

# The Mid Yorkshire Hospitals **NHS Trust**

## Awake Fibreoptic Intubation – Knowledge & Experience Audit

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This dual cycle project was intended to evaluate local experience and promote the delivery of best practice within anaesthesia. It specifically relates to securing the airway in situations where difficulties with airway management are predicted. In these cases awake intubation may be undertaken and is usually achieved using a fibreoptic laryngoscope rather than by tracheal intubation following induction of anaesthesia.

The NCEPOD report published in 1998 stated that several anaesthetists working in a department should be trained for, and competent at, awake fibreoptic intubations (AFOI)<sup>1.</sup> Additionally the fourth National Audit Project (NAP4) stated that AFOI should be used whenever indicated and therefore requires that anaesthetic departments and individual anaesthetists ensure such a service is readily available<sup>2</sup>.



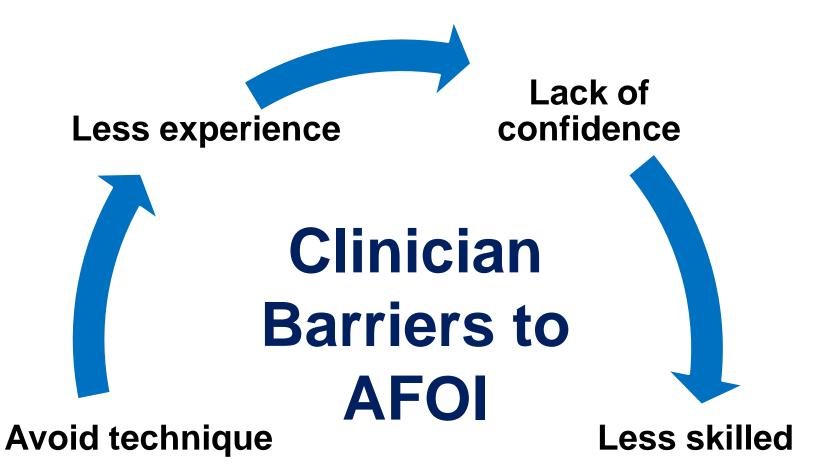
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- 2008 an audit of local experience and lacksquareknowledge was undertaken in the form of a clinician survey.
- Findings identified deficits and a local training program was developed and implemented in 2009 to address these.
- 2014 the same survey was repeated to evaluate current experience and knowledge and to evaluate the training delivered.

STAFF SURVEY 1 (2008, 3pages) →

Grade		Views on AFOI		<b>Scenarios</b> Finally I would like you to look at some short scenarios and ask you to consider which		
		Please rate the following statements by placing a vertica	I line on the visual analogue	induction/intubation technique you would be most likely to use in each situation. Imagine		
Previous experience of awake fibreoptic intubation (AFOI)		scales below depending on whether you agree or disagree with each statement.		that in each scenario local or regional anaesthesia is not an option so the choice in each situation is either: awake intubation, asleep using an IV induction or asleep using an		
Approximately how many times have you performed AFOI	as the lead anaesthestist			inhalational induction. Unless specified the patient is a cooperative adult that has been		
Ever?		1. AFOI should be a core skill for all anaesthetists		adequately fasted. There are no right or wrong answers so try to be honest and answer what you would actually do if this patient presented in your everyday practice (rather than the answer you might give in an exam!).		
In the last year?		completely		Scenario 1: Patient for urgent laparotomy is woken by first year trainee following an RSI		
Approximately how many times have you observed or assis	sted with AFOI (ie. not	disagree	agree	and failed intubation.		
lead anaesthetist)		2. AFOI should be a core skill for all consultant a	naesthetists	Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
Ever?		completely	completely			
In the last year?		disagree	agree	Scenario 2: Patient with dental abscess and mouth opening limited to 1cm.		
		3. AFOI is a difficult skill to learn		Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
Training in awake fibreoptic intubation						
Have you ever received any training in AFOI?	Yes No	completely disagree	completely agree	Scenario 3: Patient with cervical cord compression and leg weakness for discectomy.		
	n the last year			Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
	1 - 2 years	4. AFOI is a difficult skill to maintain				
	3-4 years	completely	completely	Scenario 4: Patient for mastectomy with Mallampati 3 and significant reflux.		
	5 – 10 years > 10 years	disagree	agree	Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
		5. AFOI has a significant risk of morbidity				
If yes please specify type of training received man	nequin/airway box 🦳			Scenario 5: Patient with BMI of 50 and h/o obstructive sleep apnoea for hemicolectomy.		
volu	nteer subjects	completely disagree	completely agree	Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
	ke patients					
	r (please specify)	6. AFOI is unpleasant for the patient		<b>Scenario 6:</b> Patient for category 1 caesarean section for foetal distress where "airway looks difficult".		
		completelydisagree	completely agree			
			ayıce	Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
Current practice		7. AFOI is likely to cause significant disruption to	the operating list			
Would you feel confident about performing AFOI as the sole anaesthetist? YES NO		7. AFOI is likely to cause significant disruption to the operating list		Scenario7: Patient with known difficult intubation for lap cholecystectomy.		
	-	completely	completely	Options: (circle one) Awake Asleep (IV) Asleep (inhalational)		
		disagree	agree			



#### **Overcoming the barriers & perceptions**

Lack of • Gain skills: training (awake subjects) Maintain skills: look for indications to clinician use technique experience • Join other consultants if opportunity arises

#### Action to address findings from 2008 survey:

Develop and introduce an in- $\checkmark$ house training course using staff volunteer subjects

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#### STAFF SURVEY 2 (2014) ↓

Survey Monkey Questionnaire 2014: <b>AFOI</b>					
1. What grade are you?					
Consultant					
C Staff Grade					
C Registrar					

C Core Trainee

#### nately how many times have you performed AFOI as the lead anaesthes

In the last y	rear?	
,		
3. Approxi anaestheti	mately how many times have you observed or assisted with AFOI (ie. not lead st)	
Ever?		
In the last y	ear?	
-	u ever received any training in AFOI?	
o <sub>Yes</sub>		
o <sub>No</sub>		
	ecify when you last received any training	
O Withir	the last year	
о 1-2 у	ears	
о <sub>3-4 у</sub>	ears	
• 5-10	years	
• > 10 ye	ears	
	ease specify type of training received	
🗖 Mann	equin/airway box	
Volunt	eer subjects	
C Awake	e patients	
	thetised patients	
Other	(please specify)	

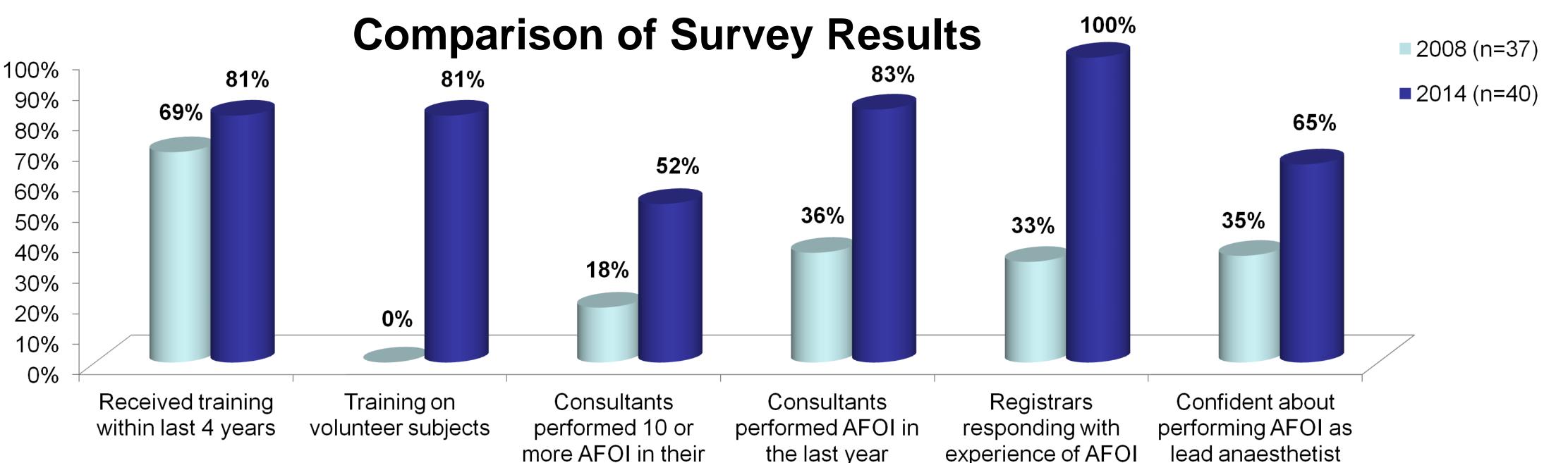
#### Unpleasant for the patient

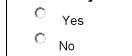
• Become skilled at technique • Sedation (eg. Remifentanil) • Meticulous local anaesthesia

#### **Disruption to** theatre list

• Create culture of using AFOI Equipment available Checklist for drugs, etc.







#### **Conclusions**

- 2<sup>nd</sup> cycle staff survey results evidenced that, since the introduction of the training course, not only has confidence in performing AFOI increased, but that AFOI is being performed more frequently.
- 2<sup>nd</sup> cycle results indicates a higher local skill set which promotes best practice and supports effective risk management.
- Majority of consultants have now attended the AFOI course, and can continue to attend it on a regular basis to ensure that their skills and confidence in AFOI remain updated. Registrars rotating into the Trust will continue to be offered a place on the course.
- Improved compliance with NCEPOD recommendations was achieved though a baseline audit, identifying and addressing areas for development and then re-auditing (closing the audit loop)

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REFERENCES: 1. Gray, Hoile, Ingram & Sherry (1998). The Report of the National Confidential Enquiry into Perioperative Deaths 1996/97. 2. Cook, Woodall & Frerk (2011). 4th National Audit Project of the Royal College of Anaesthetists and The Difficult Airway Society. Major complications of airway management in the United Kingdom

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