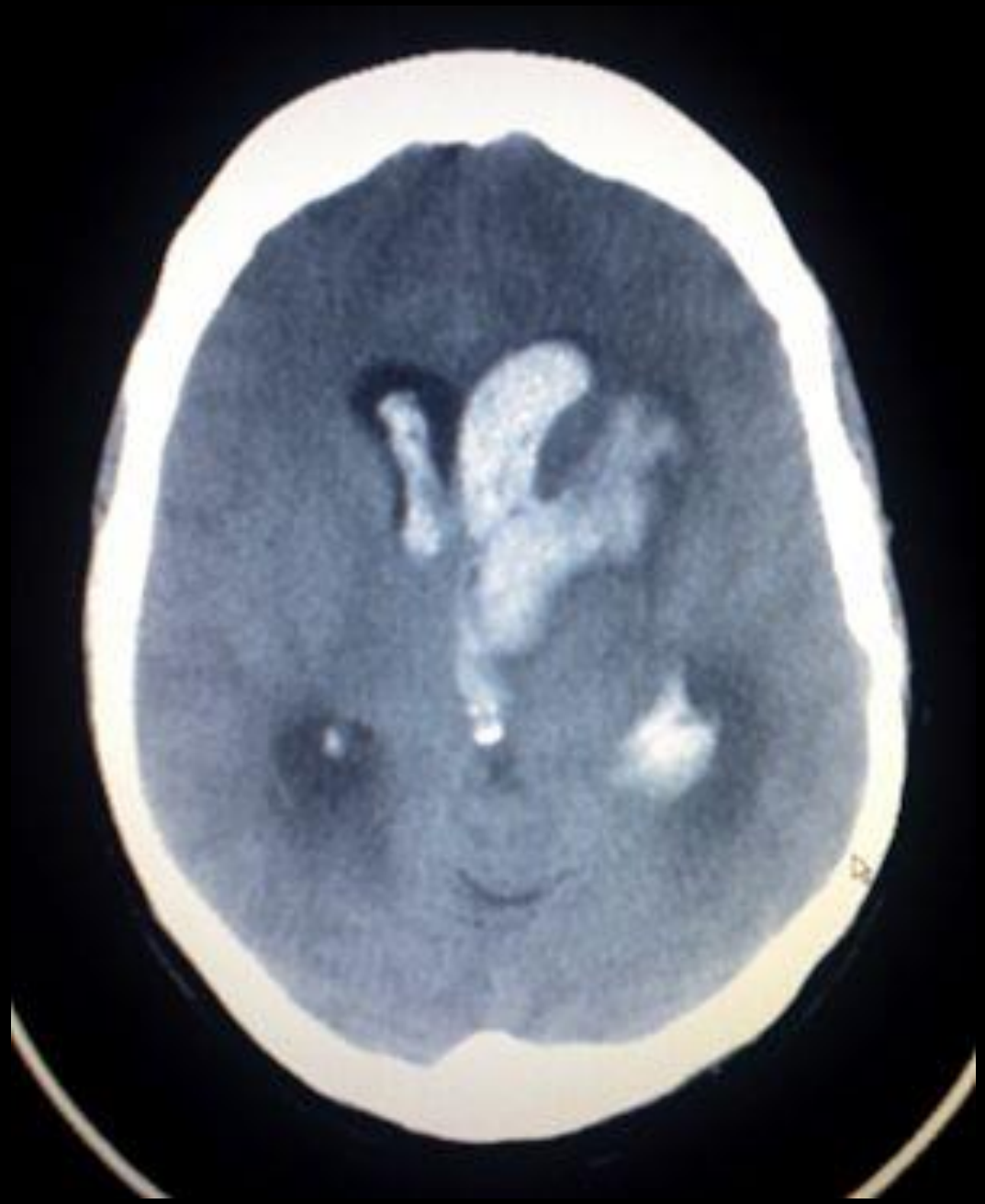
Lighting a candle on the darkest of nights.

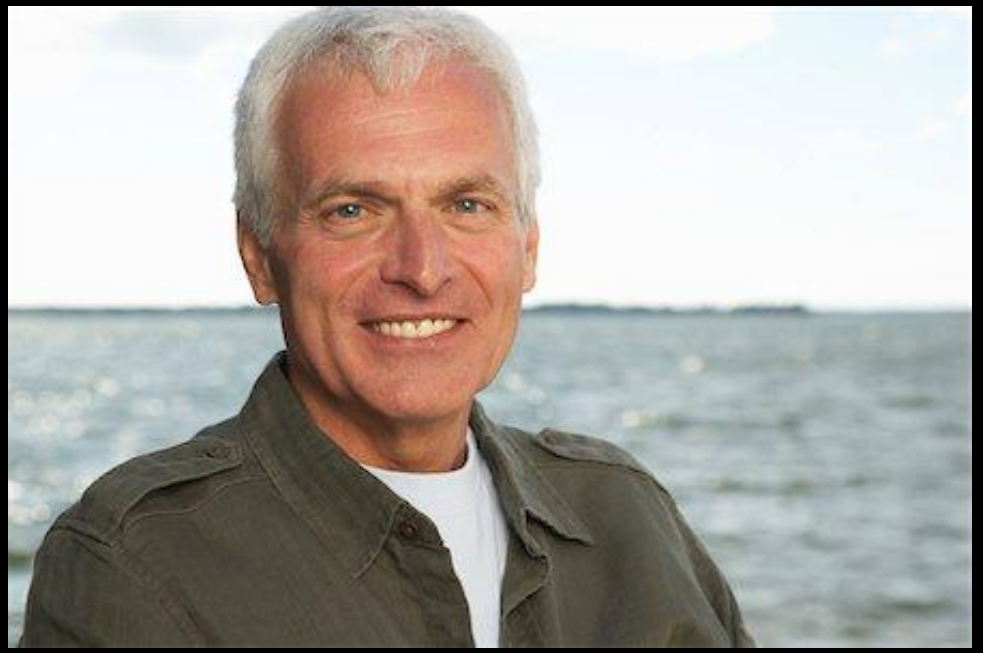
Re-thinking the role of Emergency in Organ Donation

DR MARTIN DUTCH

EMERGENCY PHYSICIAN AND MEDICAL DONATION SPECIALIST

ROYAL MELBOURNE HOSPITAL.





Who we miss in ED

Average Age: 60 years

80% Were intubated
80% Had Intracranial Hemorrhage

Don’t make notes….

https://tinyurl.com/ACEM2018OD8

Objectives of this session

- Introduction
- Best Practice Model
- Tissue Donation
- Resources
- Future

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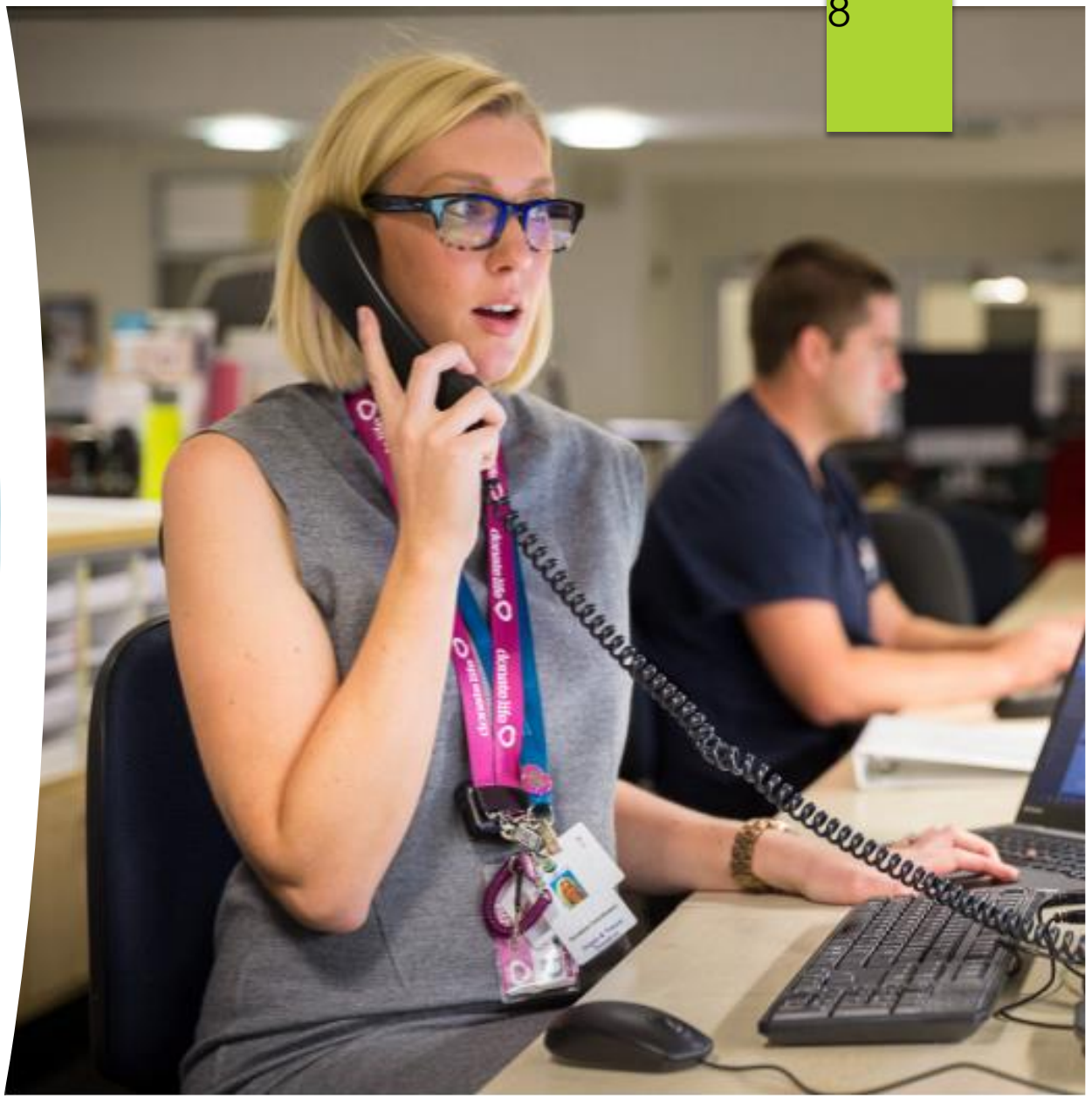
Australian Government
Organ and Tissue Authority

donatelife

- > 250 DonateLife staff
- 150 full-time equivalent positions
- over 90 hospitals
- eight DonateLife Agencies across Australia.



Donation Specialists

- Medical Donation Specialists
- Nurse Donation Specialists
- Nurse Donation Specialist Coordinators

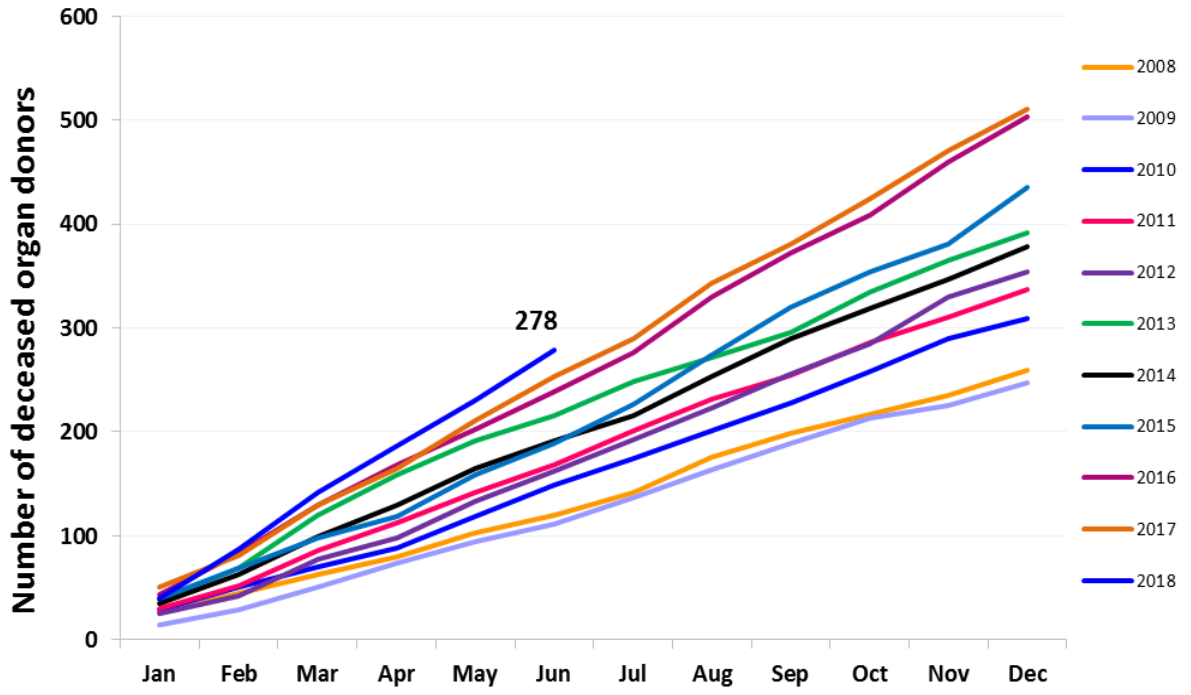
Education Pathway

IDAT → FDC Core → FDC Practical

2018
On-track for
> 550 donors

2017: 510 Donors.

2009: 247 Donors.



2017 Organ Transplants

832

281

51

206

98

1

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2016* Death or De-listing probability

1:7

1:2

1:3

1:3

1:3

*Most recent data published by ANZOD
Calculated on yearly mortality/ average number of people on wait list over 2016.

Relevance to Emergency Medicine?

Why give a rat's?

Most Donors come through Emergency

4,705

Death in Australian EDs /yr[1]

46%

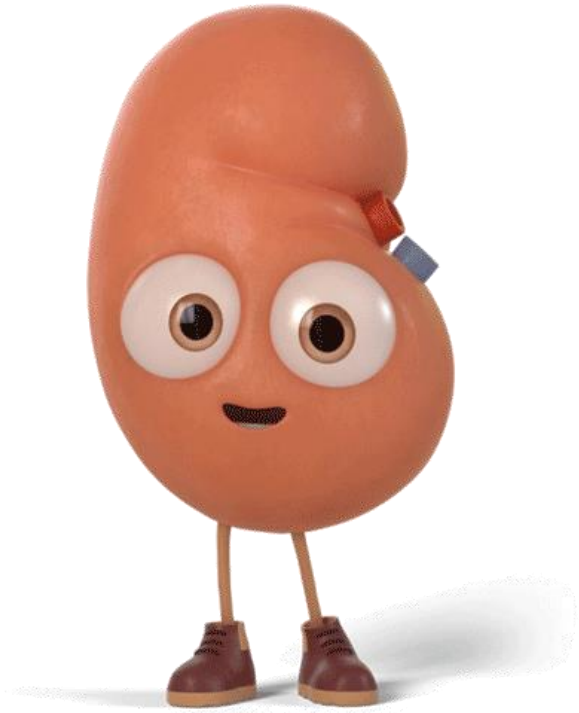
Of missed potential donors occur In emergency. [2]

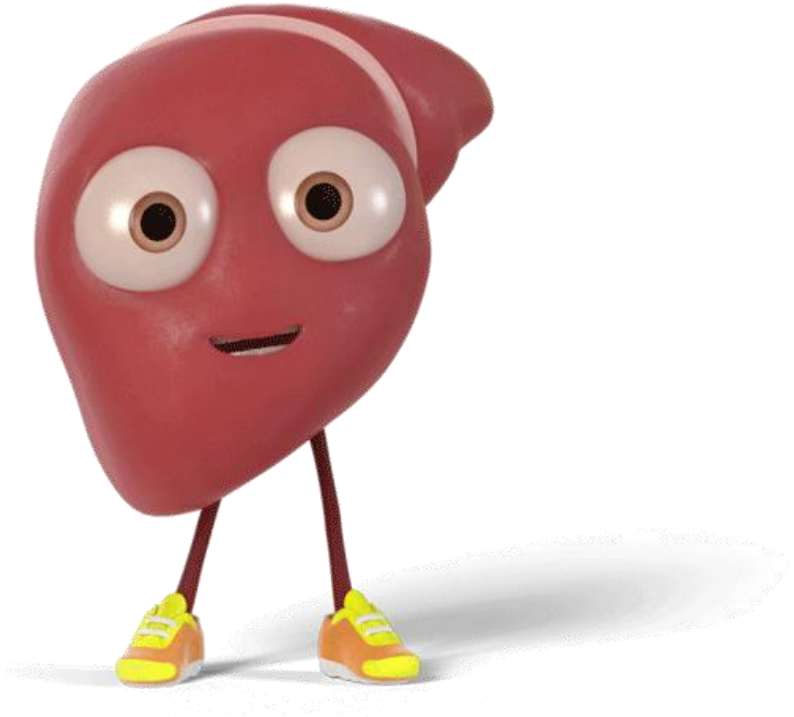
1 Australian Hospital Statistics. Emergency Department Care. 2016-2017. https://www.aihw.gov.au/getmedia/981140ee-3957-4d47-9032-18ca89b519b0/aihw-hse-194.pdf.aspx?inline=true

2 Opdam HI, Silvester W. Identifying the potential organ donor: an audit of hospital deaths. Intensive care medicine. 2004 Jul 1;30(7):1390-7.

What you do matters

My Aim





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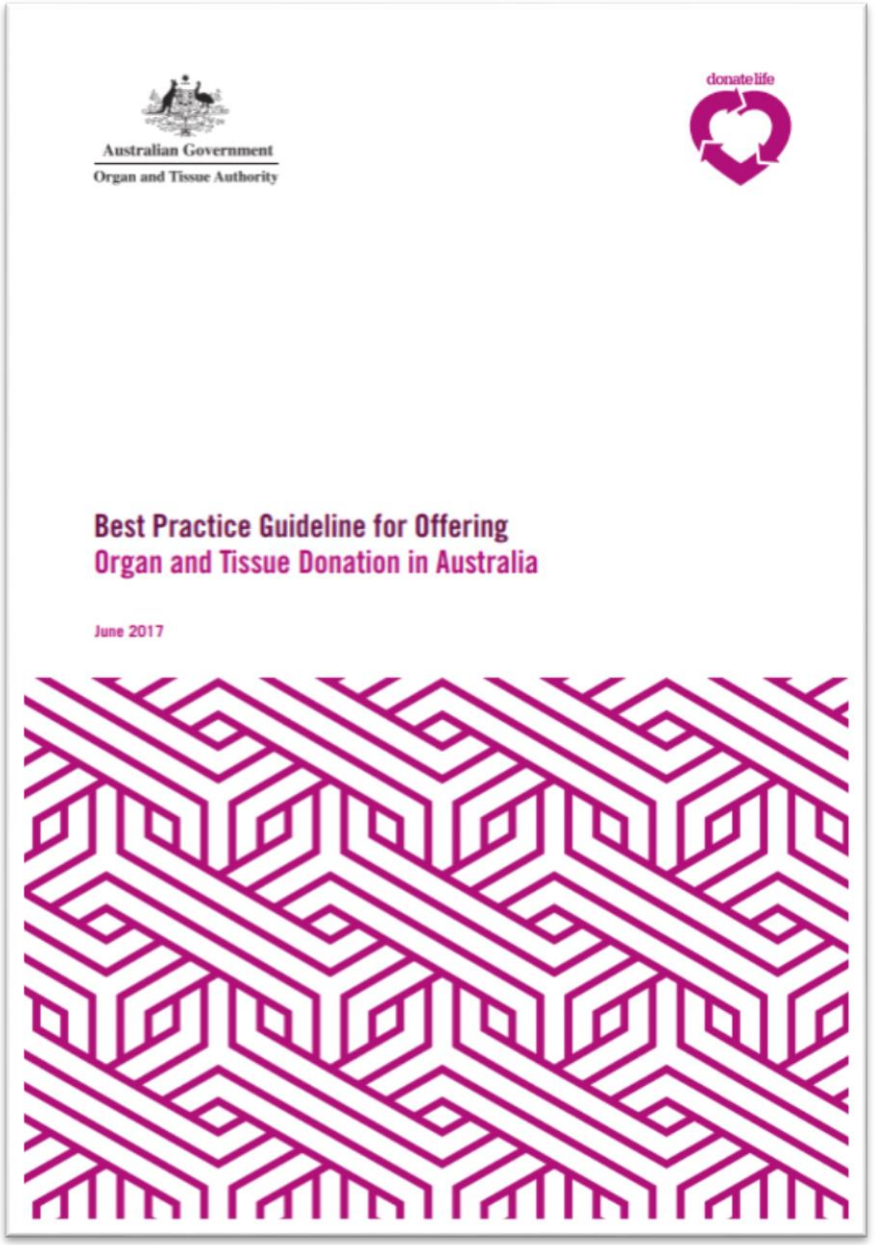
Best Practice in offering Organ and Tissue Donation

Helen Opdam
National Medical Director

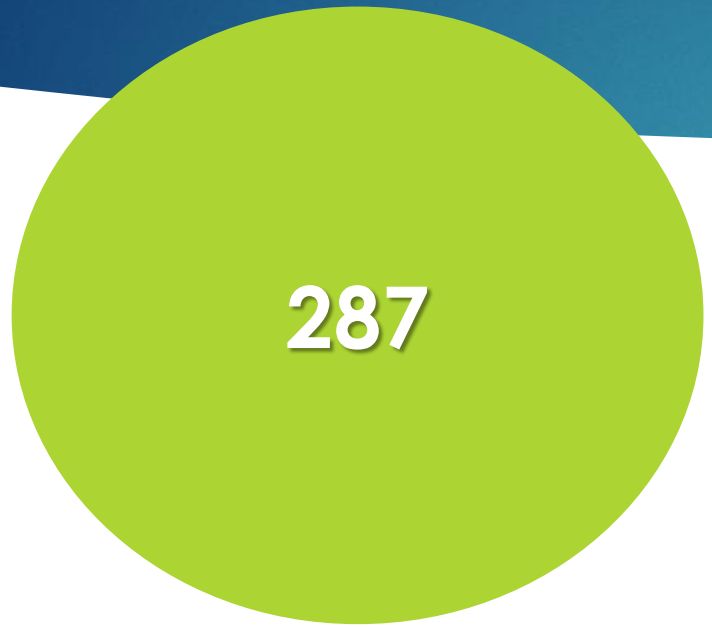


Donatelife.gov.au

- Best Practice Model

ELEMENT 1	Early Identification and Referral to a Donation Specialist
ELEMENT 2	An independent donation specialist is involved in offering donation
ELEMENT 3	Family needs to understand that death has occurred, or will occur post withdrawal of life-supporting treatment.
ELEMENT 4	The Organ Donor Register is checked prior to offering donation
ELEMENT 5	Pre-meeting between treating team and donation specialist
ELEMENT 6	Donation Specialist present when donation is first raised
ELEMENT 7	Family are provided with information to make an informed and enduring decision
ELEMENT 8	Post Family Donation Conversation Process review

The Australian Healthcare Landscape



Australian public hospital emergency departments

https://www.aihw.gov.au/getmedia/981140ee-3957-4d47-9032-18ca89b519b0/aihw-hse-194.pdf.aspx?inline=true

Australian Level 3 and above ICUs.

https://www.aihw.gov.au/getmedia/d37a56cb-dc6b-4b28-a52f-8e00f606ce67/21035.pdf.aspx?inline=true

Accredited Training Posts of the SET Program in Neurosurgery

https://www.nsa.org.au/Documents/Neurosurgial%20Training/RPT2018SETProgramTrainingUnits.pdf

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Scenario 1:

The Tertiary Centre

Royal Melbourne Hospital, Vic

The Tertiary Centre

ELEMENT 1	Early Identification and Referral to a Donation Specialist
ED Care	Provide Aggressive Neuro-critical care
ED Care	Admission to ICU for EOLC in all patients with ETT
ELEMENT 3	Family needs to understand that death has occurred, or will occur post withdrawal of life-supporting treatment.

Early Identification and Referral to a Donation Specialist

Why?

- Confirm Medical Suitability

- Check patient's wishes on AODR

- Facilitate ICU Admission

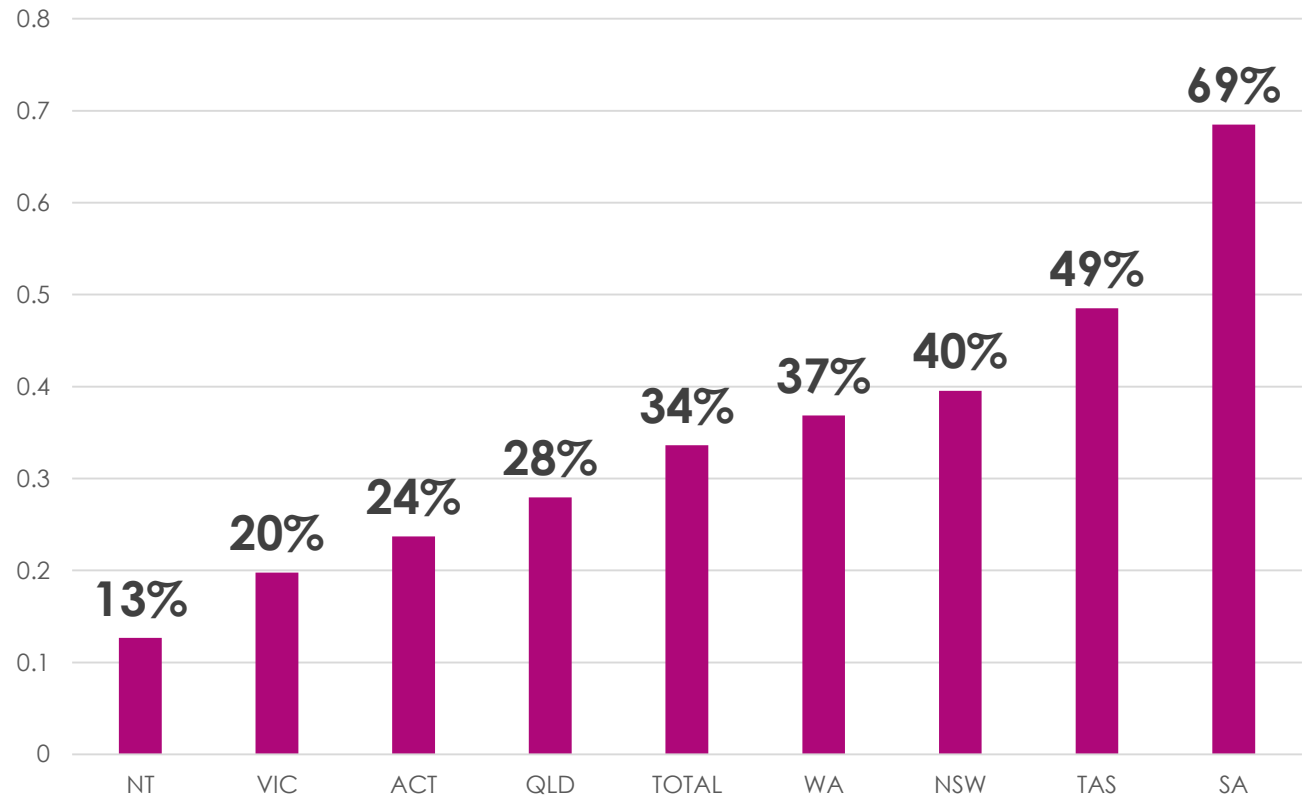
- Additional Bedside Resources

- Problem Solving

- AODR

  Administered by Medicare.
  Donation specialists are only people able to access
  Contains consents and refusals.

Did you know?



Early Identification and Referral to a Donation Specialist

How?

- Lanyard Cards
- Nursing and Medical Education
- M&M Review
- Clinical Champion

Provide Aggressive Neuro-critical care

Why?

- **Early prognostication in catastrophic brain injuries is difficult**
- Optimise outcomes for survivors
- Optimises number of viable organ in organ donors
- Reduces graft dysfunction

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Provide Aggressive Neuro-critical care

Did you Know?

Neurocrit Care (2015) 23:4–13
DOI 10.1007/s12028-015-0137-6

REVIEW ARTICLE

Recommendations for the Critical Care Management of Devastating Brain Injury: Prognostication, Psychosocial, and Ethical Management

A Position Statement for Healthcare Professionals from the Neurocritical Care Society

Michael J. Souter[1] · Patricia A. Blissitt[2,3] · Sandralee Blosser[4,5] · Jordan Bonomo · David Greer[8] · Draga Jichici[9] · Dea Mahanes[10] · Evie G. Marcolini[11] · Charles Miller[12] · Kiranpal Sangha[13] · Susan Yeager[14]

Published online: 18 April 2015
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Abstract Devastating brain injuries (DBIs) profoundly damage cerebral function and frequently cause death. DBI survivors admitted to critical care will suffer both intracranial and extracranial effects from their brain injury. The indicators of quality care in DBI are not completely defined, and despite best efforts many patients will not survive, although others may have better outcomes than originally anticipated. Inaccuracies in prognostication can result in premature termination of life support, thereby biasing outcomes research and creating a self-fulfilling cycle where the predicted course is almost invariably dismal. Because of the potential complexities and controversies involved in the management of devastating brain injury, the Neurocritical Care Society organized a panel of expert clinicians from neurocritical care, neuroanesthesia, neurology, neurosurgery, emergency medicine, nursing, and pharmacy to develop an evidence-based guideline with practice recommendations. The panel intends for this guideline to be used by critical care physicians, neurologists, emergency physicians, and other health professionals, with specific emphasis on management during the first 72-h post-injury. Following an extensive literature review, the panel used the GRADE methodology to evaluate the robustness of the data. They made actionable recommendations based on the quality of evidence, as well as on considerations of risk: benefit ratios, cost, and user preference. The panel generated recommendations regarding prognostication, psychosocial issues, and ethical considerations.

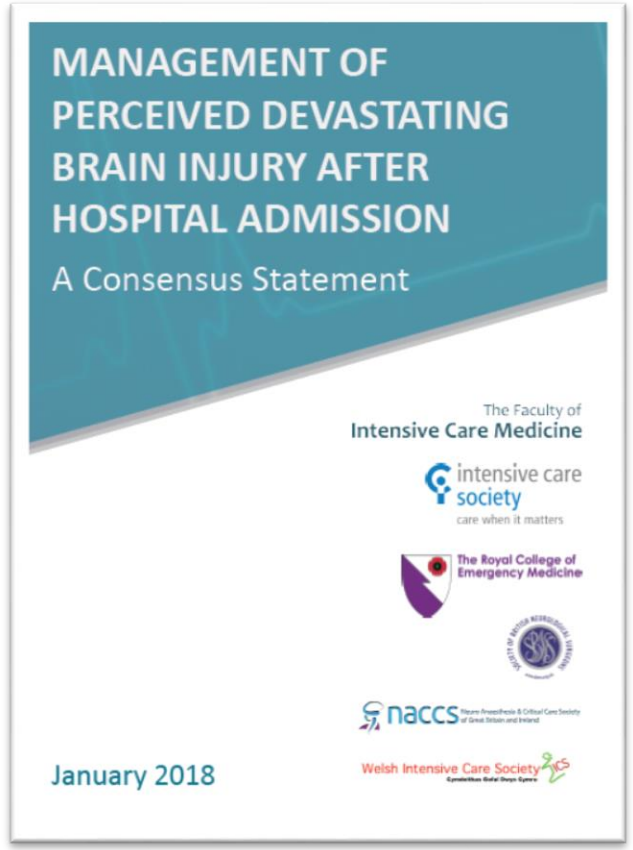
Keywords Devastating brain injury · Critical care management · Neurocritical care · Evidence · Guidelines · Recommendations · GRADE

Electronic supplementary material The online version of this article (doi:10.1007/s12028-015-0137-6) contains supplementary material, which is available to authorized users.

✉ Michael J. Souter
msouter@uw.edu

[1] Departments of Anesthesiology & Pain Medicine, and Neurological surgery, Harborview Medical Center, University of Washington, Seattle, WA 98104, USA
[2] Harborview Medical Center, University of Washington School of Nursing, Seattle, WA, USA
[3] Swedish Medical Center, Seattle, WA, USA
[4] Pittsburgh Critical Care Associates, Pittsburgh, PA, USA
[5] Penn State Hershey Medical Center, Hershey, PA, USA
[6] Department of Emergency Medicine, Division of Critical Care, University of Cincinnati College of Medicine, Cincinnati, OH, USA
[7] Department of Neurosurgery, Division of Neurocritical Care, University of Cincinnati College of Medicine, Cincinnati, OH, USA
[8] Departments of Neurology and Neurosurgery, Yale University School of Medicine, New Haven, CT, USA
[9] Department of Neurology and Critical Care Medicine, McMaster University, Hamilton, ON, USA
[10] University of Virginia Health System, Charlottesville, VA, USA
[11] Departments of Emergency Medicine and Neurology, Divisions of Neurocritical Care and Emergency Neurology and Surgical Critical Care, Yale University School of Medicine, New Haven, CT, USA
[12] Sanford University South Dakota School of Medicine, Sioux Falls, SD, USA
[13] University of Cincinnati Medical Center and University of Cincinnati College of Pharmacy, Cincinnati, OH, USA
[14] The Ohio State University Wexner Medical Center, Columbus, OH, USA

Springer



Souter MJ, Blissitt PA, Blosser S, Bonomo J, Greer D, Jichici D, Mahanes D, Marcolini EG, Miller C, Sangha K, Yeager S. Recommendations for the critical care management of devastating brain injury: prognostication, psychosocial, and ethical management. Neurocritical Care. 2015 Aug 1;23(1):4-13.

https://www.ficm.ac.uk/sites/default/files/dbi-consensus-statement-2018.pdf

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Provide Aggressive Neuro-critical care

Did you Know?

"There are patients in whom severe brain injury is perceived to be devastating and active intervention not thought to be appropriate.

However, **prognostication at this stage can be inaccurate**, and a period of physiological stabilisation and observation is recommended to improve the quality of decision making.

Patients who are intubated will require admission to critical care for this period of observation…"

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Provide Aggressive Neuro-critical care

Achieving normal physiology increases organs per donor

2x

The number of people who donated 4 or more organs.

UNOS Donor Management Goals

Donor Management Goals	Parameters
Mean arterial pressure	60–100 mm Hg
Central venous pressure	4–10 mm Hg
Ejection fraction	>50%
Vasopressors	≤1 and low dose[a]
Arterial blood gas pH	7.3–7.45
Pao_2:FIo_2	>300
Serum sodium	135–155 mEq/L
Blood glucose	<150 mg/dL
Urine output	0.5–3 mL/kg/hr over 4 hrs

[a]Low dose of vasopressors was defined as dopamine ≤10 μg/kg/min, neosynephrine ≤60 μg/kg/min, and norepinephrine ≤10 μg/kg/min.

Franklin GA, Santos AP, Smith JW, Galbraith S, Harbrecht BG, Garrison RN. Optimization of donor management goals yields increased organ use. The American Surgeon. 2010 Jun 1;76(6):587-94.

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Provide Aggressive Neuro-critical care

Achieving normal physiology improves post transplant function

50%

Reduction in delayed graft function

The Impact of Meeting Donor Management Goals on the Development of Delayed Graft Function in Kidney Transplant Recipients

D. J. Malinoski[a,*], M. S. Patel[b], O.Ahmed[c], M. C. Daly[c], S. Mooney[d], C. O. Graybill[d], C. E. Foster[e] and A. Salim[c], on behalf of the United Network for Organ Sharing (UNOS) Region 5 Donor Management Goals (DMG) Workgroup†

Introduction

Malinoski DJ, Patel MS, Ahmed O, Daly MC, Mooney S, Graybill CO, Foster CE, Salim A. The impact of meeting donor management goals on the development of delayed graft function in kidney transplant recipients. American Journal of Transplantation. 2013 Apr 1;13(4):993-1000.

Provide Aggressive Neuro-critical care

How?

- Intubation: Before scan.
- Arterial Line
- Drawn up vasopressors infusions, even if hypertensive.
- IDC
- Sedation is swapped to propofol
- 30 degrees head up

Provide Aggressive Neuro-critical care

Require Vasopressor Support

Admit to ICU for EOLC

Why?

- **Admission to ICU buys time for family to process situation.**
- ICU has more experience in delivering EOLC.
- Is often an nicer environment for family.
- Admission to explore OD is a cost effective se of health resources
- Time improves consent rates in organ donation

Admit ICU for EOLC

Deaths per patient encounter

1 in 1,560

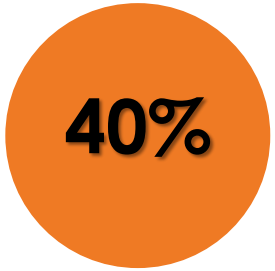
1 In 20

https://www.aihw.gov.au/getmedia/981140ee-3957-4d47-9032-18ca89b519b0/aihw-hse-194.pdf.aspx?inline=true

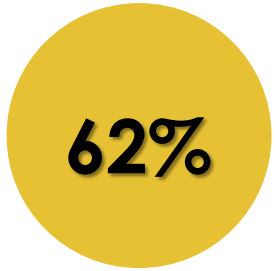
https://www.anzics.com.au/wp-content/uploads/2018/08/ANZICS-CORE-APD-Activity-Report-2016-17.pdf

Admit to ICU for EOLC

Effect of waiting until >8hrs after admission to raise donation.



Consent rate when raised with family <8hrs after admission



Consent rate when raised with family > 8 hours after admission.

P= 0.0092

Unpublished, data provided by DonateLife NSW.
N=185 Family Donation Conversations. 2016/17.

Admit to ICU for EOLC

Cost Utility of admission to ICU

QALY per icu-bed day

Standard ICU admission

QALY per icu-bed day

Palliative Care ICU Admission

Nunnink L, Cook DA. Palliative ICU beds for potential organ donors: an effective use of resources based on quality-adjusted life-years gained. Critical Care and Resuscitation. 2016 Mar;18(1):37.

Admit to ICU for EOLC

How?

- **MOU with ICU: That ICU admission is appropriate for EOLC in all intubated patients.**
- Buy Private Sector Beds: Each OD Admission is worth 10-$14K for the hospital.
- Consider inter-hospital transfer to facilitate OD.
- Escalation Plan: ICU Consultant/ ED Consultant
- Risk-man failure to access ICU when it limits OD.

Family needs to understand that death has occurred, or will occur post withdrawal of life-supporting treatment.

- **Roll of ED: Expectation setting.**
- **Roll of ED: Introduce dying**

"I'm worried that he's dying"

Raising OD early in ED can offend family members still processing futility.

Each Member of the family has Different Processing Speeds

Run the conversation based on the slowest adult/teenage member

Allow others to catch-up, by slowing things down.

"But I don't know a funeral director…

"We should call a priest…

"Could he be an organ donor…

There is time for that…."

We can help with that…"

"That's a very generous consideration, I will pass your question on to the intensive care team."

But why are we going to intensive care?

It allows time for Uncle Bob to attend and say good bye

It's a nicer, quieter place for your family.

It gives us time to support your family and their needs

It gives us time to explore what Bob would have wanted when he dies

Who works in a hospital without a neurosurgical service?

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Scenario 2:

Everywhere else

Tennent Creek, Northern Territory

PHOTO ILLUSTRATION/GETTY IMAGES/CNN

Potential Pathways

Move the team

Move the patient

Photos: Andrew Chapman
http://www.andrewchapmanphotography.com/giving-life/

Everywhere else

ELEMENT 1	**Early Identification and Referral to a Donation Specialist**
ED Care	**Provide Aggressive Neuro-critical care**
ED Care	**Admission to ICU for EOLC in all patients with ETT**
ELEMENT 3	**Family needs to understand that death has occurred, or will occur post withdrawal of life-supporting treatment.**
ED Care	**Come to a conclusion about futility**
ICU Care	**Confirm Brain Death**

Everywhere else

ELEMENT 4	**Check the AODR to know the patient's wishes**
ELEMENT 5	**Have a pre-meeting and allocate roles**
ELEMENT 6,7	**Conduct a collaborative Family Donation Conversation**
ELEMENT 8	**Have a post-meeting quality review**

3 - Family meetings

- The telegraphing meeting
  - Very Serious
  - "Placing on life support"
  - Call family in

Early Referral

Pre-Futility and FDC meeting

- Futility meeting
  - The Wall
  - "Dying"
  - Momentum
- Family Donation Conversation
  - Collaborative approach
  - The Empty Chair
  - Information to make an informed decision to explore donation further

Telegraphing meeting

- "Very Serious"
- "Placing on life support"
- "I think you should call in the family"

- Other supports? Priest?
- Maslow's Hierarchy
  - Eat, Drink, Toilet, Rest.
  - Communicate

Early Referral

- **Ring a donation specialist**
  - Confirm Provisional Medical Suitability & Clinical Need
  - Check the AODR so you know if the patient has previously registered their opinion regarding organ donation.
  - Eg.
    - 85 year old liver ☑
    - Hep C +ve lungs ☑
    - A patient with prostate Ca and a **GBM** ☑
    - A patient with un-survivable burns ☑

Handy (NOT ESSENTIAL) things to have prior to phoning

- Name, DOB, Address or Medicare number.
- Bloods
  - U&E for renal suitability
  - LFTs for Liver Suitability
  - ABG on 100% FIO2 for Lung Suitability
  - Blood Group to identify need.
- Basic past medical history
  - Smoking History
  - Special focus on malignancy
  - Special focus of BBV

Futility meeting: 3 Elements

- Elements which may be useful
  - The Wall
  - Momentum
  - "Dying"

Futility meeting

- Elements which may be useful
  - The Wall
    - Telemedicine
  - Momentum
    - Cascading Systems Failure
  - "Dying"

Emergency Specialist

Intensivist

Neurologist

Neurosurgeon

Futility meeting

- Elements which may be useful
  - The Wall
    - Telemedicine
  - Momentum
    - Cascading Systems Failure
  - "Dying"
  - **I'm going to give you some time now to spend with him/her.**
  - **I'd like to meet with you again in 20 minutes**

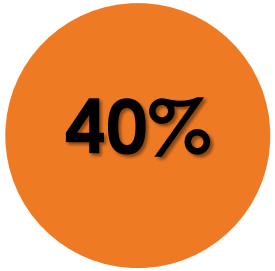
Processing Time

Normal Day

Futility

Effect of waiting
8 hours

Effect of waiting until >8hrs after admission to raise donation.



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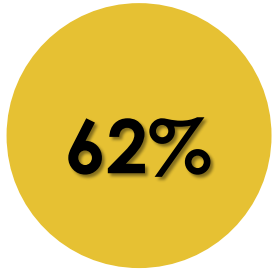

Consent rate when raised with family > 8 hours after admission.

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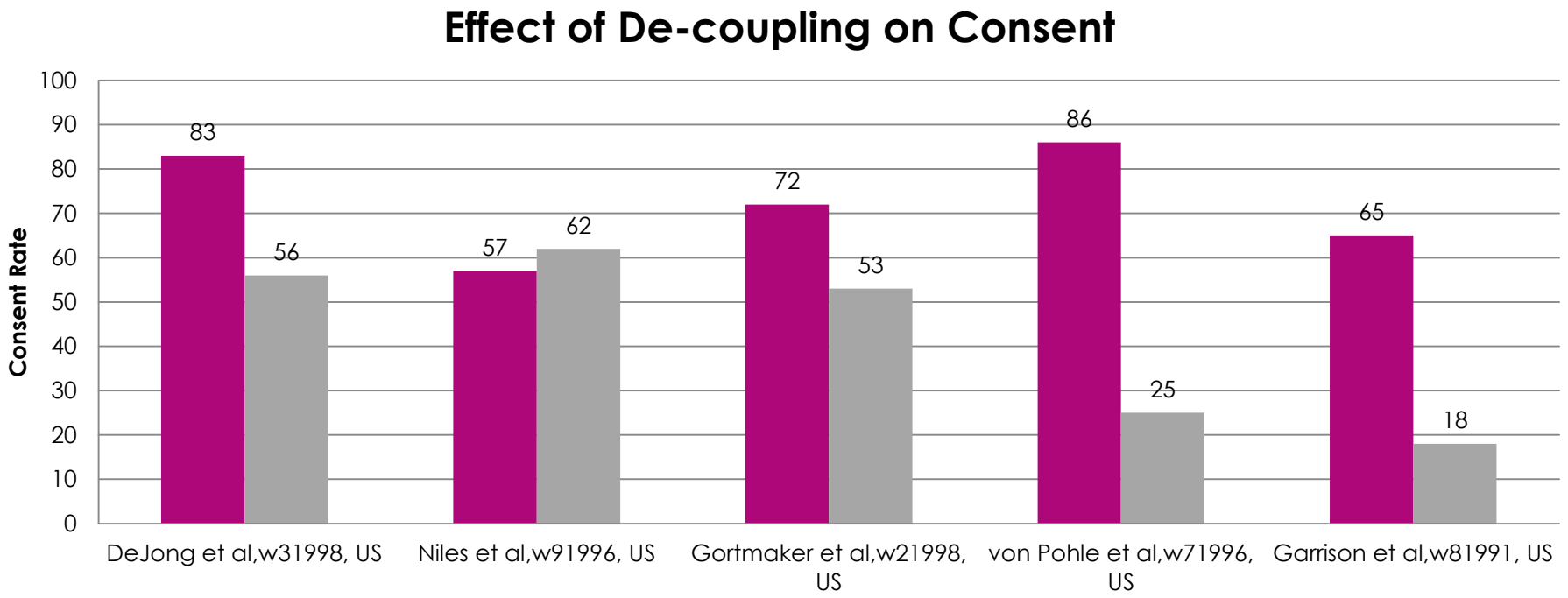
Should we separate Futility and Donation Conversations?



Simpkin AL, Robertson LC, Barber VS, Young JD. Modifiable factors influencing relatives' decision to offer organ donation: systematic review. Bmj. 2009 Apr 21;338:b991.
https://www.bmj.com/content/338/bmj.b991

Signs of understanding futility

- Crying
- Family Raise
  - Donation
  - What Happens Next
  - When do you remove LST?
  - Funeral Homes/ Plans

Raising Donation

WHAT DO WE KNOW?

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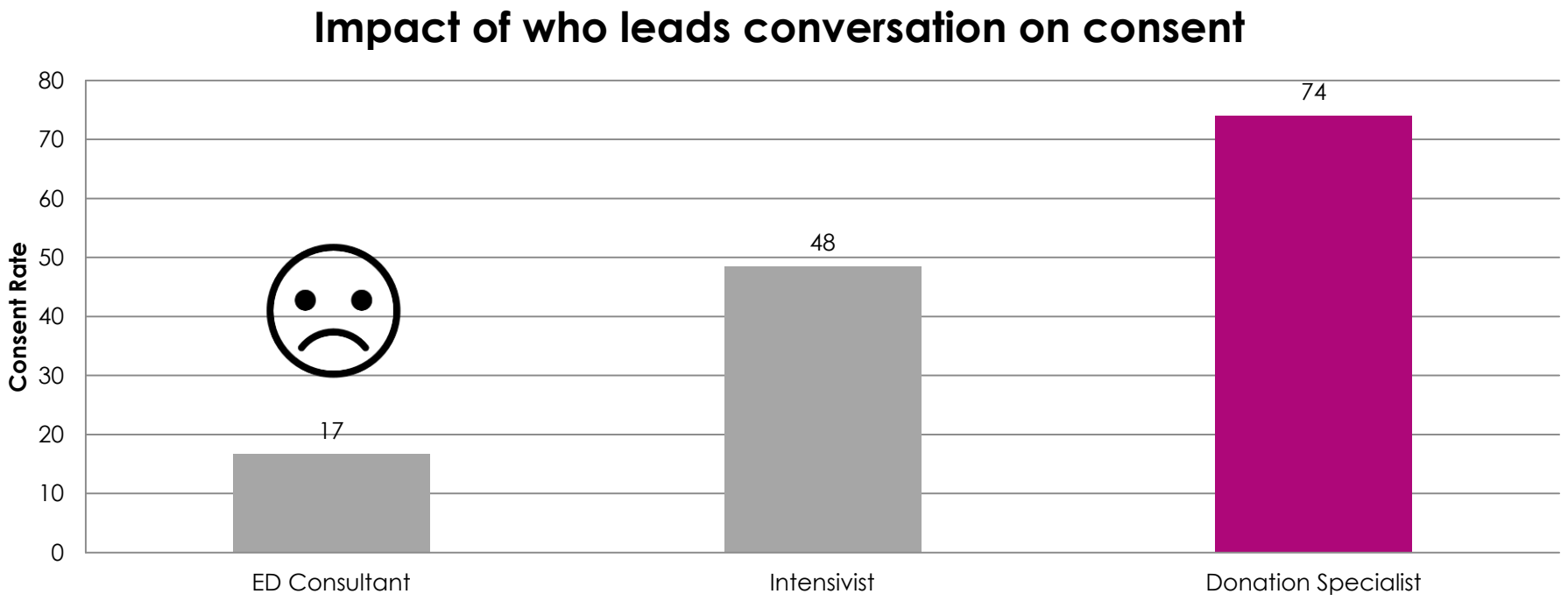
70%

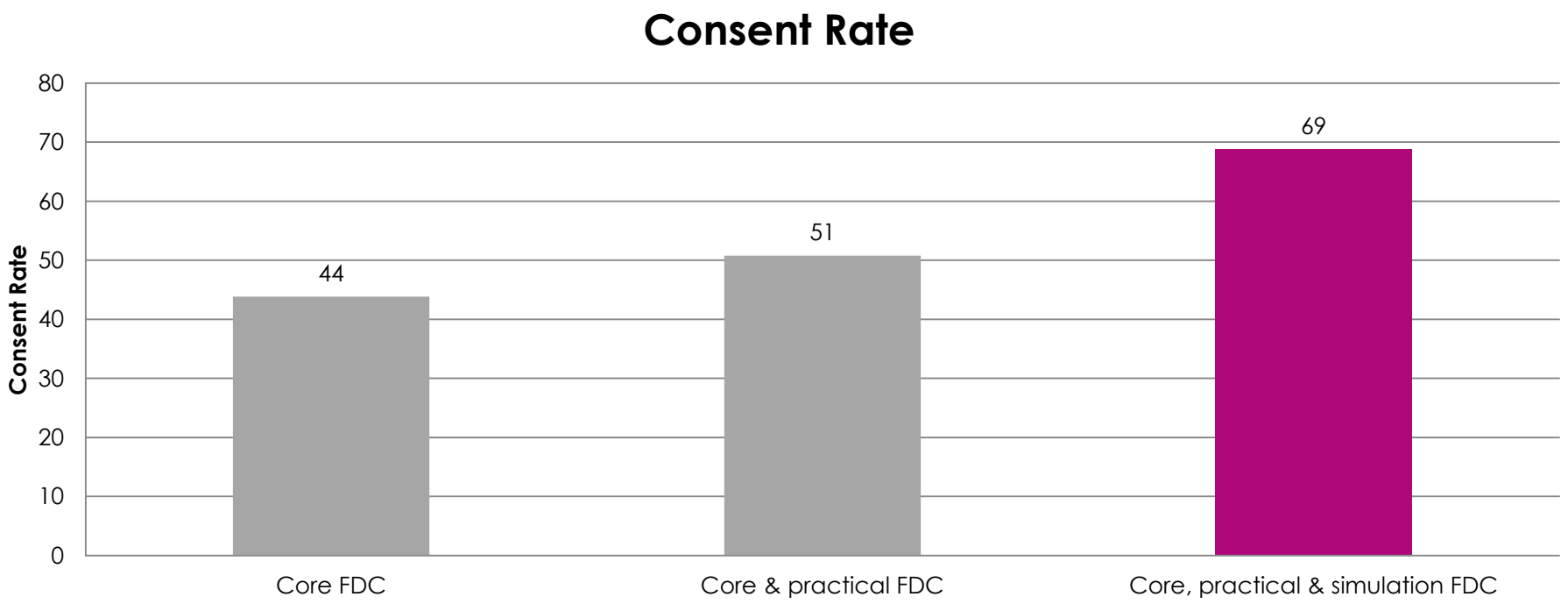
Of Australians would want to be an organ donor

Should we lead a conversation about donation?



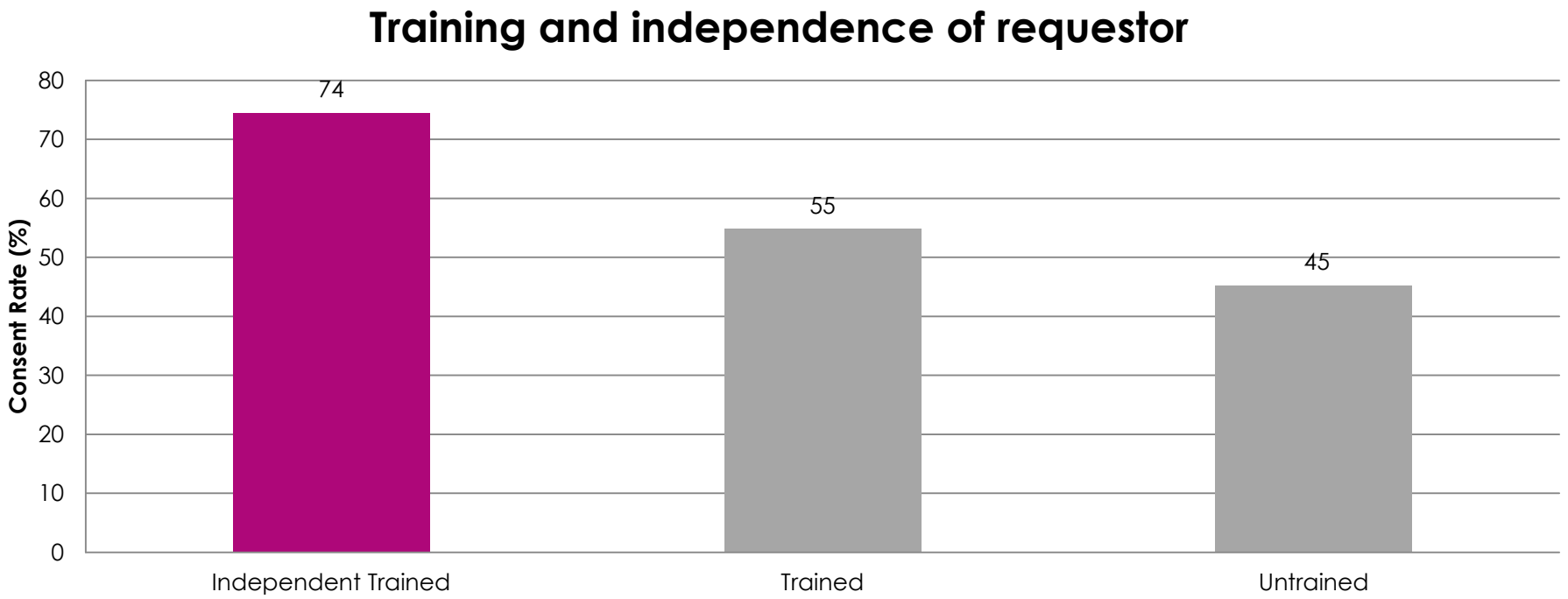
Personal Communication. Dr E Cavazzoni.
NSW DonateLife Referral Log 2018: n=840 referrals 2018 YTD.

Should we get training?



Personal Communication. Dr E Cavazzoni.
NSW DonateLife Referral Log 2018: n=840 referrals 2018 YTD.

Should we use an independent requestor?



Results of an evaluation of a pilot of models for requesting organ and tissue donation in Australia . AUSTRALIAN INSTITUTE FOR PRIMARY C AGEING.
https://donatelife.gov.au/sites/default/files/Evaluation%20Public%20Summary%20FINAL%20%2807102015%29%20OTA%20clean%20VLrevised191

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Should we check the AODR prior to a family donation conversation?

Patient:

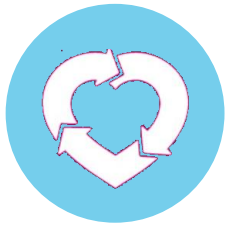
YES.

Autonomy

Family:

Yes

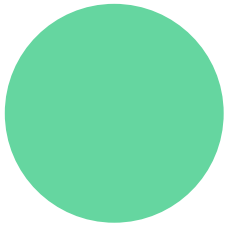
Remove Burdon of decision making



System:

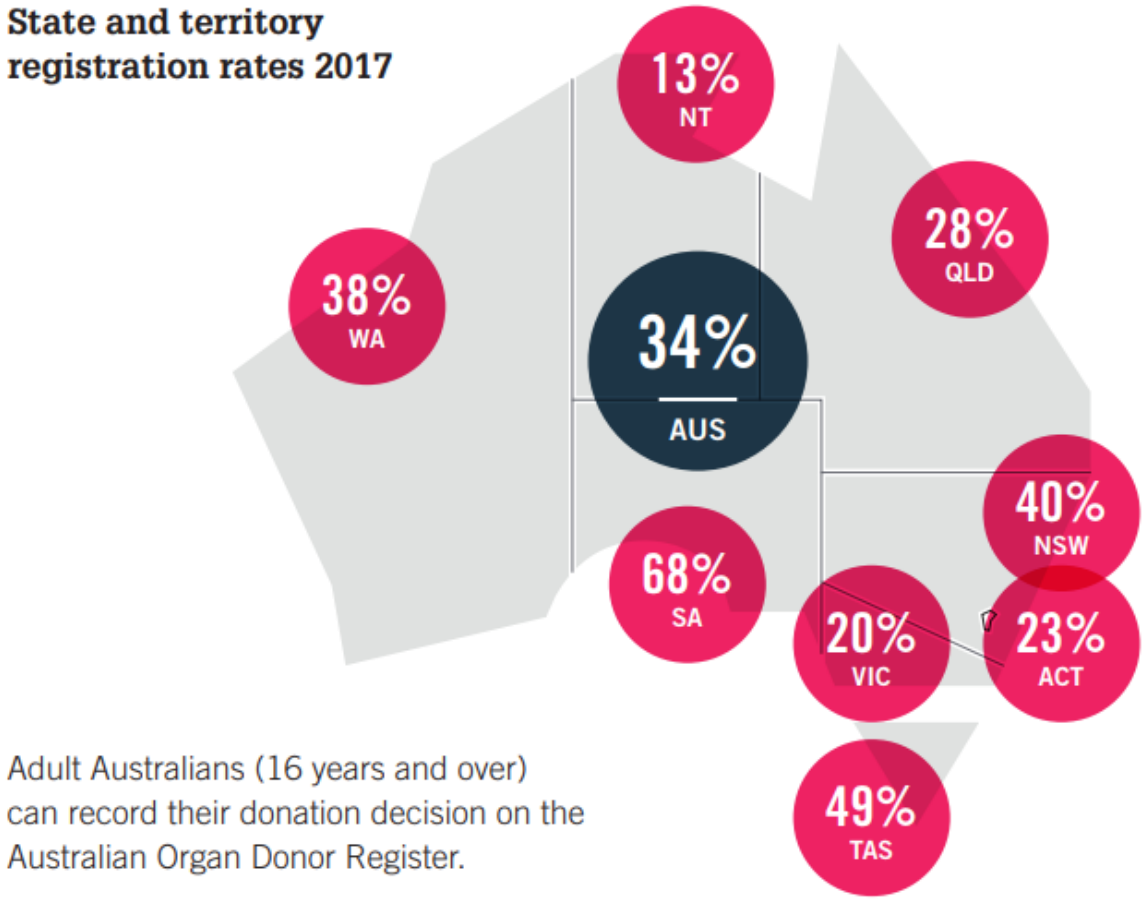
Yes

Improved consent rates



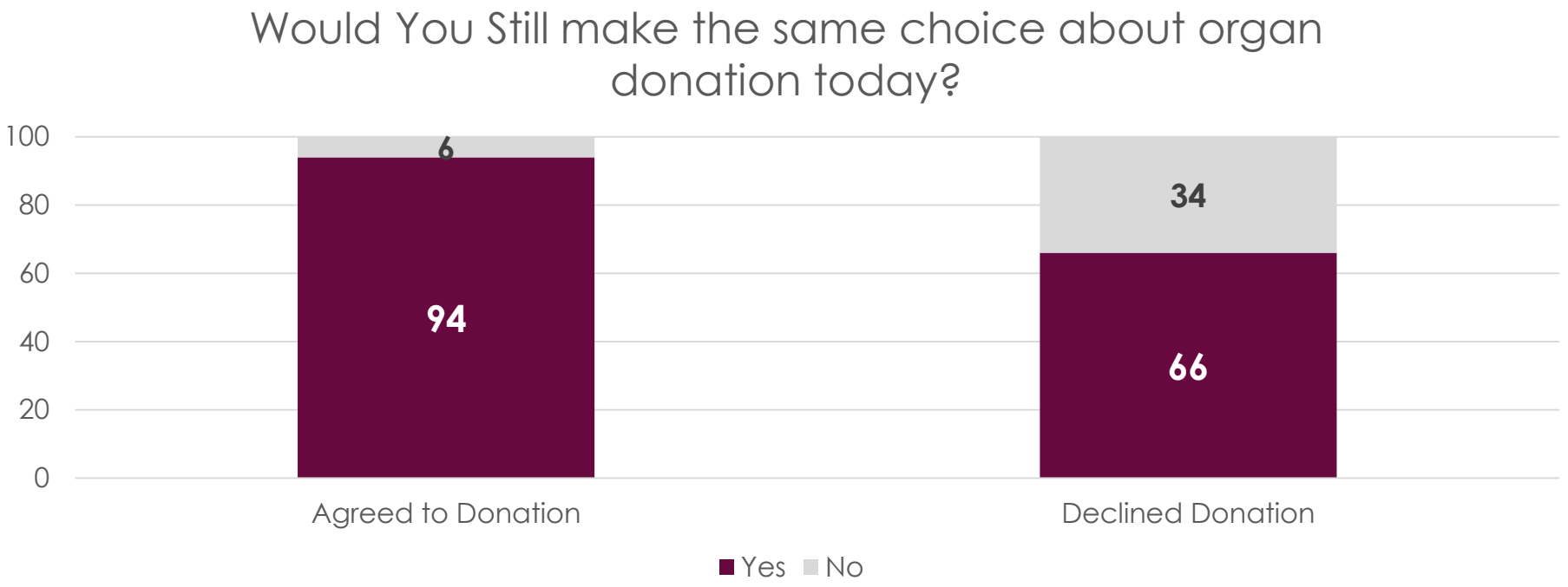
Australian Organ Donation Register

Registration Coverage



Adult Australians (16 years and over) can record their donation decision on the Australian Organ Donor Register.

Enduring decision?



Enduring Decision? Australian Data

Now that some time has passed, how would you describe your level of comfort with your decision?

DonateLife: Phase 2 Donor Family Study.
https://donatelife.gov.au/resources/donor-families/national-donor-family-study

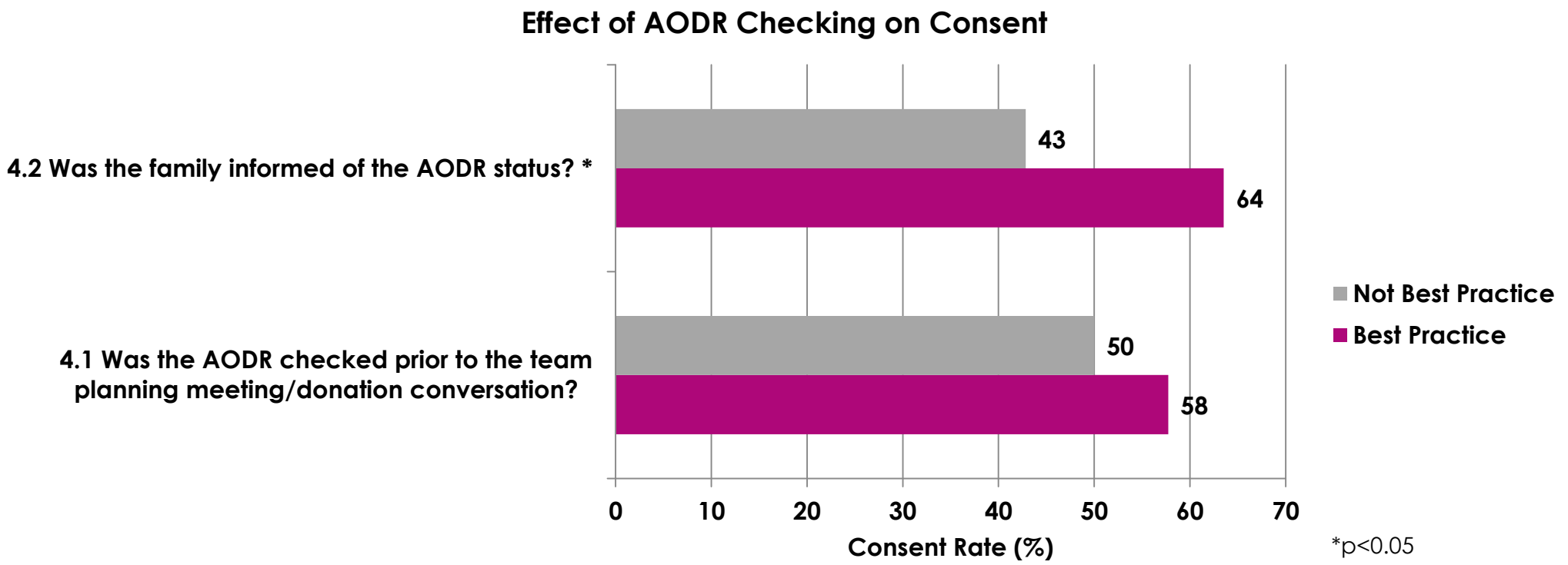
Base Total sample, less non-response
Consented to donation: Wave 2 (n=314); Wave 1 (n=185)
Declined donation: Wave 2 (n=12)

Should we check the AODR?

National Audit Data, Organ and Tissue Auth

Australian Government
Organ and Tissue Authority

Should we check the AODR?



Personal Communication. Dr E Cavazzoni.
NSW DonateLife Referral Log 2018: n=840 referrals 2018 YTD.

ACEM2018ASM ON THE EDGE
35TH ANNUAL SCIENTIFIC MEETING PERTH18-22 NOVEMBER

Raising Donation

WHAT DO WE DO?

Team Huddle

- Speak to Donate Life
  - Confirm AODR Status
  - Confirm Medical suitability and need
- Form at least 2 experienced clinicians
  - Treating team
  - Independent donation raiser
- Role allocation

3rd Party Trained Requestor

The Family Member(s)

Treating Clinician

Trained Requestor

The Discussion

- Aim:
  - Informed and enduring decision that sits comfortably with the patient and family.
- Potential Elements
  - Understanding of the person, and their values
  - Discussing the benefits of donation
  - Informing family of AODR status
  - Donation preference: Explore donation further

One tip…the empty chair.

The **2010 Nobel Peace Prize** was awarded to imprisoned Chinese human rights activist Liu Xiaobo "for his long and non-violent struggle for fundamental human rights in China".[1]

Invite remembrance

Tell me a bit about your dad….

What sort of person was he?

Introduce Donation Facts:

Rarity

- Only a very small number of people who die in hospital can become organ donors*
- Because of the way … has died, he has the ability to become an organ donor.

1-3% of all hospital deaths.

Benefits

- "someone who donates their organs, has the ability to save many peoples lives."
- "My role is to provide you with information to make a decision that would sit comfortably with your loved one, and with your family.. Both now and in the future."
- "if you wanted to explore the opportunity for … to be an organ donor, we would have to transfer him to a specialist hospital."
- OR "if … wanted to become an organ donor, this is something we could do in our hospital."
- "What we have heard from some donors families is the act of donation has helped them find some meaning out their tragedy"

Bringing the patient into the room

"Because your Dad has the ability to become an organ donor, we have checked if he had registered his wishes on the National Organ Donor Registry. Unfortunately, we don't have a record of his wishes.

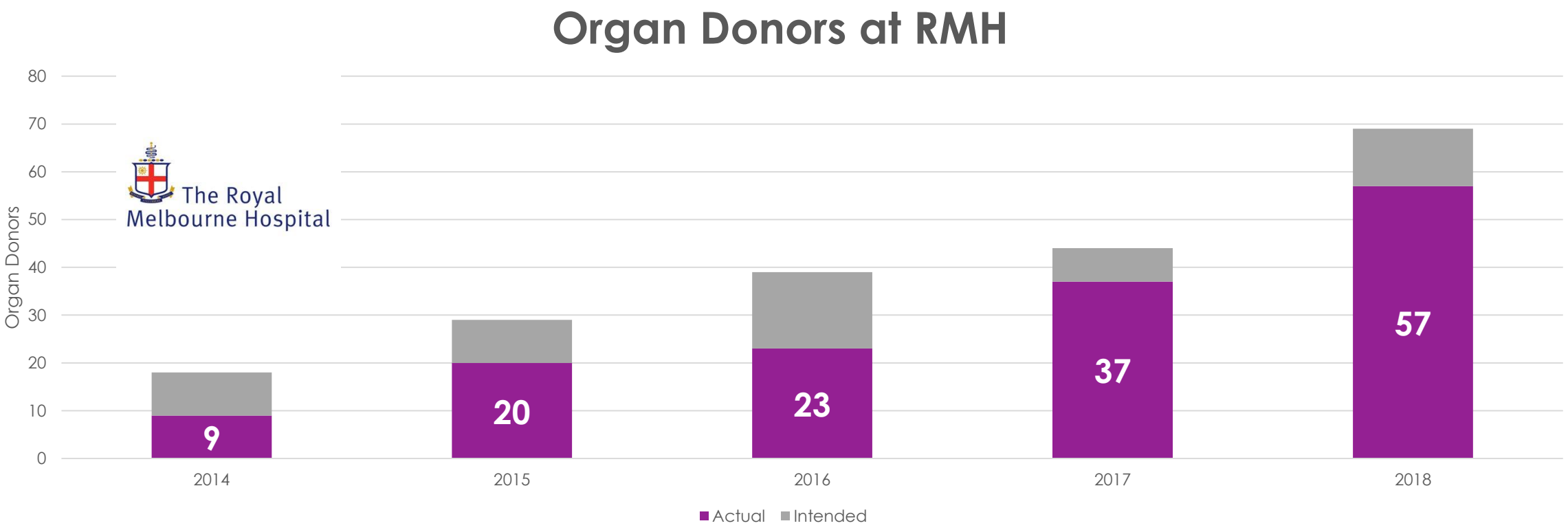
However, If your dad was in the room hearing this discussion, what do you think his views would be about organ donation?"

To be avoided: Questions with yes/no answers

- Have you discussed donation?
- Do you want your Dad to be an organ donor?

Team Debrief

What does it look like when we do it right?



What does it look like when we do it right?

The Royal Melbourne Hospital

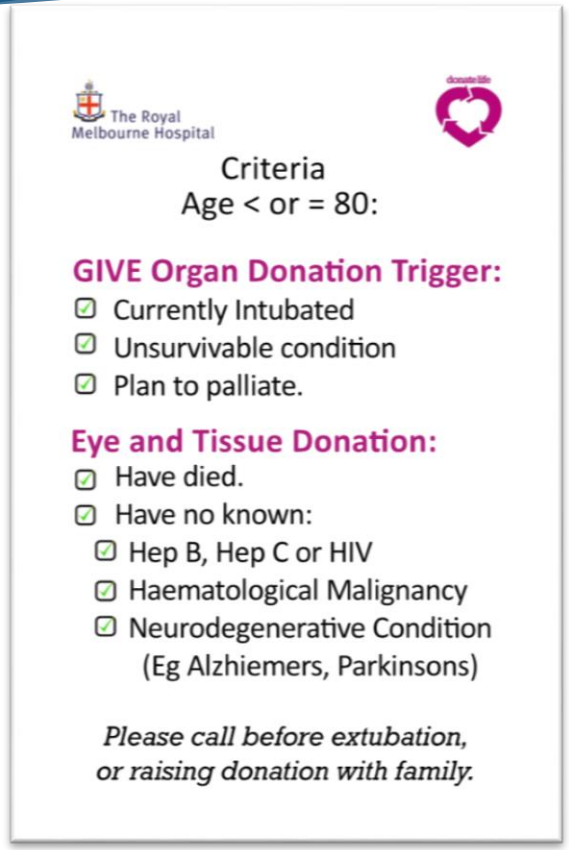
What does it look like when we do it right?

Eye and Tissue Donation in ED

- Tissue Donation

E&TD: The Gateway Drug

- More Frequent
- Targets deaths which occur within ED
- Amendable to electronic prompts
- Amendable to automatic referral pathways
- Written Feedback

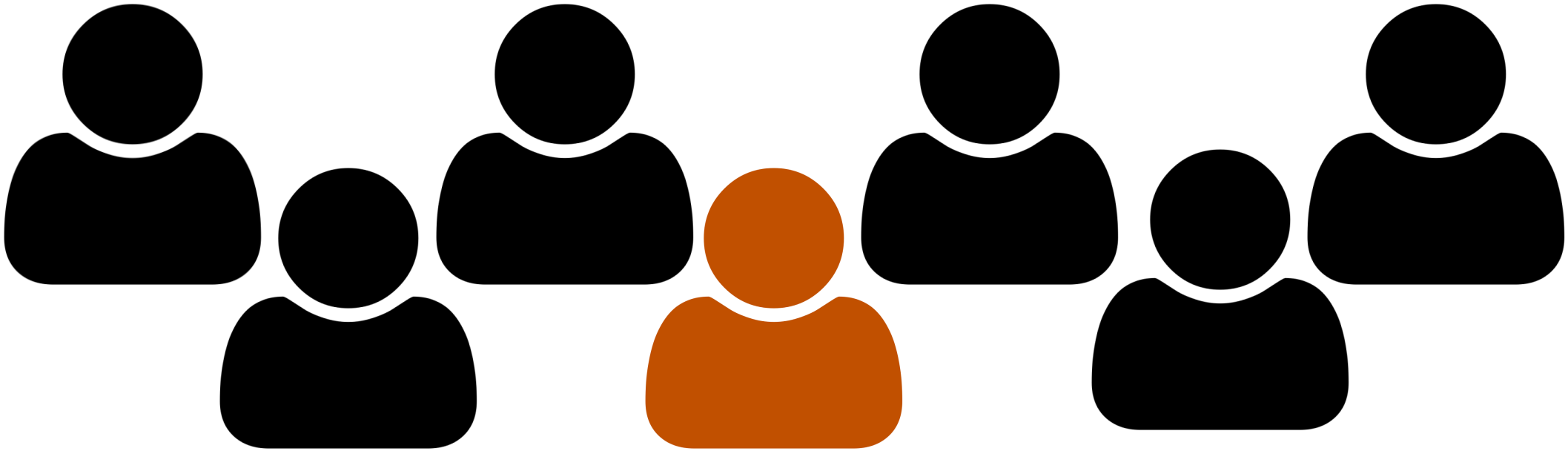


- Tissue Donation

Eye Donation in ED

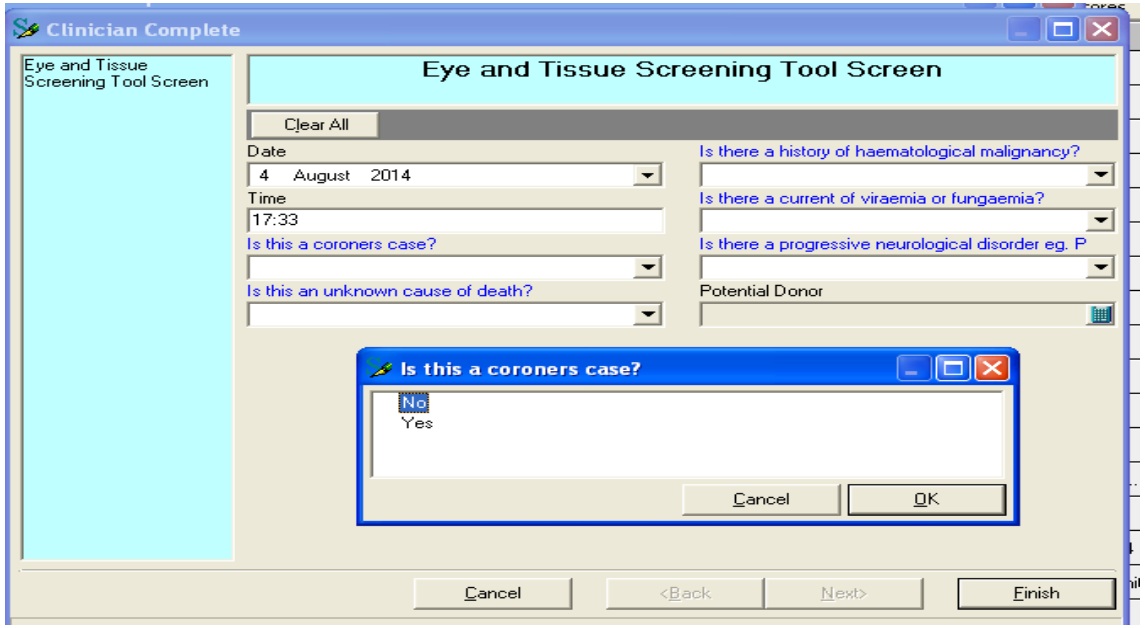
- Tissue Donation

Tissue Donation in ED



- Tissue Donation

Electronic Interventions



iDeceased™

Resources

COURSES

- **IDAT**
- **FDC WORKSHOPS**

VARIOUS ONLINE GUIDELINES

- **DONATE LIFE IN EACH STATE**
- **YOUR DONATION TEAM WITHIN YOUR HOSPITAL**
- **CAMERON 5TH EDITION**
  - **out 2019**
- **FOLDER HYPERLINK**

Contact Numbers for DonateLife

	ACT	VIC	WA	NSW	SA	TAS
Office	(02) 6174 5625	(03) 8317 7400	(08) 9222 0222	(02) 8566 1700	(08) 8207 7117	(03) 6270 2209
Referrals 24/7	(02) 5124 0000 and ask for the on-call organ and tissue donor coordinator.	(03) 9347 0408	(08) 6457 3333 Ask to speak with the on-call organ and tissue donor coordinator.	NT (08) 8922 8349	QLD (07) 3176 2350	


CAFE

We could use somebody…

SOMEONE LIKE YOU.