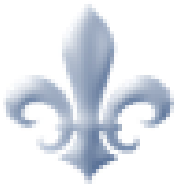


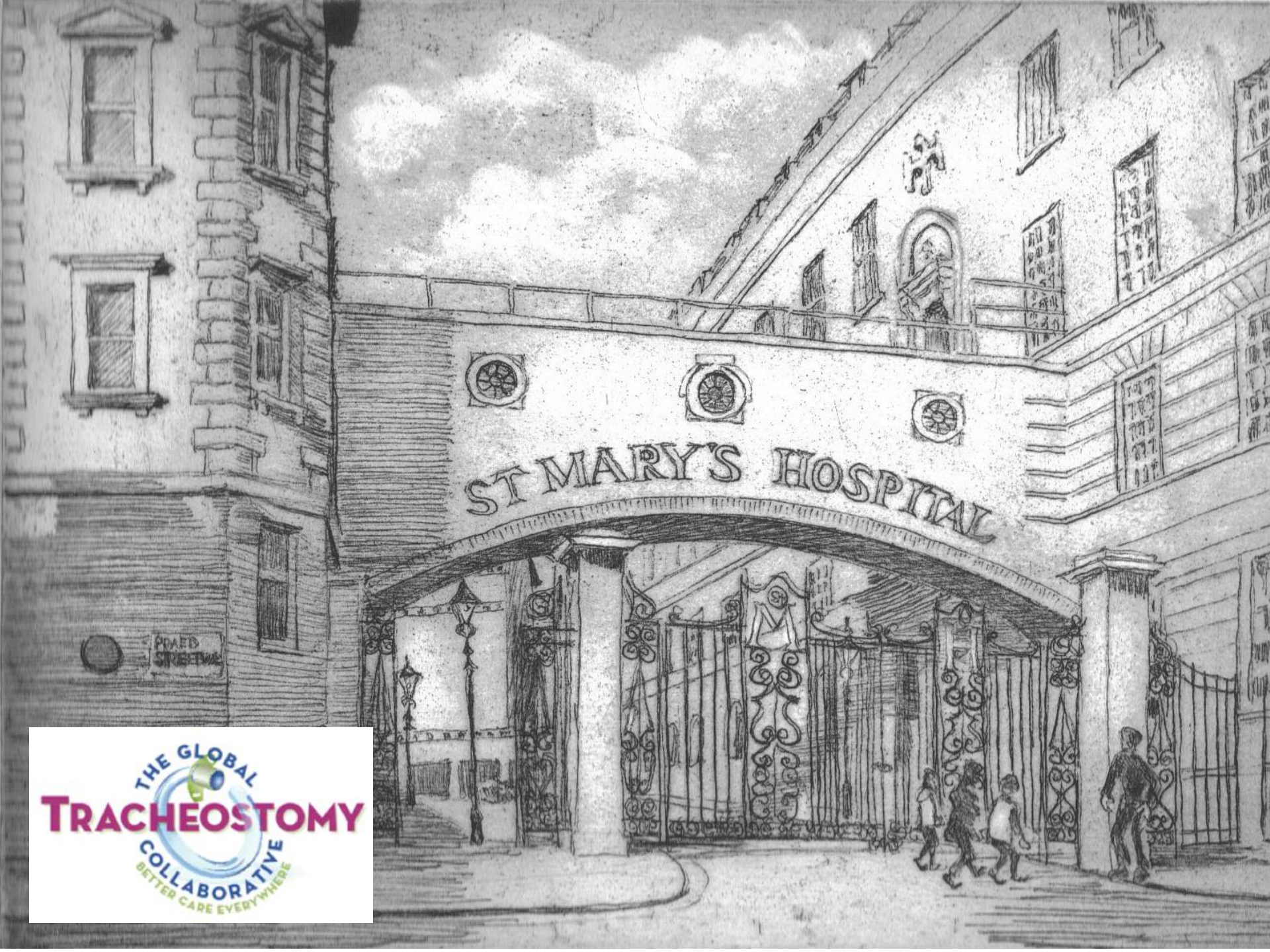
Improving Standards of Tracheostomy Care:

Local, National and Global Perspectives

Prof Antony Narula
Mr A Arora
Dr R Cetto

St Mary's Hospital
Imperial College Healthcare NHS Trust, London UK





THE GLOBAL
TRACHEOSTOMY
COLLABORATIVE
BETTER CARE EVERYWHERE

St. Mary's Hospital



- Video



Overview

- **The problem**
- **How bad?**
- **Steps taken to address the issue**
- **Lessons learned**



Defining the Problem



Critical care unit (CCU) demands⁽¹⁾



No. of tracheostomies performed⁽²⁾



**No. of adult tracheostomy patients on
the ward**



**Major implications for tracheostomy care
in the UK⁽³⁾**

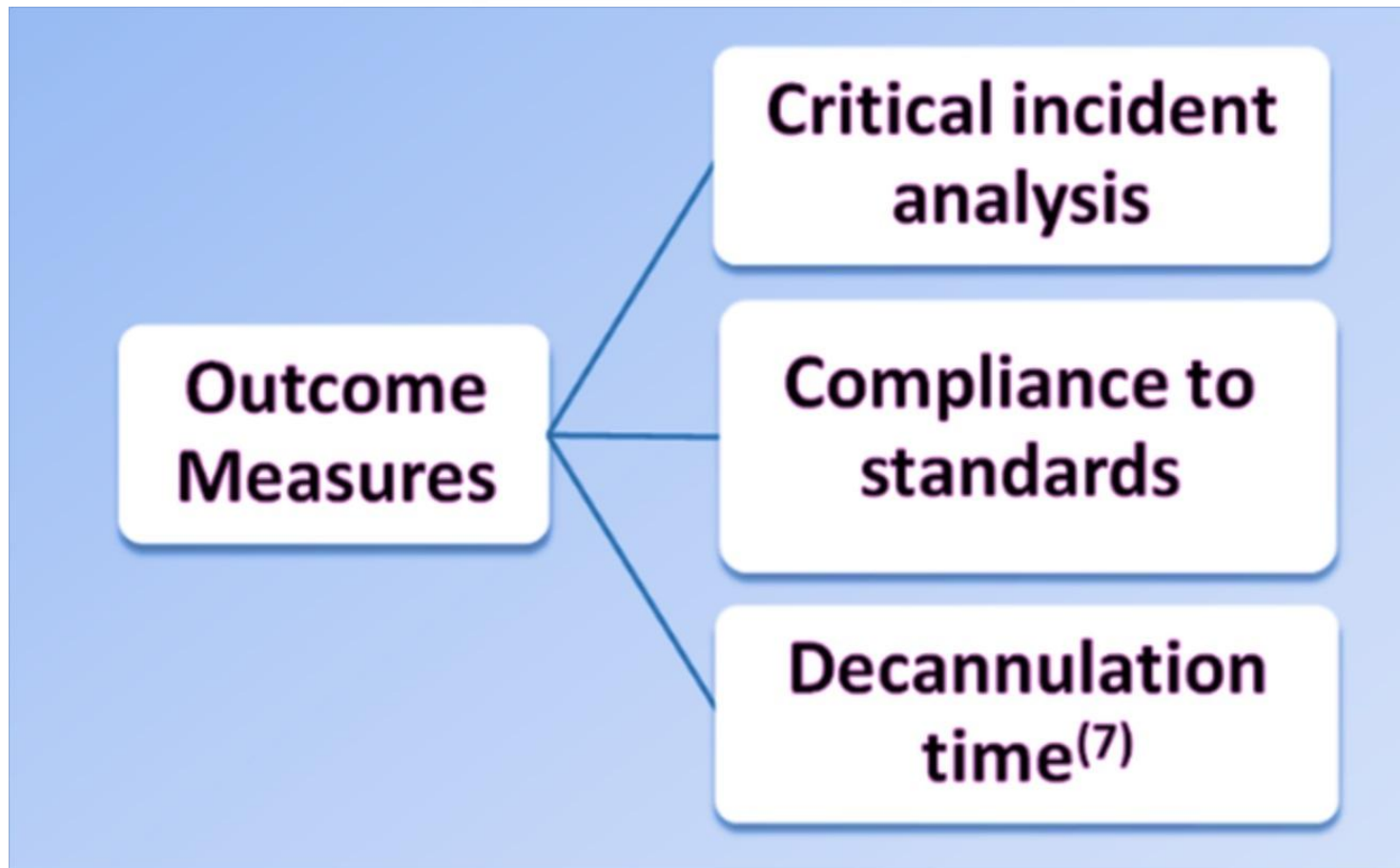


How Bad?

- **Suboptimal standards of care⁽³⁻⁶⁾**
 - **Complications**
 - **Management of emergencies**
 - **Long term tracheostomy management**



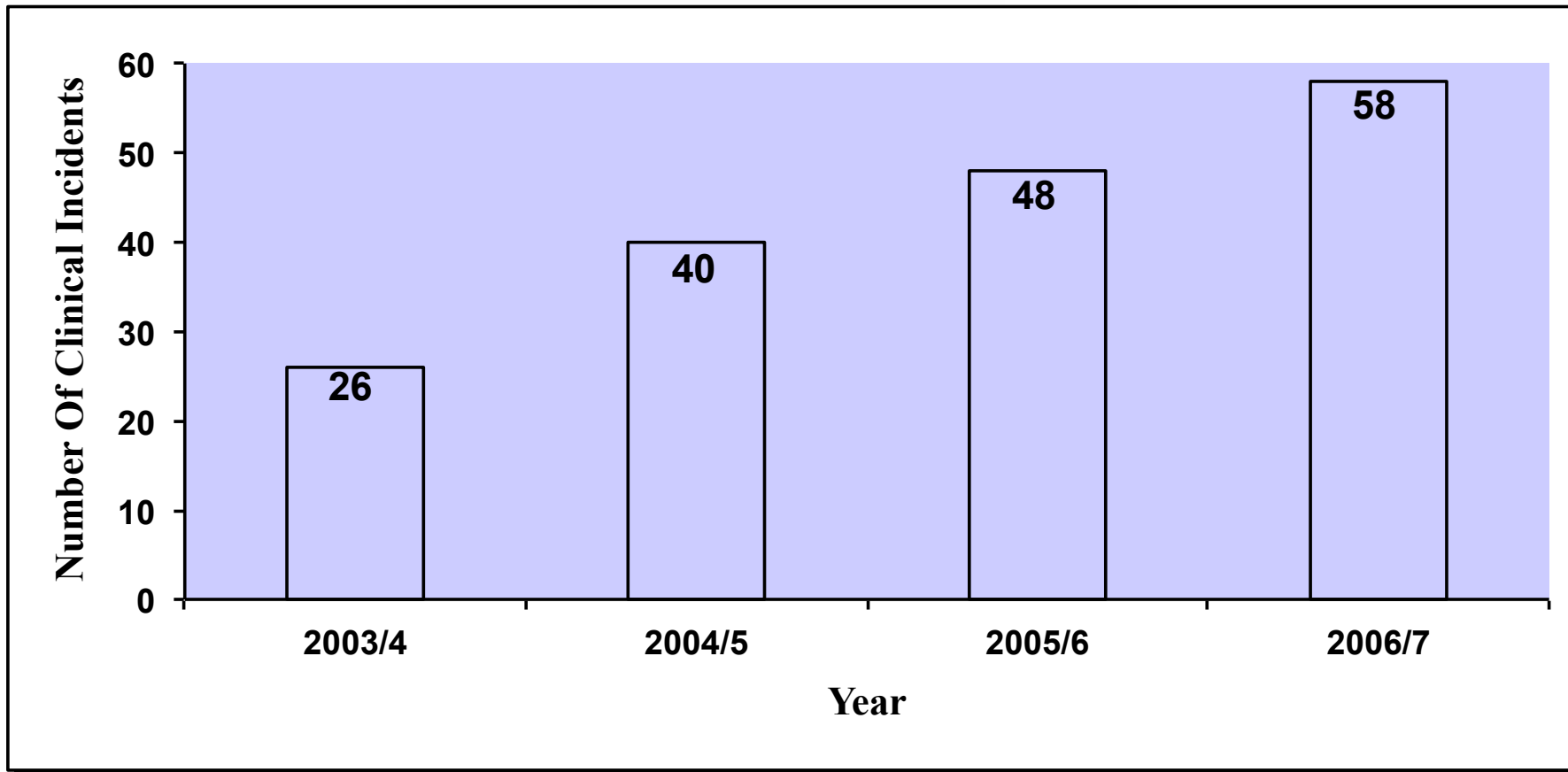
Measures of Tracheostomy Care



- **Objective measure^(4,7)**
- **Reflects tracheostomy management**
- **Important factor for complications**



Local level: critical incidents



Tracheostomy Care Bundle

The St. Mary's Tracheostomy Care Bundle Checklist

Humidification - Each patient with a tracheostomy should receive adequate humidification. This should be documented 2 hourly.

Tube Patency/ Inner tube care - Inner tube to be removed, checked for secretion build up, cleaned and replaced 2 – 4 hourly.

Safety Equipment - All bedside equipment relating to tracheostomy care checked at the beginning of each shift.

Cuff - Cuff status to be checked each shift.

Tracheostomy dressing/tapes - To be changed at least 24 hourly.

Weaning plan documented

Care plan documented

Audit of Tracheostomy Care Bundle



Improving tracheostomy management through design, implementation and prospective audit of a care bundle: how we do it

Hettige, R., Arora, A., Ifeacho, S. & Narula, A.

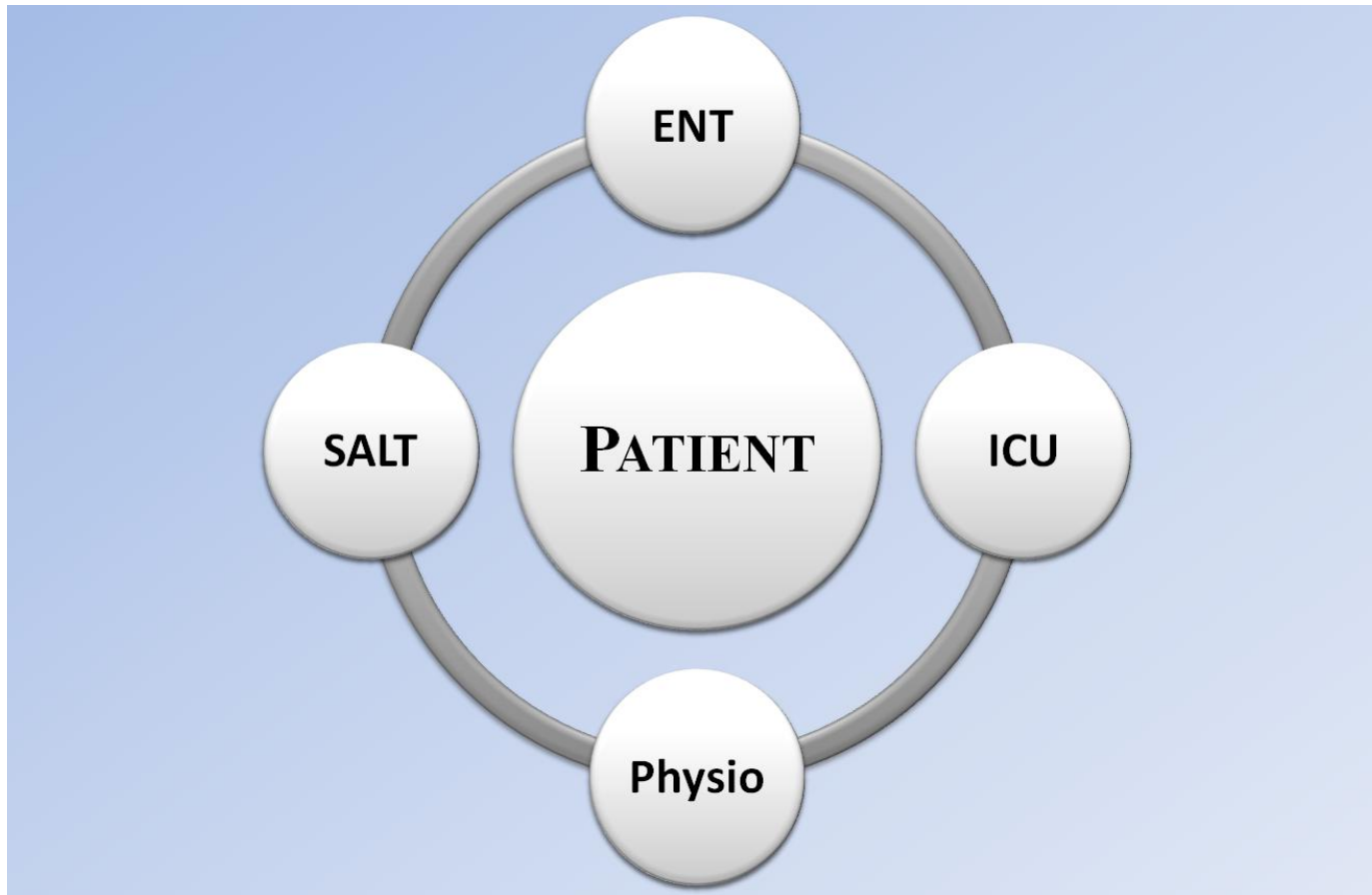
Department of Otolaryngology, St Mary's Hospital, London, UK

Accepted for publication 11 April 2008

- **Improvements**
- compliance to standard
- documentation
- bedside equipment:
 - suture scissors, tracheotomy dilator, spare tube
- severe clinical incidents



Tracheostomy Multi-Disciplinary Team (TMDT)



- Regular ward review
- Audit



Driving standards in tracheostomy care: a preliminary communication of the St Mary's ENT-led multi disciplinary team approach

Arora, A., Hettige, R., Ifeacho, S. & Narula, A.

Department of Otolaryngology, St Mary's Hospital, London, UK

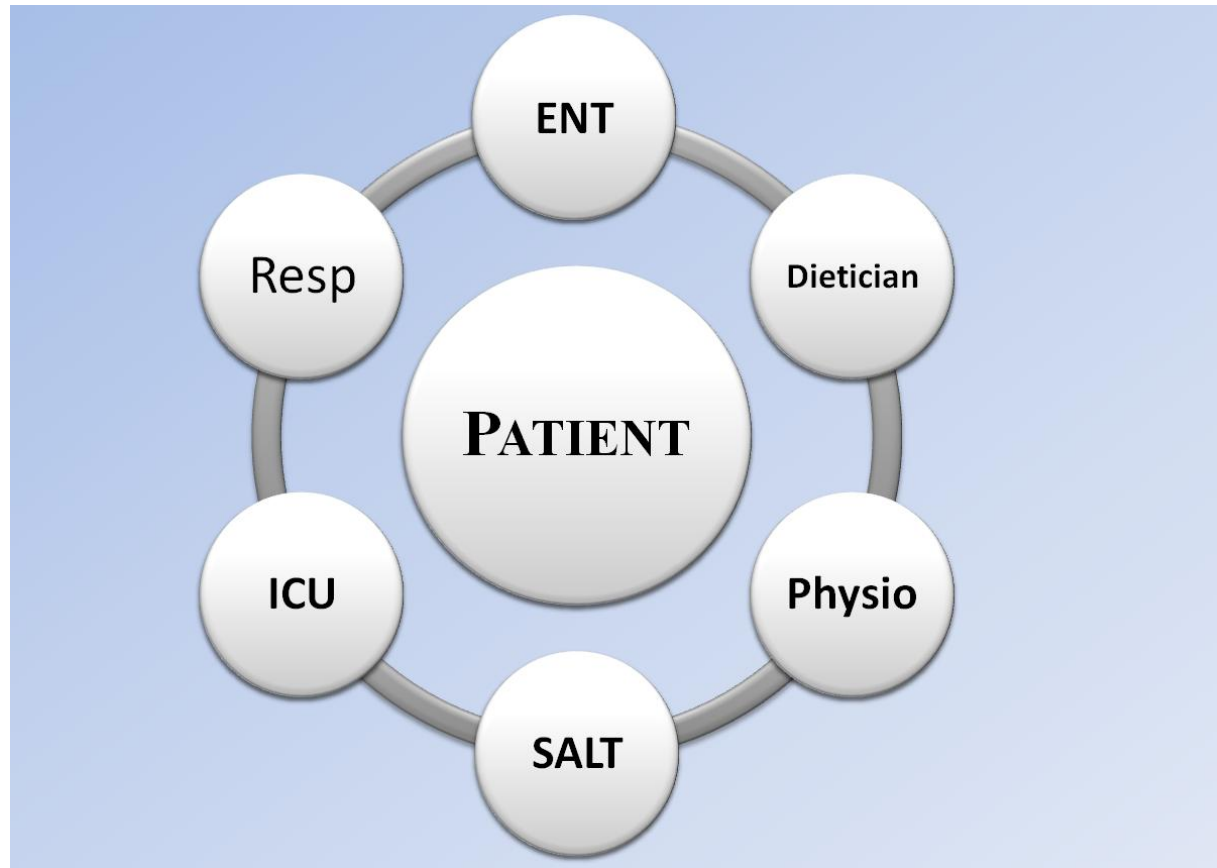
Accepted for publication 4 August 2008

Clin. Otolaryngol. 2008, 33, 596–599

- **Further improvements⁽⁹⁾**
- Compliance to standard: **96%**
- severe clinical incidents: **zero**
- total tracheostomy time reduced: **34 to 26 days**



TMDT Expansion




- **Objective measure^(4,7)**
- **Reflects tracheostomy management**
- **Important factor for complications**




- Regular ward review
- Audit
- **Educational programme**
- **Tracheostomy Working Group (NPSA guidelines)**





Educational Programme



Tracheostomy Study Days 2009







Thursday 26th March
Monday 4th May
Friday 3rd July
Thursday 15th Oct
Thursday 17th Dec

An essential one day training day for all registered nurses looking after patients who have a tracheostomy or open stoma

Topics covered include:

- Indications for tracheostomy
- Emergency airway management
- Tracheostomy equipment
- Emergency scenarios
- Tracheostomy Care Bundle
- Weaning
- Swallowing and Communication



Improving tracheostomy care: a prospective study of the multidisciplinary approach

Cetto, R.,* Arora, A.,† Hettige, R.,* Nel, M.,† Benjamin, L.,‡ Gomez, C.M.H.,§
Oldfield, W.L.G.¶ & Narula, A.A.*

Departments of *Otorhinolaryngology, †Physiotherapy, ‡Outreach and Resuscitation, §Intensive Care Medicine,
and ¶Respiratory Medicine, St. Mary's Hospital, Imperial College Healthcare NHS Trust, London, UK

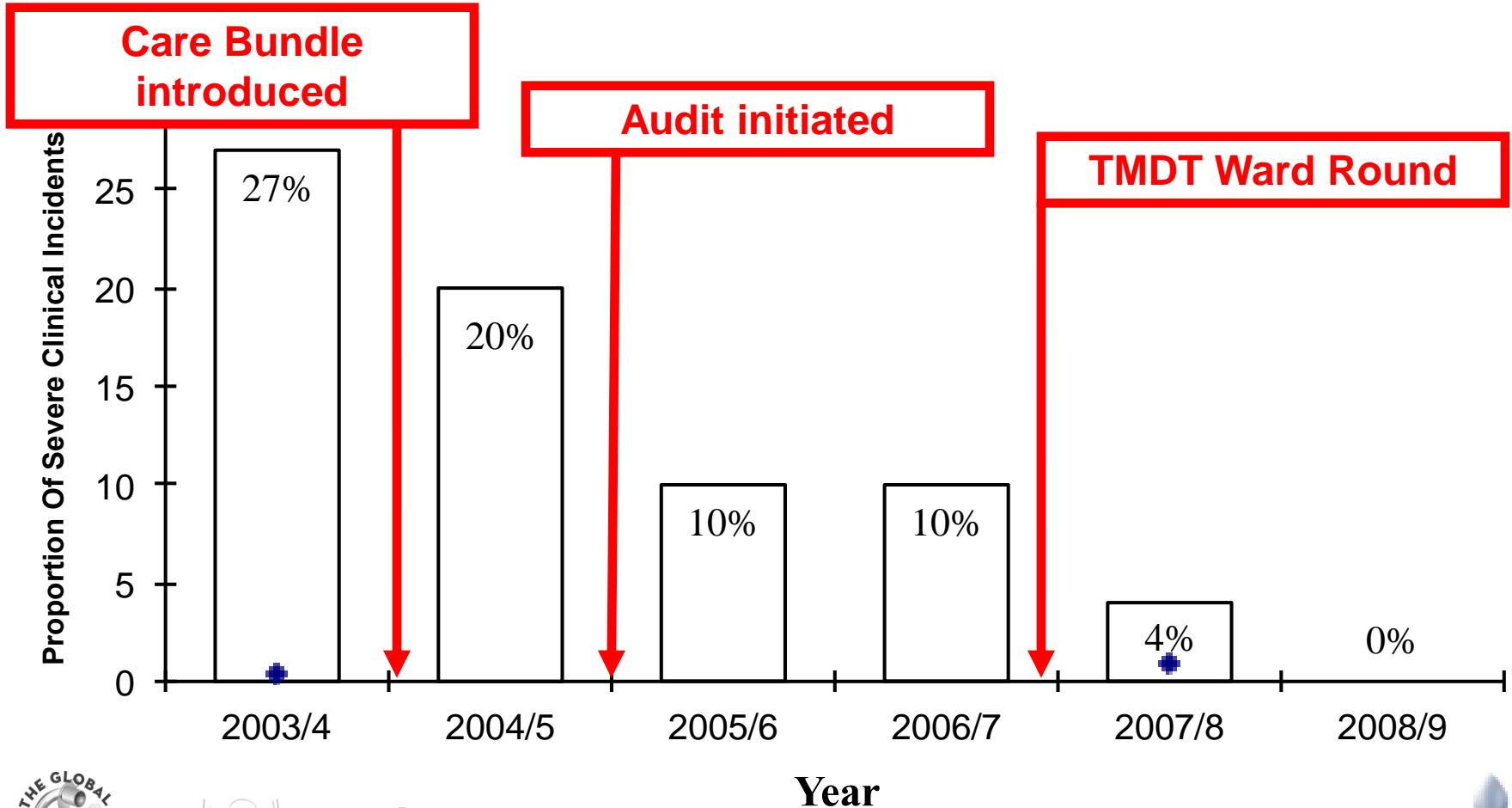
Accepted for publication 1 August 2011

Clin. Otolaryngol. 2011, 00, 00–00

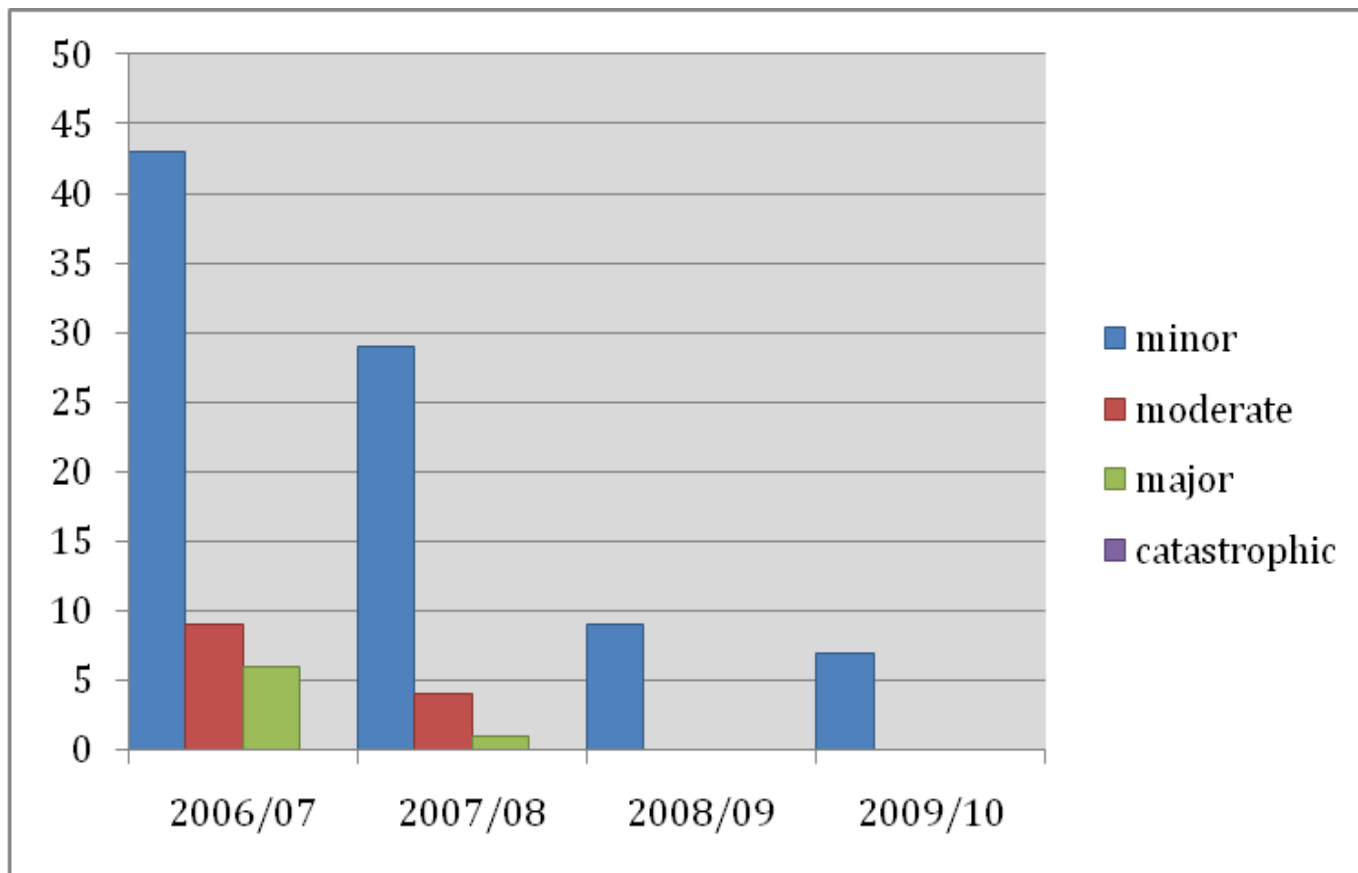
- Prospective cohort study⁽¹⁰⁾
 - 2006-10
 - 51 month clinical incident data analysis
 - decannulation, total tracheostomy time
 - feedback from study days (n=72)



Serious Clinical Incidents



Clinical Incidents



Tracheostomy Study Day Programme 2014
Mint Wing Education Centre

Time	Topic
09.15-0930	Introduction & Identification of learning needs
09.30-10.30	Anatomy and Physiology of the upper airway
10.30-11.15	Indications for Tracheostomy, Surgical procedure and Types of tubes
11.15-11.30	Break
11.30-12.00	Tracheostomy Care bundle and documentation
12.00-12.45	Weaning the Tracheostomy – where to start and what to look for.
12.45-13.45	Lunch
13.45-14.30	Communication and swallowing difficulties
14.30-15.10	Skill stations: <ul style="list-style-type: none"> • Emergency Equipment • Suctioning and airway management • Emergency care and situations • Tracheostomy Daily Care Plans
15.10-15.20	Break
15.20-16.00	Skill stations: <ul style="list-style-type: none"> • Emergency Equipment • Suctioning and airway management • Emergency care and situations • Tracheostomy Daily Care Plans
1600 – 1700	Scenarios
1700	Evaluation & close



09.15-0930	Introduction & Identification of learning needs
09.30-10.30	Anatomy and Physiology of the upper airway
10.30-11.15	Indications for Tracheostomy, Surgical procedure and Types of tubes
11.15-11.30	Break
11.30-12.00	Tracheostomy Care bundle and documentation
12.00-12.45	Weaning the Tracheostomy – where to start and what to look for.

- 13.45-14.30 Communication and swallowing difficulties
- 14.30-1600 Skill stations:
 - Emergency Equipment
 - Suctioning and airway management
 - Emergency care and situations
 - Tracheostomy Daily Care Plans

(Repeat stations)



Educational Programme

	Poor					Excellent				
	1	2	3	4	5	1	2	3	4	5
Please grade the following 1-5:										
The relevance of the course to you.	0%	0%	4.2%	12.5%	83.3%					
The overall content of the course.	0%	0%	0%	12.5%	87.5%					
The overall style of the presentation.	0%	0%	0%	16.7%	83.3%					
The time given to each section.	0%	0%	0%	12.5%	87.5%					
The course when compared to your expectations.	0%	0%	0%	4.2%	95.8%					
The usefulness of this course in improving your performance at work.	0%	0%	0%	0%	100%					
The course materials.	0%	0%	0%	8.3%	91.6%					
The teaching of anatomy and physiology.	0%	0%	4.2%	12.5%	83.3%					
The teaching of indications for tracheostomy, the surgical procedure and the different types of tubes.	0%	0%	0%	8.3%	91.6%					
The teaching of the points on the tracheostomy care bundle and how to document its use.	0%	0%	4.2%	8.3%	87.5%					
The teaching of weaning technique.	0%	0%	8.3%	8.3%	83.3%					
The skills stations: Emergency Equipment Suctioning and airway management Emergency situations Daily tracheostomy care.	0%	0%	0%	8.3%	91.6%					
The clinical scenario stations	0%	0%	0%	0%	100%					



Educational Programme

	Poor					Excellent				
	1	2	3	4	5	1	2	3	4	5
Please grade the following 1-5:										
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The clinical scenario stations	0%	0%	0%	0%	100%					

Educational Programme

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Educational Programme

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The clinical scenario stations	0%	0%	0%	0%	100%					

Decannulation Time

	Pre-TMDT	Post-TMDT
Time frame	19 months	19 months
Number of Patients	79	71
Decannulation time	21days	11 days <i>(p=0.001)</i>
Total tracheostomy time	34 days	25 days <i>(p=0.001)</i>



Summary

- Tracheostomy Care Bundle: a simple way to document and audit important components of care
- Expediting the decannulation process: reduces the time for complications to develop
- Far reaching implications: patient, financial, clinical incidents





NTSP
www.tracheostomy.org.uk





WWW.GLOBALTRACH.ORG

join us

1. Implement or expand upon best practices at your institution.
2. Participate in the Global Tracheostomy Collaborative (GTC) Database, allowing you to track your institution's tracheostomy care.
3. Benchmark with other centres.
4. Monitor adverse events.
5. Track changes in outcome as you implement interventions.
6. Receive support and education from international experts.
7. Learn directly from world leaders in tracheostomy care.



"This new initiative aims to disseminate good practice in multi disciplinary team work for tracheostomy care. UK & Worldwide research has proved that this approach saves lives and is cost effective"

- Prof Antony Narula, Co-Founder & Vice-President
ENT Surgeon, St Mary's Hospital, Paddington

All centres, regardless of level of expertise or coordination, will benefit from joining the GTC to allow their centre to benchmark, to try new interventions and to evaluate risks and improve quality. If your centre already has teams and protocols in place, you will have the opportunity to share what you have learned with many other centres worldwide.



UK GTC launch

Monday
7th July 2014

Royal College
of Surgeons
London

For more information, or to join, please visit our website
or contact us at info@globaltrach.org

WWW.GLOBALTRACH.ORG

- ENT colleagues:
 - Mr Asit Arora
 - Dr R Cetto
- Other TMDT members:
 - Dr W Oldfield (Resp)
 - Dr C Gomez (ITU)
- AHPs: SALT, physio, dietetics

