

MORAL BALANCE

- ETHICAL DECISION MAKING FOR ANAESTHESIA & ICU

Dr Dan Harvey

@criticalinsight

Bio

Consultant Adult Critical Care
Nottingham University Hospitals

National Education Clinical Lead for Organ
Donation
NHS Blood & Transplant

FICM Professional Standards
Faculty of Intensive Care Medicine

Hon. Associate Professor Intensive Care -
University of Nottingham

Vice Chair Critical Care Specialty Group -
National Institute of Health Research (NIHR)



Blood and Transplant



The University of
Nottingham



UNITED KINGDOM · CHINA · MALAYSIA



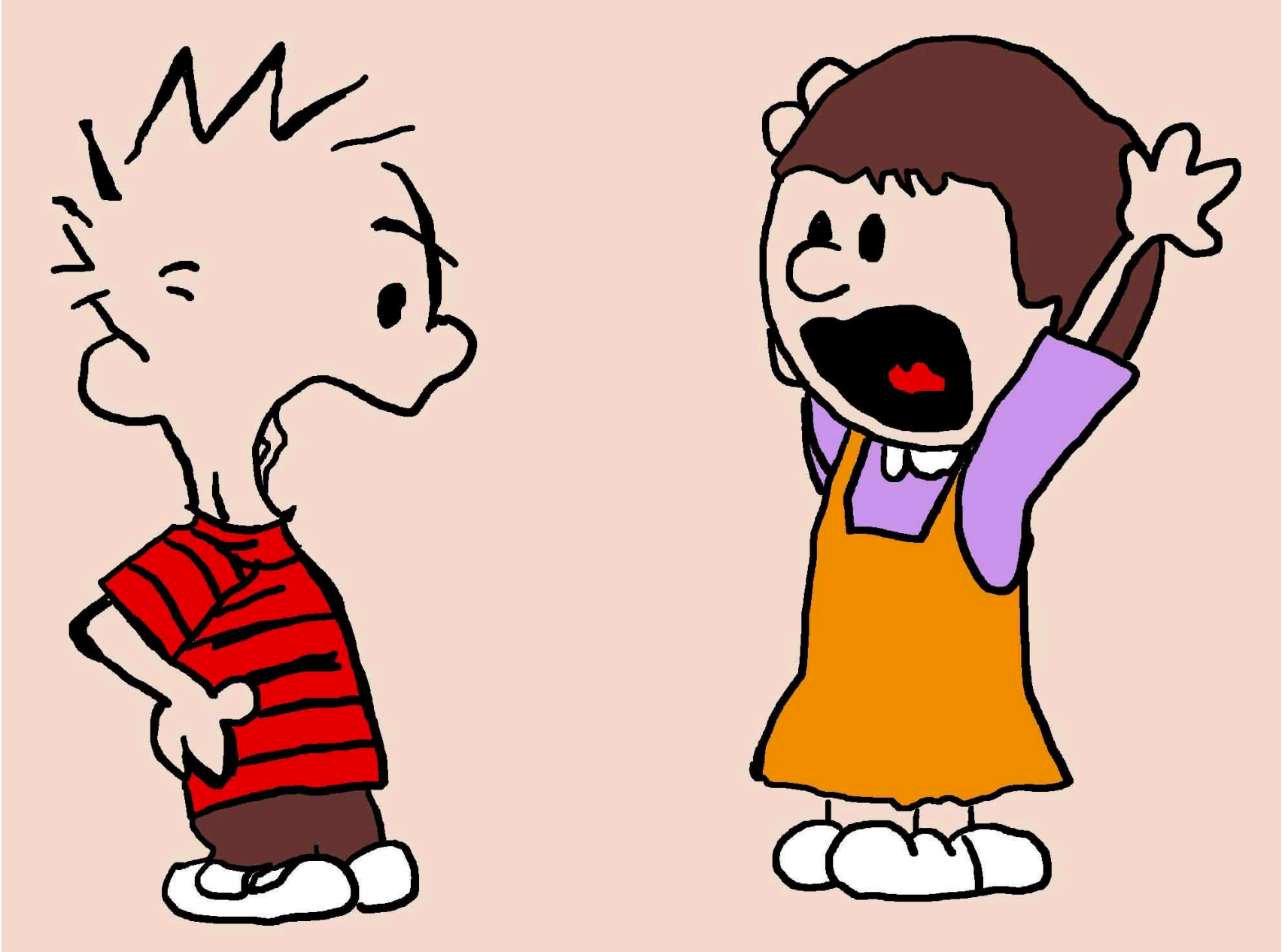
**National Institute for
Health Research**

THE ETHICAL CHALLENGE

- 49yr woman decompensated cirrhosis, new pneumonia, sepsis.
- 78yr co-morbid woman, perforated viscus & shock
- 54yr subarachnoid haemorrhage - Brain Stem Dead in ED?
- 22yr poorly compliant asthmatic, worsening, refusing Arterial line

THE CHALLENGE - OPINIONS

- *“pneumonia & sepsis reversible, cirrhosis stable, mortality high with ICU but 100% without it - it’s unethical not to offer her that chance”*
- *“she hasn’t got capacity, it’s your decision”*
- *“I’ve talked to the family - they want us to try everything”*
- *“The outcome here is the same whether we admit or not - so I’m not admitting”*
- *“For full escalation”*





OBJECTIVES

Help you make the right peri-operative decisions

Make good ICU admission decisions



GOOD ?

Justifiable

Reduce Stress

Patient & Family Satisfaction

Team Satisfaction

Reduce Fallout



GOOD DECISIONS ?

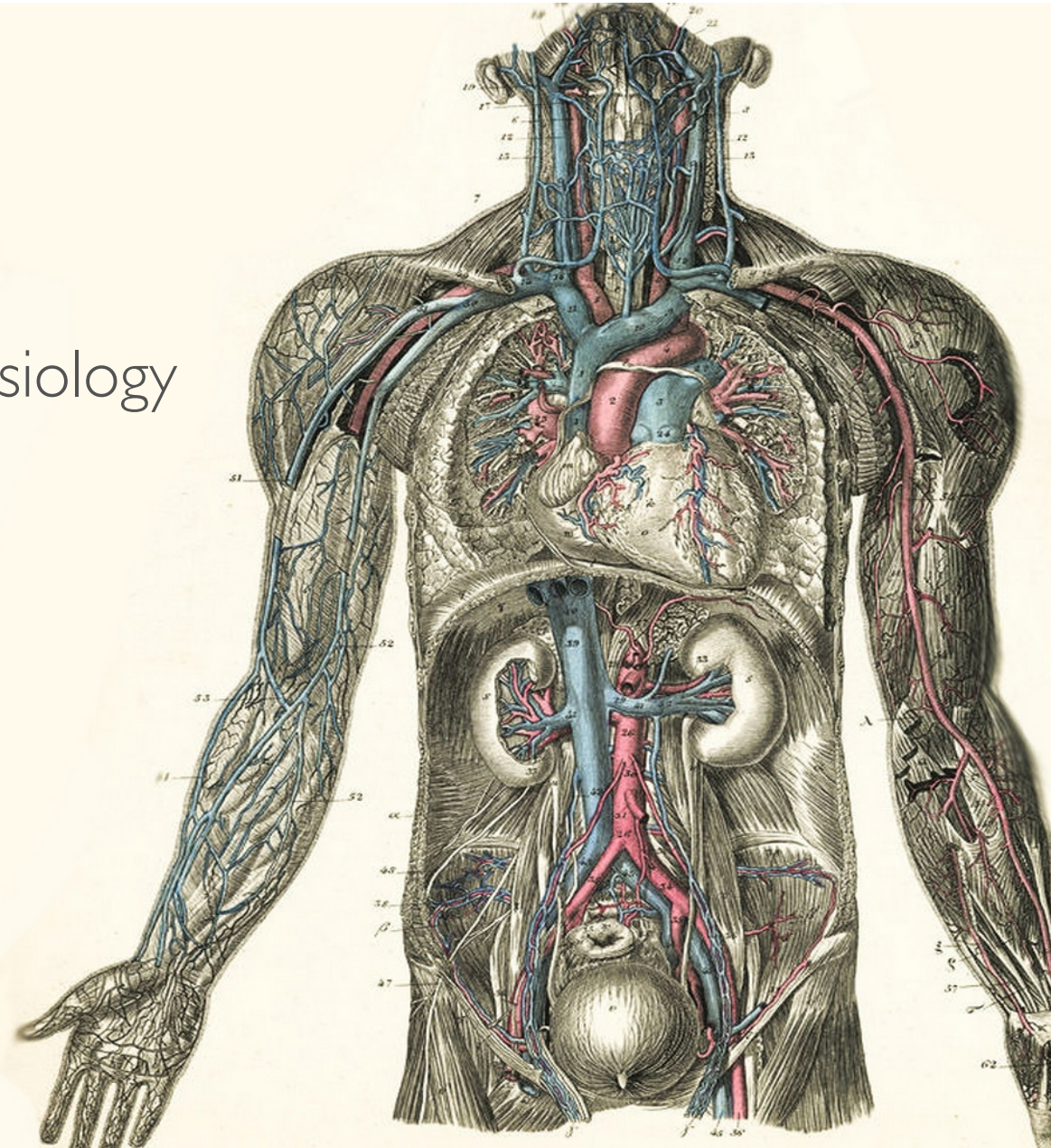
- History
- Examination
- Investigations
- Evidence & Data
-Ethics - just a hunch?



Advanced Applied Physiology

Vs

Basic Applied Ethics





HEURISTICS & DEFAULTS

- Use pattern recognition or “rules” to make quick decisions
- Numerous bias / prejudices
- Not patient centred / reactive to information

- Individual = Variable =
(random)



Competency

Credibility

Experience

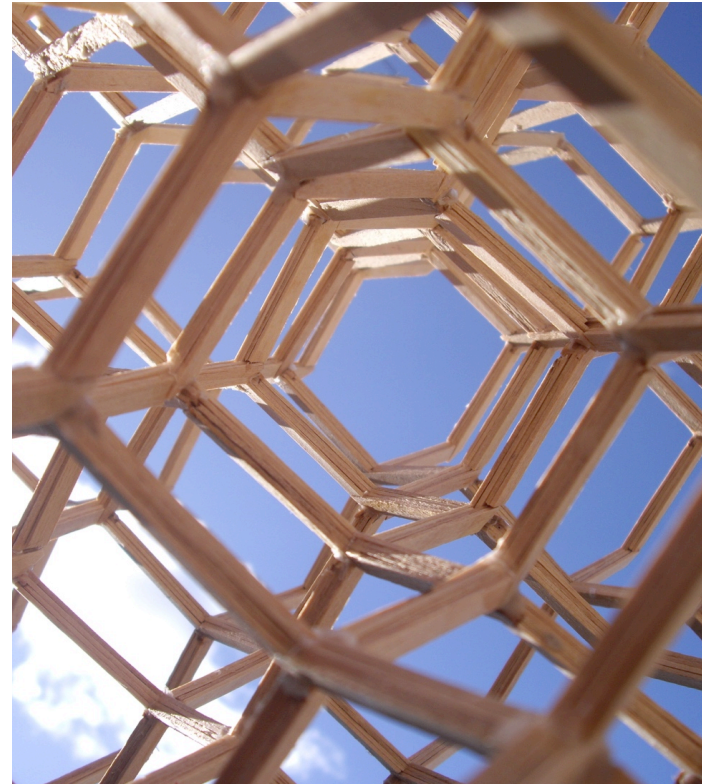
Knowledge

Skill (application)

Safety

ETHICAL FRAMEWORKS

- Applicable
- Simple / Complex
- Quick
- Robust / Analysable
- Flexible
- Reproducible
- Not Prejudicial







MORAL BALANCE

M
O
R
A
L

BALANCE

M Make Sure of the Facts

O Outcomes of...

R Relevance to the...

A Agents involved.....

L Level the arguments using the....

BALANCE BOX

MAKE SURE OF THE FACTS

- Diagnosis
- Interventions proposed / possible
- Prognosis
- Uncertainty





OUTCOMES OF RELEVANCE

Mortality / Morbidity
Pain & suffering
Physical & psychological
Grief /Regret
Dignity
Independence
Communication / Cognition
Resource utilisation
Metrics
Complaints & litigation

HARMS

Communication
Cognition
Mobility
Breathlessness
Powerlessness
Hallucinations & Delirium
Fear
Dignity
Roles



TRUE GOAL DIRECTED THERAPY

- Pain & Distress
- Communication
- Cognition
- Mobility
- Independence
- Dignity
- Fear
- Social Isolation



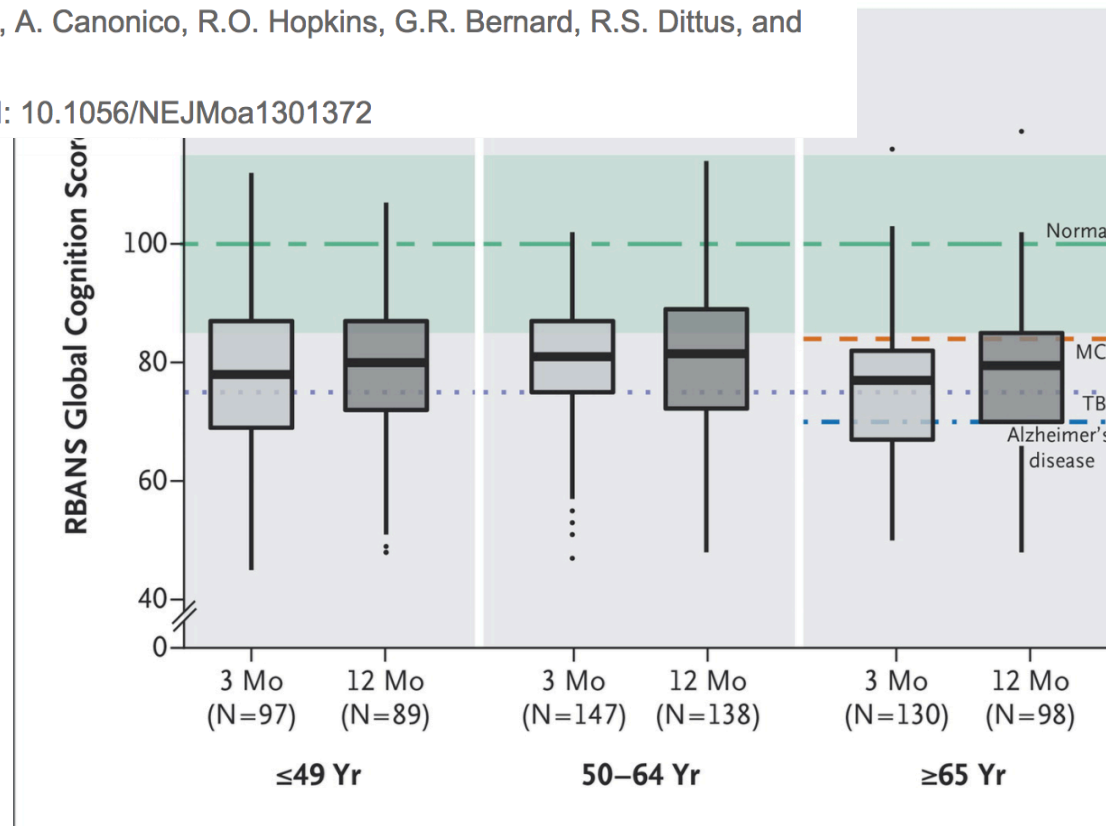


ORIGINAL ARTICLE

Long-Term Cognitive Impairment after Critical Illness

P.P. Pandharipande, T.D. Girard, J.C. Jackson, A. Morandi, J.L. Thompson, B.T. Pun, N.E. Brummel, C.G. Hughes, E.E. Vasilevskis, A.K. Shintani, K.G. Moons, S.K. Geevarghese, A. Canonico, R.O. Hopkins, G.R. Bernard, R.S. Dittus, and E.W. Ely, for the BRAIN-ICU Study Investigators*

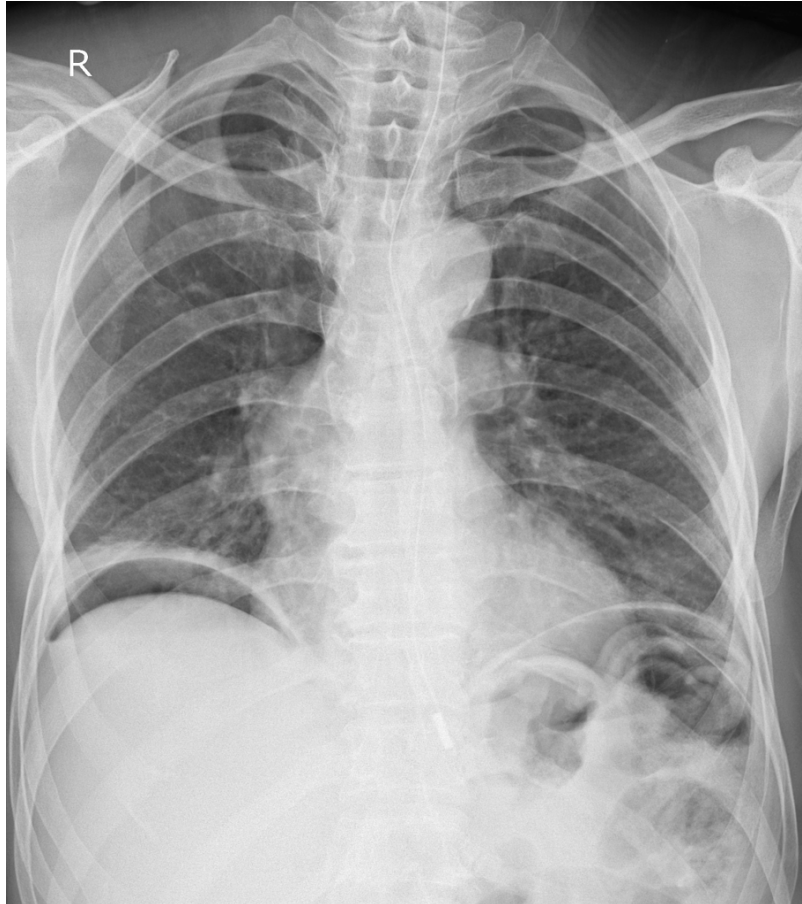
N Engl J Med 2013; 369:1306-1316 | [October 3, 2013](#) | DOI: 10.1056/NEJMoa1301372



What can we do to help?

VS

What should we do to help?



3G 10:08 PM

P-Possum
- Operative -

Operation Type **Minor Operation =1**

Number of procedures **one =1**

Operative Blood Loss ml **<100 =1**

Peritoneal soiling **None =1**

Malignancy Status **none =1**

CEPOD **elective =1**

Calculate

Physiology Score : 59
Operative Severity Score: 6
**P-POSSUM predicted mortality:
86.39%**

78 yr old woman, perforated viscus on CT. Co-morbidity – COPD, IHD, prev CVA. Ex tol 20 yrs. Independent ADLs but daughter needed outside of home.

Hypotensive, tachycardic, oligouric, mild metabolic acidosis. Despite this is considered to have capacity.

“very serious condition, life threatening”

“surgery is needed to stand any chance of survival”

“even with surgery, and intensive care, death is still likely”

- patient & family keen to “give it a go”

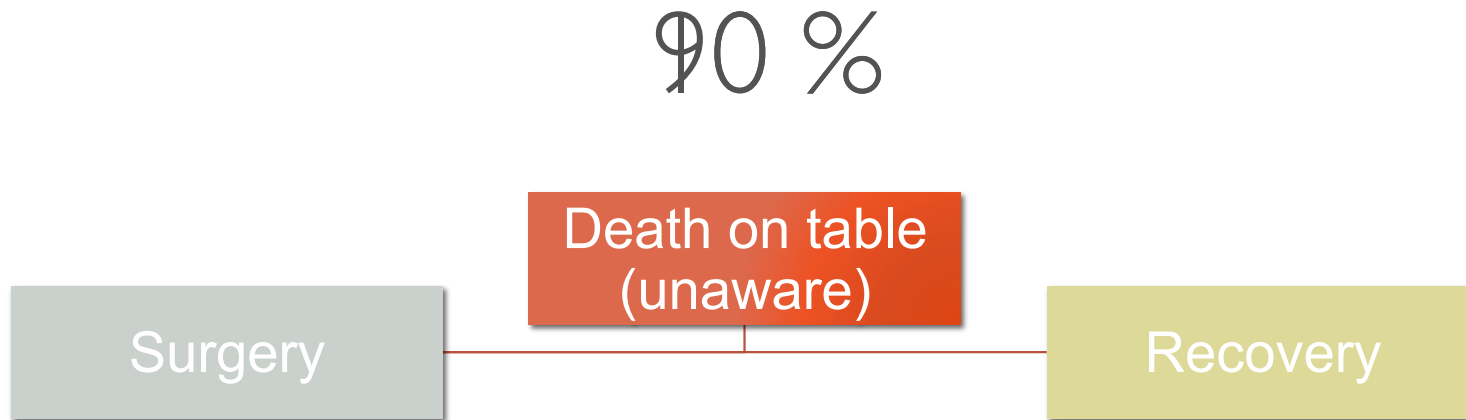
Anaesthetic opinion:

“ will almost certainly get through surgery, likely to need vasopressor support, ?

Unable to extubate”

“therefore, little value in surgery without ICU”

“Patient wants to give it a go, if we don't she'll certainly die...Is it ethical to deny her that chance?”





M Make Sure of the Facts

O Outcomes of...

R Relevance to the...

A Agents involved.....

L Level the arguments using the....

BALANCE BOX

FACTS - DIAGNOSIS

Neoplastic vs benign
AKI
IHD / LV Function
Pneumonia

Muscle Mass
Nutritional State
Exercise tolerance
Cognitive decline?

Physiology Score	Operative Severity Score	Morbidity (%)	Mortality (%)
39	25	99.382	80.358

Clinical Frailty Scale



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.



3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.



5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.



7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

Table 3: Clinical outcomes, by frailty status

Outcome	Group; no. (%) of patients*		Association, OR (95% CI) or difference in medians (<i>p</i> value) [†]
	Frail <i>n</i> = 138	Not frail <i>n</i> = 283	
Adverse event [‡]	54 (39.1)	83 (29.3)	1.54 (1.01–2.37)
Death			
In ICU	16 (11.6)	27 (9.5)	1.37 (0.72–2.62)
In hospital	44 (31.9)	45 (15.9)	1.81 (1.09–3.01)
Duration of stay, d, median (IQR)			
In ICU	7 (4–13)	6 (3–10)	1 d (0.02)
In hospital	30 (10–64)	18 (10–40)	12 d (0.02)
Discharge disposition [§]	<i>n</i> = 91	<i>n</i> = 235	
Home, living independently	20 (22.0)	104 (44.3)	0.35 (0.20–0.61)
Home, living with help	33 (36.3)	58 (24.7)	1.67 (1.00–2.81)
Other [¶]	38 (41.8)	73 (31.1)	1.51 (0.92–2.48)
Discharged newly dependent ^{**}	24 (70.6)	96 (51.6)	2.25 (1.03–4.89)
Hospital readmission [§]	51 (56.0)	92 (39.1)	1.98 (1.22–3.23)

Note: CI = confidence interval, ICU = intensive care unit, OR = odds ratio.

*Unless stated otherwise.

[†]Mann–Whitney test.

[‡]Composite of medication errors, self-extubation/reintubation, nosocomial infection, death.

[§]Among 91 frail and 235 nonfrail patients for whom data on discharge disposition and on hospital readmission within 12 mo after discharge could be ascertained (data missing, *n* = 1 per group; in hospital at end of follow-up, *n* = 2 per group).

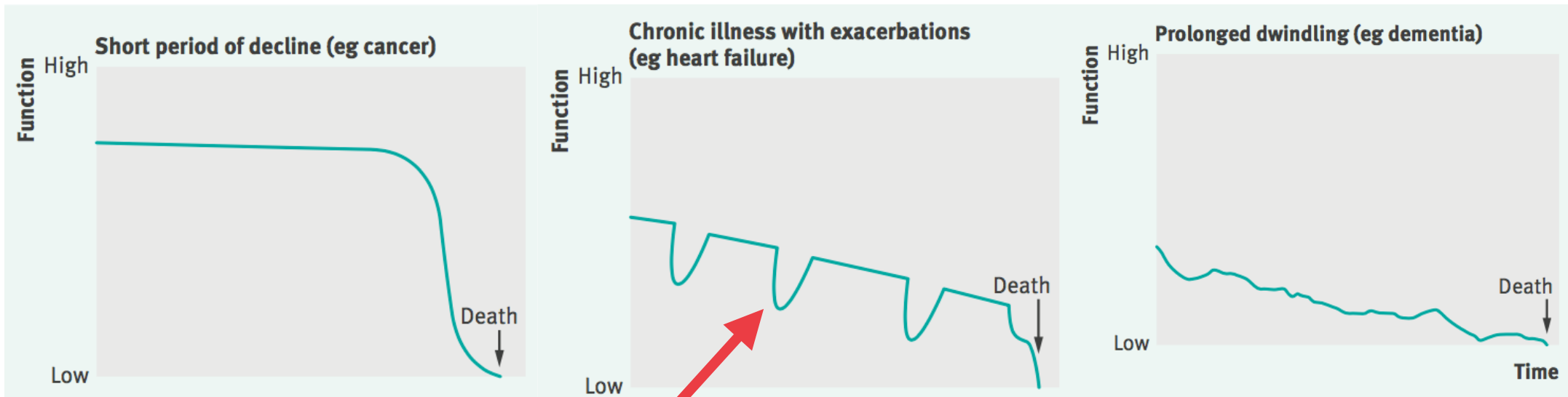
[¶]Continuing care facility, subacute care facility or other.

^{**}Among 34 frail and 186 nonfrail patients who were living independently at baseline.

Association between frailty and short- and long-term outcomes among critically ill patients: a multicentre prospective cohort study

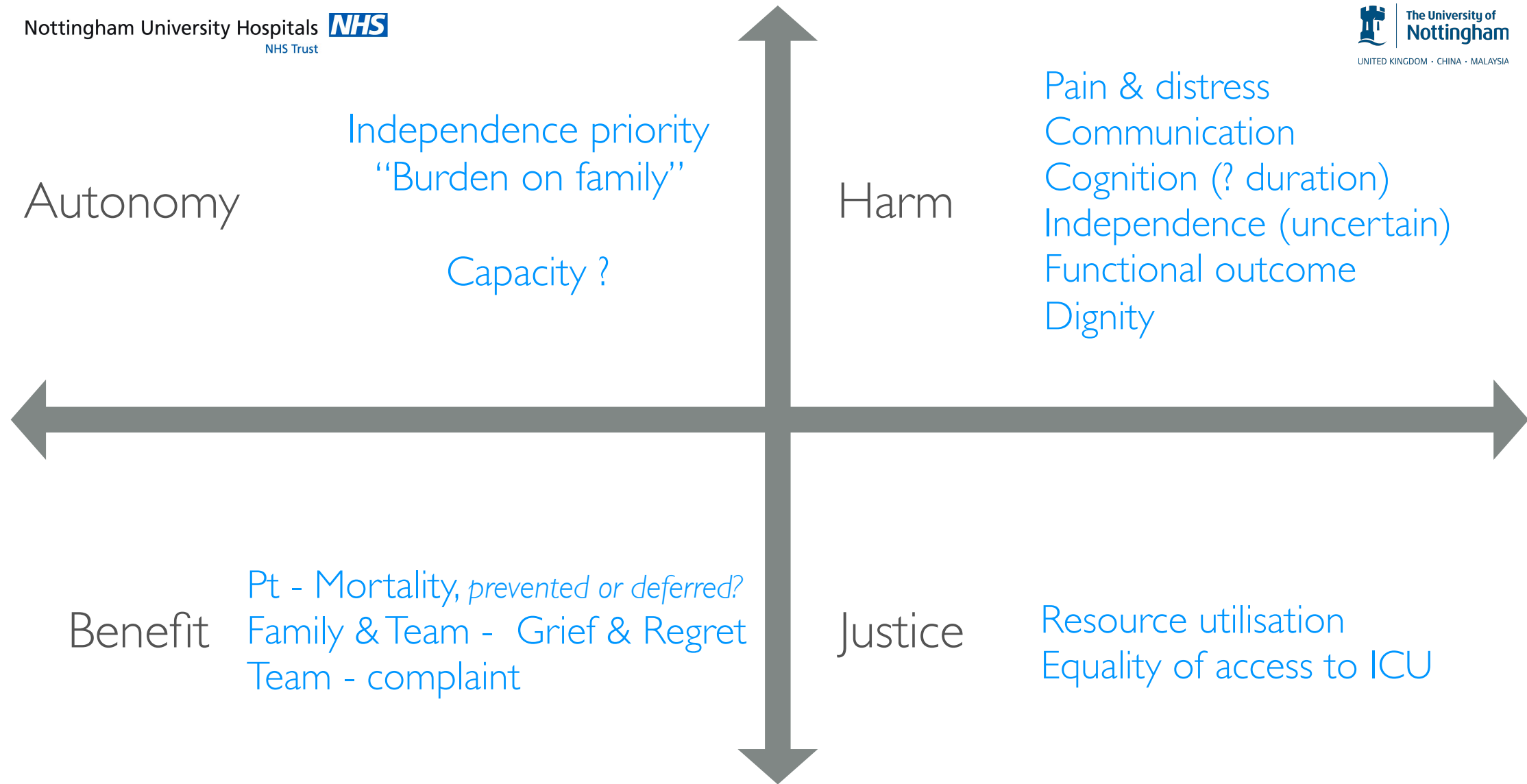
CMAJ 2014. DOI:10.1503/cmaj.130639

TRAJECTORIES



OUTCOMES OF RELEVANCE

Mortality / Morbidity
Pain & suffering
Physical & psychological
Grief /Regret
Dignity
Independence
Communication / Cognition
Resource utilisation
Metrics
Complaints & litigation



OUTCOME

- Clarity of thought facilitates discussion with patient, family & team
- Interventions & priority of outcomes & care clarified
- Expectations & understanding set at outset

Agreed

- Surgery will add certainty to some outcomes (cancer)
- Peri-op critical care provided with limitations
- Support of multi organ failure futile - **physiological**
- Ventilation extending beyond peri-op period & tracheostomy also futile – prolong life (with burdens) but do not achieve goals - **holistic**
- DNAR at patients request

MORTALITY

- Often doesn't help us make decisions
- Often the wrong ethical outcome
- Poor research & quality outcome
- Not necessarily patient centred



HOW TO START

- 7 Ps....Proper Planning
- MDT expertise - liaison
- Time & Place & People
- Structure
- (*Training*)



SUMMARY

- Recognise it's hard
- Frameworks
- Recognise ALL the outcomes
- Focus on Communication
- dan.harvey@nih.ac.uk

