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Take Me Home to the Place I Belong: Discharging the Tracheostomy-Dependent Child

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Families of children with tracheostomies are typically eager to go home after what can be a very lengthy hospitalization (1, 2). However, conflicting emotions such as uncertainty, anxiety, and fear of adverse events are often present during this highly stressful process (3, 4). Although children with tracheostomy and mechanical ventilator dependence can be safely cared for at home, such care is not without risk, thus validating the aforementioned concerns (5-7). Formal guidelines have been published to aid clinicians in caring for tracheostomy-dependent and ventilator-dependent children at home (5, 8). These guidelines emphasize the importance of preparing families for this difficult transition. However, a greater understanding of how families experience the hospital-to-home transition will foster empathy among providers as they coordinate this very complex process.

In this issue of *AnnalsATS*, Amar-Dolan and colleagues (pp. 860–868) describe the experiences of family caregivers as their children were transitioned from



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hospital to home with a tracheostomy (9). They conducted semistructured interviews of caregivers whose children were discharged from a single center and completed a grounded theory qualitative analysis to identify themes among the responses. Thirteen caregivers from 12 families were interviewed until thematic saturation was reached. The authors identified five key themes: navigating home nursing, impediments in care coordination and obtaining medical equipment, learning as a process, managing emergencies, and setting expectations. The authors concluded that a family-centered discharge process is necessary, with emphasis on care coordination and teaching emergency preparedness.

The themes identified in this study emphasize ways in which the discharge process can be improved. Family caregivers provided constructive criticism that will enable this program and others to better meet the needs of future families transitioning home with a tracheostomydependent child. However, there were also a number of positive comments. Parents noted that hospital staff "really cared about making sure we felt completely comfortable" and described home health nurses as "very helpful." Families described outings such as going to the beach as challenging but important to establish "some normalcy." These complimentary remarks emphasize the benefits of being home for both patients and their families. They also suggest that the authors' program provides a very beneficial service to its families, even as it seeks to improve care.

The study has a number of important limitations. First of all, recall bias was quite possible because family caregivers were surveyed many years after tracheostomy placement (8 mo–18 yr). Selection bias was likely affected by which families chose to respond to the invitation to be interviewed. Certain aspects of the family education and discharge process have likely changed dramatically over such a large time period. The patients also suffered from a wide range of primary diagnoses of varying severity, including both those with dependence on mechanical ventilation and those stable with tracheostomy alone. However, these limitations are also strengths in that the feedback provided was largely consistent in spite of varied clinical scenarios.

The authors make a number of suggestions for how to address the concerns raised by the family caregivers. Advocacy efforts can help improve the infrastructure for providing home nursing and durable medical equipment. Electronic systems that make clinical data available to hospitals, outpatient providers, and home health professionals can improve care coordination. Teaching caregivers how to respond to airway emergencies using high-fidelity simulation is feasible and postsimulation debriefing can improve their confidence (10-12). Novel approaches to outpatient care at home, including telemedicine, may help reinforce caregiver skills and minimize risk of travel to clinic visits when not medically necessary (13). As programs improve their initial discharge processes for tracheostomydependent children, ongoing education of family and in-home professional caregivers in the outpatient setting is an important need that has yet to be successfully addressed.

In conclusion, tracheostomydependent children belong at home whenever possible. Although the hospital-tohome transition can be highly rewarding, it is also a very stressful time for patients and their families. We can learn a great deal from the family perspectives described in this manuscript. However, as systems vary significantly among centers, so do family concerns (4, 14). Let us not forget to listen to the families of children at our own institutions and continually strive to improve their care.

Author disclosures are available with the text of this article at www.atsjournals.org.

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Strange Bedfellows: The Interaction between COPD and Lung Cancer in the Context of Lung Cancer Screening

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It has been nearly 70 years since Doll first described the association between cigarette smoking and lung cancer (1), and later others followed by discovering the association of smoking with chronic obstructive pulmonary disease (COPD). Some smokers suffer the unfortunate "double whammy" of having preexisting COPD that increases the risk of developing lung cancer and are diagnosed with both. More recently, screening high-risk current and former smokers for lung cancer using radiation low-dose computed tomography (CT) has been added to the mix (2, 3). As screening is implemented globally, and given the increased risk of developing lung cancer in those suffering from COPD, there is a temptation to advocate screening all eligible patients with COPD with the hope of enriching the screened population with more patients likely to develop an early, curable cancer. To test that hypothesis in those eligible for screening, it would be important to know the prevalence and severity of COPD, the presence of respiratory symptoms, and the prevalence of other comorbid conditions to better understand their effect on screening outcomes. The study by Ruparel and colleagues (pp. 869-878) published in this



issue of *AnnalsATS* goes some way to providing that information (4).

The study design was clever. Nearly 8,000 patients eligible for lung cancer screening by age, smoking history, or meeting certain thresholds for developing lung cancer using validated lung cancer risk models were invited to participate in a "lung

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