



What happens to the older
patient on the critical care unit?

Don Milliken

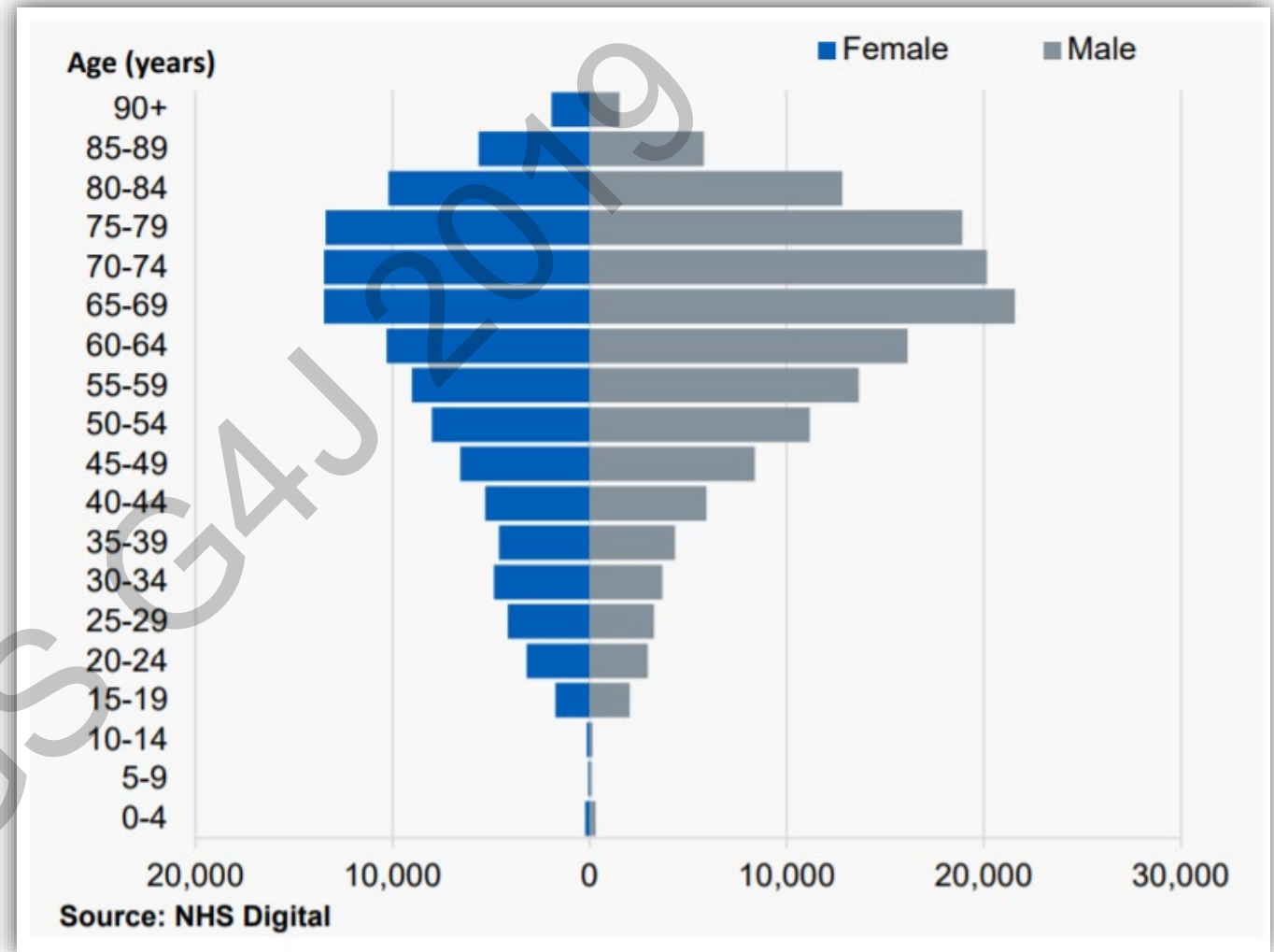
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Most critical care patients are older patients

- 52% of critical care admissions are over 65
- 35 000 patients aged over 80 are admitted per year



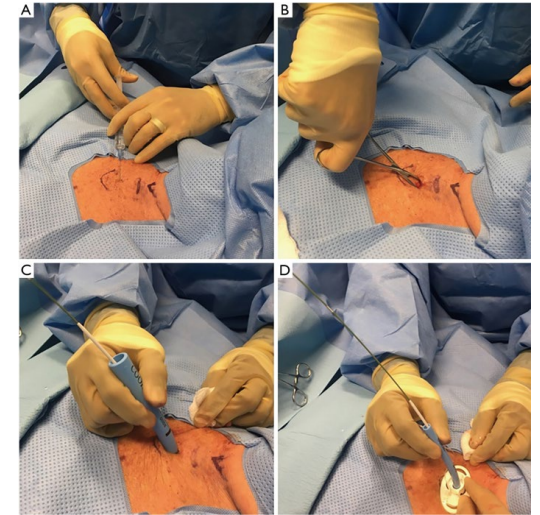
The typical older critical care patient

- Severe acute illness
- Severely deranged physiology
- Frail
- Sarcopenic
- Multi-morbid
- Impaired functional status



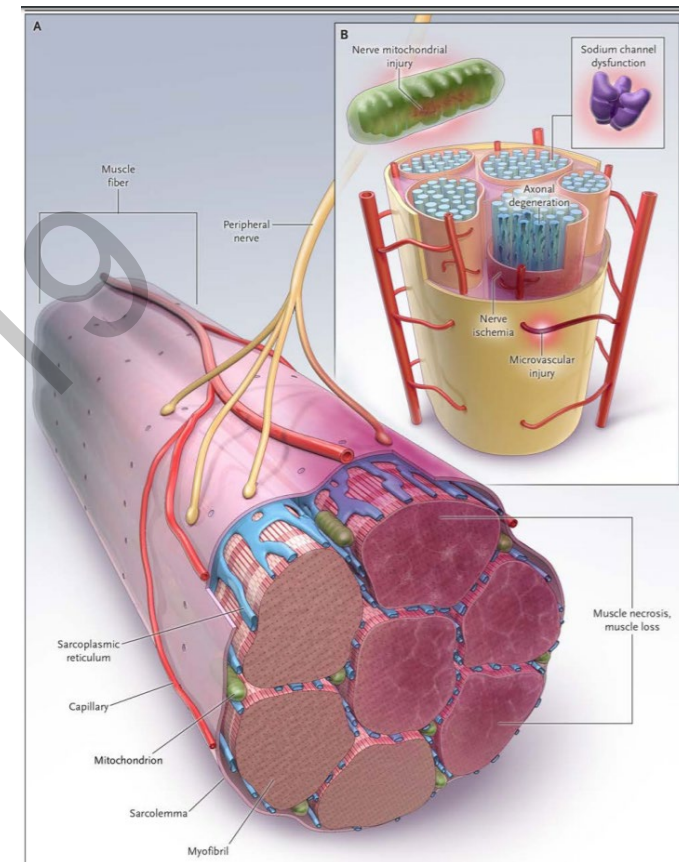
What happens on the unit?

- Most patients are sedated
- Mobility is reduced
- Most undergo invasive procedures:
 - Endotracheal intubation
 - Central venous catheters
 - Arterial catheters
 - Urinary catheters
 - Nasogastric tubes



ICU-acquired weakness

- Complex, overlapping syndromes:
 - Polyneuropathy
 - Myopathy
- Muscle wasting due to:
 - Immobility
 - Poor nutrition
 - Critical illness catabolism
- Persistent neuromuscular dysfunction
- Long-term disability



The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

CRITICAL CARE MEDICINE

ICU-Acquired Weakness and Recovery from Critical Illness

John P. Kress, M.D., and Jesse B. Hall, M.D.

A photograph of a patient lying in a hospital bed, appearing to be asleep or unconscious. The patient is wearing a white hospital gown and has several medical tubes and wires connected to their face and chest. The bed is surrounded by various medical equipment, including monitors and IV stands. The background shows a typical hospital room setting with medical equipment and a window.

Patient experiences of critical illness

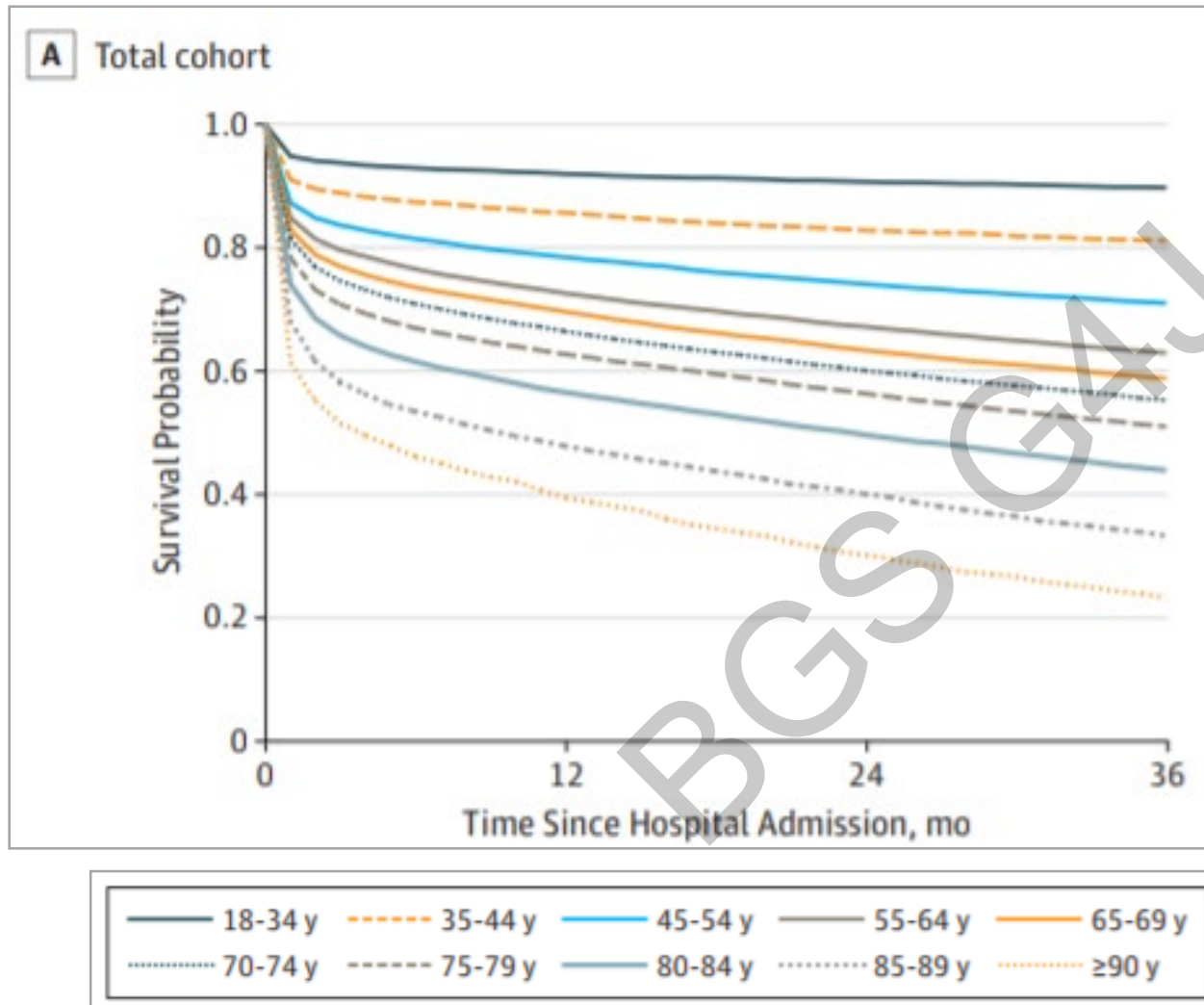
- Recall of events during critical illness is often incomplete
- But many patients recall experiences of:
 - Pain
 - Anxiety
 - Distress

Older patients are much more likely to die after critical care

Original Investigation | Critical Care Medicine

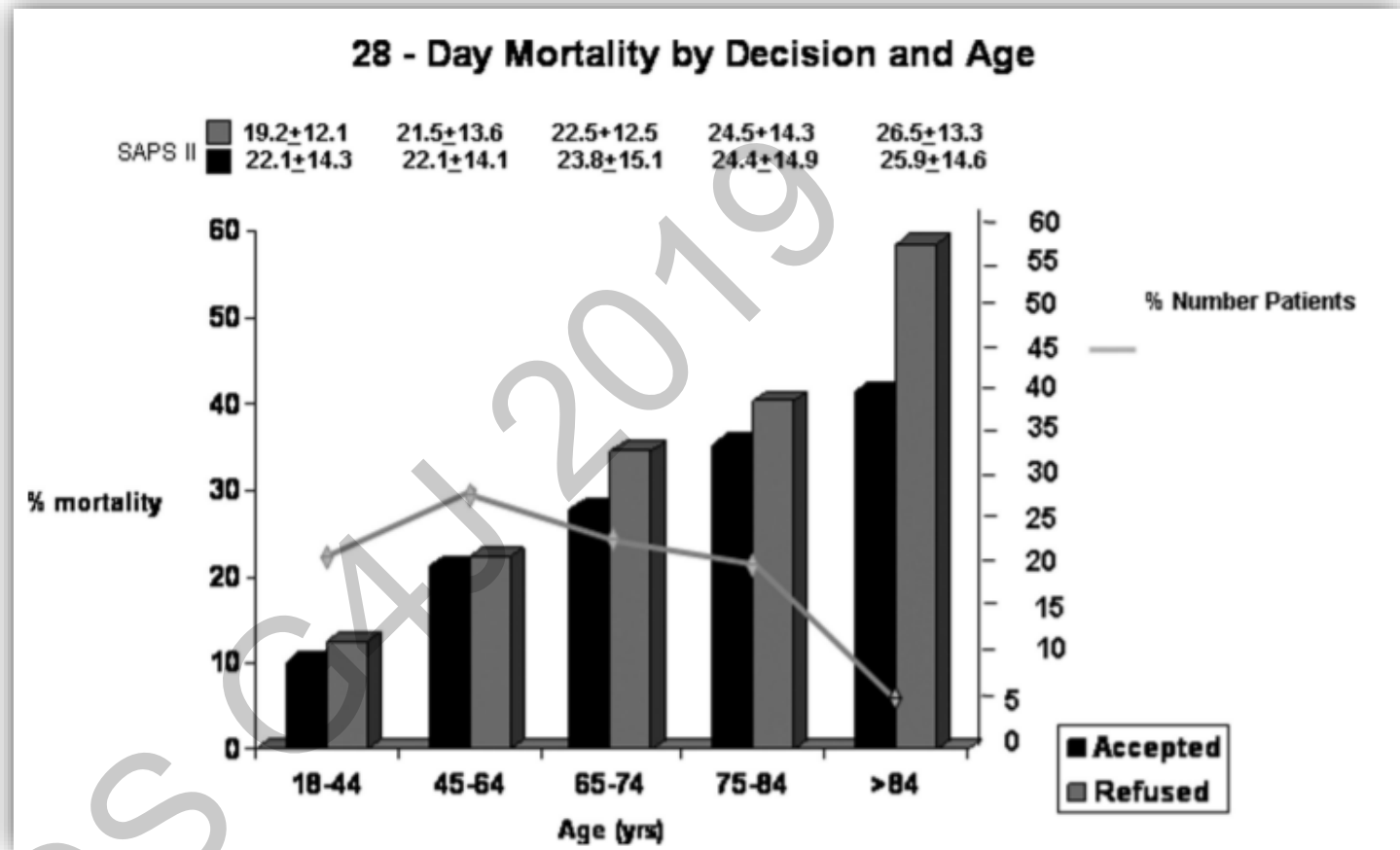
Association of Age With Short-term and Long-term Mortality Among Patients Discharged From Intensive Care Units in France

Alice Atramont, MD, MSc; Valérie Lindecker-Cournil, MD, MSc; Jérémie Rudant, MD, PhD; Ayden Tajahmady, MD, MSc; Nicolas Drewniak, MSc; Annie Fouard, MD; Mervyn Singer, MD; Marc Leone, MD, PhD; Matthieu Legrand, MD, PhD



- 133 966 ICU admissions(!)
- 3 year mortality:
 - 61% in those over 80
 - 35% in those under 80
- Age and reason for admission predicted mortality
- N.B. normal population mortality rates

The 'oldest old' may *benefit* most from critical care



- Older patients are much more likely to die after critical care admission
- *But* they also see the greatest reduction in mortality as a consequence of critical care admission

Survival isn't everything: Functional dependence after critical care

- Patients over 75 years old
- Excellent baseline functional status (BI 100!)
 - Highly selected patients
- 38% died in hospital
- 40% of survivors dependent at hospital discharge
- 21% remained dependent 1 year after discharge
- 1 in 5 of those admitted from home were unable to remain at home

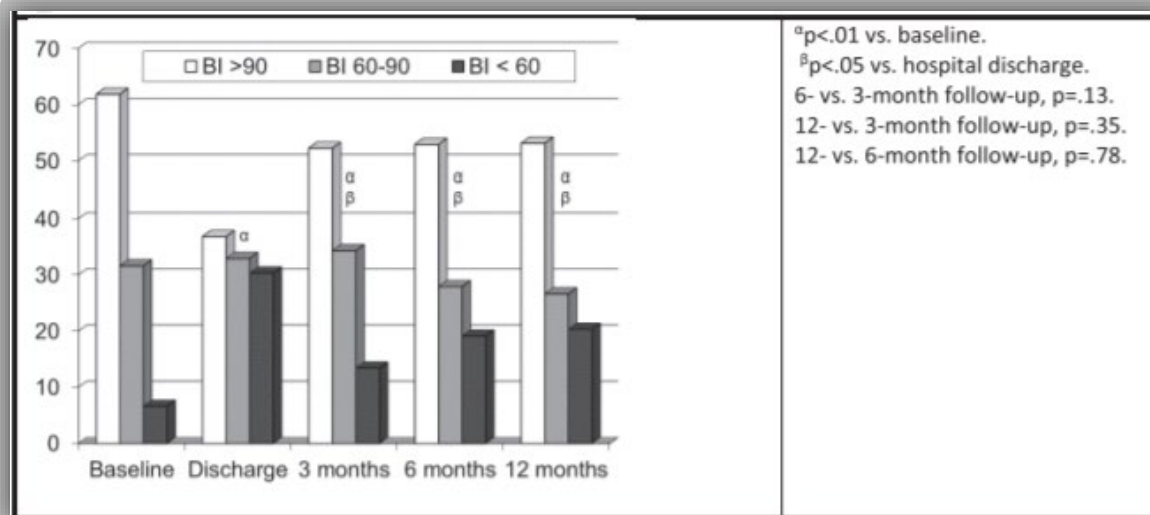
Journal of the American Geriatrics Society

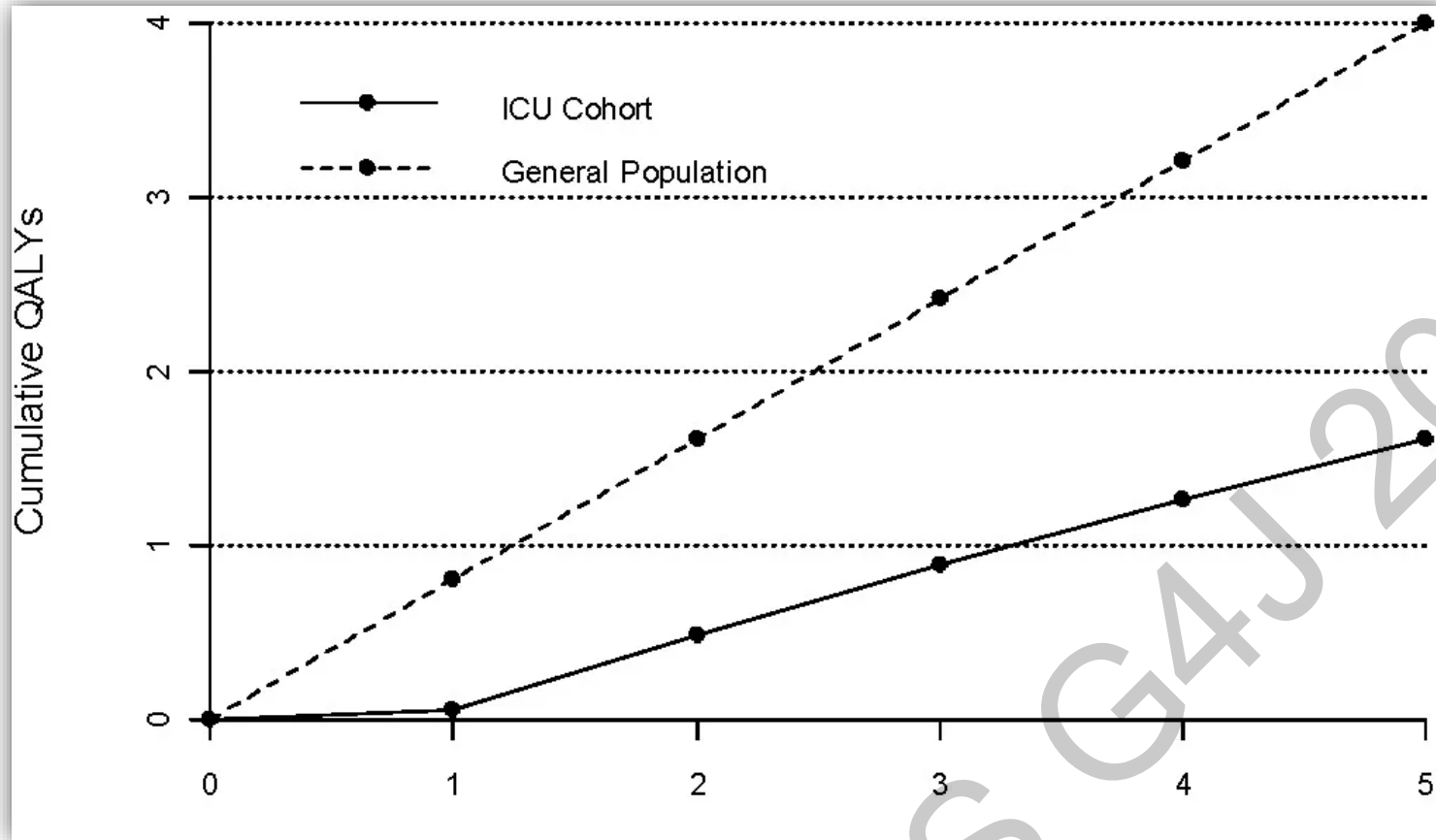


Clinical Investigations

Functional Status and Quality of Life in Elderly Intensive Care Unit Survivors

Patricia Villa MD, María-Consuelo Pintado MD, PhD, Jimena Luján MD, Natalia González-García MD, María Trascasa MD, Rocío Molina MD, José-Andrés Cambronero MD, Raúl de Pablo MD, PhD





What about quality of life?

Quality of life in the five years after intensive care: a cohort study

Brian H Cuthbertson^{1*}, Siân Roughton², David Jenkinson³, Graeme MacLennan³, Luke Vale^{2,4}

- Lower QoL in patients after critical care
- Difference persists after 5 years
- This difference is even greater in older patients
- *'Critical illness associated with ICU admission should be treated as a life time diagnosis with associated excess mortality, morbidity and the requirement for ongoing health care support.'*

Post-intensive care syndrome

- Long-term cognitive, psychological and physical impairments from critical illness

Psychological

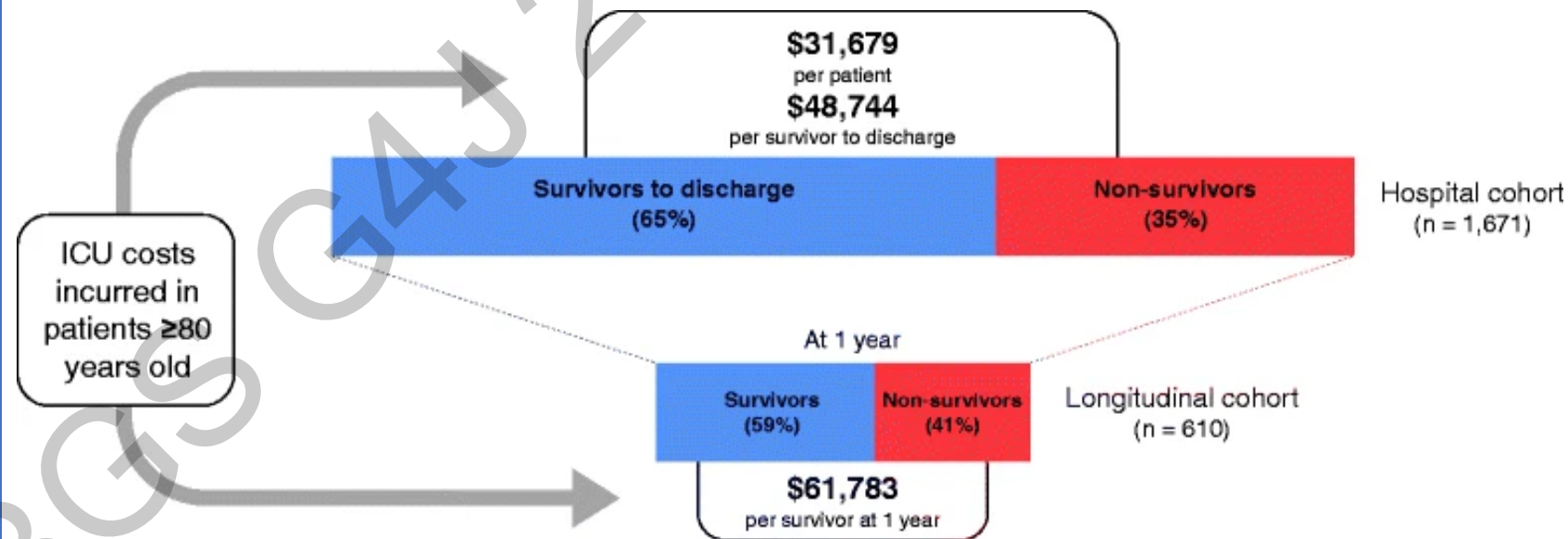
- Depression (25-30%)
- Anxiety (30-40%)
- PTSD (20%)
- Worse in older patients

Cognitive

- Age is a risk factor for delirium
- Critical care delirium associated with long-term cognitive impairment
- May persist at least 5-15 years

Most
healthcare is
delivered to
patients
near the end
of life

- Critical care may improve survival but it is expensive
- In view of the high rate of poor outcomes for older patients, is this cost justified?



The ETHICA study (part I): elderly's thoughts about intensive care unit admission for life-sustaining treatments

Do older patients want intensive care?

27% would refuse non-invasive ventilation

43% would refuse invasive ventilation

63% would refuse renal replacement therapy

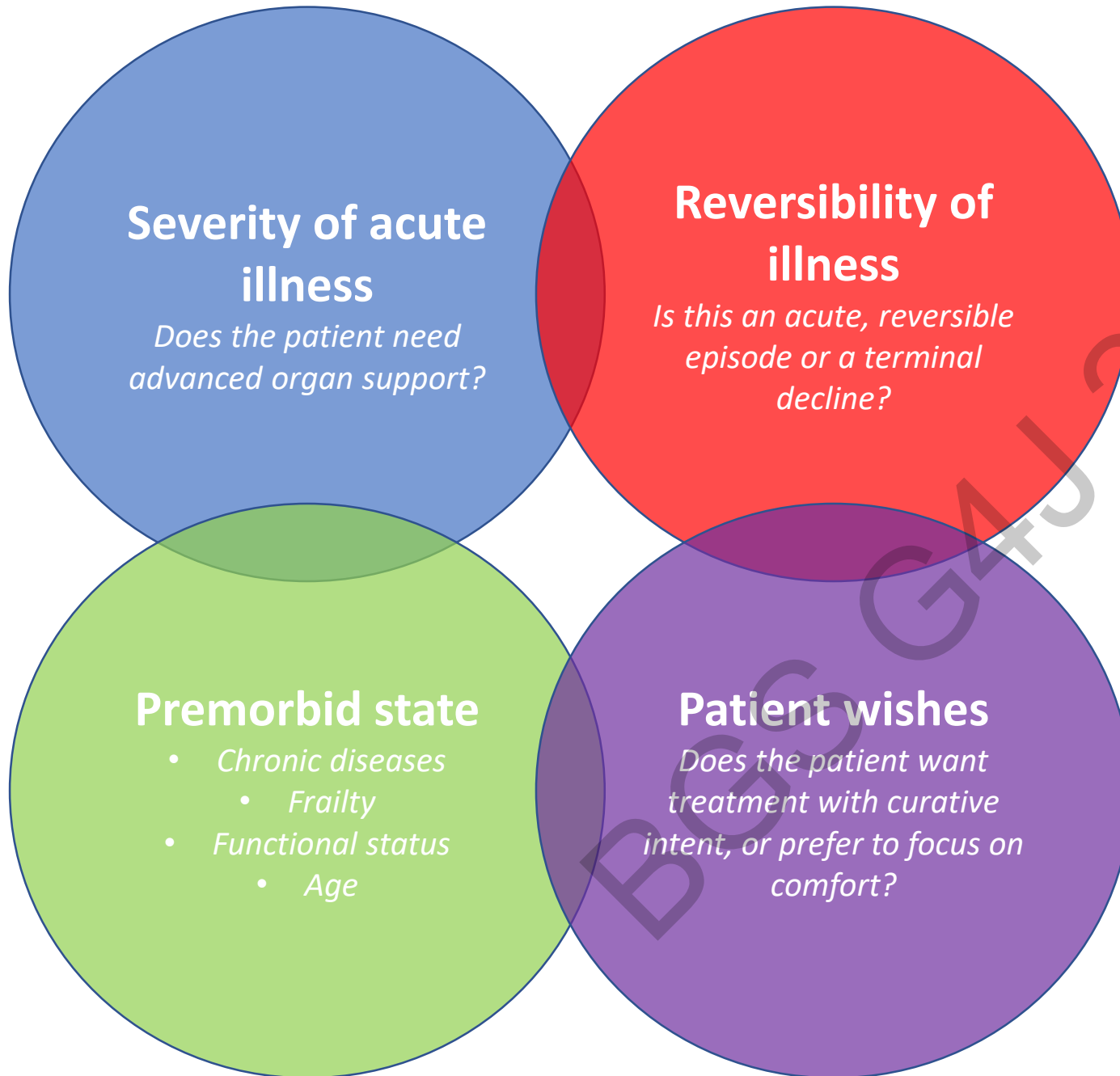
- Community dwelling adults aged > 80 with chronic diseases (N = 115)
- Shown videos of intensive care treatments
- Anticipated future quality of life influenced their choices

Critical care for older patients may...

- Offer the only chance of survival
- Extend life for several years
- Result in loss of functional independence
- Cause significant psychosocial morbidity
- Lead to poor long-term quality of life
- Be expensive and resource-intensive
- Be wanted or unwanted by the patient



How do intensivists decide who to admit?



Multiple information sources:

- Patient
- Family / Friends / Carers
- Referring team
- GP

How can you
help patients
make better
decisions?

Know

Know your patients well, especially those who are very unwell or who are at risk of critical illness

Talk

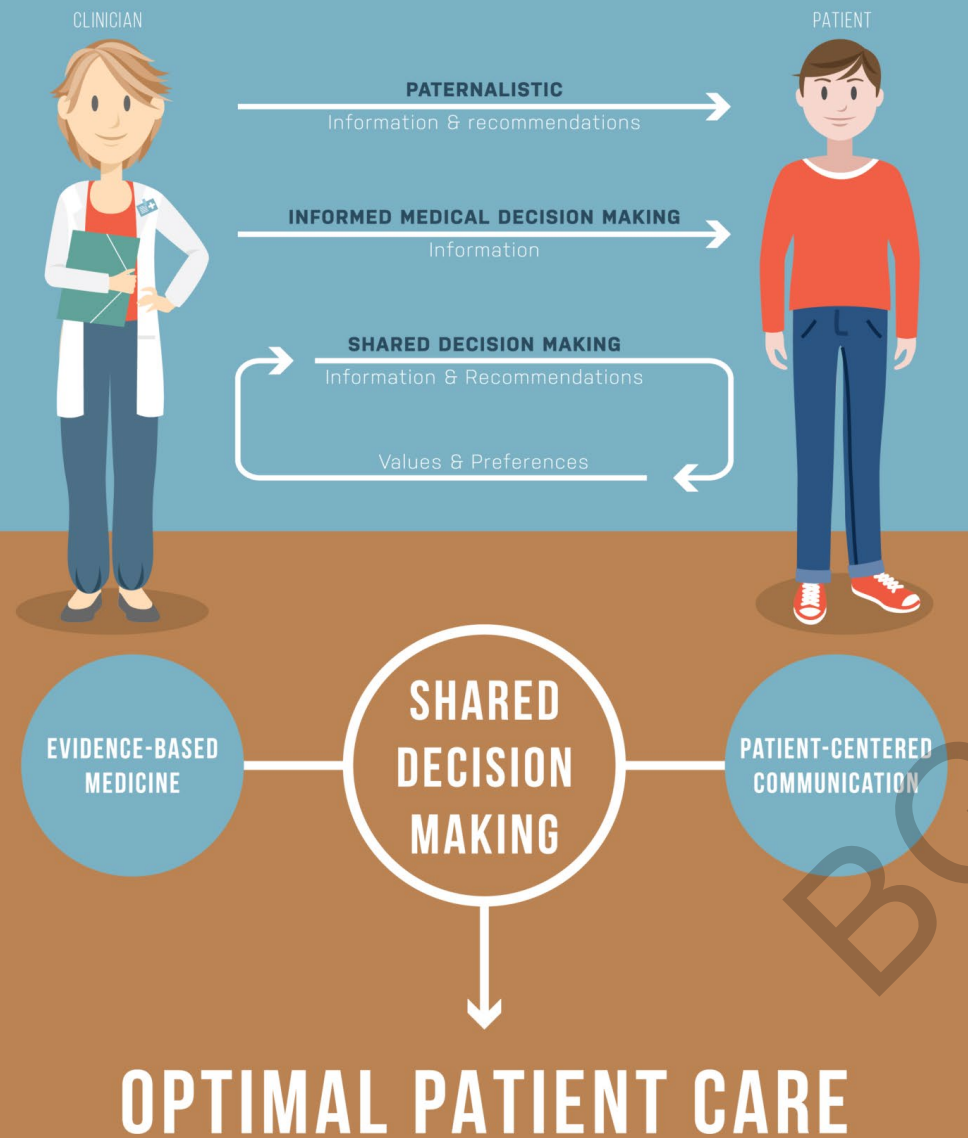
Talk to them about their treatment goals:

- Understand priorities and wishes
- Set realistic expectations
- Discuss the risks and benefits of intensive care

Involve

Involve intensivists at an early stage to inform discussions

TYPES OF **DECISION MAKING**



Shared decision making

- Patient is the expert on their:
 - Values
 - Preferences
 - Life context
- Clinician is the expert on:
 - Research evidence
 - Current best practice
 - Clinical experience

Talk early and talk often

- Discuss end-of-life care and make escalation plans early
- Give patients time and space to think
- Encourage patients to document their wishes
 - Where appropriate: Advance Decision to Refuse Treatment





- Online portal aimed at patients who may require urgent care:
 - Cancer
 - Dementia
- Allows patients to plan their urgent care in advance
- Improves communication between clinicians
- Currently in London with plans for expansion

Some things to think about

In these sections, we will ask you to consider some other important issues that might affect you if you are approaching the end of your life. How do you feel about organ donation? If your heart stops, are there treatments you would or would not want medical staff to attempt?

You may want to discuss these options with your doctor before you decide, but your answers to these questions will help clinicians to look after you in the way you wish.



My place of care preferences

If temporary urgent medical attention is needed, many people might wish to go to hospital, while others would prefer to be seen at home if possible. You can give us your preferences here.

If you put this into your care plan, healthcare professionals will do all they can to respect your wishes.

The same is true for many people approaching the very end of their lives. Some people may want to be in hospital, others would much rather be at home. We want to provide a space where anyone this is relevant for can share their thoughts and preferences.

Expressing such wishes in advance also makes these decisions easier for family and friends.



"The ReSPECT process is all about thinking ahead with patients about realistic care options in a truly person-centred way. Ultimately the process aims to help people understand the care and treatment options that may be available to them in a medical emergency and enables them to make health professionals aware of their preferences"

Dr Juliet Spiller, Co-Chair of the ReSPECT Working Group & Consultant in Palliative care at Marie Curie Hospices, Edinburgh

"Let's face it - no-one really wants to think about what might happen if they were to become critically ill! But of course the best way to do that is by planning ahead and doing the thinking while there's no crisis to deal with. That way you have time to think clearly, take advice, and share your thoughts and wishes with the people who might have to care for you. The ReSPECT process provides this opportunity in a clear, straightforward way. It will hopefully make it much easier for everyone, both inside and outside the healthcare professions, to make these challenging decisions together."

Viv Cummin, Patient Representative, ReSPECT Working Group



ReSPECT Recommended Summary Plan for Emergency Care and Treatment for: Preferred name

1. Personal details

Full name Date of birth Date completed

NHS/CHI/Health and care number Address

2. Summary of relevant information for this plan (see also section 6)

Including diagnosis, communication needs (e.g. interpreter, communication aids) and reasons for the preferences and recommendations recorded.

Details of other relevant planning documents and where to find them (e.g. Advance Decision to Refuse Treatment, Advance Care Plan). Also include known wishes about organ donation.

3. Personal preferences to guide this plan (when the person has capacity)

How would you balance the priorities for your care (you may mark along the scale, if you wish):

Prioritise sustaining life, even at the expense of some comfort Prioritise comfort, even at the expense of sustaining life

Considering the above priorities, what is most important to you is (optional):

4. Clinical recommendations for emergency care and treatment

Focus on life-sustaining treatment as per guidance below clinician signature

Focus on symptom control as per guidance below clinician signature

Now provide clinical guidance on specific interventions that may or may not be wanted or clinically appropriate, including being taken or admitted to hospital +/- receiving life support:

SPECIMEN COPY - NOT FOR USE

CPR attempts recommended Adult or child clinician signature

For modified CPR Child only, as detailed above clinician signature

CPR attempts **NOT** recommended Adult or child clinician signature

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5. Capacity and representation at time of completion

Does the person have sufficient capacity to participate in making the recommendations on this plan? Yes / No

Do they have a legal proxy (e.g. welfare attorney, person with parental responsibility) who can participate on their behalf in making the recommendations? Yes / No / Unknown

If so, document details in emergency contact section below

6. Involvement in making this plan

The clinician(s) signing this plan is/are confirming that (select A,B or C, OR complete section D below):

☐ A This person has the mental capacity to participate in making these recommendations. They have been fully involved in making this plan.

☐ B This person does not have the mental capacity to participate in making these recommendations. This plan has been made in accordance with capacity law, including, where applicable, in consultation with their legal proxy, or where no proxy, with relevant family members/friends.

☐ C This person is less than 18 (UK except Scotland) / 16 (Scotland) years old and (please select 1 or 2, and also 3 as applicable or explain in section D below):

☐ 1 They have sufficient maturity and understanding to participate in making this plan

☐ 2 They do not have sufficient maturity and understanding to participate in this plan. Their views, when known, have been taken into account.

☐ 3 Those holding parental responsibility have been fully involved in discussing and making this plan.

D If no other option has been selected, valid reasons must be stated here. Document full explanation in the clinical record.

Record date, names and roles of those involved in decision making, and where records of discussions can be found:

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7. Clinicians' signatures

Designation (grade/speciality)	Clinician name	GMC/NMC/ HCPC Number	Signature	Date & time

Senior responsible clinician

8. Emergency contacts

Role	Name	Telephone	Other details
Legal proxy/parent			
Family/friend/other			
GP			
Lead Consultant			

9. Confirmation of validity (e.g. for change of condition)

Review date	Designation (grade/speciality)	Clinician name	GMC/NMC/ HCPC number	Signature

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In summary...

Critical care for
the older person
is a double-
edged sword:

- May prolong life
- Long-term implications for functional independence and quality of life

Likely benefit of
critical care
depends on:

- Premorbid state
- Reversibility of acute illness

Shared decision-
making leads to
better decisions

- Engage patients early and often in discussions about critical care



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