

Interventions



Interventions and key drivers

Multidisciplinary care

Staff education

Institution-wide protocols

Patient & family involvement

Join us

Why join?

Share, implement, expand best practices

Participate in the GTC database

Access to support & education from the GTC



Enrolment

Nominate champions

Hospital leadership endorsement & support

Champions

GTC champions

Minimum of 2 per institution

1 physician

1 allied health

1 patient or family representative

Getting started

Enrolment

Hospital leadership endorsement & support



Preparation

Champions identify local multidisciplinary
'change team' required to improve care

Access QI resources

Baseline institutional questionnaire

Ethics approval if required

Institutional change

- Commitment to change
- Empower champions and 'change team'
- Set local goals
- Implement local policies and procedures




Early implementation

- Team-lead PDSA cycles
- Teams engage in promotion of care pathways
- Peer support locally & by webinars



Continued QI

- Feedback from GTC database
- Benchmark to other institutions
- Assess local impact
- Measure performance against local goals



How do you improve care?

GTC resources

GTC interventions menu

Selection of high quality resources for local institutions to use 'off the shelf' or to adapt to local needs:

Creating a coordinated approach
Example policies
Educational materials
Risk management strategies
Consumer participation

GTC Bite-size

Examples of excellence
Bite-sized modules

GTC e-learning

Access to international resources

GTC resources

Sign posting
'How to' guides

GTC Webinars

Ongoing continent-level support and shared learning from GTC hospitals
Led by international experts from the GTC

GTC Database Reports

Benchmarking & Feedback on global and local performance goals
Track your progress
Plan further changes

Local feedback

Informed by local audit of policies and process, including feedback from patients, carers, leaders and team members




What have we done?

Worldwide
multi-disciplinary
steering committee

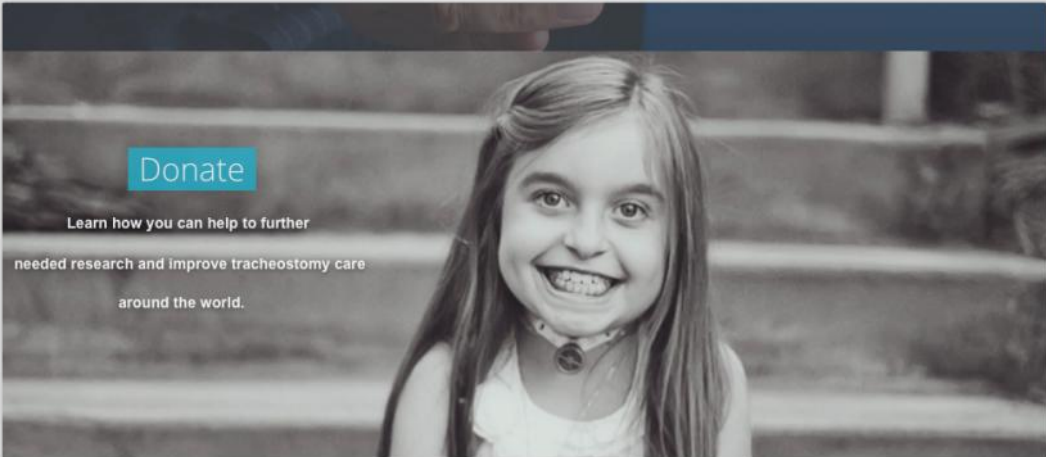
GTC website

The Global Tracheostomy Collaborative - Better Care Everywhere

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Learn how you can help to further
needed research and improve tracheostomy care
around the world.

Join the North American kickoff via webinar!

On Saturday, April 26, 2014 the GTC will hold its first kickoff meeting in Boston, MA. If you are unable to attend in person, we invite you to join us in a live-streaming webinar

For a detailed itinerary and instructions on how to join the meeting, [CLICK HERE](#)

Key drivers & Interventions Menu

Multidisciplinary care

Staff education

Protocols

Patient & family

Co-ordinated care

Education

Risk management

Policies & Procedures

Consumer engagement

A co-ordinated, truly multidisciplinary approach

- Examples of excellence
- *How* they've done it
- *What* they've done
- Models of care
- Published literature



A co-ordinated, truly multidisciplinary approach



St Mary's Hospital London is a major London teaching hospital site and part of the Imperial College Healthcare NHS Trust. St Mary's provides care for a mixture of head and neck and critical care patients, amongst others.

Driven by concerns around suboptimal standards in tracheostomy care nationally, the tracheostomy experts at St Mary's developed their own model of safer tracheostomy care. This model has been highlighted as a growing concern in view of the increasing demands for intensive care services. The model has three components: The St Mary's tracheostomy care bundle checklist, a dedicated tracheostomy multidisciplinary team and an educational programme.

They assessed the impact of this innovative approach on patients with short-term tracheostomies (<4 months in situ) following their discharge from the intensive care unit. A before and after study was conducted over 36 months, involving around 200 patients. The team demonstrated significant improvements in some key outcome measures:

- Time to decannulation following intensive care unit discharge decreased from 21 to 11 days
- Mean total tracheostomy time reduced from 34 to 25 days
- The number of critical incidents substantially declined following the introduction of intervention from 58 to 7 in the second year after intervention.



www.globaltracheostomycollaborative.org



University Hospital South Manchester, UK is a major tertiary centre with a number of on-site specialities, including a Head & Neck Surgical Unit. Clinicians at UHSM collaborated with colleagues in other hospitals across the city and analysed critical incident data for airway and tracheostomy-related safety incidents. They realised that many of the problems that we encounter with tracheostomies are the same, wherever you work, and a therefore amenable to system-wide improvement strategies.

Dr Brendan McGrath, a Consultant in Anaesthesia & Intensive Care Medicine, led a team in developing the National Tracheostomy Safety Project in the UK. The NTSP pulled together multidisciplinary expertise and created guidelines for the safe management of our patients. This focussed initially on emergency care, but developed to try and stop emergencies happening in the first place.

This was achieved through focussing on the provision of bedside equipment and information, ensuring staff were trained to manage patients and by collecting and analysing details of incidents that occurred. Education is delivered through local courses, now available by the Advanced Life Support Group (www.alsg.org) and supported by an e-learning programme developed with the Royal College of Anaesthetists and the NHS e-Learning for Healthcare. By implementing the NTSP into 4 diverse Trusts in Manchester, the team were able to show reductions in the nature, severity and frequency of incidents that occurred in our hospitals.

UHSM will be among the first to join the GTC in the UK and the implementation of the project will be watched carefully as part of an evaluation by the NHS Health Foundation.

Relevant Links:

NTSP - www.tracheostomy.org.uk
e-Learning links via NTSP website or <http://www.e-lfh.org.uk>

Critical incident analysis papers:
[Patient safety incidents associated with tracheostomies occurring in hospital wards: a review of reports to the UK National Patient Safety Agency.](#)
McGrath BA, Thomas AN. Postgrad Med J. 2010 Sep;86(1019):522-5

[Patient safety incidents associated with airway devices in critical care: a review of reports to the UK National Patient Safety Agency.](#)
Thomas AN, McGrath BA. Anaesthesia. 2009 Apr;64(4):358-65.



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Austin Health is a group of 3 teaching hospitals in northern Australia with approximately 1900 beds. In addition to primary & surgery, an area mental health service, aged care and day services, Austin Health provides state-wide services including:

- Austin Victorian Spinal Cord Service!
- Victorian Liver Transplant Service!
- Victorian Respiratory Support Service!
- Veterans' Psychiatry & Post-Traumatic Stress!
- Psychiatric Intensive Care Unit!
- Brain Disorders Program!
- Child and Adolescent Mental Health Inpatient!

The Tracheostomy Review and Management Service (TR-2002) to improve tracheostomy care at Austin Health was not a uniform model of care or standard practice. Patients with tracheostomies were admitted to hospitals, largely grouped to treat their primary medical safety concerns were apparent, particularly for a volume of patients with tracheostomy and staff unprepared to deal with this high risk group.

TRAMS is a consultative multidisciplinary team who provide advice to ward staff, patients and medical teams regarding tracheostomy. It is comprised of Respiratory Physicians, Physiotherapists, Speech Pathologists and Clinical Nurse Consultants. Since establishment, the team has treated thousands of patients outside of the ICU. In addition to their consultative clinical role, the team coordinate all practices surrounding tracheostomy care across 3 hospital sites and into the community and undertake a large teaching and education program to ensure staff and carers have the knowledge and skill required to care for patients with tracheostomy. The team also facilitate discharge and care for patients with



Multidisciplinary education

- Evidence-based (where possible)
- Published literature
- Central hub: Links to relevant resources
- Catering for all stages of multidisciplinary development



GTC Webinars

Ongoing continent-level support and shared learning from GTC hospitals
Led by international experts from the GTC

Multidisciplinary education





Portal

Health Care Professionals

SOCIAL MEDIA LINKS



NOTIFICATIONS

You have 3 new Notifications

[3 accepted group membership requests](#)

[You were promoted to an admin in the group "Program Committee"](#)

[Test User 4 requests group membership](#)

[\[x\] Clear All Notifications](#)

Bite-Size Training

[Module 1](#)[Module 2](#)[Module 3](#)[Module 4](#)[Module 5](#)

Introduction to Tracheostomies

Click on the document title to open the PDF in full screen to read, download, or print

- [1.1 What is a Tracheostomy?](#)
- [1.2 Indications and Anatomy](#)
- [1.3 Performing a Tracheostomy](#)
- [1.4 Physiological Changes](#)
- [1.5 Tracheostomy Tubes](#)

Guidelines

Multidisciplinary guidelines for the management of tracheostomy and laryngectomy airway emergencies

B. A. McGrath,¹ L. Bates,^{2*} D. Atkinson³ and J. A. Moore³

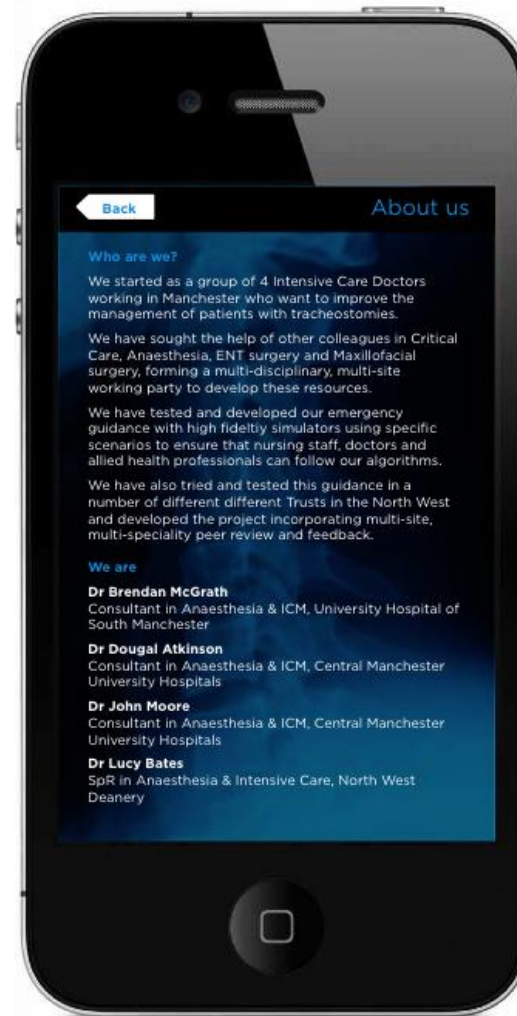
1 Consultant in Anaesthesia and Intensive Care Medicine, University Hospital of South Manchester NHS Foundation Trust, Manchester, UK

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3 Consultant in Anaesthesia and Intensive Care Medicine, Central Manchester NHS Foundation Trust, Manchester, UK

Summary

Adult tracheostomy and laryngectomy airway emergencies are uncommon, but do lead to significant morbidity and mortality. The National Tracheostomy Safety Project incorporates key stakeholder groups with multi-disciplinary expertise in airway management. , the Intensive Care Society, the Royal College of Anaesthetists, ENT UK, the British Association of Oral and Maxillofacial Surgeons, the College of Emergency Medicine, the Resuscitation Council (UK) the Royal College of Nursing, the Royal College of Speech and Language Therapists, the Association of Chartered Physiotherapists in Respiratory Care and the National Patient Safety Agency. Resources and emergency algorithms were developed by consensus, taking into account existing guidelines, evidence and experiences. The stakeholder groups reviewed draft emergency algorithms and feedback was also received from open peer review. The final algorithms describe a universal approach to managing such emergencies and are designed to be followed by first responders. The project aims to improve the management of tracheostomy and laryngectomy critical incidents.





Welcome to the National Tracheostomy Safety Project website

This site contains the resources developed by the UK National Tracheostomy Safety Project.

We have collaborated widely with the key stakeholders in tracheostomy care and developed guidance by consensus.

These resources are supported by extensive e-learning packages developed with the Department of Health e-learning for healthcare project.

The emergency algorithms, bed-head signs, e-learning and supporting videos and materials are available from the Medical Resources section.



New NTSP Manual 2013 is available to download. NTSP resources are now available for iPhone and iPad. Other smartphone Apps coming soon.

e-Learning +

Emergency Algorithms +

Videos & Resources -

We have developed a library of videos to demonstrate key steps in the routine and emergency management of neck breathing patients.

Click here to [view our YouTube library](#)

You can access our printed resources including the NTSP Manual 2013 from the [Medical Resources](#) page.

- Home
- Medical Resources
- Courses
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- About us
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Tracheostomy 1: Basic Knowledge about Tracheostomies and Laryngectomies



The images to the right illustrate tracheostomy and laryngectomy stomas. Can you tell the difference?
 Select the correct option for each image.

	Tracheostomy	Laryngectomy
A. Fig 1	<input type="radio"/>	<input type="radio"/>
B. Fig 2	<input type="radio"/>	<input type="radio"/>
C. Fig 3	<input type="radio"/>	<input type="radio"/>
D. Fig 4	<input type="radio"/>	<input type="radio"/>

Submit

Image



Fig 1



Fig 2



Fig 3



Fig 4

[Home](#)[About](#)[For Healthcare Providers](#)[For Patients](#)[eLearning](#)[Education](#)[News](#)[Links](#)[Contact](#)

eLearning

Tracheostomy eLearning Packages:

- Introduction to Tracheostomy
- Humidification
- Suctioning via a Tracheostomy Tube ([With video demonstration](#))
- Stoma Care
- Measuring Cuff Pressure
- Use of the Passy-Muir Speaking Valve
- Tracheostomy Decannulation ([With video demonstration](#))

Each Tracheostomy eLearning Package provides a concise overview of essential information on a given topic. These professionally designed packages facilitate effective and efficient learning. The user is presented with aims, animated content, interactive questions and a concise summary. Each package takes 10–15 minutes to complete. Use these as a refresher for staff when a new patient arrives with a tracheostomy tube in situ or as part of competency training.

Education

- Primary responder
- Secondary responder
- Infrastructure & equipment
 - In your workplace
- Patients
- Guidelines
- Courses



Institution-wide protocols

- Evidence-based
(where possible)
- Examples from leading institutions
- Don't miss anything out
- Re-inventing the wheel



How do you measure improved care?

- Reduction in complications
- Time to decannulation
- ICU or hospital length of stay
- Cost savings



Cameron TS. Crit Care Resusc. 2009 Mar;11(1):14–9.

Pandian V. Head and Neck Surgery. 2012 Sep 26;147(4):684–91.

Cetto R. Clinical Otolaryngology. 2011 Oct 28;36(5):482–8.

Speed L. Journal of Critical Care. 2012 Aug 10; 1–10.



Risk management strategies

- Evidence-based again (where possible)
- Examples from leading institutions
- Linked strongly with the GTC database



GTC Database Reports

Benchmarking & Feedback on global and local performance goals
Track your progress
Plan further changes

Consumer engagement

- Focused on the most important people
- Examples and guidance
- Audit and survey suggestions
- Information



Local feedback

Informed by local audit of policies and process, including feedback from patients, carers, leaders and team members

Consumer engagement

Consumer Engagement Resources

AHRQ: (Agency for Healthcare Research and Quality):
<http://www.ahrq.gov>
 Research shows that when patients are engaged in their health care, it can lead to measurable improvements in safety and quality. To promote stronger engagement, Agency for Healthcare Research and Quality developed the Guide to Patient and Family Engagement in Hospital Quality and Safety, a tested, evidence-based resource to help hospitals work as partners with patients and families to improve quality and safety.

Guide to Patient and Family Engagement in Hospital Quality and Safety:
<http://www.ahrq.gov/professionals/systems/hospital/engagingfamilies/guide.html>

Strategy 1: Working with Patients and Families as Advisors
<http://www.ahrq.gov/professionals/systems/hospital/engagingfamilies/pafamilyengagementstrategy1/index.html>

"Working with Patients and Families as Advisors Implementation Handbook" shows hospitals can work with patients and family members as advisors at the organization. Complete handbook materials can be downloaded in zipped format by selecting:
<http://www.ahrq.gov/downloads/pafamilyengagementstrategy1zipfiles.zip> 25.8 MB

Tools in this handbook include:

- *Become a Patient and Family Advisor: Working Together to Help Improve Hospital Brochure* that provides information on who patient and family advisors help the hospital, and who can become an advisor.
- *Do you have ideas to help improve our hospital? Become a patient and family advisor* - Postcard for clinicians or hospital staff to give to potential patient and family advisors along with a verbal invitation to get involved.
- *Patient and Family Advisor Application Form* - Forms that advisors complete includes basic demographic information, questions on why the applicant is an advisor, and questions on prior relevant experiences as an advisor.
- *Sample Invitation and Regret Letters for Advisory Council Applicants* - invitation and regret letters for patients and family members who have been invited to advisory council members.
- *Patient and Family Advisor Information Session* - PowerPoint presentation on who patient and family advisors are, what they do, the hospital and provides tips from other advisors.
- *Am I Ready to Become an Advisor?* - Handout for the advisor information session.
- *Sharing My Story: A Planning Worksheet* - Handout for the advisor information session.



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Patient and Family Champion

Why Partner with a Patient or Family Champion?

Dear GTC Hospital Member,

The Global Tracheostomy Collaborative (GTC) seeks to improve the quality of care for tracheostomies and their families, and therefore must be strongly connected to the people who serve. From the first GTC formation meeting held in Scotland, July 2012, I was invited as a family representative for the GTC, as the mother of a child with a tracheostomy and as it attests to the commitment the GTC has to incorporating the patient and family voice into improvement initiatives it pursues.

In addition to serving as a family representative for the GTC, I have been networking with family leaders in the tracheostomy community to spread the news about the GTC and to gather input about the priorities within our community. We are now planning to grow our patient and family involvement through the addition of Patient and Family Champions from each of the hospitals that are enrolling as members to the GTC. The goal is to have a GTC Patient and Family Advisory Council that represents the patient and family perspective within the GTC and to provide guidance for how you can encourage consumer engagement initiatives within your own hospital.

As you begin to identify your hospital GTC Champion Team, we'd encourage you to identify and partner with a patient or family champion. Your patient or family champion will help to ensure that the patient/family voice is included in your quality improvement process. Please share my contact information below with patients or family members that you feel might be interested in being involved. I have also partnered with Melissa Ciardulli, a respiratory nurse consultant from Melbourne, Australia and member of the GTC Steering Committee, who is available to provide support as a professional liaison for consumer engagement. We are both looking forward to providing your hospital join the GTC and supporting your efforts to engage patients and families in your quality improvement plans.

Additionally, it would be ideal if your patient or family champion could attend the kick off meeting in Boston, MA in April. We will provide a breakout session for our Patient and Family Champions and offer training that highlights the importance of consumer participation in quality improvement initiatives, shares current patient engagement practices at your hospital, discusses opportunities to increase involvement such as family advisory roles in development of policies and procedures, and supports your efforts in this area. If you are unable to identify a patient or family champion to attend, perhaps you can consider supporting a professional team member who will focus on this area of consumer participation. We look forward to partnering with you and helping to support your patient and family involvement in quality improvements through the GTC.

Erin Ward, Parent, MEd, CAS
 GTC Board of Directors, Patient & Family Advisory Chair
patientandfamilies@globaltrach.org

Melissa Ciardulli, Respiratory Nurse Consultant
 GTC Steering Committee, Professional Liaison for Consumer Engagement
Melissa.ciardulli@globaltrach.org



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Join the North American kickoff via webinar!

Does it work?

Incidents resulting in harm

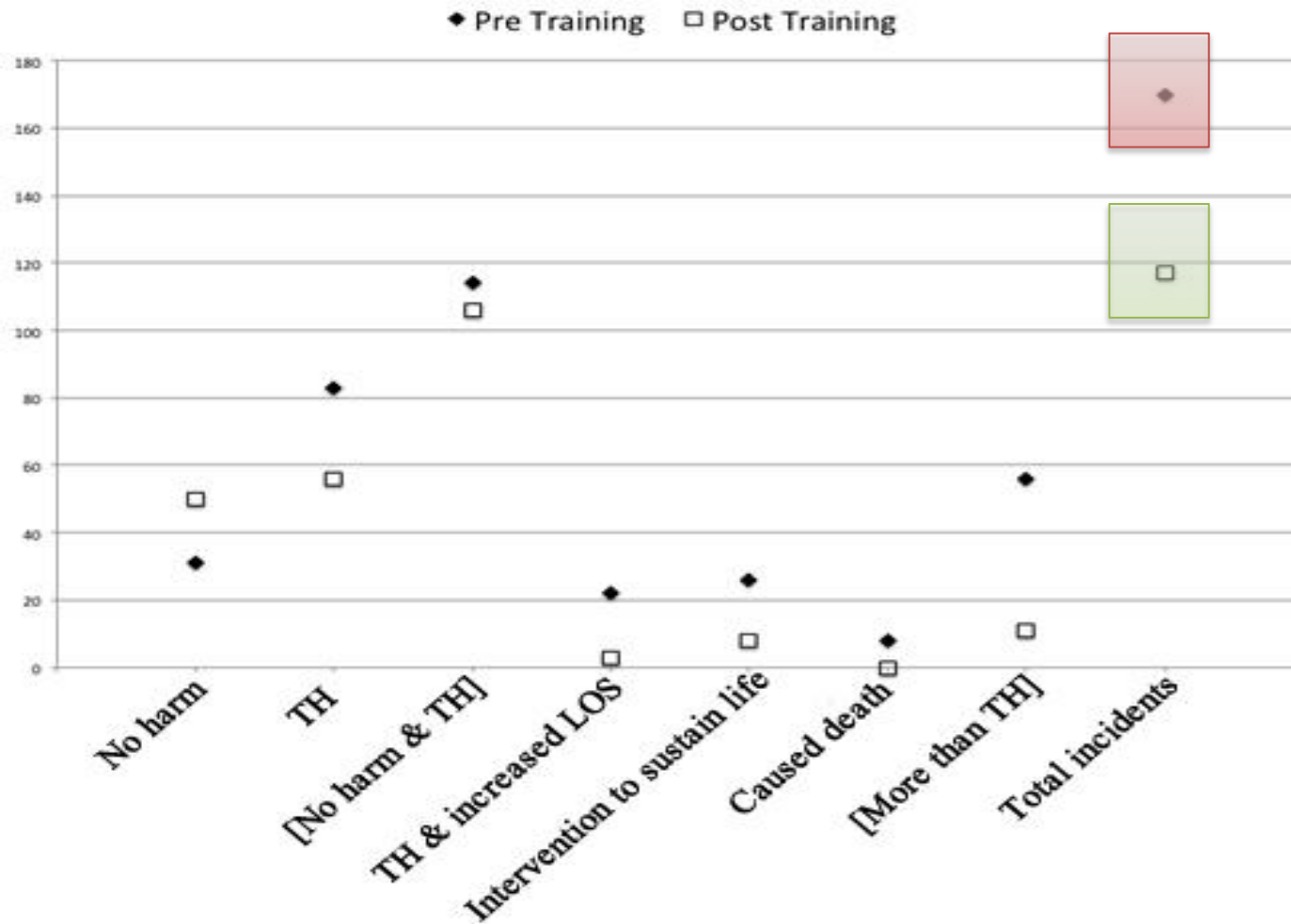


Figure 1. Total numbers of incidents and associated levels of harm for 4 Trusts combined, divided into incidents occurring Pre and Post NTSP training. TH - Temporary Harm. Combined harm categories are in [square brackets].

Reduction in harm from tracheostomy-related patient safety incidents following introduction of the National Tracheostomy Safety Project: Our experience from two hundred and eighty-seven incidents

McGrath, B.A.,* Calder, N.,† Laha, S.,‡ Perks, A.,§ Chaudry, I.,‡ Bates, L.,¶ Moore, J.A.** & Atkinson, D.**

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The National Tracheostomy Safety Project (NTSP) was initiated in response to evidence of preventable harm occurring in patients with temporary or permanent tracheostomy, or laryngectomy.¹⁻³ The multidisciplinary nature of tracheostomy care led to collaboration between the specialities and colleges primarily involved in care, namely ENT, maxillofacial surgery, anaesthesia and critical care. The NTSP published multidisciplinary guidelines for the management of tracheostomy and laryngectomy airway emergencies in 2012.^{1,2,4} This work was supported by the resources of the wider project that includes e-learning modules, a freely accessible, comprehensive manual, educational videos, guidance on equipment and infrastructure considerations for healthcare providers, multidisciplinary courses for staff (available from the advanced life support group www.alsg.org), housed on a website (www.tracheostomy.org.uk), and free smartphone applications.

Four NHS teaching hospitals in the north-west region of England were amongst the first to adopt the NTSP for managing both routine and emergency aspects of tracheostomy care. These were the University Hospital of South Manchester, Central Manchester NHS Foundation Trust, Salford Royal Hospitals NHS Trust and Lancashire Teaching Hospitals NHS Foundation Trust. Tracheostomy leads were designated and tasked with improving safety by implementing the project. Key steps involved in-house training of any staff who would be expected to care for neck-breathing patients, the use of NTSP bedhead signs (providing immediate details regarding the nature, purpose, timing, method, associated upper airway features and agreed emergency

Reporting of adverse clinical events is considered an effective method of measuring or improving the safety of health care.⁵ Local and national airway incidents have been examined in a series of reports from the DAS, ICS, RCoA, NPSA and NTSP.¹⁻³ The aim of this study was to use local trust's critical incident reporting systems to ascertain whether the implementation of the NTSP influenced the nature and severity of harm in tracheostomy-related incidents. We hypothesised that introduction of training, supported by the resources and initiatives outlined above, would reduce the severity of harm resulting from post-insertion tracheostomy-related patient safety incidents.

Methods

Ethical considerations

This study was performed using retrospective review of anonymised critical incidents. Approval was sought from each trust's clinical governance leads to analyse the data, but formal ethical approval was not required.

Implementation

The introduction of the NTSP was facilitated through training key nursing and medical staff, via day-release 'train the trainer' courses. Initially, staff from critical care units and head and neck wards were trained on courses involving a combination of workshops, presentations and the opportunity for supervised practice in the management of simulated





Thank you