



Blood and Transplant

#DDSim



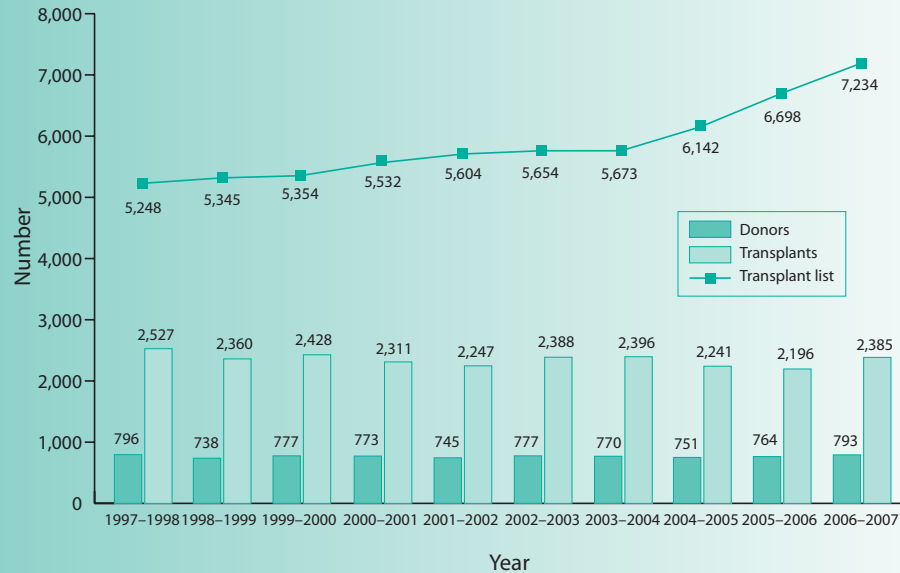
THE DECEASED DONATION COURSE
INTENSIVE CARE MEDICINE

Medical education in organ donation – how far have we come?

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Organ Donation
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The dark days of the past...

Figure 1: Number of deceased donors and transplants in the UK, 1 April 1997–31 March 2007, and patients on the active transplant lists at 31 March (of each year)



The dark of the past...



What they said

- 4.2 The five aspects are:
- i. legal and ethical issues;
 - ii. the role of the NHS;
 - iii. organisational aspects of co-ordination and retrieval;
 - iv. training;
 - v. public recognition of donors and their families and public promotion of donation.

What they said

4.2 The five aspects are:

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- iv. training;
- v. public recognition of donors and their families and public promotion of donation.

What was happening in medical training?

- 2007 syllabus for the award of CCT in ICM
- Describes the knowledge, skills and attitudes necessary to work as a ICM consultant

Knowledge

Responsibilities and activities of transplant co-ordinators
Management of the organ donor

Skills

- None listed...

Attitudes

Liaison with transplant co-ordinators

One suggestion they gave...

One suggestion they gave...

- | Attendance at surgical organ harvesting

What this 'training' regime meant

What this 'training' regime meant

- 'What's the CLOD?'

What this 'training' regime meant

- 'What's the CLOD?'
- 'I don't like having the SNOD in the room before I've mentioned organ donation'

What did the taskforce notice?

- Many critical care staff may go through their training without being involved in the care of a single potential organ donor

The recommendation

Recommendation 11

All clinical staff likely to be involved in the treatment of potential organ donors should receive mandatory training in the principles of donation. There should also be regular update training.

How have we addressed this challenge?

8.5 Manages the physiological support of the organ donor
Knowledge
Basic ethical principles: autonomy, beneficence, non-maleficence, justice
Causes of brain stem death
Role of national organ/tissue procurement authority and procedures for referral
Responsibilities and activities of transplant co-ordinators
Physiological changes associated with brain stem death
Principles of management of the organ donor (according to national / local policy)
Common investigations and procedures undertaken in the ICU prior to organ donation
Skills
Explain the concept and practicalities of brain stem death and organ donation clearly
Liaise with transplant co-ordinators (local organ donation authority) to plan management of the organ donor
Monitor vital physiological functions as indicated
Recognise and rapidly respond to adverse trends in monitored parameters
Aware of the emotional needs of self and others; seeks and offers support appropriately
Obtain consent/assent for treatment, research, autopsy or organ donation

How have we addressed this challenge?

8.5 Manages the physiological support of the organ donor	
Knowledge	
Basic ethical principles: autonomy, beneficence, non-maleficence, justice	
Causes of brain stem death	
Role of national organ/tissue procurement authority and procedures for referral	
Responsibilities and activities of transplant co-ordinators	
Physiological changes associated with brain stem death	
Principles of management of the organ donor (according to local and national guidelines)	
Common investigations and procedures undertaken in the ICU prior to organ donation	
Skills	
Explain the concept and practicalities of brain stem death	
Liaise with transplant co-ordinators (local organ donation authority)	
Monitor vital physiological functions as indicated	
Recognise and rapidly respond to adverse trends in monitoring	
Aware of the emotional needs of self and others; seeks support	
Obtain consent/assent for treatment, research, autopsy	
8.6 Manages donation following cardiac death	
Knowledge	
Basic ethical principles: autonomy, beneficence, non-maleficence, justice	
Common investigations and procedures undertaken in the ICU prior to organ donation	
Procedure for pronouncing life extinct and subsequent completion of death certification	
Responsibilities in relation to legal authorities for certifying death (e.g. Coroner, Procurator Fiscal or equivalent), and reasons for referral	
Legal and ethical framework for decision making	
Role of national organ/tissue procurement authority and procedures for referral	
Transplant team members and their roles	
Responsibilities and activities of transplant co-ordinators	
Skills	
Recognise when treatment is unnecessary or futile	
Identify potential non heart beating donors	
Lead a discussion about end of life goals, preferences and decisions with a patient and/or their relatives	
Participate in discussions with relatives about treatment limitation or withdrawal	
Liaise with transplant co-ordinators (local organ donation authority) and retrieval teams to plan management of the organ donor	

How have we addressed this challenge?

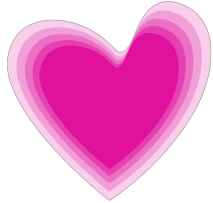
8.5 Manages the physiological support of the organ donor	
Knowledge	
Basic ethical principles: autonomy, beneficence, non-maleficence, justice	
Causes of brain stem death	
8.4 Performs brain-stem death testing	
Knowledge	
Basic ethical principles: autonomy, beneficence, non-maleficence, justice	
Causes of brain stem death	
Legal aspects of brain stem death diagnosis	
Applied anatomy and physiology of the brain and nervous system including cerebral blood supply, base of skull, autonomic nervous system and cranial nerves	
Physiological changes associated with brain stem death	
Preconditions and exclusions for the diagnosis of brain stem death	
Clinical, imaging and electrophysiologic tests to diagnose brain death: applicability	
Cultural and religious factors which may influence attitude to brain stem death and organ donation	
Skills	
Recognise when treatment is unnecessary or futile	
Identify potential non heart beating donors	
Lead a discussion about end of life goals, preferences and decisions with a patient and/or their relatives	
Participate in discussions with relatives about treatment limitation or withdrawal	
Liaise with transplant co-ordinators (local organ donation authority) and retrieval teams to plan management of the organ donor	
Working cardiac death	
beneficence, non-maleficence, justice	
Procedures undertaken in the ICU prior to organ donation	
Precondition and subsequent completion of death certification	
Authorities for certifying death (e.g. Coroner, Procurator Fiscal or equivalent), and	
Decision making	
Referral authority and procedures for referral	
Roles	
Transplant co-ordinators	

For ICM trainees



THE DECEASED DONATION COURSE
INTENSIVE CARE MEDICINE

The National Deceased Donation Simulation Course



THE DECEASED DONATION COURSE
INTENSIVE CARE MEDICINE



Blood and Transplant

For More Details & Applications Contact:

ODTmedicaleducation@nhsbt.nhs.uk

0191 202 4515

Lectures & simulation training to gain knowledge and skills in:

Diagnosing death and organ donation.

Leading end of life discussions and approaching for organ donation

Withdrawal of life sustaining treatment and the safe diagnosis of death

Develop capacity to make informed ethical and legal choices in the context of organ donation.

Develop ability to work productively with others, particularly the Specialist Nurses in Organ Donation.



Free
2 day course
(includes accommodation)

ICM trainees
ST5 or above

Consistently evaluated
as excellent &
outstanding

Experienced & Expert
Faculty National Experts

Covers FICM Syllabus
Domain 8: End of Life
Care and more

Course developed with
FICM and ICS
engagement

2018
Nottingham - Sept 11th & 12th

London -Oct 8th & 9th

2019
Salford Feb 26th 27th

Newcastle date TBC

- Free 2 day residential course for senior ICM trainees
- Started as a local pilot in Nottingham
- Now running in 7 centres in all 4 home countries of the UK
- Slowly built up course numbers and faculty so that we can now train every ICM trainee in the UK

Day 1

- Deceased donation in context
- Identification and referral
- Diagnosis of death
- Donor and recipient stories
- Ethics and the law
- Practical approach to ethics (MORAL BALANCE)
- Role of the SNOD
- Approach
- Optimisation

Evening of day 1



Day 2

- Optimise
- Withdrawal
- Ethics
- Dead or not dead
- Diagnosing death by neurological criteria
- 3 comms stations (1 DCD, 2 DBD)

Day 2

- Optimise
- Withdrawal
- Ethics
- Dead or not dead
- Diagnosing death by neurological criteria
- 3 comms stations (1 DCD, 2 DBD)

	START		08.30	09.20	10.05	10.25	11.15	12.00	12.50	13.40	14.25	14.45	15.35	16.25
	08.15	Station leads	09.15	10.05	10.20	11.10	12.00	12.45	13.35	14.25	14.40	15.30	1620	17.00
Master Timetable DAY 2: Faculty	Medical Faculty		Workshop 1	Workshop 2	Refreshments	Workshop 3	Workshop 4	LUNCH	Workshop 5	Workshop 6	Refreshments	Workshop 7	Workshop 8	Plenum Conclusion, Evaluation and Feedback; Faculty Debriefing
		Optimise Chris Booth	Optimise	Optimise		-	-		Optimise	Optimise		Optimise	Optimise	
		Testing Dale Gardiner	-	Testing		Testing	Testing		Testing	Testing		Testing	-	
		WLST Dan Haley	-	Withdraw Martin Thomas		Withdraw Chris Booth+/- MT	Withdraw +PDS		-	Withdraw Martin Thomas		Withdraw Martin Thomas	Withdraw +PDS	
		Comms 1 Andrew Davidson	DBD 1 Ben	DBD 1 Ben		DBD 3 Ben	DBD 1 Chris Booth		DBD 3 Ben	DBD 3 +PDS		-	-	
		Comms 2 Steve Jukes	DBD 1 Dale	-		-	DBD 3 Ben		DBD 1 Dan	DCD 1 Dan		-	DBD 3	
		Comms 3 Pete Hersey	DCD 1 PDS TM Helen	DCD 1 Dan		DCD 1 Dan	-		DCD 1 PDS TM Helen	DBD 1 Ben		DCD 1 Ben	DBD 3 Ben	
		Ethics Dan Harvey Pitfalls Alison Ingham	Ethics M Thomas (observe)	Pitfalls		Pitfalls	Ethics Martin Thomas		Pitfalls	-		Pitfalls	Ethics Martin Thomas	

Costs

- Approx £70000 per annum
- Only worth it if it produces more donors...

They seem to like it



Is that important?

- We are unashamedly going for hearts and minds
- ‘Passionate about organ donation’
- ‘I want to go back to my own unit and start making changes’
- We now have a number of CLODs and 1 R-CLOD who attended as trainees

Knowledge improves

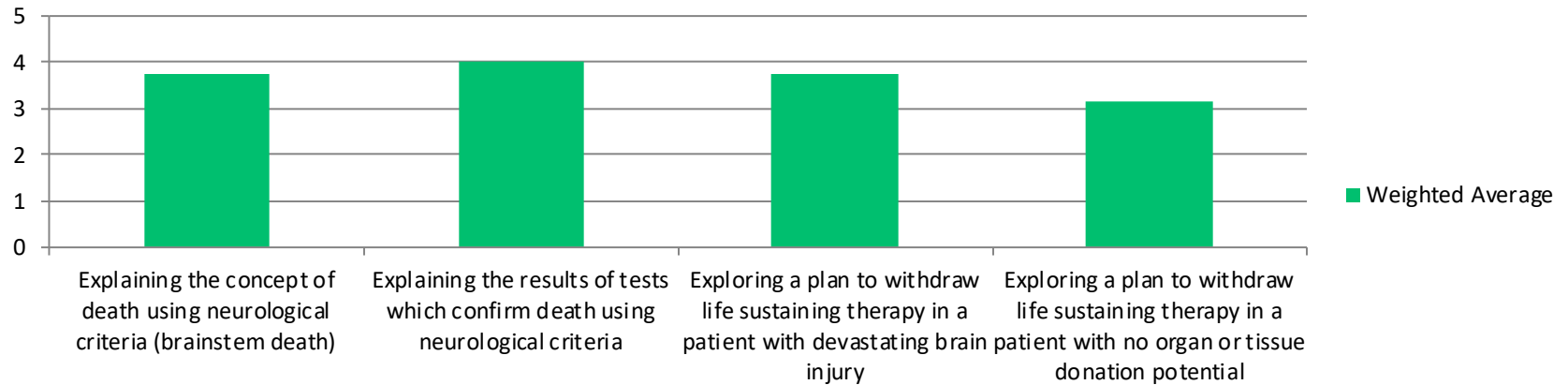
Question	Pre course proportion correct (%)	Post course proportion correct (%)	Chi squared statistic	p-value
The following statements may be consistent with the diagnosis of brain death:				
The patient flexes their arm to finger nail pressure	18/36 (50)	42/47 (89)	15.8	<0.01
The ventilator registers spontaneous respiratory effort	11/36 (31)	45/47 (96)	38.5	<0.01
The patient has a tonic clonic seizure	27/36 (75)	46/47 (98)	10.0	<0.01
The pulse increases from 70bpm to 110bpm during apnoea testing	22/36 (61)	45/47 (96)	15.7	<0.01
There is slow drift of one eye during caloric testing	28/36 (78)	46/47 (98)	8.5	<0.01

Attitudes improve

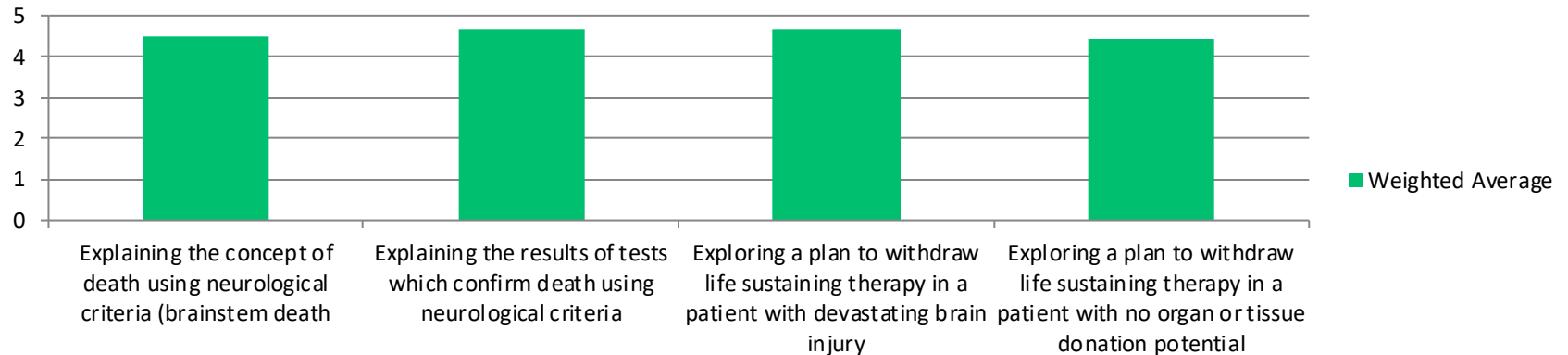
Results

Stage of donation:	Likelihood of SNOD involvement – mean pre-course score (max of 5)	Likelihood of SNOD involvement - mean post-course score (max of 5)	P value (unpaired students T Test)
Explaining concept of brain death	3.76	4.7	0.002
Explaining results of brain death testing	4.0	4.85	0.004
Exploring a plan to WLST on a patient with DBI	3.76	4.9	0.001
Exploring WLST on patient with no donation potential	3.18	4.6	<0.001

Attitudes to SNOD involvement (pre course)



Attitudes to SNOD involvement (post course)







A UK Model for Donation local donation teams



Clinical Lead for
Organ Donation
(CLOD)



'Embedded'
Specialist Nurse for
Organ Donation
(SNOD)



Non-clinical
Donation
Committee Chair
(Chair)

A UK Model for Donation local donation teams



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CLODs shoulder the load

- Twice yearly CLOD induction (fundamentals of OD and CLODing)
- Regional collaboratives
- Rely on CLODs to disseminate national learning to the local level
- Far from perfect...

Undergraduate medicine

- Nothing central from NHSBT
- Dependent on individual medical schools
- But does it matter?

Would the taskforce approve

- Not mandatory – but deliberately so
- Not ongoing – but CLOD induction and the regional collaboratives offers something close (local CLOD dependent)

Summary

- Slow work
- Drip drip effect of multiple interventions
- Anecdotal evidence (i.e. not really evidence) that the DD sim course is having direct effects in centres where OD rarely happened

Blue sky thinking...

- Donation as a recognised area of ICU sub-specialisation?

