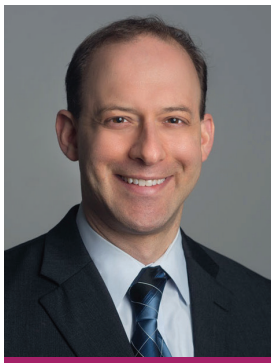
THE GLOBAL TRACHEOSTOMY COLLABORATIVE
BETTER CARE EVERYWHERE

BETTER CARE NEWSLETTER

ISSUE #6 | MARCH 2021

PRESIDENT'S MESSAGE

GLOBAL TRACHEOSTOMY COLLABORATIVE 2021: DELIVERING LOCAL LEARNINGS TO THE WORLD STAGE



Michael J. Brenner, M.D., F.A.C.S.
President, GTC

COVID-19 pandemic is the defining event of our lifetimes – a seismic disturbance that has upended lives and shaped generations. Amid this upheaval, our members, including frontline healthcare professionals, patients, and families, have been on center stage. The challenges have been formidable. Whether facing the plight of critically ill patients in an overwhelmed intensive care unit; grappling with care for a child with tracheostomy in the absence of home nursing and supplies; or bearing the torch of humanitarian efforts in an impoverished nation without oxygen or vital equipment, GTC members have been boots on the ground in this unprecedented epoch. We have seen how this moment has laid bare stark inequities across social strata and geographies.

The past year has been one of historic achievements and recognitions for Global Tracheostomy Collaborative. The accolades are too numerous to count; yet, a few shining examples bear mention. In the past year, GTC members authored influential articles in the *New England Journal of Medicine, Journal of the American Medical Association, Lancet,* and other prestigious journals across diverse specialties. The *Improving Tracheostomy Care* initiative – involving twenty diverse hospitals implementing Global Tracheostomy Collaborative key drivers – received international acclaim from *British Medical Journal,* receiving its coveted Group Quality Award at the 12th annual BMJ Awards Showcase. An Order of the British Empire recognition was conferred, one of the highest honors awarded by the United Kingdom with its imperial national award system, appearing on the Queen's New Year's Honor list for lives saved from harm, relief of human suffering, and improving tracheostomy care. Just weeks ago, the prestigious *CHEST Journal* also featured GTC leaders in a roundtable educational series. In this issue, we celebrate themes of resilience and announce the arrival of GTC database V3 (see page 3).

Thus, for Global Tracheostomy Collaborative, we have learned that we are nothing if not a learning community. In these times of crisis, vulnerabilities are exposed – for society and as individuals – and we discovered much about who we really are and what we stand for. The GTC members have found innovative ways to champion the mission of improving lives of all patients with a tracheostomy. We have learned that within our ranks are everyday heroes and thought leaders who can inform and inspire. Through its many educational channels, GTC has collected and disseminated data, providing experience that transcends international borders. This year also bore witness to heroic acts of nurses, speech-language pathologists, respiratory therapists, physicians and surgeons, patients, and their caregivers. The year 2020 was the culmination of the World Health Organization's Nursing Now movement, commemorating the 200th anniversary of iconic leader Florence Nightingale and we congratulate our treasurer for election to serve as president of *Society of Otorhinolaryngology–Head Neck Nursing*.

As the Global Tracheostomy Collaborative transitions from a fledgling organization to the global thought leader in advancing best practices and

tracheostomy care, we need to grow and change. We reached thousands of listeners worldwide on webinars; onboarded new hospitals; struck up collaborations with low and middle-income countries; and published over 3 dozen articles in premier scientific journals with authors from over two dozen nations. Amid the changing face of our organization and evolving leadership, we also face new questions. How will we ensure that the growing entity speaks with a unified voice? What measures will ensure that the all-important perspectives of patients, families, and caregivers are heard clearly? How will we navigate the fine line between expanding our reach while stewarding precious time and energy of our volunteers?

The answers to these questions will become more evident in the months and years ahead as we forge ahead and lift away the rubble of the pandemic. This newsletter highlights exciting developments within the organization and offers timely perspectives. It champions best practices for all individuals with tracheostomy and addresses the imperative for safety and quality. GTC remains a tireless advocate for patient-centered care and embraces multidisciplinary teams and data-driven practices. As the iconic baseball player and philosopher Yogi Berra observed, "It's tough to make predictions, especially about the future." It is true, amid emergence of new viral strains of virus and pervasive public health challenges, that uncertainty is a defining feature of this epoch; but, be assured that we are on the path to a brighter future thanks to the commitment and purposefulness of our steadfast members.

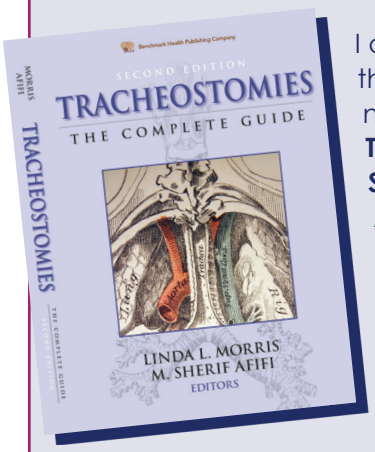
In these unsettled times, we may feel beleaguered, as if scaling an unyielding mountain; but, if we put gaze toward the horizon, we can see how high we have climbed and far we have come. We can also catch sight of the brighter future beyond. We thank all of you—readers and contributors—for your curiosity, your engagement, and your resilience. It is your passion that infuses the work of GTC with meaning. Thank you for all that you bring to this organization; because of you, we are "*On the Right Trach*."

Sincerely,

Michael J. Brenner, M.D., F.A.C.S.
President, GTC

HOT OFF THE PRESS

By: Linda L. Morris, PhD, APN, CCNS, FCCM



I am pleased to announce the upcoming launch of our new book, **Tracheostomies: The Complete Guide, Second Edition** (Morris & Afifi, Benchmark Health Publishing). Updates since the first edition include the following:

- Updated literature review for every chapter
- Clinical scenarios weaved through many chapters
- Two completely new chapters: Chapter 8 on care of the pediatric patient and Chapter 9 on care of the patient with a laryngectomy
- Expanded product information from a wider variety of international manufacturers
- Guidelines and recommendations for care of the patient with acute airborne illness and aerosol generating procedures
- New section on care of the patient in the office or clinic setting
- Review questions at the end of each chapter
- In addition to a print version of the book, online versions will also be available

Look for the book coming soon to Amazon and Apple. Follow me on LinkedIn and Twitter (@TrachPro) to get the latest updates and announcements of availability. Be sure to be one of the first to purchase and write a review. ■

YOUR GTC DATABASE: V.3

By: Charissa J. Zaga, BSpPath, MPH, PhD(c); and Bradley A. Schiff, MD, FACS

The GTC database is an internationally, HIPPA-compliant (Health Insurance Portability and Accountability Act) database. Data privacy is addressed extensively in the Data Use Agreement that each member hospital and the GTC has signed. Data can be entered in two ways in the database – either with Protected Health Information (PHI) collected, such as date of tracheostomy tube insertion, or non-PHI, where key time points are collected relative to the day of admission, e.g. tracheostomy tube insertion occurred on day 10 of admission.

The database committee has global multidisciplinary membership across adult and pediatric specialty fields, and the committee together with feedback received from member hospital has refined the data fields since it's initial creation. Version 3 of the database is to be launched in early 2021.

The GTC database contains an *enrollment form*, whereby the patient is allocated a GTC database number. This number is comparable to how a patient's Medical Record Number links all of a patient's admission in the one record. In the database, this GTC number links their admissions with a tracheostomy to the one *enrollment form*. One only enters the patient's demographic information into the *enrollment form* once. In the admissions form, data can be entered into a *core form* and an *expanded form*. The *core form* contains data fields that relate to the key reporting outcomes in the GTC bi-annual aggregate report. The *expanded form* contains more detailed data fields, some which expand on initial data entered into the *core form*. For example, if you entered into the *core form* that the patient was decannulated prior to discharge or death, in the *expanded form*, you have an opportunity to enter further details such as, what steps facilitated decannulation, where the decannulation took place, and any post-decannulation respiratory and secretion clearance requirements. Member hospitals may choose to select which sections of the *expanded form* they choose to enter data. It is recommended that the select sections are routinely entered. The *expanded form* contain more detailed data fields, therefore facilitating more robust outcome reporting.

There are several key changes and improvements made to version 3 of the GTC tracheostomy database. First and most importantly, there have been numerous improvements made to enhance ease of data entry and functionality for the front-end user. We have also made a number of additions and changes to the database to strengthen the impact of the data collected. Foremost among these changes are improvements made to the sections on tracheostomy-related adverse events and tracheostomy-related complications, which we have linked with the World Health Organization's level of harm classification system. Additionally, in response to feedback from our member hospitals, we increased the number of pediatric co-morbidity data fields and reasons for admission. Finally we expanded the communication and swallowing sections. With 9,538 number of patients currently in the database, we look forward to reaching the next milestone of 10,000 patients and ongoing feedback from our member hospitals!

Entering data into the database and receiving bi-annual data reports enable teams to monitor trends in clinical practice and compare how their site compares to other sites in an unidentified fashion. The GTC database is unique in its large number of patients and hospitals, representing many different countries and continents. The diversity of the GTC member hospitals enables members to evaluate current tracheostomy treatment and outcomes on a global scale. While every hospital has different patient populations comparing your hospitals strengths and weakness to a norm enables the hospital to identify potential areas of improvement, and helps focus quality improvement initiatives to improve care and minimize modifiable risks like adverse events. ■

Please contact database@globaltrach.org

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REFLECTIONS ON HOW COVID-19 PANDEMIC HAS CHANGED TRAINING ON TRACHEOSTOMY CARE

By: Joyce Houston, RN, Tracheostomy Clinical Nurse Specialist | NHS Lanarkshire, Scotland

I am the Tracheostomy Clinical Nurse Specialist at NHS Lanarkshire, the third largest health board in Scotland. A unique post for adult services was created in 2009. NHS Lanarkshire serves a population of 660,000, covering 1772 square km. We have three acute university hospitals, several cottage hospitals, nursing homes, brain injury unit and two hospices – all under my care. I even had to review a patient in our local high security prison (HMP Shotts), which was interesting.

As an important part of my role, I am responsible for training patients, family members and nursing/medical staff on how to care for patients with a tracheostomy/laryngectomy ensuring safe discharge from hospital and beyond. I work closely with our ENT (Ear Nose Throat) consultants, and the multidisciplinary team members. We model our training on the guidelines from The National Tracheostomy Safety Project (NTSP, 2012).

On Monday 6th April 2020, I suddenly found myself having to work from home – following a risk assessment it was deemed necessary for me to work from home. As you can imagine, I was devastated because how was I going to manage to fulfil my role if I was not on site? In order to continue to provide the best possible service and training support for my patients and colleagues, I had to reconsider how I would deliver the tracheostomy/laryngectomy care training.

I started to get calls from nurses within Lanarkshire, ward nurses needing training for ICU step-downs, and district homecare nurses requiring tracheostomy/laryngectomy training in preparation to support patients who were discharged home etc. So, armed with my laptop, from my kitchen table I set out my presentations and all the kits required for the training. I would email the staff trainees copies of my presentations, a link to the 4 e-learning modules from the NTSP website (www.tracheostomy.org.uk/e-learning), which they would need to complete before attending the session. Then, they could attend the training session by logging onto my NHS "attend anywhere" video call or Microsoft Teams so that we could all hear and see each other. This had its challenges, but the staff gave great feedback. Even though we missed the "hands on" approach, I was able to show them the kits, explain and demonstrate how all worked. Fortunately, there were experienced staff in tracheostomy/laryngectomy care at each site who could also lead simulated hands-on training and supervise their practice on the patients. I was also able to give the nursing staff ongoing support via the video calls.

Since I returned to patient contact in July 2020, this method of training has continued as travel restrictions between the sites remain in place. Staff can also participate in the training from home, as often the wards are too busy to allow time away from patient care. When they join in from home, I have found they are more relaxed and have the time to concentrate fully.

I think the virtual training shows our resilience and ability to adapt to situations we find ourselves in. Looking forward, we should consider to implement virtual trainings in the future. Nothing beats "hands on" but faced with no alternative I think we have fulfilled our training requirements well.

Feedback from a trainee, Lauren, a nurse on the HECT (Hospital Emergency Care Team) from University Hospital Wishaw:

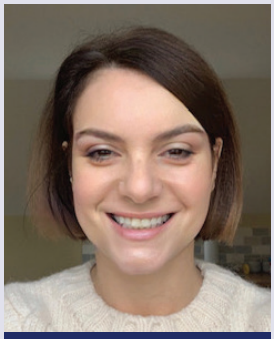
"*I had a training session with Joyce focusing on Tracheostomy and Laryngectomy anatomy, care, maintenance and management of these specialist airways. Due to a new job role where I am responsible for managing these patients, I requested further teaching and learning to help provide the best care to the patients. I was provided presentation slides, e-learning and helpful websites prior to the session to help gain a background of knowledge which I found beneficial. The teaching session was informative and extremely helpful. Joyce was excellent at discussing the important factors of each of these airways and the main differences between them. She took the time answering my questions and was very approachable. This online video training session has greatly advanced my learning, knowledge and confidence when dealing with patients who have a specialist airway and I managed to do this from the comfort of my home. Thanks again Joyce!*" ■

REFERENCES

National Tracheostomy Safety Project. (2012). www.tracheostomy.org.uk/resources/papers?paper=tracheostomy-adult-emergency-guidelines

RESILIENCE

By: Barbara Bonvento, Specialist Respiratory Physiotherapist, National Physiotherapist Lead | NTSP (National Tracheostomy Safety Project)



Barbara Bonvento

To be honest, I have always been the kind of person who smirks at the word resilience. I have always considered myself a strong woman. I live in the U.K. and I have a husband who keeps a stiff upper lip. Then I have found myself in a situation where things were a bit overwhelming.

In February 2020 I went to visit my parents, in Northern Italy. The plane landed in Milan. It was quite eerie: men in full hazmat were checking travellers' temperature. It was like a scene from a dystopian movie, one that I am unable watch from beginning to end.

We spent the week at home, complying with lockdown rules. We hardly ventured outside out of fear of becoming infected and passing it to my parents, who are in their 70s. I could never forgive myself if that was to occur. Displays of affection were also banned.

We came back to Manchester and cases were starting to increase in the U.K. too. I found myself living the same situation twice: worried about my family in Italy and as well about my family in the U.K., like living it once wasn't enough.

Patients began to arrive in our Intensive Care Unit. We were all frightened. Moreover, as a team leader, I had the task to reassure the more junior members of staff, trying to reassure them that if they were compliant with all the infection preventions measures in place, they would have been alright. I felt like I was lying but I didn't know what else to do to.

The number of patients affected were increasing, it was a predicament where you felt numbed and overwhelmed. Gone was the variety of pathology to treat, every patient had the same pathology, some were younger than me, without any significant past medical history. It was the biggest challenge we had to face, both from a clinical and a psychological point of view.

In April I felt unwell, achy and tired. I thought I did those YouTube yoga exercises too vigorously, however, to be sure, I went for a swab; it was positive.

Luckily a mild form of the disease affected me, some others weren't so fortunate. (A bit annoyed as my sense of smell is still to recover.) You start to ask yourself questions, why are some people more affected than others?

In our department we have Occupational Therapists who have been trained in delivering Mind-Space sessions. Most of members of our department took advantage of this and found the meetings to help greatly as it focused on the positives and helps to destress.

During the so called "first wave," the weather was strangely warm and dry, quite unusual for Manchester. You could see people jogging all the time, maintaining a safe distance from each other, in fact I have never realised so many people liked jogging in our street.

My husband and I opted for long walks in the evenings, making the most of the weather, which was cathartic. As on a normal day, we came home, had dinner and watch television or finish work emails in the evenings, with no room for deep conversations.

To date, the weather is not so great, sunset is at 16:00 and the inclement Manchester weather is back on track, this, however, has not stopped us from our walks and exercise in the evenings. As my Norwegian friend says, "There's not such a thing as bad weather, only bad clothing."

Now I feel my resilience has been tested, the strategies I have used are exercising and Mind-Space meditation. I promise, I will never snigger again. ■

RESILIENCE & NEW BEGINNINGS

PERSPECTIVES FROM A SPEECH AND LANGUAGE THERAPIST

By: Sarah Wallace, OBE, PGDip, MRCSLT

Consultant Speech and Language Therapist | Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester UK

Sarah Wallace

During my 30 year career as a Speech and Language Therapist (SLT), many of which have been spent in intensive care, I have been fortunate enough to have worked in the United Kingdom as well as in countries with different healthcare systems and resources, such as Cambodia. These varied environments have considerably stretched my knowledge, skills, and resilience in the past. I have relished these challenges and I have no doubt that they have stood me in good stead during the past 11 months, because the pandemic has demanded an immeasurable ability to deal with the unpredictable and the unfamiliar.

Never before have we had to learn about a new disease whilst treating it, to observe our patients so closely, and to make decisions about care without knowing for sure what the outcomes might be. This required flexibility, creativity, and an ability to rapidly absorb new knowledge and skills beyond anything I've ever known. My position as a national advisor in tracheostomy care not only allowed me to witness collaboration on an unprecedented scale, but also gave me an enormous opportunity to provide clinical guidance on the best care for patients whilst also keeping SLT staff safe with appropriate PPE. In particular, swallowing assessments carry a risk of virus transmission, an issue that needed urgent attention and which was not something that had ever dictated our role before.

Communication problems have also been thrown into the spotlight. The effects of COVID-19 and intubation cause huge laryngeal complications, with an impact on voice being a key feature. More intensive care patients than ever have needed a tracheostomy, bringing with it the associated communication difficulties. Wearing PPE face masks has also brought communication to the forefront of healthcare professionals' minds, which has raised a level of awareness that can only benefit all patients in the future.

As an SLT, I am often in the privileged position of giving someone their first sip of water or being able to restore their voice, and facilitating a patient's first spoken communication with their families is extremely moving for staff and patients alike. Throughout COVID-19, this has been more challenging than ever, but seeing the extraordinary courage, positivity, and resilience of our patients, their families and colleagues is what inspires and motivates us to keep going. I am truly tired but also optimistic that new knowledge gained and the international collaborations forged will have a lasting beneficial impact on care for all patients, not just those with COVID-19. ■

KUDOS

NATIONAL HONOUR FOR NTSP SLT LEAD SARAH WALLACE, OBE, PGDIP, MRCSLT

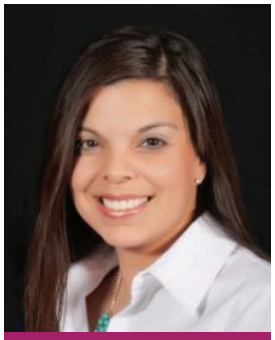
The British honours system rewards individuals with Honours, Decorations and Medals in public recognition of their merit, service or bravery. Honours are announced and awarded twice a year by Her Majesty The Queen. The OBE (standing for Officer of the Most Excellent Order of the British Empire) is awarded to individuals who have made major contributions at a local level, or whose work has gained a national profile. Read more here:

www.tracheostomy.org.uk/news/national-honour-for-ntsp-slt-lead-sarah-wallace

NAVIGATING TELEHEALTH

REFORMING CURRENT PRACTICES & IMPROVING ACCESS TO CARE

By: Laura Moreno DNP, APRN, FNP-C | Driscoll Children's Hospital
and Jessica L. Peck DNP, APRN, CPNP-PC, CNE, CNL, FAANP, FAAN | Louise Herrington School of Nursing, Baylor University



Laura Moreno

Jessica L. Peck

Access to health care continues to be a major challenge for patients and health care providers across the globe. In many rural areas similar to South Texas, patients face many dilemmas, including transportation, financial, employment, and immigration constraints which are vital deterrents to follow-up care. Pediatric patients with a tracheostomy are a medically complex, vulnerable population who require on-going medical assistance, technology-based advancements, and multidisciplinary care to sustain life.

As an advanced practice nurse in an otolaryngology clinic within a pediatric hospital, it was evident that the transition from hospital to home proved to be challenging, with obvious gaps in care. Caregivers of patients with a tracheostomy often reported being anxious and overwhelmed with assuming the role of primary caregiver at their initial face-to-face post-hospital follow-up visit. They expressed concern on how to get their technologically dependent child access to specialized healthcare needs, lacked confidence in their abilities to provide care to their child, and reported a tracheostomy-associated complication with an unnecessary emergency room visit or hospital re-admission within 30 days after discharge. Non-adherence with follow-up visits increased particularly among those families dealing with immigration concerns, primarily because parents did not want to risk deportation or face legal consequences when seeking medical care.

The implementation of a quality improvement project paved the way for a bridging strategy to improve access to care while reforming the current practice standards for this specific patient population. The intent was to incorporate a hospital-based discharge protocol as well as the integration of a telehealth initiative for follow-up care in pediatric patients with demanding medical needs. The concept of telemedicine has emphasized remote monitoring to connect patient and caregiver while facilitating effective communication, coordination of care, increasing caregiver confidence, trust, and patient engagement despite the distance. It has allowed patients and their families to receive the care they need to stay healthy while avoiding complications, unnecessary emergency room visits, and re-hospitalizations. The adoption of telemedicine has undoubtedly become a major component that offers health care providers an option of reaching patients to deliver quality care and maximizing patient outcomes using a virtual platform. Caregiver knowledge, telehealth satisfaction, and caregiver efficacy were specific aims assessed in the quality improvement project to improve patient outcomes.

In 2020, the COVID-19 pandemic added an additional strain on the entire health care system that favored the implementation of telehealth as the primary focus of access to care. Health care systems have been compelled to utilize available strategies and essential resources to build vital capacity between the patient and provider using remote support to increase interactions and effectiveness comparable to the traditional standard of care. Health care providers, policymakers, and government leaders are supporting system reforms specific to telehealth as the demand for widespread access to care has increased. Telehealth has proven to be a significant, reliable, and cost-effective element for acute and chronic patients in need of primary and specialty care with varying diagnoses as the current pandemic continues to negatively affect patients and providers throughout all avenues of the health care system. ■

PROGRESS
IN THE MIDST OF A PANDEMIC

By: Amanda Furie, MA, CCC, SLP; Marta Kazandjian, MA, CCC, SLP, BCS-S; and Sarah Trapp, MS, CCC, SLP
Silvercrest Center for Nursing and Rehabilitation, Briarwood, New York

Eileen would never have imagined that at 36 years old, she would have experienced an event that would change her life forever. It began in October 2019. Despite being a healthy woman, she began to experience ascending tingling/numbness in her feet and hands before being admitted to the acute care hospital. Following a battery of neurological tests, including lumbar punctures and MRI, Eileen was diagnosed with Guillain-Barre Syndrome, a progressive, rare condition in which a person's immune system attacks the peripheral nerves. Her symptoms worsened with deterioration in her respiratory condition, necessitating intubation and mechanical ventilation. After failed weaning (removal from the ventilator) attempts, a tracheostomy was performed. Her intensive care unit course was complicated by autonomic dysfunction, urinary tract infection, intermittent fevers, and uncontrolled neuropathic pain. Her physical motor status declined, leaving her unable to move her arms and legs. She had facial weakness, including the inability to close her eyes bilaterally. After a long and complicated acute care stay, Eileen was stable enough to be transferred to our post-acute location in December 2019.

When Eileen arrived at Silvercrest Center for Nursing and Rehabilitation, she was evaluated by the interdisciplinary team. She was fully dependent on the mechanical ventilator, unable to verbally communicate or move her arms and legs while receiving her nutrition and hydration through a feeding tube. The interdisciplinary team worked together to target Eileen's specific needs. While the physical and occupational therapists targeted goals to gradually increase her strength, the speech pathologists quickly established goals to address her communication and swallowing needs. Despite attempts to deflate her tracheostomy tube cuff, she was unable to produce voice while on the ventilator. Once Eileen made progress in the ventilator weaning protocol, the medical team endorsed the respiratory therapist to downsize the tracheostomy tube to allow more upper airway flow for voice production.

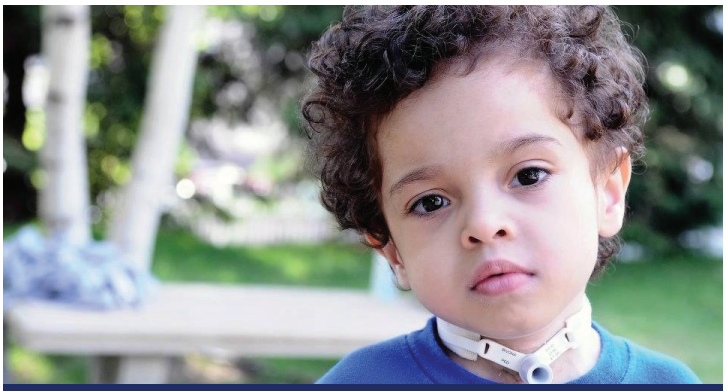
Eileen

Over time, Eileen tolerated full cuff deflation and eventually a one-way speaking valve (Passy-Muir) placement in-line with the ventilator. Alongside targeting Eileen's communication, the speech pathologists also evaluated her swallowing with flexible endoscopy at her bedside. This assessment allowed these swallowing specialists to visualize her tolerance of both food and liquid trials. Eileen began swallowing therapy with goals targeting intake by mouth with the use of safe swallowing strategies. Over the course of several months, while using her speaking valve to cough and product her airway, Eileen began to take small amounts of food and liquid while remaining free from infection. Therapy and slow weaning from the ventilator continued over several months as her strength increased.

Although Eileen continued to make progress toward a functional recovery, she wasn't expecting

PROGRESS (from page 10...)

the healthcare system to face a new challenge, COVID-19. Despite this unforeseen obstacle, Eileen has been able to maintain her current progress, has been tolerating a full regular soft diet with thin liquids, and has been communicating verbally with her one-way speaking valve. Eileen has now regained strength in her arms to perform tasks such as feeding herself, dressing, and making phone calls to her family. She is using her legs to walk up to 300 feet with a walker. Her progress and improved strength allowed her to most recently tolerate removal of the tracheostomy tube! She is now able to breathe and speak on her own. Eileen is preparing to return to her home in the community. She has fought a hard battle but remembers to smile each day as she communicates to her family and friends on the phone. Eileen attributes her recovery to hard work, a loving family, and a committed team who is dedicated to caring for her each and every day, even in the midst of a global pandemic. ■



WHAT IS THE GTC? The Global Tracheostomy Collaborative (GTC) is a quality improvement collaborative that recruits hospitals to join us, to improve the lives of people living with a tracheostomy through implementing best practices around tracheostomy team care and standardization. Their outcomes are tracked through a world-wide confidential database.

HOSPITALS: Join the GTC Today!
globaltrach.org/member_hospitals

HEALTHCARE PROFESSIONALS: Join Today for Free!
globaltrach.org/healthcare_professionals

TRACHEOSTOMY MYTH VS FACT

COVID-19 CLINICAL COURSE

Mechanically-ventilated COVID-19 patients invariably "declare themselves" with rapid recovery or death within 2 weeks.	Approximately 10% of patients can languish for weeks on ventilators relevant to many thousands of patients.

VIRAL TRANSMISSION FROM TRACHEOSTOMY

COVID-19 tracheostomy is associated with a high rate of viral transmission to healthcare workers.	Most COVID-19 tracheostomy series document zero transmissions, owing to protocols and waning infectivity.

CANDIDACY OF PATIENTS

Few COVID-19 patients are candidates for tracheostomy due to high PEEP or poor pulmonary reserve.	Patients with COVID-19 mirror other patients with ARDS. Most such patients have sufficient reserve to allow procedures with apnea pauses.

Adapted from: Brenner MJ, Feller-Kopman D, De Cardenas J.Chest. 2021 Feb 5:S0012-3692(21)00250-6. doi: 10.1016/j.chest.2021.01.076.

EXPERIENCE OF A TRACHEOSTOMY OUTREACH SERVICE IN A QUATERNARY REFERRAL CENTRE: INSIGHTS FROM THE GTC

By: Krishnaswamy Sundararajan; Anne Gatley; Lee Pryor; Derek Hynes; and Gerry O'Callaghan

Tracheostomy is a commonly performed procedure[1] in the intensive care unit (ICU) enabling assisted ventilation in patients weaning from mechanical ventilation. There are several factors that play a role in effective management of these patients and a multi-disciplinary team approach is usually required to meet their complex needs[2]. Whilst some of these procedures are undertaken on a short term basis, usually in the setting of elective surgery, others are required for a longer term necessitating resource intense intervention.

Whilst tracheostomy remains a common and safe procedure in patients requiring prolonged mechanical ventilation and airway protection in the ICU, the process of weaning from tracheostomy to maintenance of spontaneous respiration and/or airway protection is complex relying on effective teamwork between various stakeholders[3,4,5] namely allied health (speech pathology in particular), nursing and medical teams. In this context we sought to evaluate the outcomes in patients undergoing tracheostomy at a quaternary referral centre using the data made available by the Global Tracheostomy Collaborative (GTC). A retrospective review of prospectively collected data in patients who underwent tracheostomy in an ICU at our quaternary referral centre having a shared model of care with respect to surgically and percutaneously inserted tracheostomies was undertaken. All patients who received a new tracheostomy in 2018 and achieved hospital discharge by January 2019 were included in the submission to the GTC Red CAP database.

In comparison to the GTC benchmark (tabulated results), the length of stay (LOS) of tracheostomy patients in our ICU was high (50.3 days v/s 47.3 days) with comparable cannulation time (26.6 days v/s 26 days). The decannulation rate was higher than average (91.3% v/s 54.9%). The adverse event rate was less than GTC benchmark (7.6% v/s 18.1%). Our cohorts were predominantly surgical/trauma as compared to the medical patients in the GTC data (Figures 1, 2).

FIGURE 1: Distribution of medical reasons for admission-primary admissions

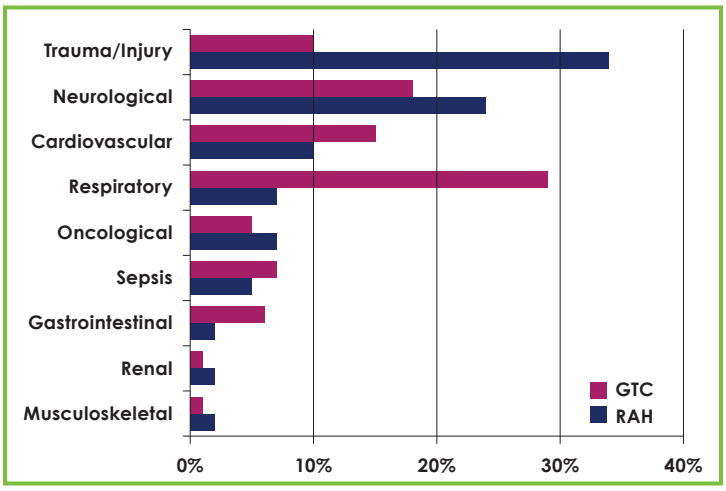
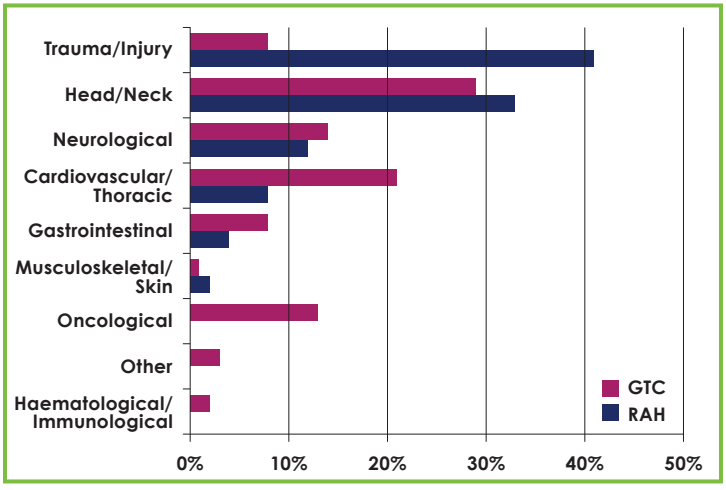
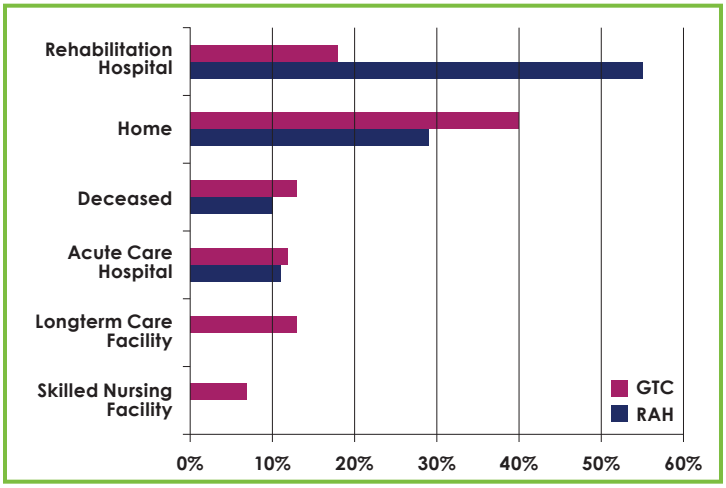


FIGURE 2: Distribution of surgical reasons for admission-primary admissions



From a procedural point of view, we had a 65% v/s 35 % split in surgically inserted v/s percutaneously inserted tracheostomies which was similar to benchmark data. However, in terms of discharge destination, (Figure 3), ours were predominantly rehabilitation units (considerably more than average); whereas other sites have more discharges home (certain index hospitals in the GTC dataset based in

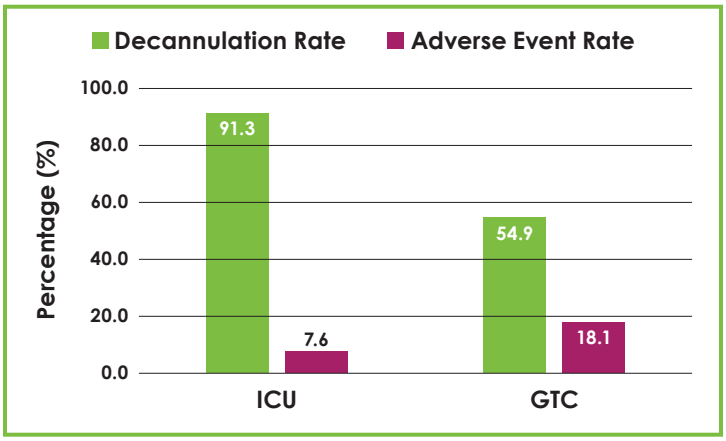
FIGURE 3: Discharge disposition-primary admissions

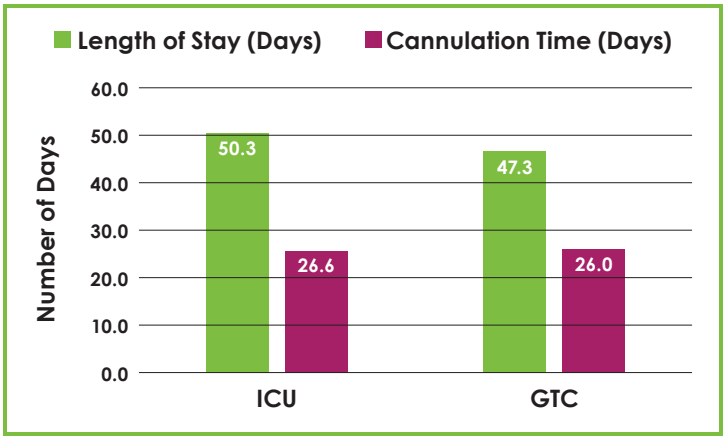


RESULTS:

Length of Stay (Days)	Mean	p-value	Remark
ICU	50.3	0.4068	Not Significant*
GTC	47.3		
Cannulation Time (Days)	**Mean**	**p-value**	**Remark**
ICU	26.6	0.8396	Not Significant*
GTC	26.0		
Decannulation Rate	**Proportion(%)**	**p-value**	**Remark**
ICU	91.3%	0.00001	Significant*
GTC	54.9%		
Adverse Event Rate	**Proportion(%)**	**p-value**	**Remark**
ICU	7.6%	0.0093	Significant*
GTC	18.1%		

*Level of significance @ 0.05 (5%)





the United States can access other long term care facilities[6] / skilled nursing facilities)

The clinical service delivery in our organisation is on par with other services enlisted with the GTC without any significant deviation from accepted standards of care apart from length of stay which is influenced by factors extraneous to care provision in this quaternary hospital. ■

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