The Glue That Holds It Together:
Sharing What Works in
Aerodigestive Coordination
Part 2

Cincinnati Children's Hospital Children's Hospital of Colorado Rady Children's Hospital

The Aerodigestive Express

All Aboard the Multispecialty Train!

Michelle Tate, MSN, APRN

Division of Pediatric Otolaryngology-Head & Neck Surgery Aerodigestive and Esophageal Center Cincinnati Children's Hospital Medical Center







Operational Structures



Care Coordination



Sustaining Team
Relationships



Challenges and Quality Improvement



CCHMC Aero Digestive Program

Founded in 1999

patients since

50 US States
23+
Countries

6-9 month wait time

3-4 New on visits every week

Requires 3
Specialties

2648 "active" in past 2-year period, Active Esophageal patients FY24 197

234 total referrals in FY24 (4.5/wk), FY25 Project +23% growth



Founded by Dr. Robin Cotton



Ambulatory Evaluation

- ADEC is an ambulatory service
- Collaboration can be challenging between aerodigestive physicians and the in-house physician
- Risk for being lost to follow-up.
- Therefore, we recommend that the ADEC referral be placed after patient is discharged





ADEC Members:

48 clinical, 11 supp

- Physicians
 - Medical Director
 - Program Director
 - Business Manager
- Nurse Practitioners- 1
- RNs- 7
- Allied Health Professionals
 - Nutrition Therapy
 - Speech Pathology
 - Social Work
 - Occupational Therapy

- Referral Coordinator
- Surgical Scheduling
- Data Coordinator
- Insurance pre-authorization commercial, out of state Medicaid, international patients
- Customer service representatives



Michael Rutter, M.I

The Journey Begins

- 1. Referral sent to CCHMC aerodigestive program
- 2. Coordinator receives and request medical records
- The train conductor is determined by the primary health concern





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ADEC Program:

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Lead Service

Pediatric Surgery

Pulmonology

GI

Interdisciplinary Feeding Team

Major airway issues NOT currently on ventilator, reconstruction, decannulation, aspiration, vocal cord paralysis

pulmonary issues

Diagnosis

TEF/EA (+/- already repaired)

Caustic/foreign body ingestions, complications from esophageal replacements, congenital esophageal strictures Ventilator dependent

Surgical issues have been dealt with but continue to have

GI issues are predominant, esophageal dysmotility, GERD, eosinophilic esophagitis

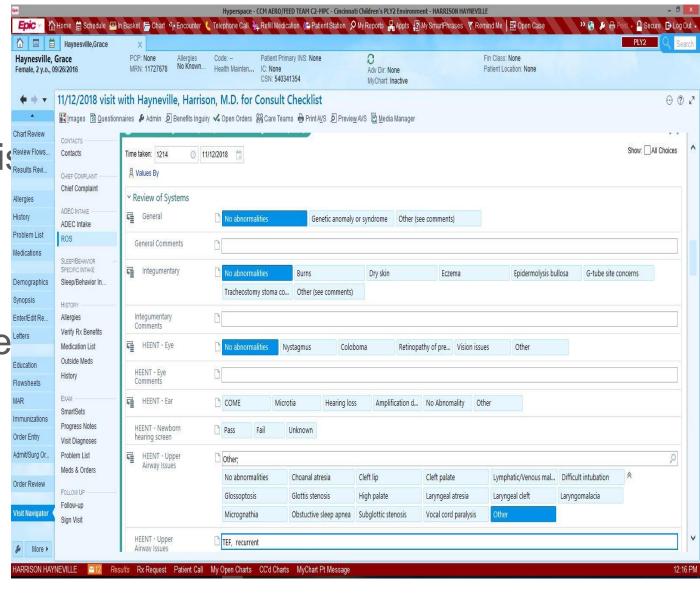
Intolerance of enteral feeds, poor weight gain, limited oral intake

* Must require 3 or more services on team



Intake Note

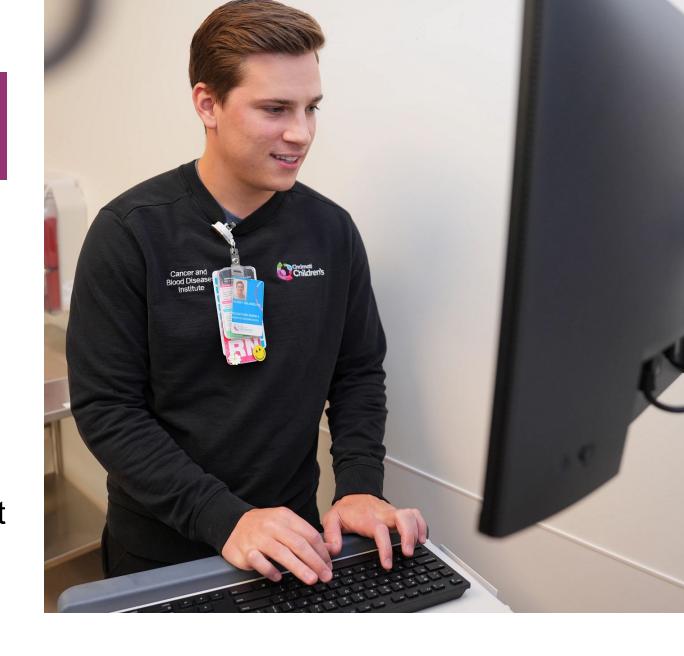
- Epic encounter- "Consult Checklice Results Review Flows...
- Birth/medical/surgical hx
 - Complex review of symptoms
- Includes all components of progress note (meds, allergies, eleters)
- Phone interview/Red cap survey by NP/RN with caregiver
- Includes 'reason for referral' in caregiver's words





Mary's Intake

History of 34 week gestation with CHARGE syndrome, coarctation of the aorta, chronic lung disease, moderate OSA, laryngomalacia, bilateral coloboma, bilateral choanal atresia, profound sensorineural hearing loss, silent aspiration, feeding difficulties/dysphagia with chronic wet cough and GERD who is GT dependent

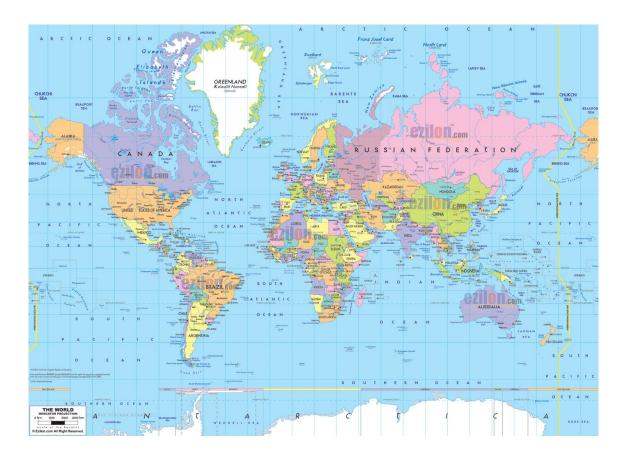




The O Drive

PATIENT:	Cell Phone:
Home Phone: MR#:	
DOB:	
PT's Home City, State:	
MOM:	Dad:
Email: Referring Physician:	
Referring raysician.	
Primary Care Physician:	
Other Local Physicians:	
ADEC STATUS:	
ADEC PRIMARY MD:	
ADEC LEAD NP/RN:	
ADEC TEAM:	
REASON FOR REFERRAL/PARE	NTAL GOAL:
PAST MEDICAL HISTORY PER F	ARENTAL REPORT (as of intake by):
MEDG	
MEDS:	
<u>MEDS</u> : <u>ALLERGIES:</u>	
ALLERGIES: SBE:	
ALLERGIES: SBE: ISOLATION:	
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REVISED:



Pack your bags – prepping patients for their journey

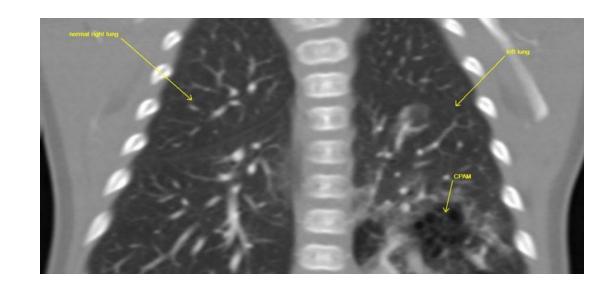


- After presentation to team, orders are placed followed by an email to the parent reviewing clinical aspects
- Schedulers email aero itinerary
- 1 week out from evaluation call from team (review of itinerary with details: locations, times, NPO instructions and answer any parent/guardian questions. Inquire about recent health status changes



Initial aerodigestive evaluation

- Anesthesia consult: thorough review for every new pt, telehealth or in person visit
- Imaging: Chest CT to r/o bronchiectasis
- Shared clinic
- Eval of swallow: VSS/FEES aspiration/VC mobility
- Triple scopes: MLB, Flex Bronch, EGD any other specific needs for pt





Shared Clinic

- Traditionally MDs (pulm & GI) and RD see patients in in shared clinic space on Tuesday prior to OR on Wednesday
- Effective July 1, 2025- 2nd shared clinic on Thursday morning to facilitate Aero OR block on Friday
 - 2 Pulmonary APPs
 - 1 Ped Surg APP (esophageal patients and care algorithm)
 - Dietician
 - Currently no GI
 - Primarily for follow up patients





Interdisciplinary Feeding Team Clinic

- Feeding Team is under the Aerodigestive umbrella- not every Aero patient needs IFT and not every IFT patient is Aero. Separate flags to identify Aero vs IFT. This is our only revenue stream directly to Aero program.
- IFT patients are determined by clinical needs: dysphagia, feeding intolerance, advancing oral feeds; cannot be NPO. Seen by Provider, SLP, OT, RD





The conductor keeps the train in motion



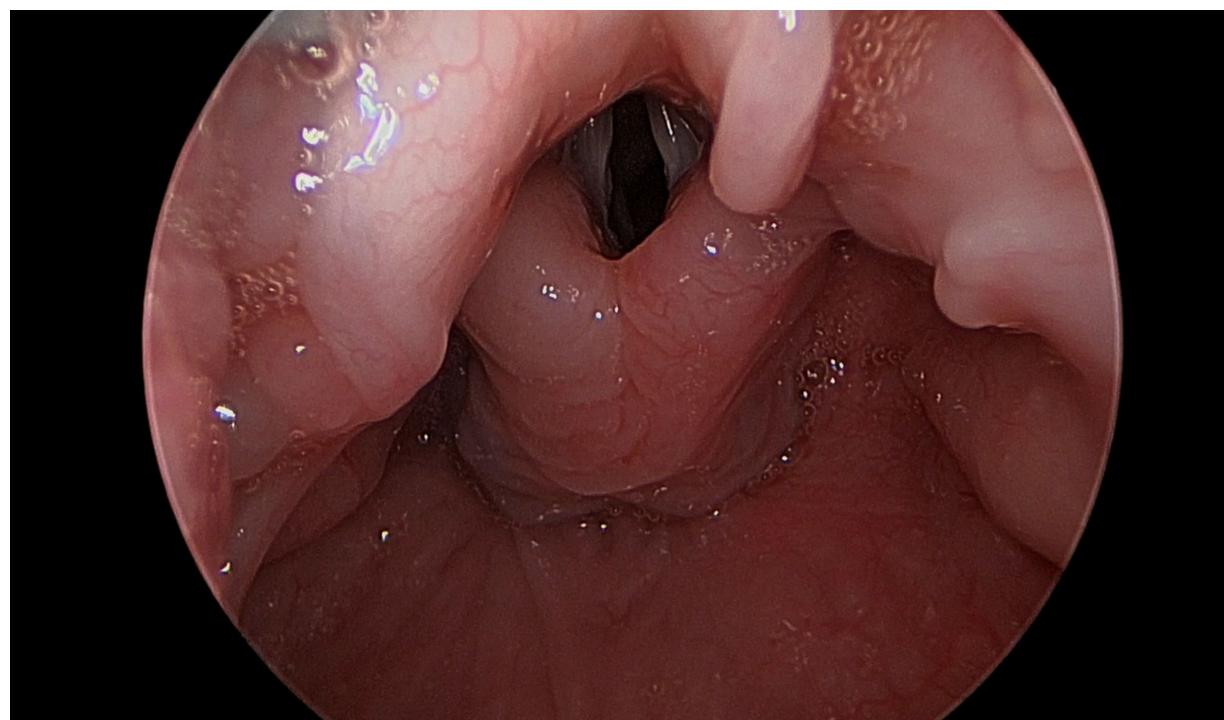
- APP/RN is primary point person for patient and family
- Record Review
- Develop plan for evaluation
- Present new and established patients at weekly meetings
- Attend OR and consult with family (preliminary plan)
- Follow up telephone call with family (discuss results/final) plan)
- Treatment orders- Medication/OR/Scans
- Triage phone calls/emails, long-term follow-up
- Education



Mary's Journey



- First visit: Anesthesia consult Shared clinic (Pulm, GI)
 FEES, Chest CT pFlex, MLB, therapeutic EGD possible GJ change EUA eyes
- CT chest identified a large tracheoesophageal fistula. Initial airway evaluation showed an easy, grade 1b view, crowded large tonsils, type 1 laryngeal cleft, mild subglottic lateral shelving, proximal tracheoesophageal fistula which easily accommodated a 4mm rigid scope into the esophagus; fistula just proximal to the level of the sternal notch.



Mary's Journey

- Trans-cervical, trans-tracheal TEF repair. Repeat scope showed the TEF repair was intact and she then underwent endoscopic repair of type 1 laryngeal cleft. F/U MLB flex bronch with T&A continues PPI and an H2 blocker.
- Next steps: local chest CT and f/u scopes per family request due to travel concerns- if signs of aspiration and bronchiectasis...DROOL

Peaks and Valleys - Keeping the train on track



Peaks

- Good communication/team approach &Coordinated Care
- Respect for interdisciplinary plans
- Comprehensive work-ups and timely plan to families
- Flags in EPIC

Valleys

- Insurance approval
- "Herding the sheep" MDs not hired by Aerodigestive, MD availability/restrictions with scheduling
- Scheduling/limited space/wait times







Questions? Thank you!

PART 2: SEPTEMBER 5, 2025

The Glue that holds it together: Sharing what works in Aerodigestive Coordination







Children's Hospital Colorado (CHCO)

Amy Wrenn, DNP, CPNP, FNP Nicole Parr, MSN, CPNP

Overview of the CHCO Aerodigestive Program

- Our Aerodigestive Program started in Colorado in 2010.
- Our current Aero MDC team of 28 includes:
 - 10 MDs: 2 ENTs, 4 Pulmonologists, 2 GI, 2 Anesthesiologists
 - 4 NPs: 2 Aero/Pulmonary, 2 General GI + Aero
 - 3 Aero RNs
 - 3-4 SLPs, 1 OT, & 3 RDs
 - 1 SW
 - 1 Scheduler
 - 1 MA
- Our continued vision we will be a national leader in providing comprehensive treatment of children with complex airway, respiratory, swallowing, and gastrointestinal tract disorders





CHCO Aerodigestive - Since Sept 2010







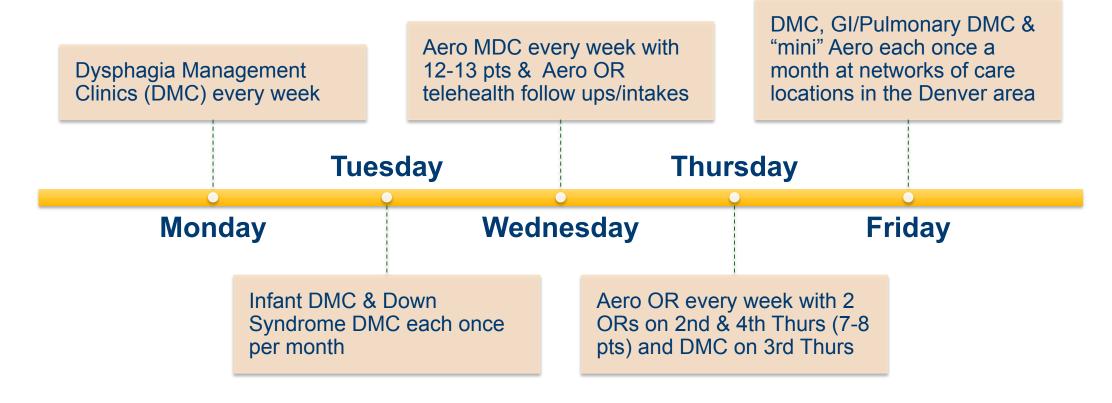








A Typical Week in CHCO Aero Program







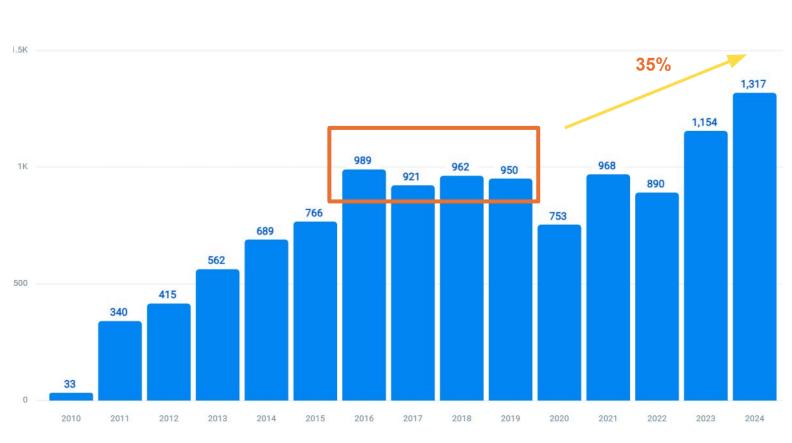
Aerodigestive Clinic Volumes

Number of Visits

Between 1/1/2010 and 12/31/2024 by year

In 2024:

- Over 1300 encounters, 14% growth over 2023
- 900 unique patients served

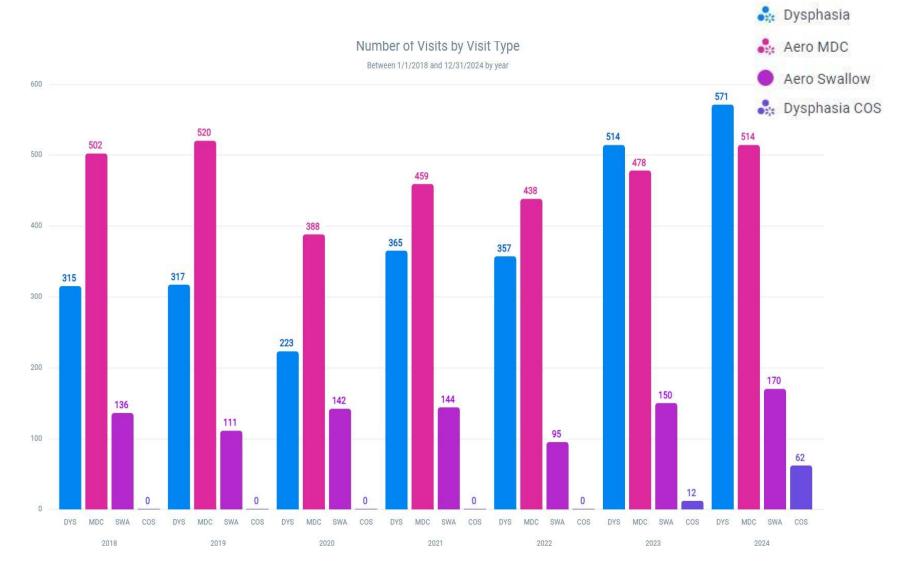






Aerodigestive Clinic Volumes: 5 (+) years

- Our Dysphagia
 Management Clinic
 (DMC) volumes
 surpassed our Aero MDC
 volumes in 2023
- In 2024 we completed234 Aero procedures
- In 2024 we had 440 new referrals
- Referrals for 2025 YTD we have completed 300 Aero MDC referrals and 180 DMC referrals
- In 2024, we saw patients from 17 states. We are the only Aero program in a 7-state radius.







What our Aerodigestive team has found helpful...



Epic In-basket Pools for our schedulers, RNs, APPs, & RDs

Epic Lists for new referrals and various other Aero lists

Annual Aerodigestive retreat in May which we discuss where we have come from and where we are going







"Here, it's different..."

- Dysphagia management clinic is where we filter most of our follow ups from MDC. We have a GI/Pulmonary DMC (everyone but ENT) at 2 network of care locations)
- We have Anesthesia embedded in our program, and they see all new patients at MDC
- We have SLPs and OTs who see patients in MDC, DMC, and both are a part of our VFSS and FEES

Changes in the Past Year

Referral Process & Telehealth Access

- Referrals received from all surrounding states
- Expanded telehealth services for complex intakes & second opinions
- Licensed in New Mexico & Wyoming enables intakes and follow-ups in these states

Post-Procedure Follow-Up Improvement

- Families often have extensive follow-up questions post-clinic/scope
- Initiated post-op telehealth visits with Aero NPs
 - Review scope results
 - Address outstanding questions
 - Clarify next steps for care
- Early outcomes:
 - Improved family understanding
 - Decreased MyChart messaging
 - Reduced burden on Aero nurses & APPs





Changes continued...

Team Expansion

- New RN & NP in Aerodigestive team improving workload distribution
- Dysphagia Management Clinic increased capacity and ability to see more patients

Multidisciplinary Clinic Improvements

- MDC template revised to:
 - See more new patients per year
 - Allow dedicated time for team discussions post-clinic
- Typical clinic volume:
 - 12-13 patients/clinic (7-8 new, 4-5 follow-ups)
 - Allows for more urgent add on new patient



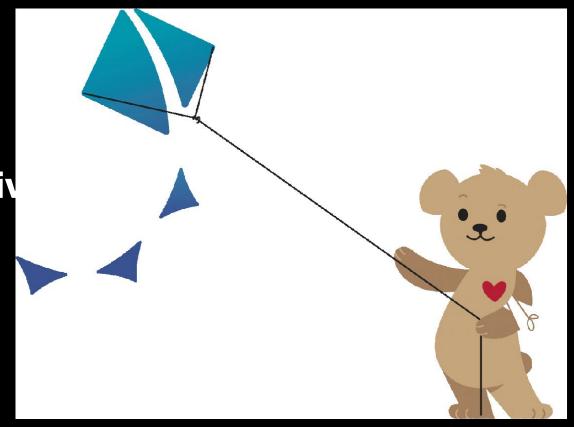


The Glue That Holds It Together:

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Coordination

Part 2



Virginia Floco, PA-C & Tinsley Recher, BSN, RN, CPN

Center for Pediatric Aerodigestive Disorders and Airway Surgery



Aerodigestive Program Statistics



Jan. 2017

We have a total of 1, 988 Aerodigestive patients in our registry since January 2017



1 Jan. 2025

Since 1/1/2025 we have completed 720 Aerodigestive visits with 252 of those as telemedicine

Since 1/1/2025 169 internal Aerodigestive referrals have been placed



1 Jan. 2025

In 2024 282 new patients seen in person, 357 return patients in person, 13 new telemedicine and 113 return telemedicine.

Total =765 patients seen in 2024

In 2024 39.5 Aero clinics held + 12 half day feeding clinics

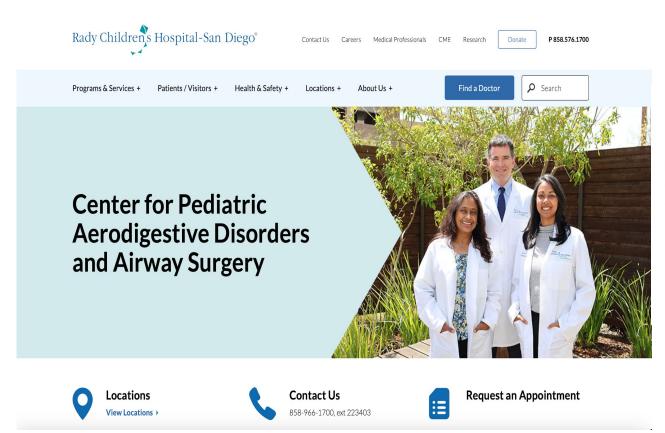
Aug 2024 Aero increased to full day weekly clinics with start of TEF/EA, CHARGE and Tech Dep.

Nov 2024 Aero feeding clinic increased to 2 half days per mo

2024 program Statistics

Rady's Aerodigestive Program

https://www.rchsd.org/programs-services/aerodigestive-center/

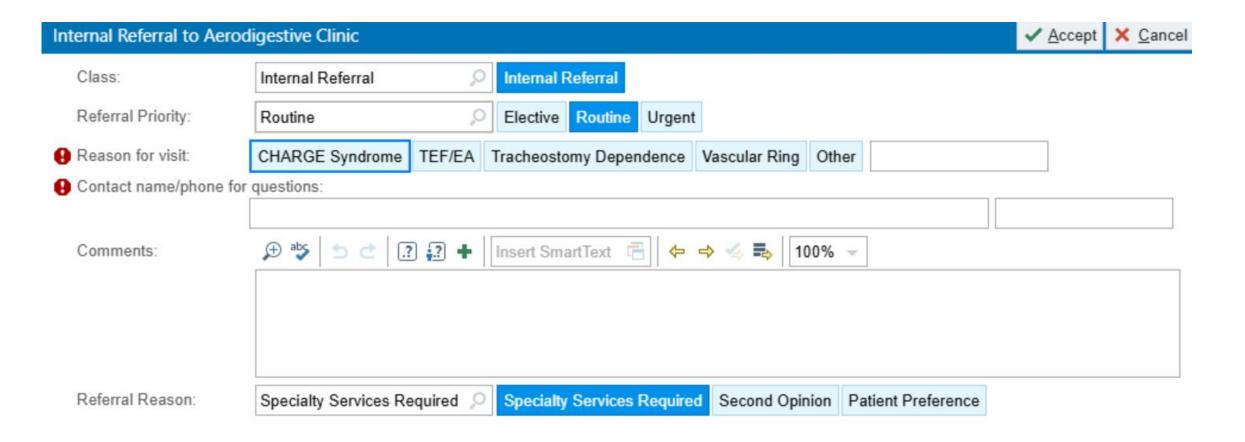


Request an Appointment

Access our referral forms below to request an appointment at Rady Children's Hospital. If you have any questions, please contact our Center for Pediatric Aerodigestive Disorders and Airway Surgery Nurse Coordinator at 858-966-8336 ext: 223403.

- Patient Registration Form
- Provider Referral Form

Internal Referrals



Offered Clinics & Collaborative Programs

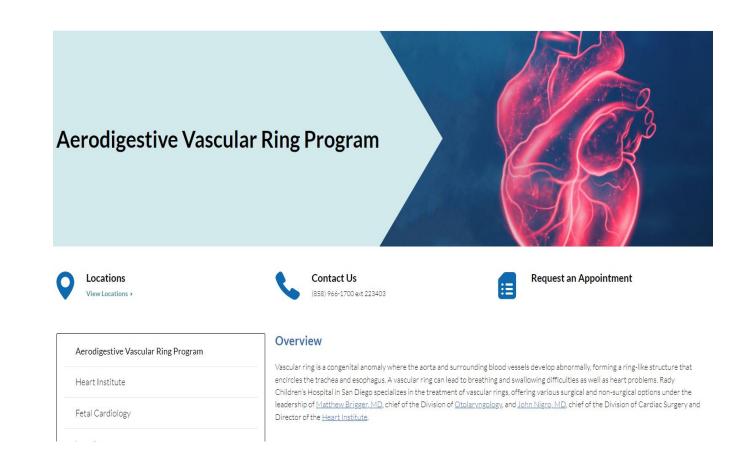
Operationalized:

- Vascular Ring Program
- Feeding & Tube Weaning Clinic
- TEF/EA program
- Tech dependent clinic
- CHARGE program

Aerodigestive Vascular Ring Program

Team members:

- Aerodigestive Team
- · Cardiothoracic Surgery
- Cardiology
- Fetal Cardiology
- 3D printing scientist
- Radiology



https://www.rchsd.org/programs-services/aerodigestive-vascular-ring-program/

Feeding & Tube Weaning Clinic

Clinic includes: GI, SLP/OT feeding therapist, Dietician, RN Care coordinator

- Goal of this clinic is to closely follow our dysphagia population that has few Pulmonary or ENT needs
- With the intent to wean patients from feeding tubes



Technology-dependent Clinic

- Geared towards trach & ventilator-dependent children who may be candidates for stepping down support or determining candidacy for decannulation
- Aerodigestive team
- As of August 2025 patients who have had changes made in their level of support are followed up with an Aero Pulmonologist that includes an RN and RT in a monthly half day clinic.

CHARGE Clinic

- Care Coordinator PA Annette Rodrigues
- Dedicated support, family education and coordination of care
- Collaboration with Aerodigestive Team

Clinic Prep leading to visit

- Obtaining any external medical records
- Appt reminders come as texts, calls and Mychart messages
- Extensive chart review
- Documentation in snapshot-includes primary specialists, Chief Complaint, HPI and summary of pertinent diagnostic studies.

- Contacting family prior to visit to review patient's history, goals and provide overview for the upcoming visit
- Team is emailed an agenda the day before to review that includes upcoming

UC San Diego

Aero clinic day

Conference room huddles with Zoom available. All team members join.

All patients scheduled for the day reviewed as well as OR cases for the week and any additional patients

Team split into groups to see each patient

Encounters are under Aerodigestive department with links to specialty notes. Separate procedure note templates

Multi D summaries completed with recommendations

Educational material given to families as well as 1 on 1 nurse visit as needed

Encounter Notes

Multi-Disciplinary Summary Sandra Salzedo, RD Aerodigestive

Sandra Salzedo, RD Aerodigestive Medicine • 9/18/2024 All notes



Jon Forfa, SP Aerodigestive Medicine • 9/18/2024

Sandra Salzedo, RD Nutrition • 9/18/2024

Daniel J Lesser, MD Pulmonary • 9/18/2024

Sandra Salzedo, RD Nutrition • 9/18/2024

Soma Kumar, MD Gastroenterology • 9/18/2024

Matthew T Brigger, MD Aerodigestive Medicine • 9/18/2024



Virtual Whiteboard for Tracking

4	В	C	D	Е	F	G	Н	I	J	K	L	М	N
1													
2	Patient	Appt Time	aryngoscopy	FEES	Room	Room Status	ENT	Pulm	GI	Speech / OT	Cardiology	Dietitian	Peds Surgery
3	Column1 ~	Column2 🔻	Column ~	Column ~	Column!	Column6	Column7	Column8 ~	Column9 ~	Column1(~	Column12 ~	Column1:	Column1:
4		1:30				Discharged	Seen	Seen	Seen	Seen		Not needed	
5		1:30				Discharged	Seen	Seen	Seen	Seen		Seen	
6		2:00	<i>,</i>			Discharged	Seen	Seen	Seen	Seen		Seen	
7		2:00				discharged	Seen	Seen	Seen	Seen		Not needed	
8		2:30	Yes	Yes		Discharged	Seen	Seen	Seen	Seen		Seen	
9		2:30	Yes			Ok to discharge	Seen	Seen	Seen	Seen		Seen	
10		3:00	Yes	Yes	5	Re-rooming needed	Seen	Seen	With Pt	With Pt		Not needed	
11		3:00											
12		3:30			10	Pt Ready	With Pt	With Pt	Seen	Seen		Not needed	
13		3:30:00 TM			12	Pt Ready	Seen	Seen	See Pt Next	See Pt Next	*		
14			,										
											1		-

Conference Summary

Patient Name is a age gender who was seen in our Aerodigestive clinic 8/21/2025 for {feeding and/or airway} assessment

Parents have had concerns with ***

During our assessment Patient Name was found to have ***

Procedure(s) performed were **{FEES or Flex scope}**

Our team recommendations are:

Please feel free to contact us with any questions or concerns.

Sincerely,

The Center for Pediatric Aerodigestive Disorders and Airway Surgery at Rady Children's Hospital

Rady Children's Hospital – San Diego

Aerodigestive and Airway Surgery Program

Nurse Coordinator: (858) 966-1700, ext. 223403

Fax: (858) 966-7852 Attn: Aerodigestive Clinic

Email: RadyAerodigestive@RCHSD.org

Follow up Fridays -Coordinator

Call families to review the recommendations from team conference (all orders, recs completed before)

Sends Conference summary to PCP, referring provider and the family Triage of calls and communication with team members as needed

Follow up on DME orders placed in clinic

Follow up appointment coordination

Aero Triple scopes

Full OR days on 2nd and 4th Thursdays of each month for a total of 8 patients

Half day on 4th Friday of each month for a total of 4 patients

Preop and Post op TM visits with Aerodigestive NP

All results and recommendations reviewed during our weekly Aerodigestive conference

Clinic to clinic collaboration



Weekly Aero conference



Monthly Aero operations meeting



Aero CV conference



Yearly Aero retreat

Thank You! Any questions?