

#### ISSUE #5 | November 2020

### PRESIDENT'S MESSAGE



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

When the Global
Tracheostomy Collaborative
was created in 2012, the
notion of a global entity
conceived to promote high
quality, multidisciplinary
tracheostomy care was
at once visionary and
audacious. Nearly a
decade later, that vision is
becoming reality. The GTC
has expanded its reach

and impact across countries and continents. We have kickoffs and international symposia in America, Europe, and Australasia. Our database has matured into a state of the art repository for data on care. Our key drivers have been promulgated in dozens of scholarly publications. And, the face of care has changed. In the life of an organization, there arise myriad opportunities for growth and change. How we respond to these moments – whether we shy away from them or embrace them – ultimately determines what we become, and the magnitude of our impact in this world.

The GTC is, at its core, a learning community committed to best practice that is grounded in a trust, collaboration, and sharing. A report on GTC even prior to the pandemic, detailed participation from 197 institutions and 22 countries, encompassing a community of

doctors, nurses, speech language pathologists, nurses, respiratory therapist, and –all importantly–patients, families and caregivers.<sup>4</sup> The GTC has demonstrated significant improvements in communication, clinical assessments, and quality improvement. We recently reported on 5,000 patients with tracheostomy and will have over 10,000 patients in 2021. The GTC showed dramatic improvement in quality of life, reducing adverse events, and saving lives in the largest multidisciplinary tracheostomy care project to date.<sup>1,3</sup> We are indebted to all of you who have made these accomplishments possible.

In the last 6 months, GTC has grown spectacularly, even explosively, given the pressing need for international knowledge and the questions around infectious transmission in tracheostomy. Our learning community offered the world definitive, multidisciplinary guidance amid times of pandemic crisis, informing scientific literature. 4-10 Thousands of individuals have taken part in our webinar series. GTC examined measures targeting zero harm in infectious transmission, ensuring safety of healthcare workers, navigating public health crises, and high-stakes decision making. As we started looking to the future, we have explored rehabilitation, strategies for multidisciplinary education, and emerging approaches to telemedicine, all drawing on voices from across continents with regular contributions from multidisciplinary experts, patients and family.

I am honored to assume the role as your president, following our founder, David Roberson, who now serves as chairman of our board of directors. In my personal experience with GTC, serving on the board, as a continental lead, and treasurer, I have come to know many of you. We have grown together as learners. I have matured as a clinician, organizer, and colleague, blessed with opportunities to join you in impacting lives. Now, we look ahead to the next chapter in this organization. Many of our families have faced challenges, and our member institutions faced different challenges; many brought on by COVID-19, but we are all partners in improving health care, quality improvement and medical education.

As president, I will be a fierce advocate for improving lives of all individuals with a

tracheostomy and for all healthcare workers and families who offer tracheostomy care. I support leadership development for individuals throughout our organization and will continue to look for opportunities for us to grow and to take chances. Doing so may involve expanding the scope of our activities, taking on new challenges, and making changes to comfortable ways at times. Thank you for all that you have given of yourself to this organization and for all that you continue to do in building its future. The best is yet to come.

Sincerely,

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

President, GTC

- <sup>1</sup> Brenner MJ, Pandian V, Milliren CE, et al. Global Tracheostomy Collaborative: datadriven improvements in patient safety through multidisciplinary teamwork, standardisation, education, and patient partnership. *Br J Anaesth*. 2020;125(1):e104-e118.
- <sup>2</sup>Cherney RL, Pandian V, Ninan A, et al. The Trach Trail: A Systems-Based Pathway to Improve Quality of Tracheostomy Care and Interdisciplinary Collaboration. *Otolaryngol Head Neck Surg*. 2020;163(2):232-243.
- <sup>3</sup> McGrath BA, Wallace S, Lynch J, et al. Improving tracheostomy care in the United Kingdom: results of a guided quality improvement programme in 20 diverse hospitals. *Br J Anaesth*. 2020;125(1):e119-e129.
- <sup>4</sup> Swords C, Bergman L, Wilson-Jeffers R, et al. Multidisciplinary Tracheostomy Quality Improvement in the COVID-19 Pandemic: Building a Global Learning Community. *Ann Otol Rhinol Laryngol*. 2020:3489420941542.
- <sup>5</sup> McGrath BA, Ashby N, Birchall M, et al. Multidisciplinary guidance for safe tracheostomy care during the COVID-19 pandemic: the NHS National Patient Safety Improvement Programme (NatPatSIP). Anaesthesia. 2020.

- <sup>6</sup> McGrath BA, Brenner MJ, Warrillow SJ, et al. Tracheostomy in the COVID-19 era: global and multidisciplinary guidance. *Lancet Respir Med*. 2020;8(7):717-725.
- <sup>7</sup> McGrath BA, Pelosi P, Schultz MJ, Brenner MJ. Preoperative apnea trial and considerations regarding timing of tracheostomy in anesthetic planning for patient with COVID-19 disease. *J Clin Anesth*. 2020;67:110013.
- <sup>8</sup> Schultz MJ, Teng MS, Brenner MJ. Timing of Tracheostomy for Patients With COVID-19 in the ICU-Setting Precedent in Unprecedented Times. JAMA Otolaryngol Head Neck Surg. 2020.
- <sup>9</sup> Smith JD, Chen MM, Balakrishnan K, et al. The Difficult Airway and Aerosol-Generating Procedures in COVID-19: Timeless Principles for Uncertain Times. Otolaryngol Head Neck Surg. 2020:194599820936615.
- <sup>10</sup> Zaga CJ, Pandian V, Brodsky MB, et al. Speech-Language Pathology Guidance for Tracheostomy During the COVID-19 Pandemic: An International Multidisciplinary Perspective. Am J Speech Lang Pathol. 2020;29(3):1320-1334.

### A SYMPHONY OF STORIES

By: Adrianna Griffith, Senior Speech Pathologist, TRAMS, Austin Health

The Tracheostomy Patient and Family Forums have been offered at Austin Health and supported by the GTC since 2017. A vibrant, growing tracheostomy community has met in person to share stories, challenges, encouragement, and ways to thrive while living with a long term tracheostomy.

The pandemic dictated that the 2020 Forum needed to be held virtually. A *Symphony of Stories* was the first virtual forum we held and it was a resounding success. Over 100 patients, families, and carers attended this forum with a similar number listening to the recording.

Guest speaker, Benjamin Northey, Chief Conductor of the Christchurch Symphony Orchestra (New Zealand) and Chief Conductor in Residence of the Melbourne Symphony Orchestra, spoke to the "Magic of Music" and captivated the audience with his examples of resilience and the power of music to heal. He spoke to his involvement in the Christchurch Disaster Recovery. His orchestra was instrumental in providing the traumatised community with a way to heal collectively through the uplifting power of music. So much of his message also spoke to our struggles with the pandemic.

Patients, Daisy Xu, Sally and Jenny Messer, Larry and Michelle Green, spoke to how they have successfully moved home and are thriving in the community in spite of COVID 19. Their inspiring stories of personal resilience in the face of adversity were truly moving.



Dr. Michael Brenner thanked Erin Ward, outgoing Chair of the GTC Patient and Family Committee, for her extensive contributions and tireless efforts to ensure that the voice of the patient and family are central to all aspects of the GTC work.

The new online platform was appreciated by many patients, families, and carers. It allowed them to attend without travelling, and to safely connect in spite of social distancing. Feedback received included such comments as: "Convenient and safe", "Together apart", "This took just over an hour to feel connected and informed", "It allowed for the sharing of stories and a feeling of connection within the community".

We thank all our presenters and attendees.

Austin Health and the GTC look forward to future Tracheostomy Patient and Family Forums.

Please be sure to watch the recording which can be found at: www.globaltrach.org ■

### WHAT HAS THE GTC DONE FOR US?

By: Sylvia Harrison, Joyce Gray

Complex Airway and Tracheostomy Clinical Nurse Specialists Royal Hospital for Children, 1345 Govan Road, Glasgow G51 4TF

We have always prided ourselves on running a safe, family-focussed tracheostomy service for children across Scotland, ventilated and non-ventilated, at home and in hospital. However, there are always things to improve and learn, so we were delighted to join the Global Tracheostomy Collaborative a few years ago. It has provided us with a fantastic peer group around the world with whom we can share best practice and practical tips. The GTC builds on a lot of the excellent work done in the UK by the National Tracheostomy Safety Project.

The GTC holds international conferences which are a really good way to meet colleagues from around the world to share experiences and challenges if you get the chance to go. Even if you can't, you can always attend an online webinar. These run regularly and cover a diverse range of topics in tracheostomy care affecting both adults and children. The webinars are interactive so you can

submit questions and debate with the speakers. Previous webinars are available online to view at your leisure on the GTC website which also houses lots of training materials and protocols from departments around the world. There is an online forum for professional discussions, and another for families. There is also a database which allows you to track your own data and benchmark your service against similar services around the world. This is perhaps one of the most powerful tools for driving change in your hospital.

Since joining the GTC we have taken on the challenge of improving our tracheostomy service and we have introduced an annual family fun day, NTSP bed head cards, nurse bedside checklists, a weekly tracheostomy ward round and a variety of updated protocols. There's always more to do but the GTC will show you how to get started!

## HOW HAS IMPLEMENTING THE GTC HELPED YOUR ORGANIZATION? DO YOU HAVE A POSITIVE STORY TO TELL?

Please send us an article or infographic to <a href="mailto:info@globaltrach.org">info@globaltrach.org</a> and we will showcase you in our next GTC newsletter.

# KNOW THE PURPOSE OF YOUR RESPIRATORY HEALTHCARE EQUIPMENT

By: Ricky L. Williams, I, BS, RRT

A mechanical ventilator is one of the most commonly used pieces of respiratory equipment throughout the world, especially since the COVID 19 pandemic. The purpose of a mechanical ventilator is simply to breathe (ventilate & oxygenate) for a person who has breathing complications and is unable to sustain a normal breathing pattern without assistance.

"Know your equipment" is a statement that I have educated many my colleagues over the past two decades, and I have also been on the receiving end as well. A Respiratory Care Practitioner (RCP) must be engaged, aware, and alert of why they are applying equipment for what purpose with an end goal. I initially thought of "Know the purpose of your respiratory equipment" from my own personal experiences. As I became seasoned and savvy, I learned to be in a position to help. One of my colleagues asked me for assistance with a problem. When I arrived to help and assess the situation, it was actually a simple resolution that required attention to detail and knowing your equipment. The ventilator was a PB840, which must have the ventilator circuit open to the atmosphere when capped, the machine will go into failure, and you will be going through the entire fleet, believing that there must be a manufacturer problem because all the ventilators will fail when turned on. I also recall on one occasion with an O2 cylinder, the RCP didn't turn the dial to the "ON" green position to allow oxygen to flow, and the cylinder bled out quickly (stop flowing), the RCP called me, and I explained about the dial in the back of the cylinder that must be on for the oxygen to continue. It was a different oxygen cylinder. Another event occurred in the ICU, where the endotracheal tube (ETT) cuff was visible in back of the patient's mouth.

The patient had self-extubated. Although the tube was still in their mouth, the RCP was more focused on why exhaled volumes were not displayed and alarming on the ventilator. I cannot express and stress enough to always assess your patient first! This example was interesting during a ventilator exchange from a PB7200 to an Esprit ventilator. An especially important note is when starting the Esprit, you must adjust the sensitivity dial, or it will default at negative 20 pressure, and this will make it very difficult for the patient to trigger a breath. The RCP noticed the patient, who was initially doing well, suddenly deteriorated and started using their inspiratory muscles. When I arrived at the bedside, I noticed the level of the sensitivity control, made changes to the ventilator, and provided education to the RCP, and the problem was solved. Over my 25 plus year career, I have been on both sides of "Know your Equipment," which leads to knowing your patient and what is the best equipment to use at the bedside to provide the best optimal outcome. The RCP profession has a plethora of equipment, and it can be overly complicated. Just because an individual can turn on equipment and turn dials, it does not qualify the person to manage it. I had a situation with an individual locating the 'ON' switch with a BiPAP. Just knowing how to turn switches on does not qualify one to be a professional to operate and manage respiratory equipment. I truly recommend attending in-services, lectures, seminars, conferences, discuss various equipment during morning huddles, and participate in annual competencies. If someone finds the annual competencies ineffective, and repetitive, then they could consider getting on appropriate committees to create changes. Nevertheless, the goal is to learn and be very efficient in operating the equipment in

whichever profession you are in. Families will pick up very quickly when a clinician is not competent at the bedside, and this is when they will request another staff to care for their loved one. Fumbling with a sick/ill patient, especially when they are in respiratory distress, is not professional, and it is negligent to be underprepared. Healthcare is problem-solving for a living; we are trained and educated for years to solve problems to make people better. -It is also recommended that one does not go into an intensive care unit, and not be clinically ready. Discuss, learn, and keep your knowledge updated and collaborate with your colleagues to be able to go in being prepared. Being a little nervous is expected, not knowing how to perform a particular task is concerning. In my first year as an RCP, I was working in a stepdown unit, when a nurse called me to assess a patient in distress. While assessing, a physician walked and said, "Let's intubate." Immediately, I saw two RCPs coming to the bedside. Since I was new, the physician quickly assessed my knowledge level and called for someone more qualified and competent to respond to the situation. I was baptized by fire that day. All RCPs must know that we are in the life-saving business. I grew from this initial experience, and this is where the term "Know your equipment and

know what equipment is best for your patient to rescue and recover them from an emergent situation" was internalized. Also, we need to know the medications, the RCP team, and the environment you are expected to work in for the day. I would also recommend reading the equipment manual. As a young RCP, you will gain so much wisdom and knowledge. Join your professional organization and get professional magazines that speak to best practices, not only respiratory but other disciplines too. Develop new ideas to improve your department policies and procedures based on evidence-based information. All of what I have discussed will "Sharpen the Saw," habit: 7, in the book" of Highly Effective People." Also habit 1: "Be Proactive," will prepare you in knowing your equipment when the expected and unexpected problems occur. When you solve it, you will be your department's "Rock star."

"Always be willing to be a student to understand, and as you teach, you'll be understood."

"Absolute Truth; Just My Thoughts"

**Ricky L. Williams I, BS, RRT**Director of Respiratory Therapy



BE A PART OF SAVING LIVES AND IMPROVING THE QUALITY OF CARE FOR TRACHEOSTOMY PATIENTS - DONATE TO THE GTC TODAY!

**GLOBALTRACH.ORG/DONATE** 

### MIA MATTHEWS STORY

By: Mia Mathews, parent



We found out we could finally bring Channing home on Palliative Care when she was nine months old. At that time, Channing spent the first nine months of her life in the neonatal intensive care unit (NICU) at Johns Hopkins Children's Hospital. This was exciting news at first, then it hit me, "WE WERE BRINGING A CHILD HOME ON A VENTILATOR. TRACHEOSTOMY AND, FEEDING TUBE." Those words echoed over and over in my head as we drove home from the meeting with her care team to make plans for home. How were we going to take care of her and give her the attention she needs while working full-time and caring for our other two kids? What if the electricity went out one night? She needs power for her vent and pulse oximeter, what will we do? Channing required 24 hour care around the clock, will one of us have to stop working? As time went on and HOME DAY approached, our concerns were eased as we found that in the state of Maryland, when you are bringing home a child with complex medical needs such as Channing's, you are automatically enrolled into a state program called REM (Rare and Expensive Medical Care). This allowed Channing to be supplied with a nurse for ten hours a day and eight hours at night so we could maintain a job and rest at night. In addition, we could access other therapies and equipment to help her to grow and develop.

With the support provided by insurance and the hospital to ease our transition to home, I wanted to make sure we included our 10 and 18 year old in her transition to home and care. With one baby in the NICU and two kids and a husband at home, our family was split for about ten months. Ten months of me spending late nights and early mornings by Channing's side while missing out on being a mom to the kids at home. They understood, as they knew that something really important kept their baby sister from coming home ten months earlier. But as a mom, I held a lot of guilt for not being there at bedtime and on weekends. But they were still too young to understand the magnitude of the care and time she required. Once Channing finally made it home, we enjoyed having our family all under one roof. We could have dinner together again, sit and watch a movie or all make a trip to the grocery store. Outings took a bit more time and coordination as we had to plan them around Channing's feedings and medication schedule, but we managed. Our adjustment having Channing home took a while as it was different. Now we had nurses in our home all day while we were at work, therapist's visiting at different times of the day and not to mention the ER visits when Channing would catch a cold or common tracheostomy infection. As things settled and we found our routines, we made sure to include Channing's brother and sister in her care. They enjoyed seeing their sister in the NICU but that was a controlled environment. Having her home allowed them to hold and play with her without being connected to too many sensors. I took any opportunity to teach them about their little sister. I always encourage other families to include siblings in caring for their brother or sister with complex medical needs. They need to build that

bond especially if they were separated for ten months, like Channing and her siblings. Below are some of the ways I included Channing's brother and sister in her care:

- Allow them to be hands on. If they want to hold, let them. If they want to help transferring the child, let them hold cords, or move furniture. Our daughter (18) would start moving furniture out of the way when she knew Channing was being moved to her play area.
- Let them see and witness a scary moment. I know this may sound traumatizing but they have to learn how they can be a part of a life-saving event. Both siblings knew where Channing's emergency bag was and what was in it. When Channing would go into distress, and they were around, they would go right to the bag and even call 911 if the situation went beyond our control.
- Teach them. We taught both kids how to change and suction her tracheostomy and infection control (especially during flu and cold season, always wash your hands:).) We let them watch the trach change and taught them the most important parts as well as what numbers to look for on the pulse oximeter that would warrant a suction.
- Have fun. We showed them all the amazing things Channing could do. Though she was limited because of a developmental delay, she still liked to play and explore her new surroundings. Her brother and sister always took the opportunity to play with Channing and help her to develop by reading to her and encouraging her to use her toys.

These are just some, but not all, of what you can do to incorporate siblings in caring for a child with complex medical needs. Our family eventually became comfortable and Channing's equipment was just an extension of her, so that came along too. I would suggest, depending on how old the siblings are, to let them visit their brother or sister in the hospital. Check the hospitals protocols for age, vaccinations and seasonal cold/flu requirements. Start there if you can. Allow them to see their siblings and start to feel comfortable around the equipment (if your child is coming home on some) and encourage them to ask questions. Remember it's a big adjustment for parents, siblings and the complex child to settle home into the new normal. And who knows, it might encourage them to get a career in the medical field.

Sadly, Channing passed away on April 13, 2018 at 2 1/2 years old. We had some amazing moments and celebrated milestones we didn't think she would meet. Now we have another major adjustment, life after Channing. Channing was a huge part of our lives and our families. She certainly left a void in all of our hearts and some days as her mom I don't know how I will recover, or if I ever will. I do my best by making sure her siblings can express their feelings to us about how they are feeling, when they are struggling and having a hard time coping. The death of a child is unimaginable, profound and heartbreaking. But I am unfamiliar with how to handle the death of a sibling. At the time, Channing's brother was 10 and her sister 19. Her brother being so young and never experiencing the death of a close family member, misses his sister. He misses having her here and being able to play with her. Channing's older sister feels the same way, in addition to having the unanswered question "why?" and the regrets of not having more time.

All we can do as a family is support each other and find joy in the thousands of pictures and videos we have from Channing's short, memorable and amazing life. We will always love you ladybug.

### **UPDATES**



Mellisa Webb

While staying home, staying safe, I have been learning how to cook new dishes: honey lemon salmon, egg toast, baking new treats like chocolate chip eggless cookies, and baked banana donuts.

What is your favorite meal or sweet treat?

Stay safe, stay healthy.

To patients getting care

then or now, please ask your doctor for wrist therapy to help keep your wrists strong. I say this from experience as a few years ago, my left wrist kept shaking the most. I felt if I was to carry a glass of water, I was going to spill it. I found out from my doctor that it is an essential tremor from having too many IV cords in my left arm when I was six years old. My hand was wrapped up in cords of tape and a soft pad to lay my hand on. You can see it in the picture of me, sitting in a chair smilina.

Doing the best every day with my wrist exercises from the physical therapist I saw.

Thank you for reading.

### Melissa Webb,

Patient & Family Committee member and former tracheostomy patient.

# WORKED UP AN IDEA TO IMPROVISE BETTER CARE IN THE RESOURCE LIMITED HOSPITAL SETTING IN SOUTH INDIA.

By: Vishnu V Reddy Martha, MD, PH.D,

Research fellow, Texas Children's Hospital/Baylor college of Medicine, Houston, TX. Email: vishnumarthareddy@gmail.com. Phone: 4847876739

A group of 3 Second year nursing students were called and discussed about the ward trach care and preparation of a trach care poster or chart (3 feet x3 feet size) depicting essentials of trach care. The nursing students immediately liked the idea and agreed to work on the poster. Within a week they prepared the poster. They liked the joint effort of a medical doctor working with the nursing staff and sharing the ideas. The poster /chart made by them was hung in the trach

ward/room and it was used for demonstrating the trach care steps to the family members of the patients.

### **OBSERVATIONS:**

The patient community included both adults and children with tracheostomies. Male adults are placed in one ward/ room and women and children in another ward/room. The family

care takers at the bed side of the patient varied, it could be a wife, son, daughter, grandparents, husband etc. Most of the visitors were either illiterate or below 10th grade of education. Socioeconomic status ranged from lower to middle income groups.

When called for demonstration, they were very eager to participate, learn and practice the trach care methods. We could see the excitement when each step was explained to them in detail, more so with utilising the common material and simple methods.

- 1) A demo was given for checking to see whether the inner tube was blocked by using a wisp of cotton wool, cleaning the inner tube with a gauge wick with or without using a new broom stick which is readily available in all houses, using a infant bottle brush, checking for the patency of the tube during cleaning by placing the tube under tap water flow or pouring a tumbler full of water from one end of the tube and seeina for the full flow or a disturbed flow at the other end. If the flow is disturbed or partial it indicated a block inside the tube and were advised to clean the tube well once again.
- 2) Using a small metal bowl/ kettle and a stove to keep the metal trach tube in the boiling water. Soda bicarbonate (eating soda) is added to the boiling water to remove the crusts.
- 3) Advised to keep the tip of suction catheters dipped in diluted savlon solution bottle, hung to the patient's bed. Before taking up suction they are asked to dip and rinse in clean water bottle hung to the bed and use for suction of secretions.

4)

- A. Using a moist two layered thin cloth across the tracheostomy tube opening to prevent drying of secretions.
- **B.** One other way of humidification is using a hot water kettle held close to the trach, site with steam emanating from the nozzle serving as a source of humidifier

5)

- A. As a preventive measure and as a treatment for early excoriation of skin at the muco cutaneous junction they were informed to apply a coat/ thin layer of betadine ointment on a gauge pad and it should be placed around the stoma. The gauge embedded betadine serves as retainer of ointment for long and the gauge has the added advantage of cushion effect for the trach tube.
- B. As a precautionary measure and to prevent too many secretions flooding the trach opening ( i.e. mucocutaneous junction), in selected cases we preferred to use a small transparent plastic sheet cut to the size of the surgical dressing of trach and place it as the top layer on the dressing from wherein the secretions can easily be suctioned out without soaking the dressing underneath.
- 6) Told to have a torch to look into the trach to remove the crusts.
- 7) Self suction of tracheostomy tube/ trach site using a hand held small mirror (approxm.10 centimetres diameter) in one hand.
- 8) In view of voice problem, asked to clap or use a simple tool like tiktok (costs 2-3 Indian rupees) to alert the people around in case of need.

### **OUTCOMES:**

- 1) The patient and their family attendant's confidence improved
- 2) The gap between the treating personnel and the patients decreased
- 3) Overall improved compliance
- 4) Family members were well

- motivated to look after the trach patient at their home setting after getting discharged from hospital.
- 5) The joint effort of doctors/trainees and nurses/trainees will go a long way in the translation of thoughts/ideas into a very practical way of dealing with minimal resources, without delay and can be implemented soon as a pilot and later convert it into the guidelines.

### THE TRACHEOSTOMY CARE TOOLS ARE MADE USING THE INDIGENOUS MATERIAL.



House hold bottle brushes to clean inside of the trach tubes.



Baby brush to clean outside of the inner and outer trach tubes.



Kerosene Stove burner



Steel bowl

Portable kerosene stove burner with a kettle / steel bowl to prepare sterile saline, hot water, boiling the outer and inner metallic tubes in water and rinsing the synthetic tracheostomy tubes in hot water.

### MANAGEMENT AT BEDSIDE IN THE HOSPITAL

In addition to all the above measures taught to the patient (to follow either at home or resource limited hospital setting) the following are practiced in a hospital:

AN ELECTRICAL HEAD LIGHT or a torch at each trach bed or to have both if in case one fails other is available

TRAY BY BEDSIDE which should have scissors, long forceps to pick up hard crusts from 2-3 centimetres from the stoma if in case. Clean gauge pieces for cleaning the excess secretions, mucus suckers as an alternative to electrical suction apparatus, betadine ointment.

SUCTION CATHETERS. Each patient bed to be provided with two container bottles with two cath. One for dilute savlon and one for clean tap water or sterile water (boiled and cooled water).

### IMPROVISING IN THE HOSPITAL WITH THE AVAILABLE RESOURCES.

### IN LONG TERM MANAGEMENT.

We have formulated a plan for educating the nurses by giving a demonstration by doctor/ resident during ward rounds mostly.

The Nurses in turn educate the hospital helpers and the family members of the patient when the need arose and when they had free time from their routine work.

However, no effort made to identify the regular nurse, hospital helper or the family member who could be entrusted and be available with the patient for more time of the day. It was a random training for trach care.

Adequate time and concern were not given to explain complications that may arise and about the overall safety of the patient.

### 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 Guillian 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 ICU course was complicated by autonomic dysfunction, UTI, 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. the physical and occupational therapists targeted goals to gradually increase her strength, the speech pathologists quickly established goals to address both 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. Over time, Eileen tolerated full cuff deflation and eventually a one-way speaking valve (Passy-Muir) placement inline with the ventilator. Alongside targeting communication. Eileen's the pathologist's also evaluated her swallowing through use of fiberoptic 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 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 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 now has 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. ■

### DEVELOPMENT OF THE FIRST NON-MEDICAL LED PRACTITIONER TEAM

## SPECIALISING IN AIRWAY MANAGEMENT

### WITHIN THE BELFAST HEALTH AND SOCIAL CARE TRUST, ENT SERVICES.

By:Yvonne Elley (ENT Nurse Practitioner) and Sally Murphy (ENT Physio Practitioner)

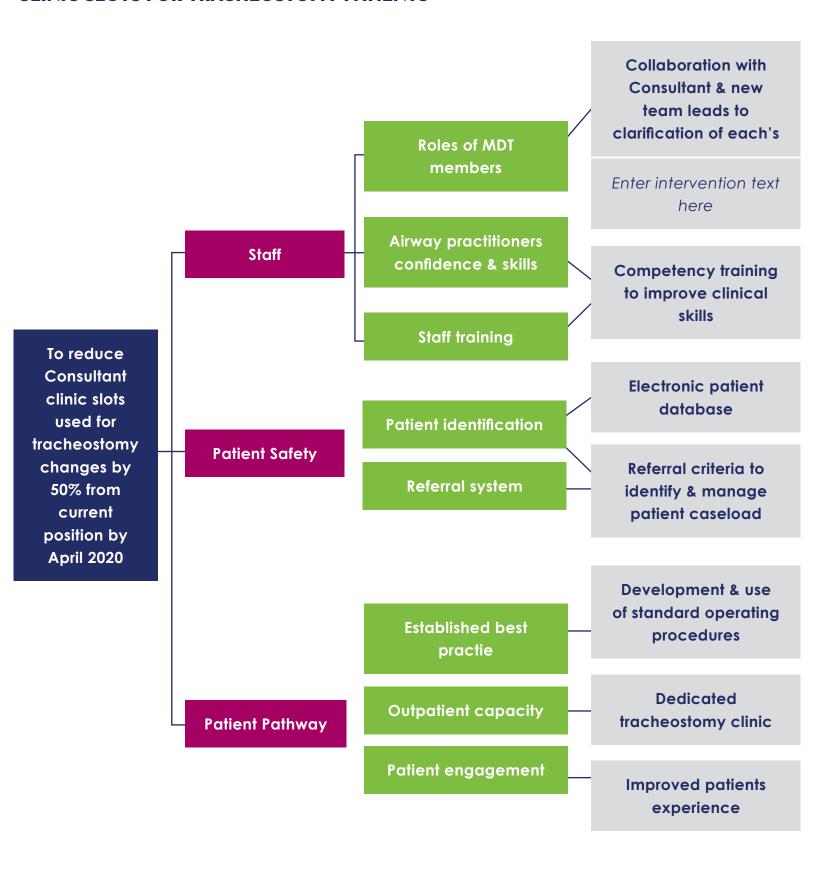
#### **BACKGROUND:**

October 2019 saw the development of two new roles to contribute to the launch of a brand-new service within ENT. These were an ENT Nurse Practitioner and Physiotherapist specialising in Airway Management. Together this team would lead on the provision of expert tracheostomy care across the service.

The initial focus for the practitioner team was developed from an ongoing quality improvement project, led by the ENT Assistant Service Manager, Sarah Wilson. The aim of the QI project was to initiate a non-medic led tracheostomy care pilot clinic with an aim to reduce Consultant clinic slots for tracheostomy changes by 50% by April 2020.

Prior to the new service commencing, ENT patients with a tracheostomy tube were booked into Head and Neck Cancer Consultant review appointments, which are in high demand. There were noted negative impacts for some of these patients, in particular a lengthy wait in an outpatient clinic particularly for those patients receiving palliative treatment who often required ambulance transport. There was also commonly an absence of a dedicated health professional to follow up tracheostomy patients who were discharged from the ward as well as an absence of a bespoke community service.

### DRIVER DIAGRAM FOR THE QI PROJECT TO REDUCE THE USE OF CONSULT CLINIC SLOTS FOR TRACHEOSTOMY PATIENTS



### **METHOD:**

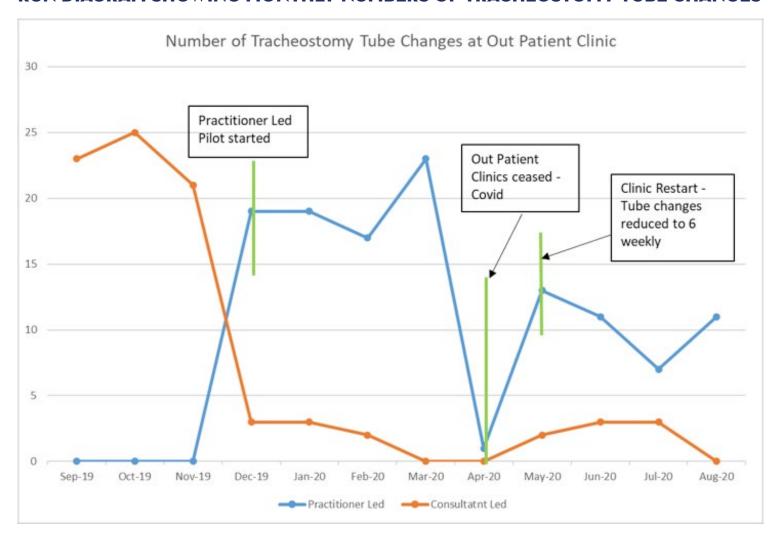
A database of existing tracheostomy patients attending outpatient clinic for routine tube changes was formulated. Following this the team developed a referral system allowing medical staff to safely allocate appropriate tracheostomy patients to the practitioner caseload. The practitioners were able to refer to Consultants when the need arose, encouraging communication and dialogue.

To ensure quality and safety of patients and practitioners standard operating procedures and competencies relevant to tracheostomy tube changes in the outpatient setting have been

developed locally and implemented, in line with national guidelines.

The next step was to set up independent practitioner led clinics for tube changes. A weekly clinic commencing the 9th December 2019 was secured in outpatients, which allowed approximately 24 tube changes monthly. In conjunction, telephone reviews commenced allowing interim assessment of patient needs which resulted in ad hoc clinics, additional Consultant review appointments and highlighted the need for increased community support.

### RUN DIAGRAM SHOWING MONTHLY NUMBERS OF TRACHEOSTOMY TUBE CHANGES



### **RESULTS:**

As illustrated above the first practitioner led clinic was week beginning 9th December 2019, the aim of 50% reduction in Consultant clinic slots for tracheostomy tube changes was achieved and superseded. The data collection was disturbed due to the Covid 19 pandemic, as all non-emergency outpatient clinics were cancelled from the end of March to May 2020. Clinics recommenced mid-May at a reduced frequency. Small increases in numbers of consultant led tube changes due to disease progression are evident May to July.

### **CONCLUSION:**

Covid 19 highlighted and reinforced the already obvious need to reduce attendance of vulnerable patients at busy outpatient clinics. The plan now is to encourage self and carer tube changes where risk assessment deems this safe. This will expand and develop into another QI project. A further aspect of the potential project would include education, confidence building and skill expansion for community teams regarding tracheostomy/ airway management.





### TRINITY COLLEGE DUBLIN SEEKING PARTICIPANTS FOR TECHCHILD PROJECT

By:Prof Maria Brenner (Principal Investigator)

TechChild is a five-year programme of research (2019-2024), funded by the European Research Council (ERC). The aim of the programme of work is to explore influences on the commencement of long-term ventilation and to develop a theory to explain the initiation of technology dependence in the context of contrasting health, legal, and socio-political systems. The programme of research will include input from healthcare professionals (phase 1 - ongoing), parents and children (phase 2 - commencing Spring 2021).

It is really important that your voice is heard. We are currently seeking to speak with physicians,

nurses and members of the multidisciplinary team who care for children when LTV is commenced. We are conducting short interviews with this group up to the end of November 2020 and we would love to hear from you! Participation in the project is entirely voluntary, will be confidential and all participants anonymised in the data. You can obtain further information on the project from: Professor Maria Brenner, Professor in Children's Nursing, School of Nursing & Midwifery, Trinity College Dublin, Ireland brennerm@tcd.ie or Dr Denise Alexander ALEXANPD@tcd.ie Research Fellow.

# THE DEVELOPMENT OF AN INTERPROFESSIONAL TRACHEOSTOMY REVIEW AND MANAGEMENT SERVICE FOR THE SUNSHINE COAST HOSPITAL AND HEALTH SERVICE

By:Kate McCleary, Advanced Practitioner Physiotherapist

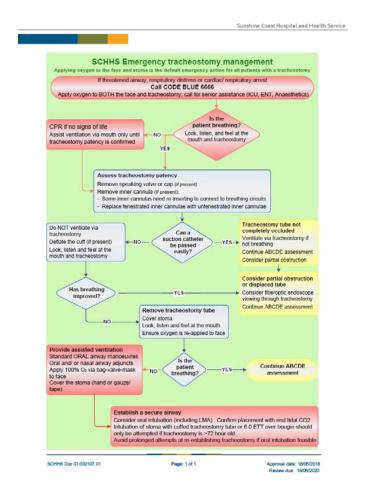
### **BACKGROUND**

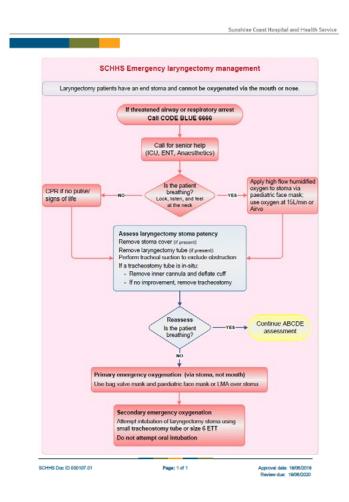
Over the last few years it has become emergingly apparent after several clinical incidents that the Sunshine Coast Hospital Health Service would benefit from an initiative to help treating/ admitting teams to plan, support and care for altered airway patients being admitted to our health service.



### **OBJECTIVES**

To form an outreach team that could provide clinical education and clinical support for the treating/ admitting teams caring for this cohort of patients.





### **PROJECT IMPLEMENTATION**

The Tracheostomy Review and Management Service (TRAMS) has been formed unfunded by the following members:

- Ear Nose and Throat (ENT) & Intensive Care Unit Consultants
- ENT Clinical Nurse Consultant (CNC)
- ICU Senior Speech Pathologist
- ICU Advanced Practitioner Physiotherapist
- Medical Emergency Team Clinical Nurse

Through early benchmarking of other altered airway outreach teams in other hospital health services nationally and internationally we have developed and implemented internationally-validated emergency resources to care for altered airway patients while an inpatient. These resources include emergency management flowcharts, educational material for staff, and discharge planning material for patients.

The TRAMS team round every altered airway patient weekly to support staff caring for the patients to ensure their management is progressing and check up on emergency management set-up procedures for these patients.

Over the last eighteen months we have developed a full-day interprofessional-faculty simulation-based education program workshop on the altered airway which we have delivered to over 100 nursing staff, speech pathologists and physiotherapists and we provide monthly nursing clinical education as a monthly refresher to cover as many ward-based nursing staff and clinical coaches as possible.

### **OUTCOMES & DISCUSSION**

Most importantly the Sunshine Coast University Hospital now has an altered airway outreach service to support staff caring for this highly vulnerable patient group. Feedback from staff caring for this group attending our education sessions has demonstrated increased confidence in the clinical education base of the nursing staff across the sunshine coast hospital health service which can only serve to improve patient care and therefore decrease clinical incidences across our hospital health service which will benefit our community as a whole (the patients and their families who care for them).

#### **NEXT STEPS**

- Ongoing Altered Airway Workshops and monthly education tutorials for staff
- Ongoing weekly rounds to altered airway patients
- Ongoing development of education materials for staff and patients
- Ongoing general support as required

### **ACKNOWLEDGMENTS**

Acknowledgement to:

Chris Bishop, ENT CNC

Sarah George, Senior Speech Pathologist

Dr David Hogan, ENT Staff Specialist

### A JOURNEY WITH T

By: Gwen Bryan

I have what is known as "brittle asthma". One day I decided to ask my doctors what that meant. Bad idea. They explained "imagine a fine glass vase. you gently blow on it and it shatters". I was frightened. Don't know if he was joking but I was truly scared. At 17 I decided ignorance about my health was bliss and never to ask them that question again. Why am I telling you this? Well, as a child growing up, I spent a lot of time in and out of hospital. Same as a teenager and an adult with non-responsive asthma. After years of bouncing from wards, HDU and ICU and regular high doses of steroids, something needed to change.

I am heavy, for the doctors out there, morbidly obese. I hate that term. Anyway, I was in HDU for 6 days and one of my consultants told me that there was nothing wrong with me except that I am morbidly obese. I was devastated, called my GP and told her 'I will not take any more tablets until someone tells me what is wrong with me'. When you are just out of hospital and on a high dose of steroids, this is not the best idea. To my knowledge you do not go to HDU because you are heavy. My GP was great, calmed me down and arranged for a change in hospital and consultants. The best move ever. Prof Corrigan explained to me what was going on and was honest with me at each stage of my journey to finding out what was causing the asthma to be so out of control. I was still bouncing in and out of hospital and on high doses of steroids, but it did not stop me from living my life. I was a good social worker progressing in my career, singing, studying and mentoring people. All my passions alongside my faith.

Having seen a range of consultants over several years, I was sent to the ENT team in 2007 because my breathing was unsettled, and my voice sounded like a heavy breather. Not a good sound



on the phone as a social work manager! First, I was told that it was psychosomatic and sent to see a psychiatrist. When this didn't work in 2009, I was sent to see another ENT team, the head and neck specialists who said you need an immediate tracheostomy. They diagnosed Bilateral Vocal Cord Immobility with Laryngomalacia. In shock I said no. At that time, my GP and chest consultant agreed with me. I was happy and was regularly

monitored by the ENT team and they were also great. However, in 2012 after I had just ordered my brand-new yellow Suzuki motorbike to my great excitement. I was told I would have to have tracheostomy surgery. I cried all day long, but I remembered before my other doctors did not agree so was encouraged for a short while. Sadly, they agreed and after a second opinion at the ENT hospital in London where yet again, I asked why? The lovely professor showed me my vocal cords and what they should look like. It was not a pretty sight. I now have a tracheostomy nicknamed T. Over the first 6 months I had no voice and it became clear that I was not going to have a voice. But they said If I lost 2 stone, T would be gone.

Life was changed. I lost 5 stones but 6 years 6 months and 15 days later I still have my friend T. We fight regularly as T and asthma are not very good friends. T does not like being changed because the stoma collapses very quickly so there needs to be 2 nurses at the change. I still go in and out of hospital. A&E doctors get worried when I arrive. I ended up once having a consultant diagnose shingles because the other doctors were too nervous. I guess hearing your patient before seeing them must be quite unnerving? Because I cannot speak, they forget that I can hear, so it's

fascinating how they negotiate who will treat me. I haven't worked out why T is such a problem in hospitals.

However, I have continued to study as I love learning and it has been a challenge for my teachers and lecturers. I am a qualified practice educator for social work students, I have a level 3 in British Sign Language and am working on doing level 6. I have a post graduate diploma in Career Coaching and this summer will graduate with a MSc Applied Positive Psychology and Coaching Psychology. I am part of a deaf and hearing choir, which fascinates my friends. I am still mischievous and my nick name in sign language means trouble. Not that I am trouble. I am the chair of a charity and actively involved in my church.

I am passionate about seeing people be the best they can be, hence my chosen careers. What's next? I want to do a PHD. I want to do some research into the lived experience of people with no speech, especially those with Trachs. I want to look at how I can offer support to people with challenging life limiting disabilities. I want to teach my T nurses basic sigh language, live life, laugh, have fun and encourage people on their journey with T. Any ideas as to how will be appreciated at:

gwenbryan@hotmail.co.uk

# 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!

**HEALTHCARE PROFESSIONALS:** Join Today for Free!

