

INNOVATION & ENTREPRENEURSHIP IN THE NHS

A GUIDE

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King's Lynn

CONFLICTS

id	title	assignee	inventor/auth	priority date	filing/creation	publication date	grant date
JS-20200163	Regional anaesthesia injection apparatus	The Queen Eli	Peter Jeffrey Y	02/06/14	23/09/19	16/01/20	
JS-10525229	Device for performing regional anaesthesia	The Queen Eli	Peter Jeffrey Y	24/04/12	17/09/18	07/01/20	07/01/20
JS-20190536	Medical gas delivery system	Indian Ocean	Peter Jeffrey Y	24/02/16	24/02/17	21/02/19	
JS-D857541	Security alarm	Venner Medica	Peter Jeffrey Y	24/02/17	24/02/17	27/08/19	27/08/19
JS-D841311	Equipment box	Venner Medica	Peter Jeffrey Y	29/07/16	27/01/17	26/02/19	26/02/19
JS-D819439	Equipment box	Venner Medica	Peter Jeffrey Y	29/07/16	27/01/17	05/06/18	05/06/18
JS-20163719	Detection device	Peter Jeffrey Y	Peter Jeffrey Y	01/10/11	31/08/16	22/12/16	
WO-20170294	Safety apparatus for use in a medical procedure	Venner Medica	Peter Jeffrey Y	16/08/15	16/08/16	23/02/17	
WO-20170061	Oropharyngeal airway	Venner Medica	Peter Jeffrey Y	06/07/15	06/07/16	12/01/17	
WO-20162032	Medical gas flow safety system	Venner Medica	Peter Jeffrey Y	13/06/15	13/06/16	22/12/16	
3B-2542450	Safety warning system	The Queen Eli	Jeffrey Young	11/05/15	11/05/16	22/03/17	
IP-3270869	Transnasal tube	Peter Jeffrey Y	Peter Jeffrey Y	17/03/15	17/03/16	24/01/18	
WO-20151592	Data routing and processing systems and method	Auxilium Ltd	Peter Jeffrey Y	18/04/14	20/04/15	22/10/15	
3B-2570812	A method and apparatus	The Queen Eli	Jeffrey Young	02/06/14	02/06/14	07/08/19	
3B-2516718	Medical guide wire	Queen Elizabeth	Peter Jeffrey Y	30/07/13	04/04/14	04/02/15	
IP-201313587	Artificial airway apparatus	Internati	Peter Jeffrey Y	27/05/04	25/02/13	11/07/13	
CA-2850592	Detection device	Peter Jeffrey Y	Peter Jeffrey Y	01/10/11	01/10/12	14/01/20	14/01/20
IP-2393411	Catheter for tracheo-bronchial suction with valve	Mario Zocca, F	Mario Zocca, F	09/02/09	09/02/10	14/12/11	
WO-20091185	Sampling connector	The Queen Eli	Peter Jeffrey Y	25/03/08	25/03/09	01/10/09	
3B-2452776	Method for monitoring an airway device such as an endotracheal tube	Internat Paten	Peter Jeffrey Y	17/09/07	17/09/07	18/03/09	
CA-2658700	Fluid connector system	Peter Jeffrey Y	Peter Jeffrey Y	20/07/06	19/07/07	19/04/16	19/04/16
JS-7360540	Endotracheal tube which permits accurate detection of condensation	Indian Ocean	Archibald I. J.	23/01/02	13/05/02	22/04/08	22/04/08
3B-2324735	A device to seal the trachea in the intubated patient	George Down	George Down	28/04/97	21/04/98	20/06/01	20/06/01

Motivation

- Do it for the journey
- Do it to *potentially* make a global difference
- Prepared to self-sacrifice
 - Financially
 - Time
- Be resilient
 - Institutional Persecution
 - Extra-Institutional Criticism

..... lots of people will like it

..... lots of people like to diss it

..... and (almost) no one will use it initially

Generating wealth is good



2011

The **AHSN** Network



NHS Innovation Accelerator



NHS Clinical Entrepreneur Programme



Innovation Pathway

Environment

Idea

Consider the Pathway (Feasibility)

Pre-clinical Prototyping

Patenting (Ownership)

Partnering / Engaging /Funding

Clinical Prototyping

R&D, Ethics

Industry connections

Iterative design process

Further IP

Engage clinicians/healthcare systems

Engage patients

Pre-clinical Studies

Clinical Studies

Manufacturing

Regulatory

Quality Control

Supply

Adaptations in design

Implementation





Who Owns Your Idea?

18 Intellectual Property

You will comply with our procedures for intellectual property which are in line with 'The NHS as an Innovative Organisation, Framework and Guidance on the Management of Intellectual Property in the NHS'.



The NHS as an Innovative Organisation

A Framework and Guidance on the Management of Intellectual Property in the NHS

Where to go?



Support or Release

Need clarity from the outset

If not it will come back to haunt you

Innovation Pathway

Environment

Idea
 Consider the Pathway (Feasibility)
 Pre-clinical Prototyping
 Patenting (Ownership)
 Partnering / Engaging /Funding
 Clinical Prototyping
 R&D, Ethics
 Industry connections
 Iterative design process
 Further IP
 Engage clinicians/healthcare systems
 Engage patients
 Pre-clinical Studies
 Clinical Studies
 Manufacturing
 Regulatory
 Quality Control
 Supply
 Adaptations in design
 Implementation



How

Implementation

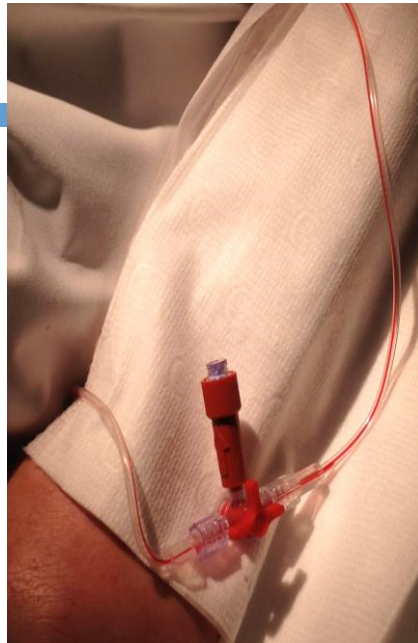
- Be a multinational
 - Have resource and control over
 - Clinicians
 - Nurses
 - Managers
 - Procurement
 - NHS England
 - DOH
- Be outside the valley of death

Our Devices and the Innovation Pathway

NIC

Non-injectable arterial connector

- Prevents
 - ▣ accidental injection
 - ▣ bacterial contamination
 - ▣ blood spillage



Oxy-Blade



 A full view of the Oxy-Blade. It features a 3.5-inch video viewer at the top, a black handle in the middle, and a clear plastic blade at the bottom. The device is shown against a light blue background.

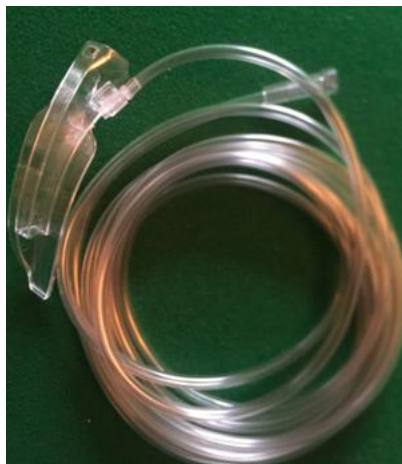
Video Viewer
The 3.5" high resolution viewing screen provides real time, wide angle view during the intubation procedure

Handle
Ergonomically designed for use as a standard Macintosh laryngoscope or as a video laryngoscope via an independent power supply within the handle

Camera Module
The high intensity LED light source at the distal tip provides a clear image of the laryngeal structure

Interchangeable disposable blades

Oxy-Blade





Cost - low

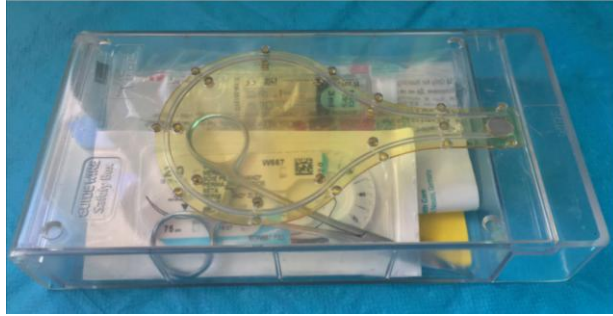
Availability in all locations – 15 l min⁻¹

Change of practice - minimal

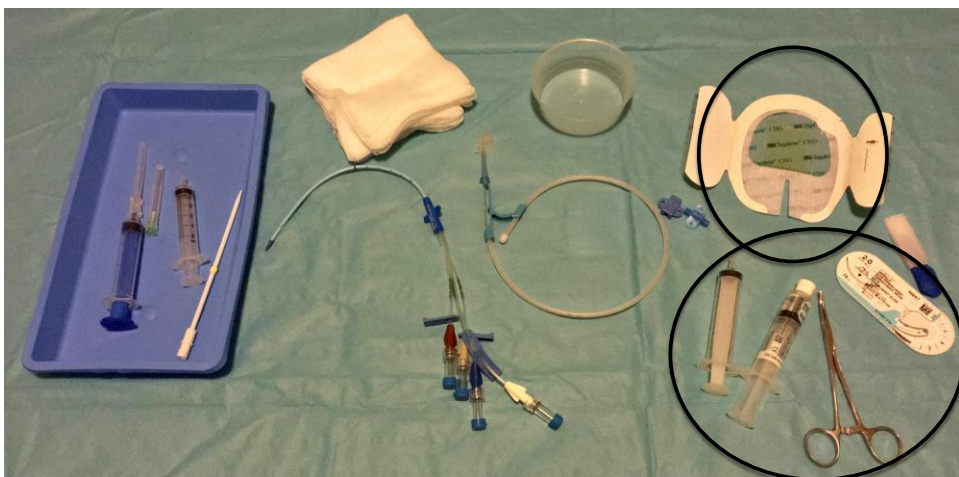
DRUGGUARDIAN



WIRESAFE



Retained central line guidewires

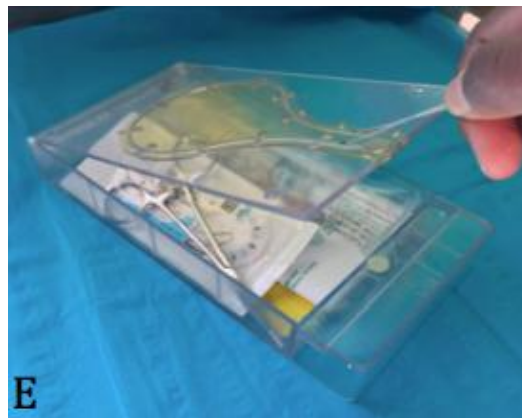


Retained central line guidewires



Retained central line guidewires

- The guidewire unlocks the box to allow completion of the procedure



Retained central line guidewires

- Becomes a sharps container
 - Easy disposal
 - Sharps
 - Guidewire



SAFIRA





Classification: Official



**Patient
Safety
Alert**

Stage One: Warning
*Risk of using different airway
humidification devices simultaneously*

15 December 2015

Alert reference number: NHS/PSA/W/2015/012

Alert stage: One - Warning

Actions**Technical notes****NRLS search dates and terms**

A NRLS search was undertaken on 23 November 2015 for the key words HME* and heat_moisture_exchange*. In total, 518 incidents were identified and all were reviewed.

It was found that 76 incidents had been reported in which a HME had accidentally been left attached to a 'wet circuit' and these reports were further analysed.

HUMIDICARE



GlucoSave



NGT



Office de la Propriété
Intellectuelle
du Canada
Un organisme
d'industrie Canada

Canadian
Intellectual Property
Office
An agency of
Industry Canada

CA 2977895 A1 2016/09/22

(21) **2 977 895**

(12) **DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION**

(13) **A1**

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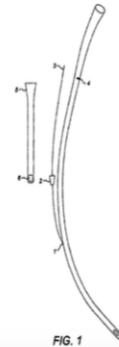
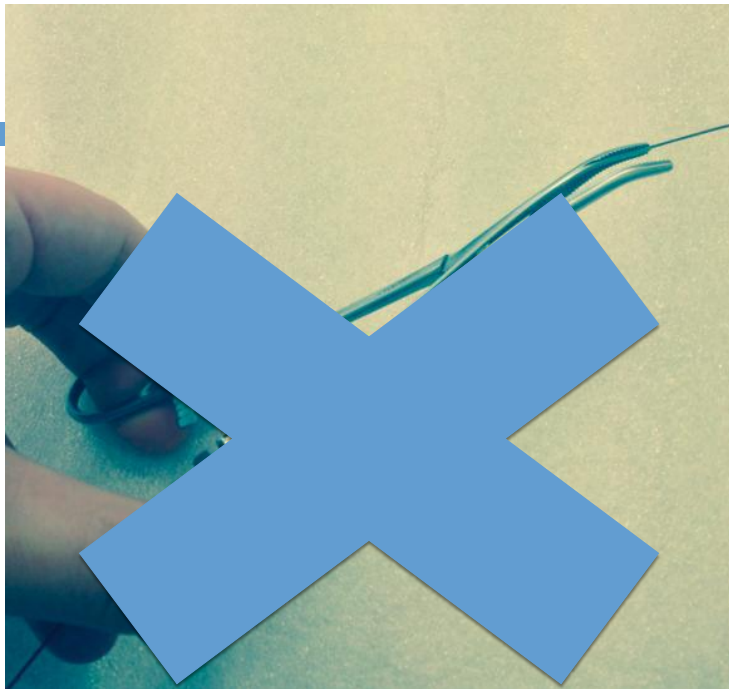
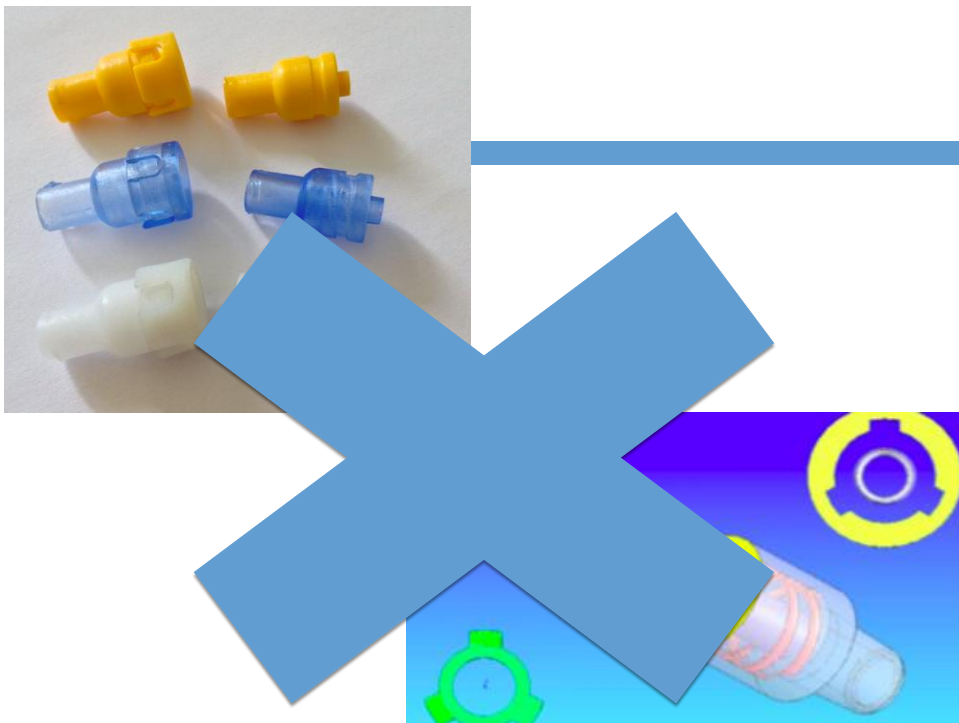
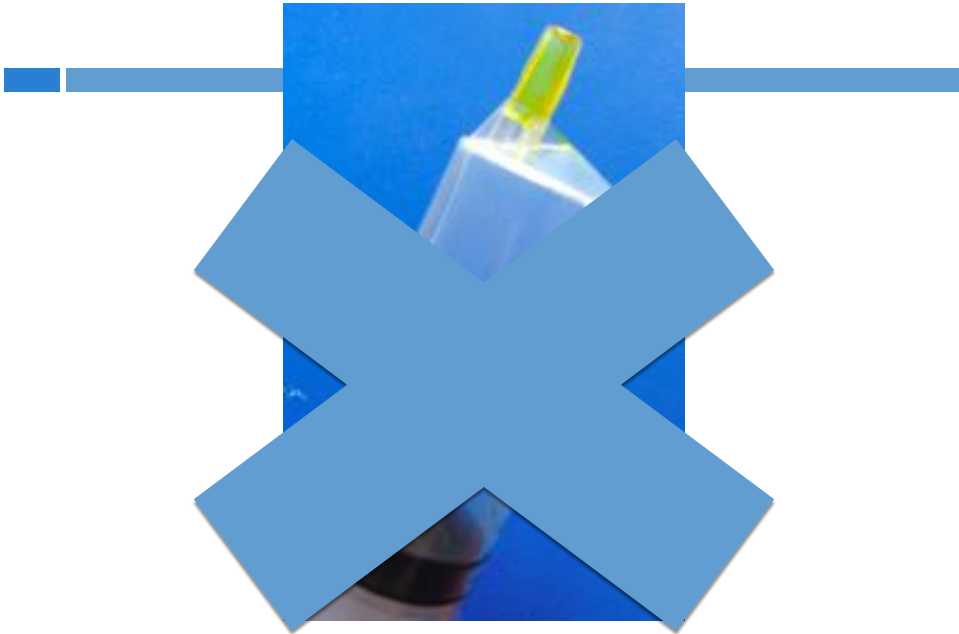


FIG. 1





Summary – Bedside Innovation

- Fun
- Frustrating
- Rewarding if you breakthrough

Increasing support and acceptance in the higher NHS



The screenshot shows the top navigation bar of the Association of Anaesthetists website. The logo is on the left, followed by a search icon and a menu with items: Education & events, Membership, Resources & publications, News & opinion, Get involved, and Wellbeing & support. Below the navigation bar is a header for a news article titled "Association statement on coronavirus". The header includes a breadcrumb trail: Home > News & opinion > News > Association statement on coronavirus. To the right of the breadcrumb trail are social media sharing icons for Facebook, Twitter, LinkedIn, and Email. Further right are buttons for Register, Login, and Join us.

Association statement on coronavirus

Saturday 1 February 2020

The coronavirus is now in the UK. Early reports suggest it spreads and presents similar to SARS with flu like symptoms and respiratory failure. Anaesthetists are particularly at risk as these patients present for intubation. Lessons from the Toronto SARS outbreak in 2003 indicate that [many staff infections occurred during intubation](#) and at the early stages of the outbreak when personal attention may have been less rigorous.