Objective:
At the Mayo Clinic Children’s Center, patients with complex feeding, breathing, and swallowing disorders entered the system through different departments (ENT, PM&R, GI, Neurology and Pediatrics) and received disparate evaluations and treatment recommendations. Multispecialty diagnostic evaluations could take months to complete. A multi-disciplinary, physician-led team was created to develop a new model of care with focus on enhancing the patient experience and standardizing care for this complex patient population.

Planning:
A multispecialty and multi-disciplinary taskforce met to create a specific, seamless, coordinated, thorough, consistent, and efficient multispecialty aerodigestive program using a pediatric and family centered approach. Baseline assessment of previous patients seen included the time from initial appointment to completion of diagnostic evaluation, downstream financial impact, numbers of consultations/visits, anesthetics exposures, and radiology exposures. The analysis showed an average of 210 days from initial appointment to diagnosis and duplicative use of anesthetics and radiology resources. Stakeholder input from current patient families was solicited and a family advisory board was created. Referring provider’s satisfaction was surveyed. Deficiencies and care variations were explored and a genuine desire for and commitment to change was agreed upon.

Implementation:
The taskforce proposed a new model of care that streamlined practice and required the coordination and cooperation of clinicians, therapists and support staff from many different departments and divisions. Central to the new model of care was the inclusion of a nurse care coordinator and general pediatrician. The proposal received support from leadership and included:
- clinic infrastructure and staffing support to support a new pediatric aerodigestive clinic model
- consistent referral guidelines and a standardized approach to care through the creation of agreed upon care process guidelines that crossed physician sub-specialties
- dedicated appointment slots to reduce time from initial referral to diagnosis and treatment (3-5 days)
- improved communication with a weekly multi-disciplinary and multi-specialty care conference

The clinic piloted the new model of care for six months and then reassessed the patient experience, outcomes and itineraries. Comparison to baseline population showed an improvement in all areas.

Results:
Patients coming to the aerodigestive clinic can expect their care to be planned, coordinated, and centrally scheduled across specialties. Their itinerary is a focused diagnostic evaluation by a multispecialty team coordinated by a pediatrician/pediatric nurse practitioner. A 3-5 day series of appointments includes consultations with multiple specialties, feeding/swallowing evaluations, a pH impedance test, endoscopic and radiological procedures, etc. Care is coordinated and procedures are performed jointly to minimize anesthetic exposure. Clinicians meet at the end of the itinerary to develop a unified care plan, which may include surgical intervention, feeding programs, or follow-up consults with the necessary subspecialists. The pediatrician/pediatric nurse practitioner continue to provide care coordination until the patient graduates from the aerodigestive clinic. Enhancements to the patient’s visit include:
- Decreased itinerary length and improved access to appointments
  - Baseline: 3.5 months median and 7 months average for complete diagnostic evaluation.
  - New model: 3-5 days for complete diagnostic evaluation.
- Improved care coordination
  - Itineraries are coordinated and centrally scheduled across multiple departments.
  - General pediatrician serves as the “quarterback” for the multispecialty team.
  - RN Care Coordinator is the single nursing contact for the multi-specialty team.
- Increased patient satisfaction
  - Patient satisfaction survey showed 100% satisfaction with the new practice model.
  - Family advisory board endorsed new model of care.
- Decreased variation in care with collaborative care plans
  - Clear referral guidelines and written protocols were endorsed by all sub-specialties involved for patients with complex feeding, breathing, and swallowing disorders.
  - When compared to baseline, anesthetic exposures decreased by 44% and radiology exposures decreased by 47%.