

# *Final Report: Reimagining Multidisciplinary Pediatric Care for Children with Feeding and Swallowing Difficulties at Oregon Health & Science University*

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## Executive Summary

### Introduction

Pediatric feeding disorders are defined as “impaired oral intake that is not age-appropriate and is associated with medical, nutritional, feeding skill, and/or psychosocial dysfunction” that lasts for at least two weeks and meets one of the above-associated criteria (Goday et al., 2019). These disorders affect a significant percentage of children, including those with developmental delays. Thus, multidisciplinary care has become recognized as the standard of care for children with pediatric feeding disorders. Oregon Health and Science University (OHSU) offers multiple clinics providing pediatric feeding and swallowing care, including the aerodigestive clinic, the feeding team within the CDRC, and the neonatal transition clinic. Because of the multiple entry points to receive multidisciplinary care at OHSU, patients and providers alike are often confused as to which clinic to attend, and patients may often be referred to multiple clinics without clear guidance or coordination between the clinics. Therefore, this capstone project aimed to assess the needs of multidisciplinary care for feeding and swallowing disorders at OHSU and propose improvements based on market analysis.

### Methods

In carrying out the analysis, the needs assessment combined with a market analysis of pediatric feeding clinics across the US led to the creation of proposed improvements for coordinating this care at OHSU. The assessment and analysis were based on a combination of primary and secondary research, with a particular emphasis on primary research. Key stakeholders from OHSU were interviewed and a Qualtrics© survey was sent to all staff and providers at the three OHSU clinics with the primary outcome measure being a thematic assessment of the quality of longitudinal care delivery.

### Findings

Key internal review findings were commensurate with and confirmed our sponsors’ initial assessment. These findings included a complex reporting structure that complicate coordination of care across OHSU clinics, an outdated and non-cohesive online presence, and a lack of formalized referral pathways.

Nearly 46% of respondents to the Qualtrics© survey disagreed that patients receive good or ideal longitudinal care to support growth development, nutrition, and feeding tolerance. None of the respondents felt that patients were consistently referred to the appropriate clinic. In addition, the qualitative component of the survey found that families are often confused, leading to phone calls to the incorrect clinic and the care team having additional unnecessary work added to their workload, variable and inefficient referral orders in Epic, and mixed messages received by families when multiple clinics are involved.

External interviews with pediatric feeding clinics at other academic medical centers identified positive common themes, including financial sustainability through procedures and therapy, key human resource models with a nurse coordinator and medical director, and structural factors including a comprehensive questionnaire for effective triage and multiple reminder modes, both automatic and manual, for appointments. Of note, there were also barriers that these clinics faced that are like the barriers identified at OHSU, including long waitlists, limited resources for treatment, multiple department involvement with a lack of centralization, frequent no-shows leading to inefficient clinic days, and ineffective initial triage.

## Analysis

The Four Frame model introduced by Bolman and Deal (2017) was utilized to analyze key findings. The structural frame identified unclear pathways and guidance for providers and families, leading to confusion and frustration across key stakeholders. The human resources frame found limited personnel resources that cause clinicians to “wear multiple hats”, affecting timely, efficient patient care and employee job satisfaction. In addition, space constraints, especially if wanting to expand programming or add additional treatment options for patients, were a limiting factor in the human resources frame. The political frame identified a lack of care coordination between the clinics with differing motivations among stakeholders, as well as a lack of centralized coordination of care, which is necessary to drive systemic change. And finally, the symbolic frame found a lack of clinic identity and leadership, which ultimately contributes to all challenges faced by the clinics in their current state.

## Recommendations

Recommendations were organized based on The Innovation Matrix by Nagji and Tuff (2012) with the idea that most companies invest in initiatives along a broad spectrum of risk and reward, with a goal to have a diverse portfolio of both small and new, innovative changes that support the growth and success of the company or organization. Core innovation initiatives are efforts that optimize existing products and services for patients and can be considered “low-hanging fruit”. Core initiatives recommended include establishing identity and scope with a mission, vision and values, clearly defining inclusion and exclusion criteria for the clinics, improving referral consistency with coordinated and standardized referral practices, and effective staff coordination and leveraging of resources. Adjacent innovation initiatives are in between core and transformational initiatives with characteristics of both. Recommended adjacent initiatives include developing a comprehensive website, expanding the feeding clinic to include treatment services, Epic order sets with a triage tool, and community outreach to providers. Transformative initiatives include strategic planning, determining the desired governance structure, the creation of a comprehensive clinical program that integrates all OHSU feeding and swallowing programs, and relocating the CDRC feeding clinic under a specialty service line, such as pediatric GI. Transformational initiatives develop breakthroughs and invent things for markets that don’t yet exist by developing new products and assets. Recommended transformative initiatives include strategic planning, determining the desired governance structure, the creation of a comprehensive clinical program that integrates all OHSU feeding and swallowing programs, and relocating the CDRC feeding clinic under a specialty service line, such as pediatric GI.

## Next Steps

Immediate next steps involve establishing effective lines of communication between the clinics and conducting a comprehensive quality review to identify longitudinal care delivery issues. Concurrently, agreed-upon quality metrics should be established and measured to serve as a basis for evaluation. This

will aid in recommending changes to executive leadership and resource allocation to accomplish transformational goals.

### Limitations

Limitations to this project included a central focus on the feeding clinic at the CDRC, limited input and perspectives of other OHSU clinics, and the absence of a comprehensive financial analysis. The timing of an analysis such as this will need to be intricately linked to decisions made.

### Conclusion

In conclusion, the current state of pediatric feeding and swallowing care at OHSU is characterized by disparate entry points, limited resources, and a lack of coordination among the three core clinics. This results in confusion for patients, families, and providers, potential treatment delays, and preventable hospital admissions. The proposed recommendations aim to address these concerns and provide family- and patient-centered, multidisciplinary, and coordinated care, ultimately improving outcomes for children with feeding and swallowing difficulties at OHSU.

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