

Who to Treat - at 3am?

Dr Chris Danbury
Consultant Intensive Care Physician

Conflicts of Interest:
Expert witness in Aintree v James
Lead Editor of Core Standards for Intensive
Care Units
Commissioned GPICS
Chapter author on GPICS

- Intensive Care Medicine
- Making Decisions
- Burnout



Intensive Care

Respect for Autonomy

All patients should be treated respectfully and equitably, and should receive the best available care. Careful attention should be given to ensuring that any processes put in place to guide decision making do not inadvertently result in discrimination (unjust or prejudicial treatment) against patients with particular characteristics.



COVID

- The principles of intensive care decision-making are the same whether the patient has COVID-19 or any other condition

Futility

- Nebulous concept
- Courts followed a physiological definition of futility in *Aintree v James*
- Physiological futility is very rare

ICM Capacity

- 2010 (November):
 - 3515 Critical Care Beds
 - 86.06% Bed occupancy
 - UK population 62.51 million (5.6 beds per 100,000)
- 2019 (November):
 - 4121 Critical Care beds
 - 82.9% Bed Occupancy
 - UK population 66.65 million (6.1 beds per 100,000)

1.06% year on year rise in critical care beds over the last decade

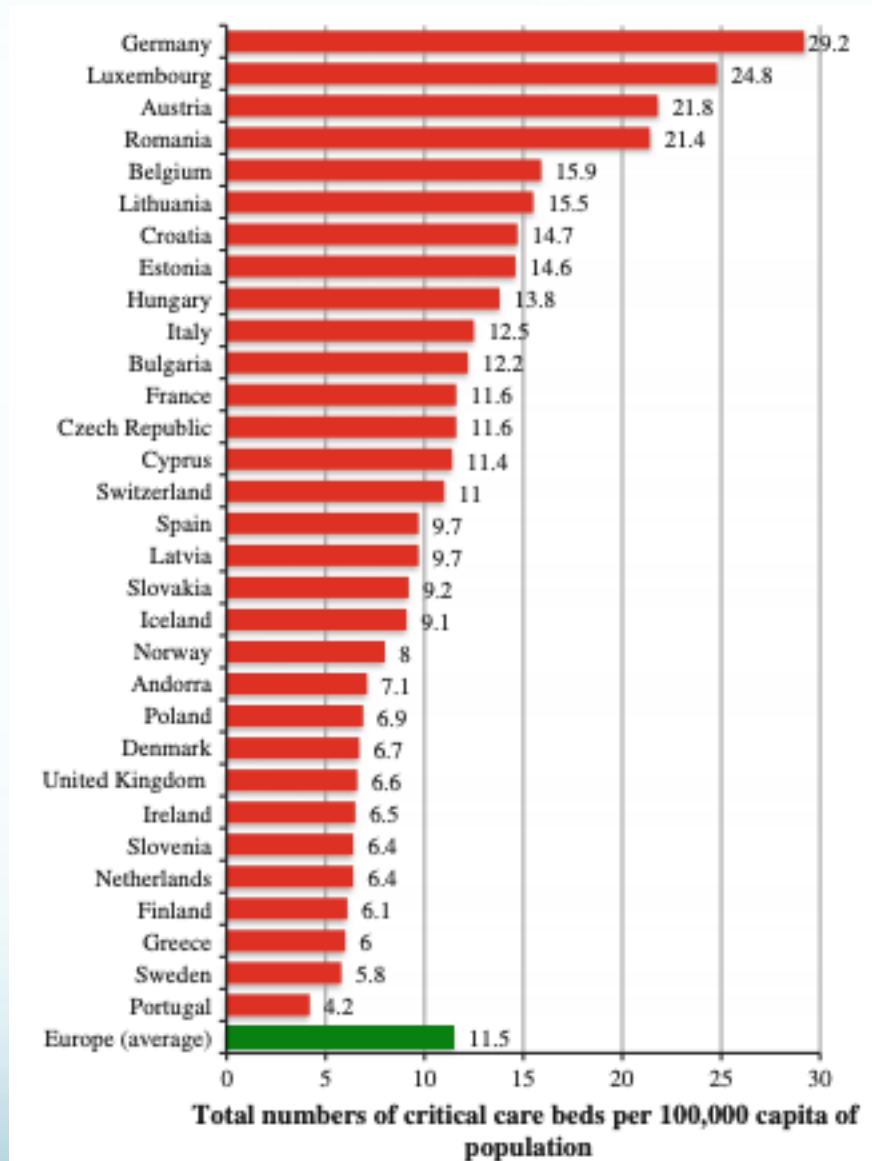
<https://www.england.nhs.uk/statistics/statistical-work-areas/critical-care-capacity/>

ICM Demand

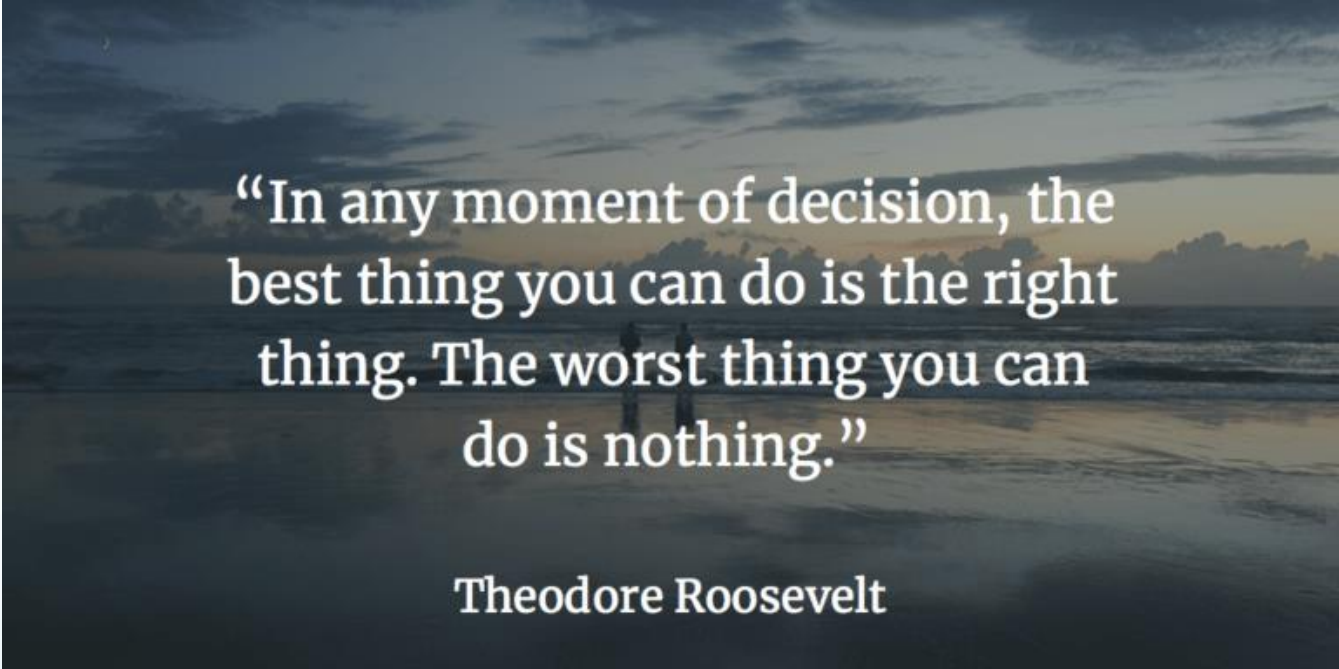
- 2010: 102,069 admissions to critical care (ICNARC)
- 2017: 198,794 admissions to critical care (ICNARC)

7% year on year increase in demand for critical care services

<https://onlinereports.icnarc.org/Reports/Index>



Making Decisions



“In any moment of decision, the best thing you can do is the right thing. The worst thing you can do is nothing.”

Theodore Roosevelt

Beneficence and Non maleficence in ICM

- Time pressure
- Every decision carries potential risks and benefits
- Doing nothing is a decision and can be more harmful than doing something



By Photographie personnelle User:Poussin jean - objet personnel
User:Poussin jean, CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=1681347>

Justice

- UKCEN: *distributing benefits, risks and costs fairly; the notion that patients in similar positions should be treated in a similar manner.*

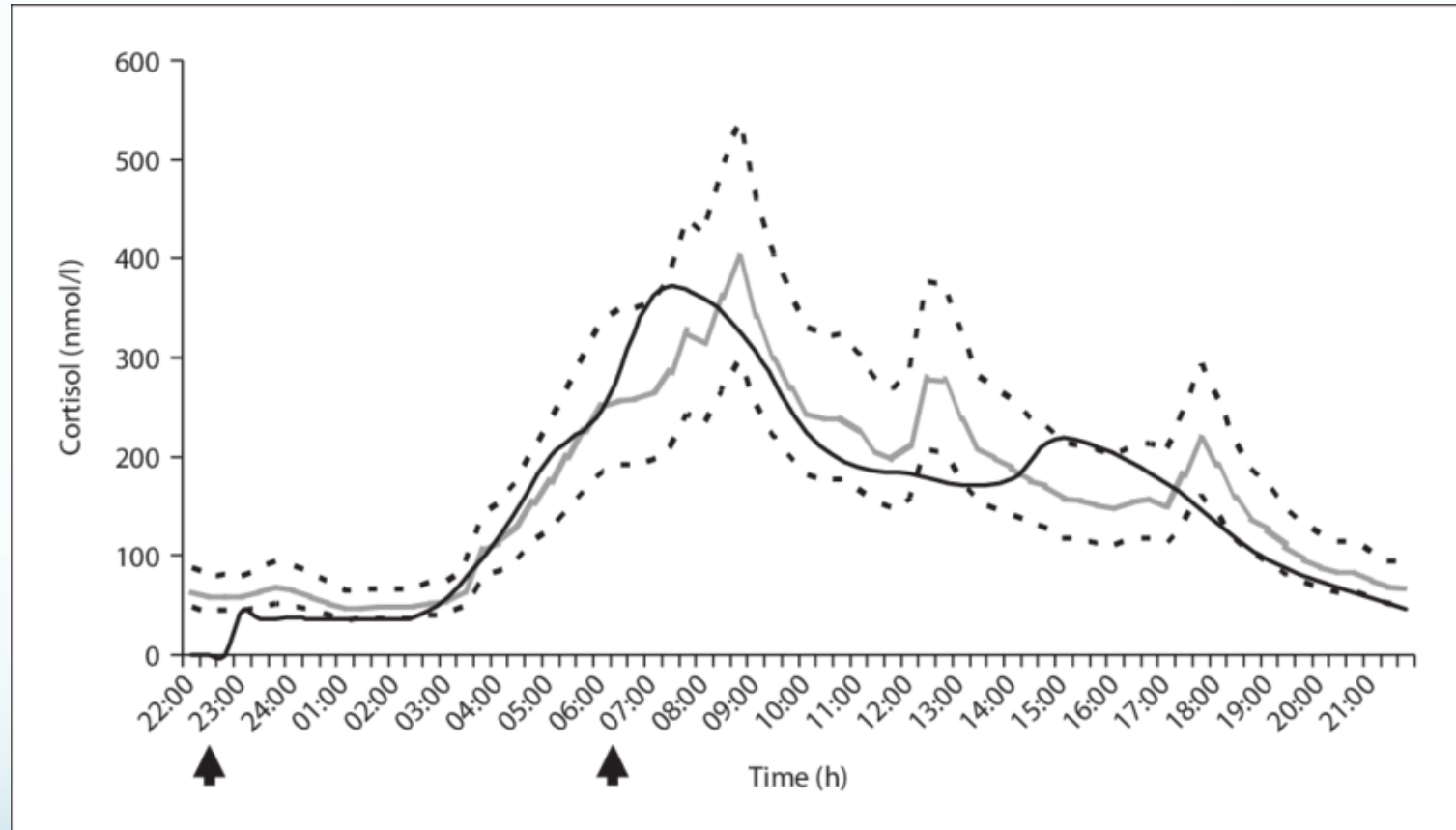
Making Decisions at 3am

- Consultant Intensivist
 - Site manager
 - Hospital exec - on call
 - No Ethics Committee
-
- Guidelines would be helpful - Departmental, Specialty specific, Trust wide, Regional, National

Making Decisions at 3am

- Decline admission to ICU
- Admit to ICU
- Admit to surge ICU bed
- Transfer (ties up 2 senior trained members of critical care staff and a front line ambulance for several hours)

Cortisol



Physiological cortisol circadian rhythm. Circadian rhythm of cortisol in 33 individuals with 20 min cortisol profiling. Peak cortisol levels are reached at around 08:30 h and nadir cortisol levels at around midnight. The peaks of cortisol at noon and around 18:00 h represent meal- induced cortisol stimulation [taken from Debono et al., JCEM 2009;94:1548–1554]

When was lunch?

- Metabolic State Alters Economic Decision Making under Risk in Humans
- Human risk preferences are exquisitely sensitive to current metabolic state
- Judicial rulings can be swayed by extraneous variables that should have no bearing on legal decisions

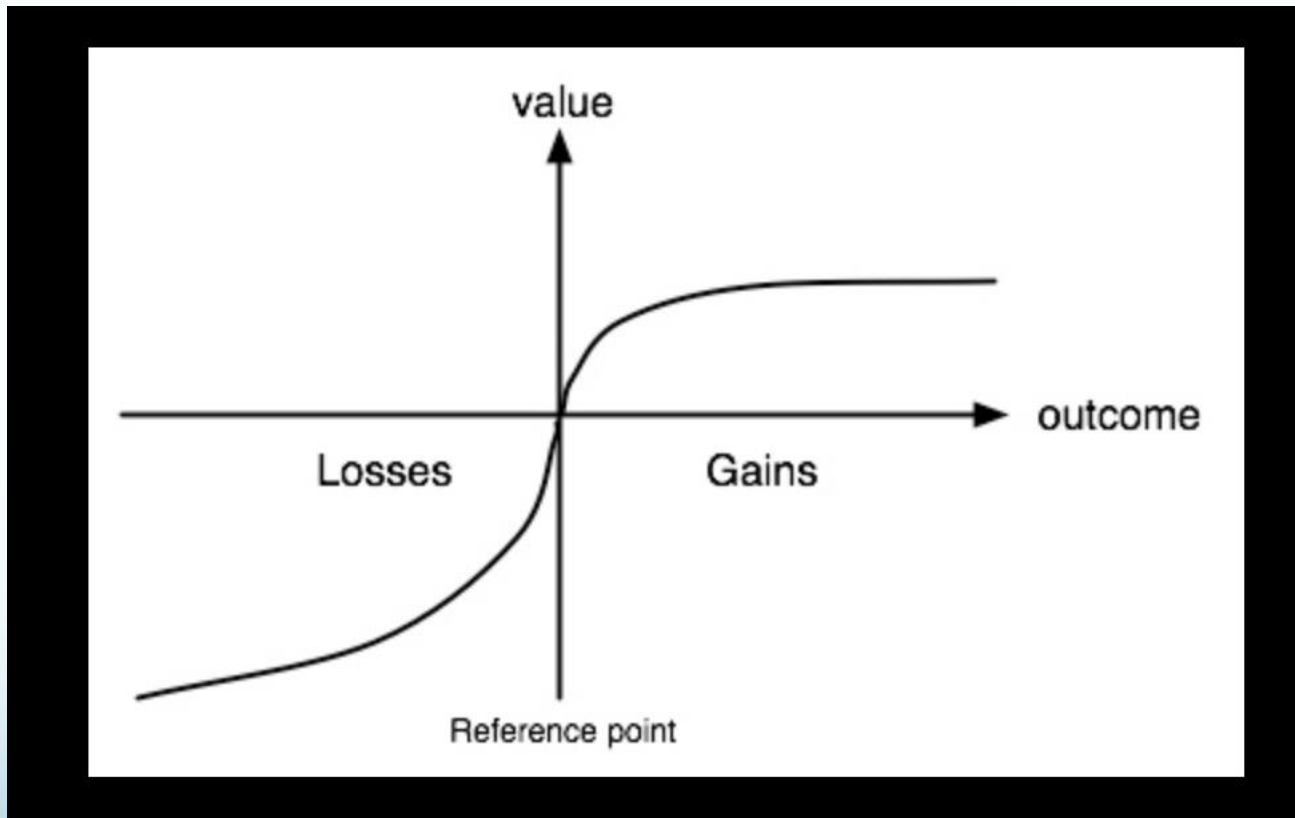
Symmonds, Mkael, Julian J. Emmanuel, Megan E. Drew, Rachel L. Batterham, and Raymond J.

Dolan. 'Metabolic State Alters Economic Decision Making under Risk in Humans'. *PLOS ONE*

5, no. 6 (16 June 2010): e11090. <https://doi.org/10.1371/journal.pone.0011090>.

Danziger, Shai, Jonathan Levav, and Liora Avnaim-Pesso. 'Extraneous Factors in Judicial

Prospect Theory



Burnout



Burnout

- ICM professionals have always had a high burnout rate.
- The COVID-19 pandemic has had an overwhelming psychological impact on intensivists. Follow-up, and management are warranted to assess long-term psychological outcomes and alleviate the psychological burden of the pandemic on frontline personnel.

Azoulay, Elie, Jan De Waele, Ricard Ferrer, Thomas Staudinger, Marta Borkowska, Pedro Pova,

Katerina Iliopoulou, et al. 'Symptoms of Burnout in Intensive Care Unit Specialists Facing the

COVID-19 Outbreak: A Study of Intensive Care Unit Specialists (8 August 2020) 110

My unit - the COVID effect

January 2020

17 Beds

60% Emergency admissions

80% Lack Capacity

May 2020

56 Beds - 34 in use

100% Emergency admissions

80% Lack Capacity

Theatres utilised as an ICU

Decision to increase resource not made by clinicians.

Conclusion

- Covid 19 has unmasked an underlying problem
- Resource allocation is key to decision making in ICM
- Clinical Decision making needs support:
A National framework would be useful
- The problem impacts both patients and staff