

# Validation of an Aerodigestive Provider Assessment Survey

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## BACKGROUND

Multidisciplinary aerodigestive programs consisting of providers from otolaryngology, pulmonology, gastroenterology, and speech-language pathology are common in US pediatric settings (Ongkasuwan & Chiou, 2018). These programs have a higher success rate in alleviating symptoms, decreasing hospital admissions, and improving patient and family quality of life compared to fragmented care among several individual specialists (Rotsides et al., 2017; Appachi et al., 2017). The Aerodigestive Program at Texas Children's Hospital (TCH) was started in 2012 and now evaluates roughly 380 patients per year. A team of 9 core physicians, two nurse coordinators, one advanced practice provider, speech language pathologists, and dieticians meet several times a month to discuss patient care. Conversely, the model of multidisciplinary aerodigestive care is less common in adult medicine. When transitioning from pediatric to adult providers, fragmentation of care poses a significant burden for patients and families, worsened health indicators, and can result in loss to follow-up (Cotts, 2018).

Currently, there is no formal pathway to transition pediatric patients from the TCH Aerodigestive Program to specialists for adult patients. Primary care providers or pediatric subspecialists refer patients to adult specialty clinics as needed on an ad hoc basis. From 2019-2020 the Department of Otolaryngology- Head and Neck Surgery at Baylor College of Medicine (BCM) served approximately 28 patients referred through the Transitional Medicine Clinic with pediatric-onset chronic aerodigestive disorders. These patients received otolaryngology care and/or speech-language pathology intervention; however, data on how many of these patients were also seen by pulmonology and gastroenterology is unknown.

## PURPOSE

To create and validate an aerodigestive provider assessment survey

## METHODS

A survey was developed to assess provider knowledge and current practices in the transition of patients with chronic aerodigestive disorders from pediatric to adult care by a multidisciplinary panel of 6 healthcare providers. After the initial question pool was agreed upon, it was then distributed to a 8-person national expert panel for feedback to obtain content validation. An expert panel of 6 clinicians developed the initial survey; content and face validity were evaluated by a 8-person national expert panel.

The expert panel was asked to give feedback and rank each question in regards to the validity of the question as it related to the overall survey:

1. The item is not relevant to the survey.
2. The item is somewhat related to the survey.
3. The item is quite relevant to the survey.
4. The item is highly relevant to the survey.

Questions were edited to align with feedback from the expert panel and the content validity index (CVI) was calculated.

## CONCLUSION

The content validity index measurements from this newly developed survey suggest that it is a valid tool for assessing current knowledge and practice in care of transitions among patients with complex aerodigestive needs. The survey developed in this project will be utilized to identify knowledge gaps and process issues that can be addressed to ease the transition of adolescents from pediatric specialty care into adult specialty care.

## REFERENCES

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## RESULTS

Question	Experts in Agreement	I-CVI	UA
Which providers make up your current aerodigestive clinic team (select all that apply)	6	0.75	0
When patients with tracheostomies transition to adult specialty care, they should remain under routine medical follow-up with:	7	0.875	0
When patients with chronic aspiration/dysphagia/gastrostomy tubes reach adulthood, they should remain under regular medical follow-up with:	7	0.875	0
Adolescents with tracheostomies should be transferred	8	1	1
Adolescents with chronic aspiration/dysphagia/gastrostomy tubes should be transferred	7	0.875	0
The pediatric specialist should inform the adult health care provider	8	1	1
For patients with tracheostomies, the following specialty/specialties are an active participant in transition	7	0.875	0
For patients with tracheostomies, the following specialty/specialties should manage ventilator titration and troubleshooting during the transition period	6	0.75	0
For patients with tracheostomies, the following specialty/specialties should perform routine surgical tracheostomy management including tracheoscopies, direct laryngoscopies, and bronchoscopies?	7	0.875	0
For patients with tracheostomies, the following specialty/specialties should manage clinical aspects of the tracheostomy tube such as: tube selection, DME orders, stoma health, and trach secretions management?	6	0.75	0
For patients with chronic aspiration/dysphagia/gastrostomy tubes, the specialty/specialties are systematically an active participant in transition	8	1	1
For patients with tracheostomy tubes, in your practice, which of the following have you encountered as a barrier to a smooth transition from pediatric to adult care?	8	1	1
For patients chronic aspiration/dysphagia/gastrostomy tubes, in your practice, which of the following have you encountered as a barrier to a smooth transition from pediatric to adult care?	8	1	1
The following education points should be addressed by the providers caring for patients with complex aerodigestive needs	8	1	1
Which team member provides the following education in the adult practice? (select all that apply)	8	1	1
Which team member provides the following education in the peds practice? (select all that apply)	8	1	1
During the transition period who should primarily handle patient education?	8	1	1
*Transition Components	7	1	1
*Transition Overall	7	1	1

### Expert Proportion Relevance

1	1
2	0.86
3	0.91
4	0.96
5	0.87
6	0.96
7	0.78
8	0.74

Average Proportion Relevance = 0.88

SCVI/Ave	0.88
SCVI/UA	0.52