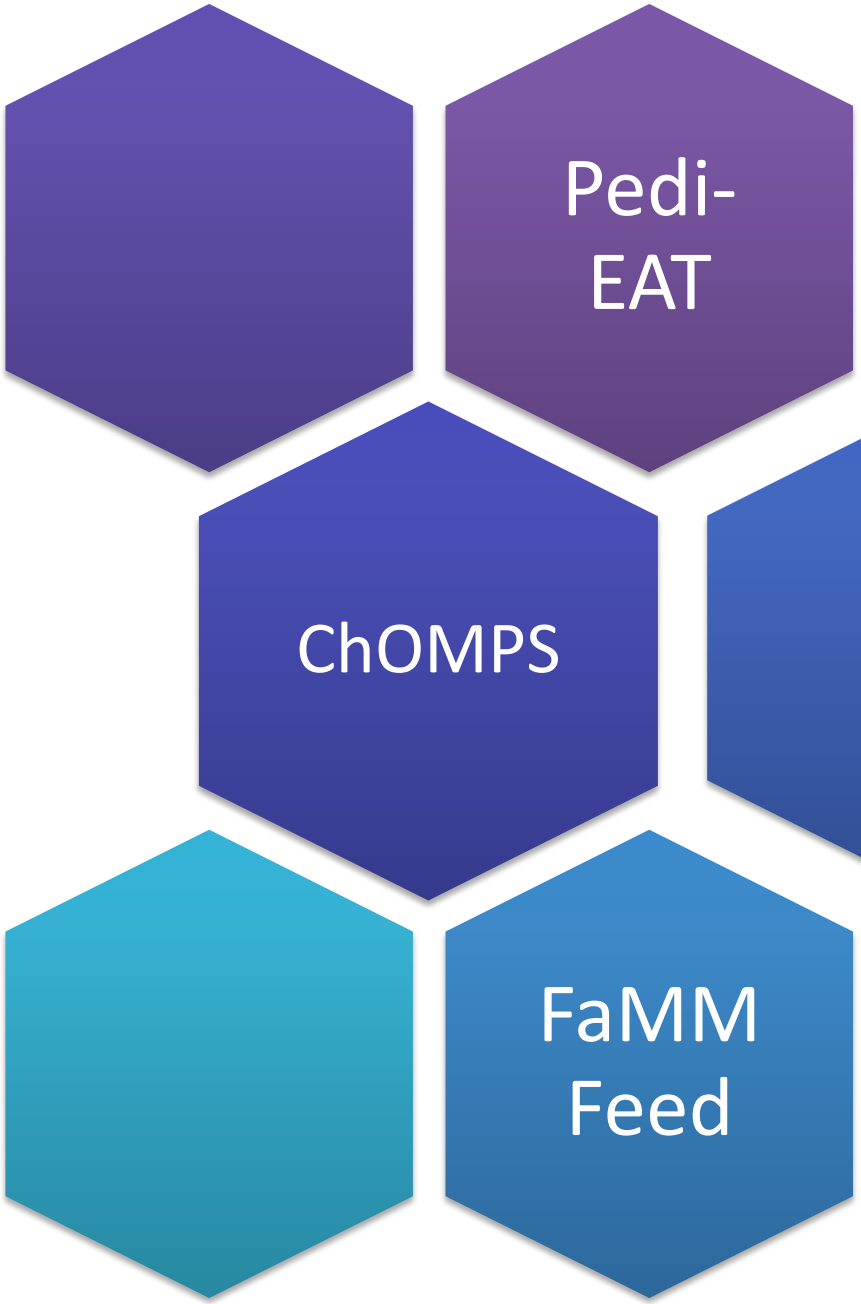
Caregiver/Client Satisfaction

- Published Questionnaires
- Facility Questionnaires

Kucukdeveci et al, 2011

Outcome Measure Resources

- GAS App
  - ann.chapleau@wmich.edu
- GAS training
  - www.csesa.fpg.unc.edu
  - www.elearning.canchild.ca PDF
- Outcome report training
  - www.rehabmeasures.org
- Feeding Matters
  - www.feedingmatters.org



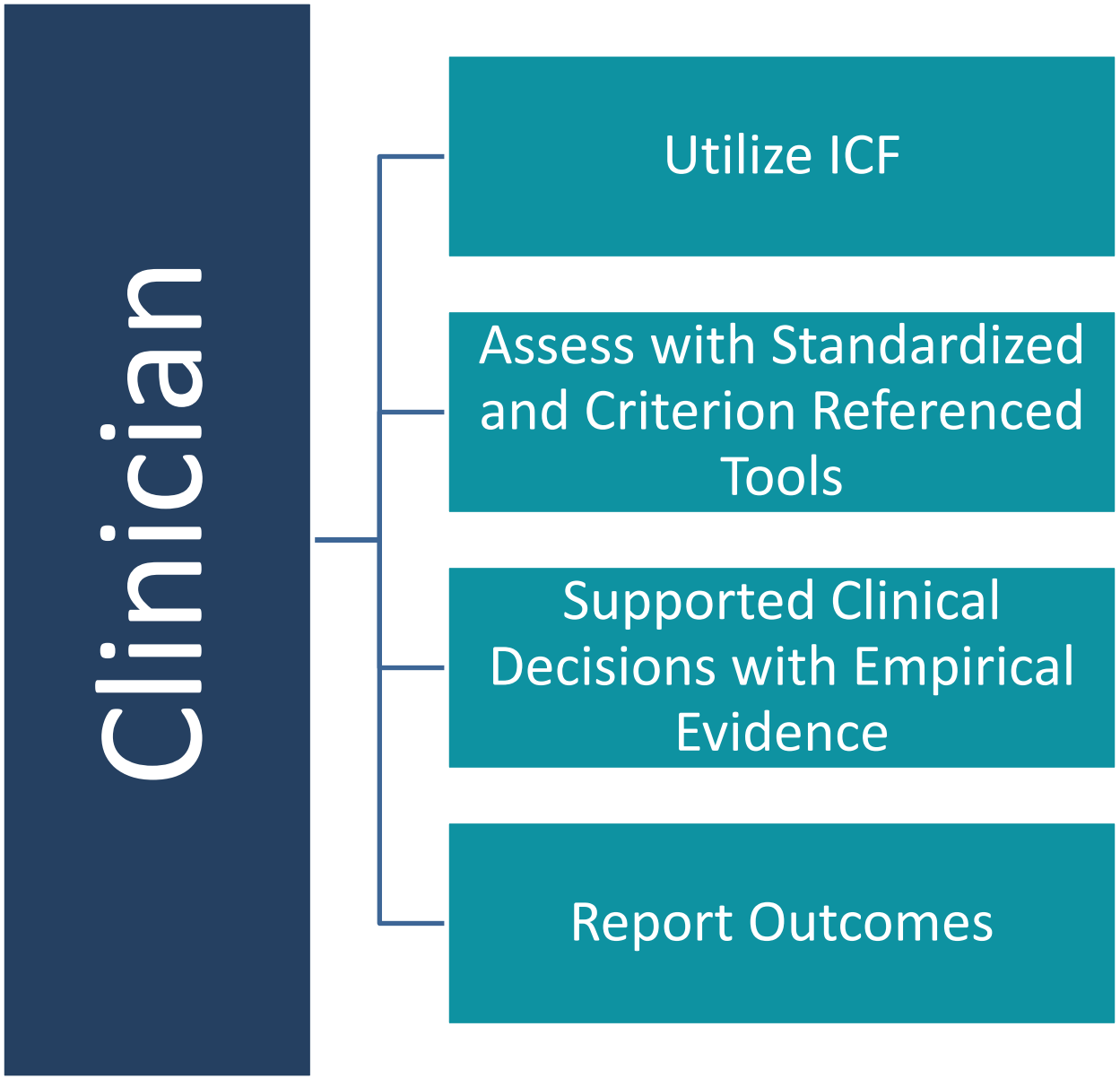
Emerging Tools

www.feedingflock.web

Our Conclusions

"ICF will be an essential basis for the standardization of data concerning all aspects of human functioning and disability around the world"

WHO, 2001


Clinician
Utilize ICF
Assess with Standardized and Criterion Referenced Tools
Supported Clinical Decisions with Empirical Evidence
Report Outcomes

"*model* the way, *inspire* a shared vision, *challenge* the process, *enable* others to act, *encourage* the heart"

Kouzes and Posner 2012

Certificates of Attendance & Survey

Please let us know your thoughts.

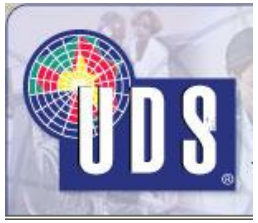
A link for a survey will be sent to all registrants. Please share with all attendees.

A certificate of attendance may be requested via the survey.

surveymonkey.com/r/IPRCwebinarsurvey

CEUs for Occupational Therapists

IPRC would like to thank to our partners at **WeeFIM** for sponsoring today's CEUs.



To obtain CEUs for today's event, each participant must have attended the full presentation and complete an online evaluation in order to download a certificate.

An evaluation link and instructions will be sent to all registrants. Please share with all attendees.

IPRC
International Pediatric Rehabilitation Collaborative

Questions?

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832-687-1074

Discussion Questions

Utilize these questions to springboard discussion at your own organization.

1. Consider your feeding documentation. Are there changes that could be made to improve the quality of information provided? What steps could be taken to ensure that certain information is captured by all clinicians?

2. Consider your feeding population. Are they receiving care in the appropriate setting / therapeutic model based on their needs? Does my organization have the right partners?

3. Consider your assessment tools. Are there additional tools that should be considered for use? How is the information obtained used to drive care?

4. Consider the ICF Model. Does my staff understand it with regard to the feeding client?

Assessment Information

- DDS
  - www.nutrionalmanagement.org
- SOMA
  - Reilly S, Skuse D, Mathisen B, Wolke D. The objective rating of oral-motor functions during feeding. Dysphagia. 1995;10:177–191.
  - Ko MJ, Kang MJ, Ko KJ, Ki YO, Chang HJ, Kwon J-Y. Clinical Usefulness of Schedule for Oral-Motor Assessment (SOMA) in Children with Dysphagia. Annals of Rehabilitation Medicine. 2011;35(4):477-484. doi:10.5535/arm.2011.35.4.477.
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  - Wolf LS, Glass RG. Feeding and Swallowing Disorders in infancy: assessment and management. 1st ed. Arizona: Therapy Skill Builders; 1992. pp. 85–147.
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  - Morris SE, Klein MD. Pre-feeding skills: a comprehensive resource for feeding development. 2nd ed. San Antonio: Therapy Skill Builders; 2000. pp. 72–89.
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  - www.amazon.com

- MFP
  - Kenny DJ, Koheil RM, Greenberg J, Reid D, Milner M, Moran R, Judd PL. Development of a multidisciplinary feeding profile for children who are dependent feeders. Dysphagia. 1989;4:16–28.
- BPFAS
  - Crist W, Napier-Phillips A. Mealtime behaviors of young children: a comparison of normative and clinical data. J Dev Behav Pediatr. 2001;22(5):279–286
- CEBI
  - Archer LA, Rosenbaum PL, Streiner DL. The Children's Eating Behavior Inventory: Reliability and validity results. J Pediatr Psychol 1991; 16: 629-42.
- NOMAS
  - www.nomasinternational.org
- EFS
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  - www.shaker4swallowingandfeeding.com
- Feeding Interview Questionnaires
  - Logemann JA. Evaluation and treatment of swallowing disorders. 2nd ed. San Diego: College Hill Press; 1998. pp. 168–180.
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- www.who.org
- www.ihi.org
- www.feedingflock.web
- www.nashp.org