Decisions to refer and admit to intensive care : improving quality and process

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Why does it need improving?

- For the patient these are life and death decisions
- They are often made in circumstances where there is limited time and uncertainty of outcome
- There is evidence of substantial variation in how these decisions are made
- There are no nationally used guidelines
- There is little in the way of training for clinicians making these decisions

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Why is it difficult?

Intensive Care

- Potentially life-saving
- Harms
  - Procedures
  - therapies
  - Critical illness
- Measure of success
  - Survival
  - Functional survival
  - Quality survival

Funded by NIHR

Decision-making

- A decision to refer or admit/not admit to ICU is a decision about whether to withhold a potentially life sustaining treatment

- Clinical component what *can* we do?
- Ethical component what *should* we do?

- Both need justification

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Addressing the problem:
NIHR funded project to look at process of decision making

Systematic reviews

Observational study

Questionnaire Study –
(ICU consultants and outreach nurses)

Funded by NIHR

Systematic review
Factors affecting decisions to admit to ICU

Patient related

- Current functional status / quality of life
- Patient age
- Presence of chronic illness
- Patient preference
- Family preference
- Gender

Clinician/organisation related

- Seniority of clinician
- Prognostic pessimism / perception of futility
- Clinician's specialty
- Patient's "specialty"
- ICU bed availability
- Advance care plan or directive
- Time of day

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Observational study

- Complex decisions
- Lack of communication/shared understanding between referral team and ICU regarding:
  - Reason for referral
  - Responsibility for ongoing care
- Little evidence of weighing factors for and against admission
- Difficulties with communicating with/involving patient's family
- Anxiety, confusion, and isolation experienced by family

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"…that's difficult because you yourself are in a bit of turmoil … you don't take in everything that they're saying to you and it would be better if they were able to say to you, 'Right this happened, that has happened, we are now moving her,' and they make the decision. I couldn't make the decision as whether to move to intensive care or…"

Patient's son

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"and I think he was, he was sort of maybe thinking out loud, out loud to himself and maybe saying to R you know, and we're sort of standing there thinking, "Oh my gosh, flipping hell!" because obviously like you know, I always think well when they're helping somebody breathe, you know, well what's wrong?"

Patient's wife

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"But they're obviously making decisions because different doctors come in but you don't maybe realise why they come in. But then perhaps somebody later will come and explain to you or perhaps not. I think it's just a bit hit and miss."

Patient's daughter

Funded by NIHR

Observational study

- BUT: there were also examples of good practice to learn from

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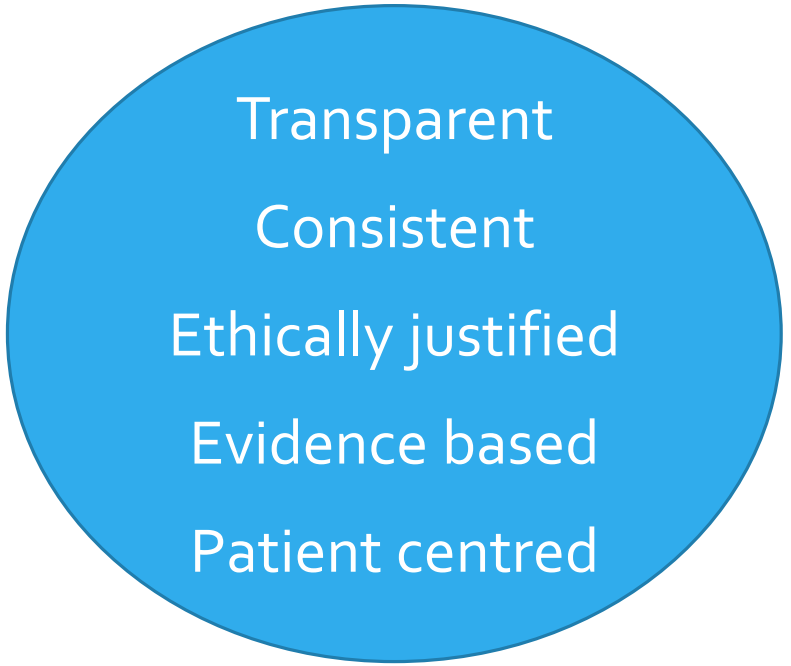
What would a good decision making process look like?



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What would a good decision making process look like?

Consent (Montgomery 2015)
Incapacity (MCA 2005)
Refusal of treatment (Re T 1992)

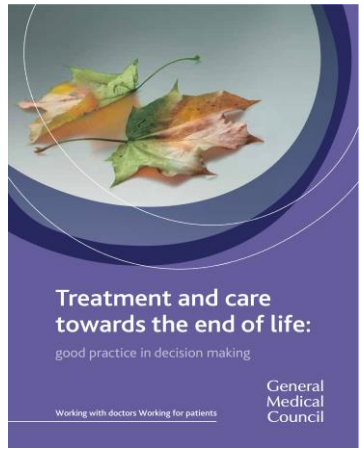
Transparent

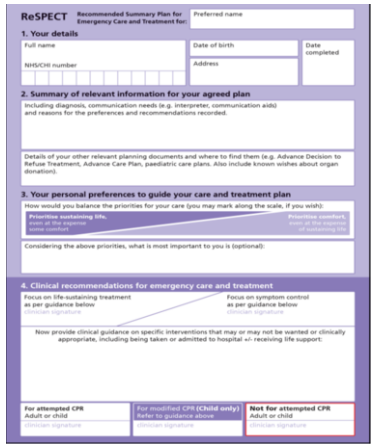
Consistent

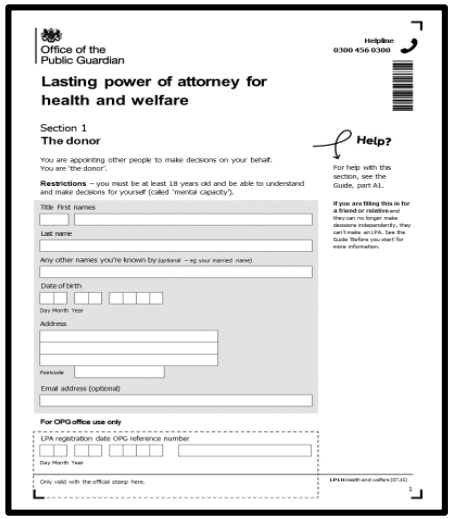
Ethically justified

Evidence based

Patient centred







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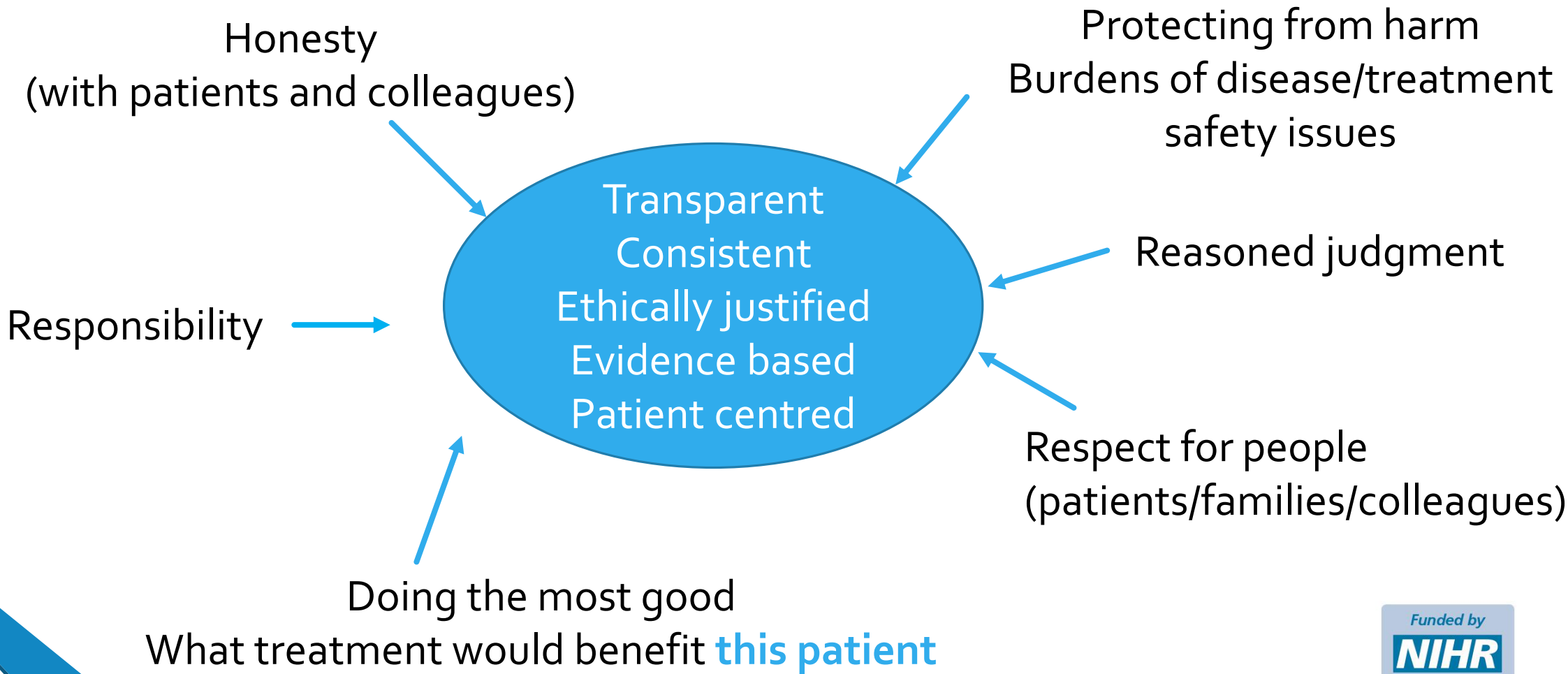
Ethically grounded clinical decision making



Funded by NIHR

Why doesn’t it always happen like this?

- Complicated
- No time
- Limited information available
- Outcomes are uncertain
- Unclear lines of responsibility

Funded by NIHR

How can we make it better?

- Provide a structured framework for decision-making that:

1. Records relevant clinical evidence and patient wishes
2. Prompts patient centred, ethically justified decision making
3. Guides implementation, communication, and review

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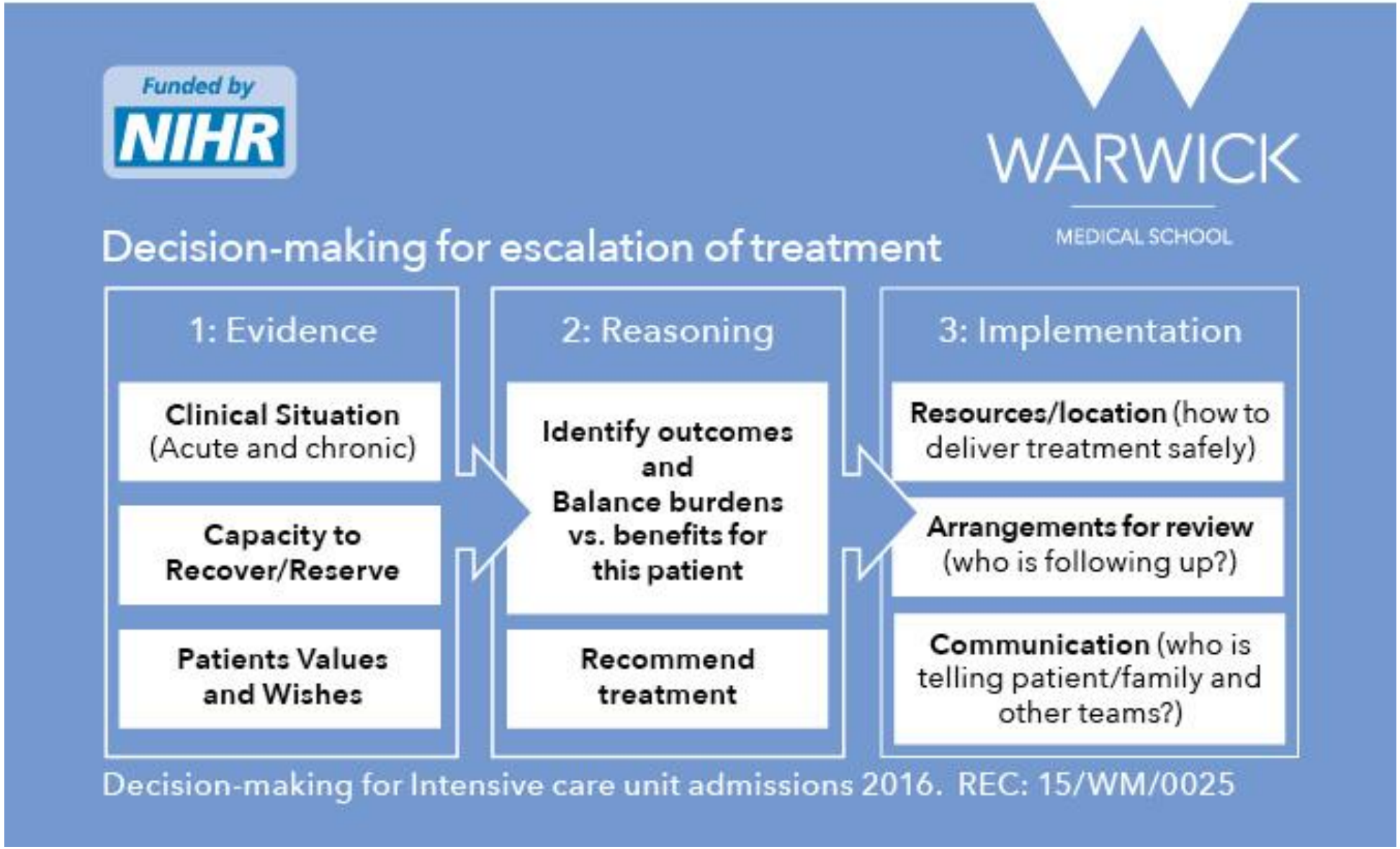
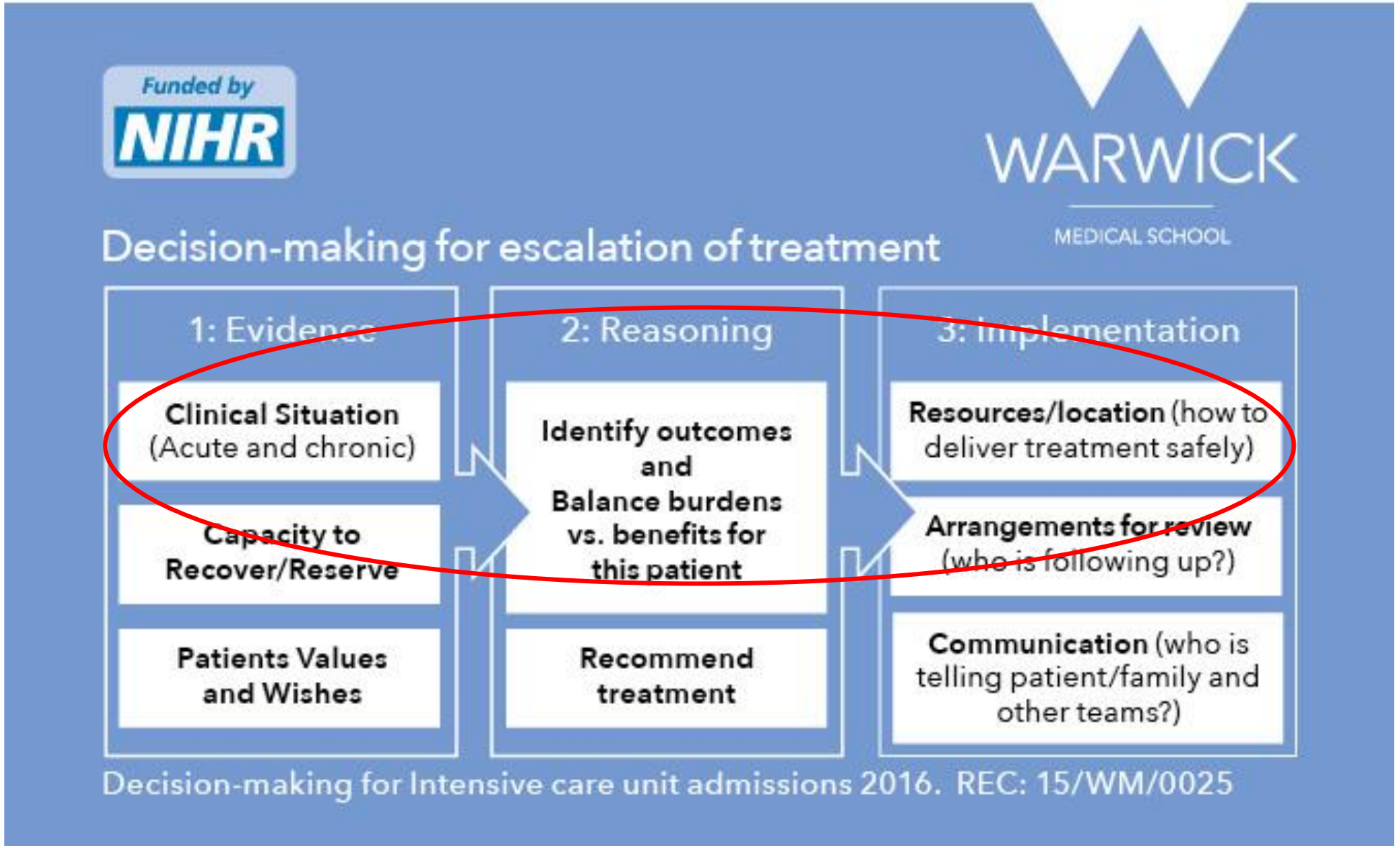

Funded by
NIHR
WARWICK
MEDICAL SCHOOL
Decision-making for escalation of treatment
1: Evidence
Clinical Situation (Acute and chronic)
Capacity to Recover/Reserve
Patients Values and Wishes
2: Reasoning
Identify outcomes and Balance burdens vs. benefits for this patient
Recommend treatment
3: Implementation
Resources/location (how to deliver treatment safely)
Arrangements for review (who is following up?)
Communication (who is telling patient/family and other teams?)
Decision-making for Intensive care unit admissions 2016. REC: 15/WM/0025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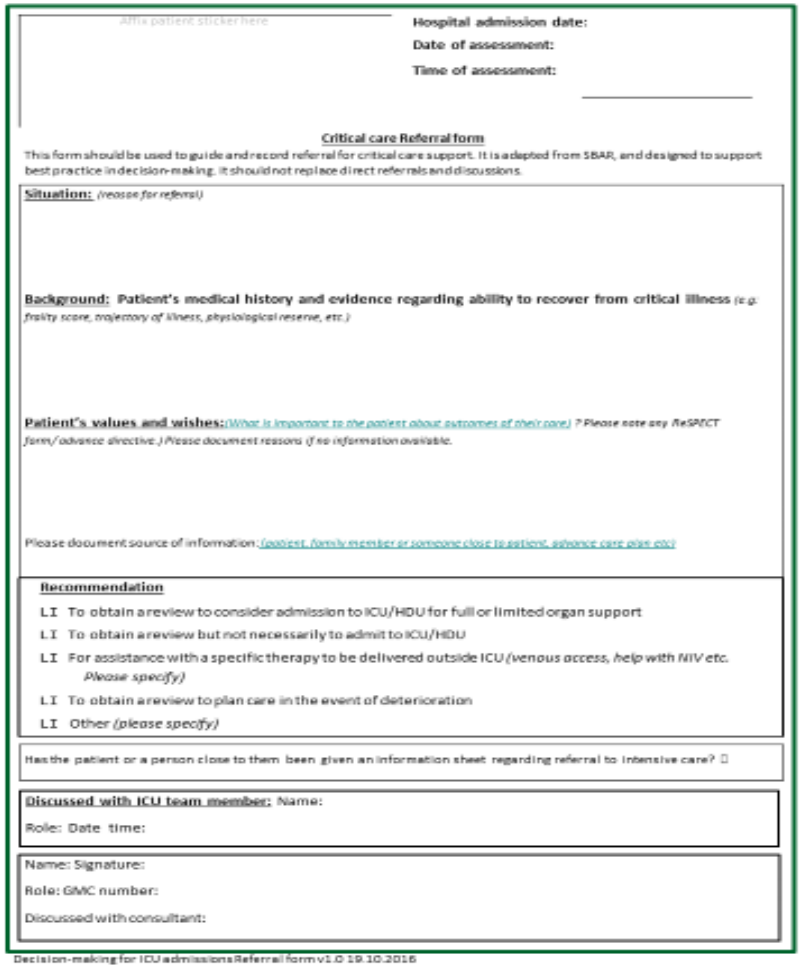
Providing a structured framework



Affix patient sticker here

Hospital admission date:

Date of assessment:

Time of assessment:

Critical care Referral form

This form should be used to guide and record referral for critical care support. It is adapted from SBAR, and designed to support best practice in decision-making. It should not replace direct referrals and discussions.

Situation: *(reason for referral)*

Background: Patient's medical history and evidence regarding ability to recover from critical illness *(e.g. frailty score, trajectory of illness, physiological reserve, etc.)*

Patient's values and wishes: *(What is important to the patient about outcomes of their care) ? Please note any ReSPECT form/ advance directive.) Please document reasons if no information available.*

Please document source of information: *(patient, family member or someone close to patient, advance care plan etc)*

Recommendation

- ☐ To obtain a review to consider admission to ICU/HDU for full or limited organ support
- ☐ To obtain a review but not necessarily to admit to ICU/HDU
- ☐ For assistance with a specific therapy to be delivered outside ICU *(venous access, help with NIV etc. Please specify)*
- ☐ To obtain a review to plan care in the event of deterioration
- ☐ Other *(please specify)*

Has the patient or a person close to them been given an information sheet regarding referral to intensive care? ☐

Discussed with ICU team member: Name:

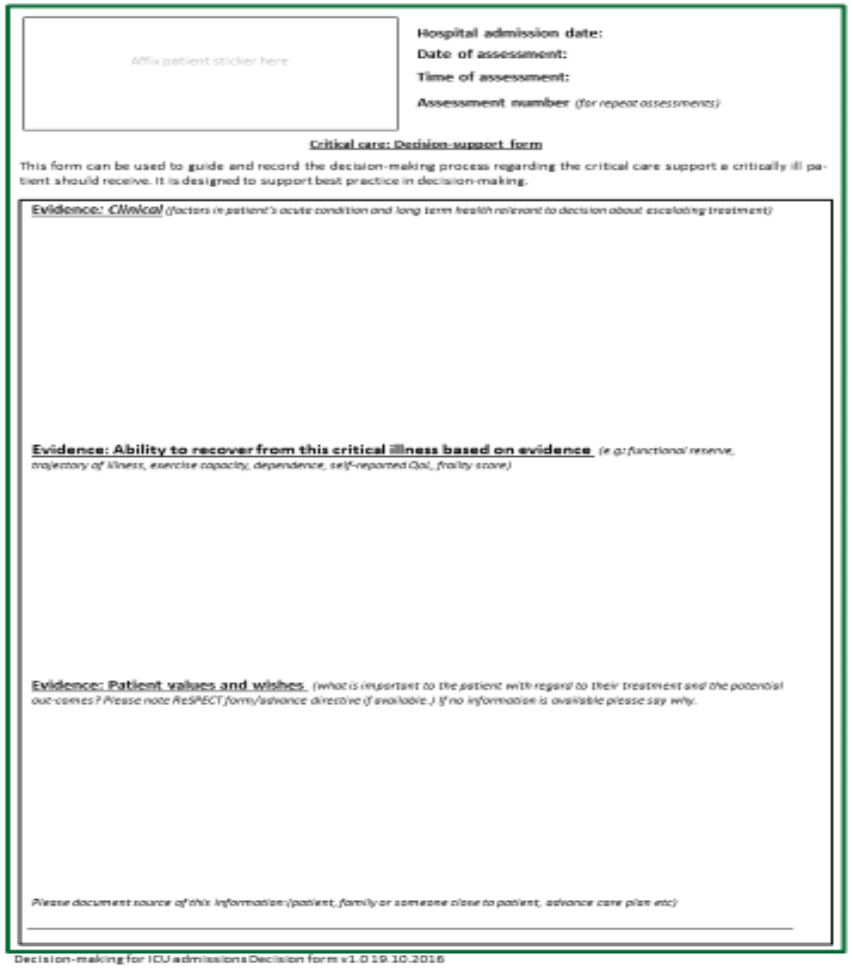
Role: Date time:

Name: Signature:

Role: GMC number:

Discussed with consultant:

Decision-making for ICU admissions Referral form v1.0 19.10.2016



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Evidence: Clinical *(factors in patient's acute condition and long term health relevant to decision about escalating treatment)*

Evidence: Ability to recover from this critical illness based on evidence *(e.g: functional reserve, trajectory of illness, exercise capacity, dependence, self-reported QoL, frailty score)*

Evidence: Patient values and wishes *(what is important to the patient with regard to their treatment and the potential outcomes? Please note ReSPECT form/advance directive (if available.) If no information is available please say why.*

Please document source of this information (patient, family or someone close to patient, advance care plan etc)

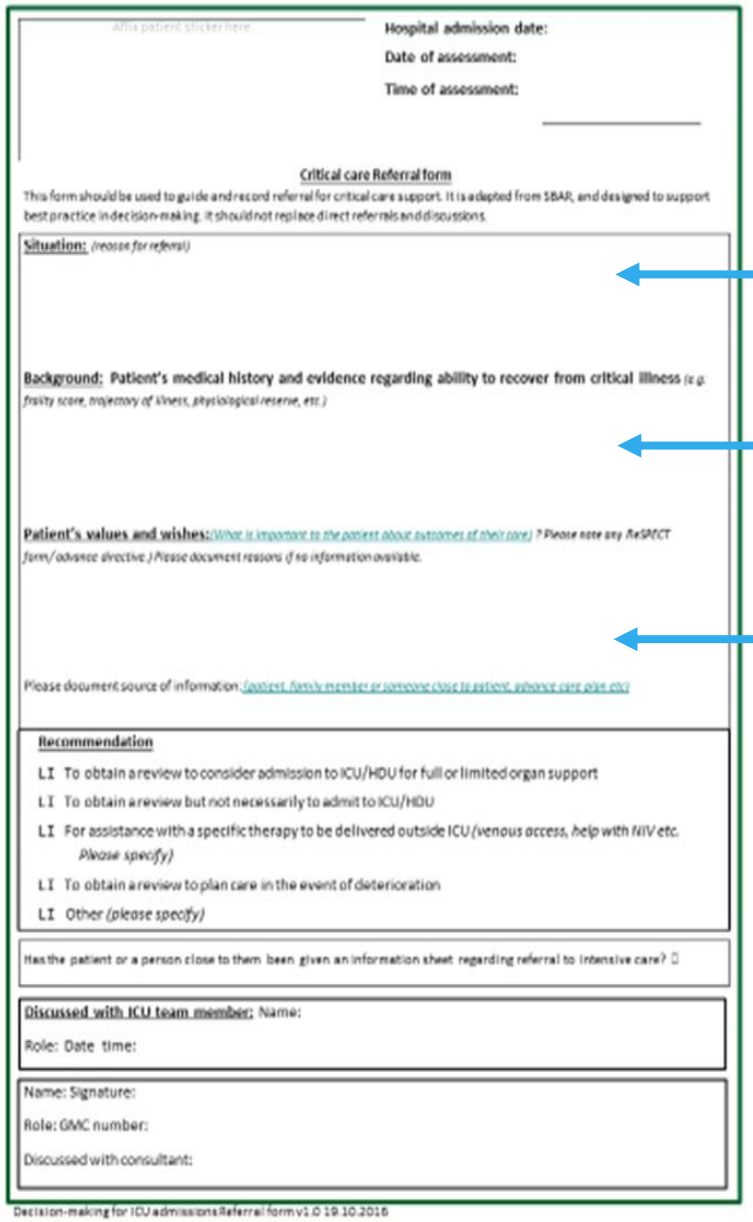
Decision-making for ICU admissions Decision form v1.0 19.10.2016

Funded by NIHR

Referral process

- Referral mechanism is important
- SBAR format
- Consultant to consultant referrals are the preferred model
  - Most senior available clinician
  - Referrals should not be delegated
- Clear involvement of patient/advocate
  - Information leaflet
- Clear recommendation: what is being asked for?
- Document referral to whom and when
- **Use the form**

Referral form



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Please document source of information: *(patient, family member or someone close to patient, advance care plan etc)*

Recommendation

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- LI To obtain a review but not necessarily to admit to ICU/HDU
- LI For assistance with a specific therapy to be delivered outside ICU *(venous access, help with NIV etc. Please specify)*
- LI To obtain a review to plan care in the event of deterioration
- LI Other *(please specify)*

Has the patient or a person close to them been given an information sheet regarding referral to intensive care? ☐

Discussed with ICU team member: Name:
Role: Date time:

Name: Signature:
Role: GMC number:
Discussed with consultant:

Decision-making for ICU admissions Referral form v1.0 19.10.2016

Situation: reason for referral

Background: medical history and **evidence** regarding ability to recover from critical illness
(frailty score *score, trajectory of illness, physiological reserve, etc)*

Patients values and wishes: what is important to the patient about outcomes of their care
Note presence of any ReSPECT form or advance care plan
Please document reasons if no information available

Please document source of information: (patient, family member or someone close to patient, advance care plan etc)

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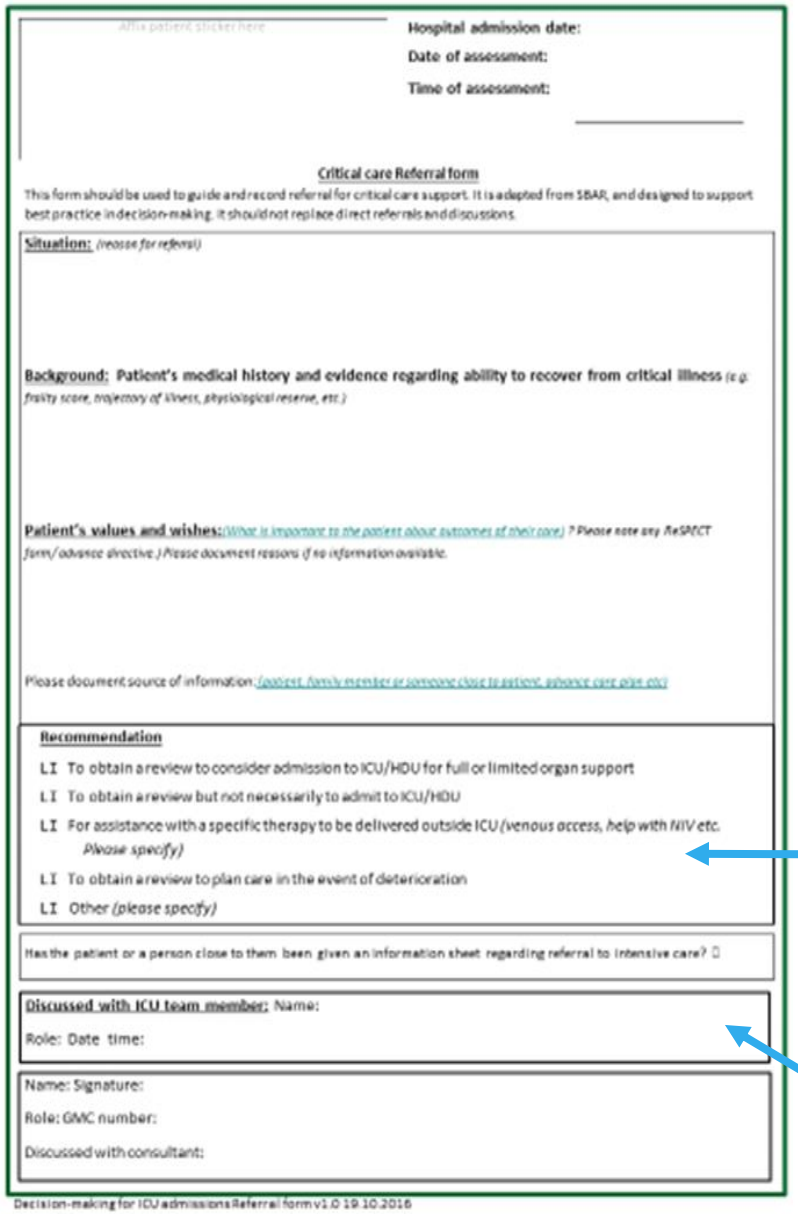
Referral form



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- Other *(please specify)*

Has the patient or a person close to them been given an information sheet regarding referral to intensive care?

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Patient and family information

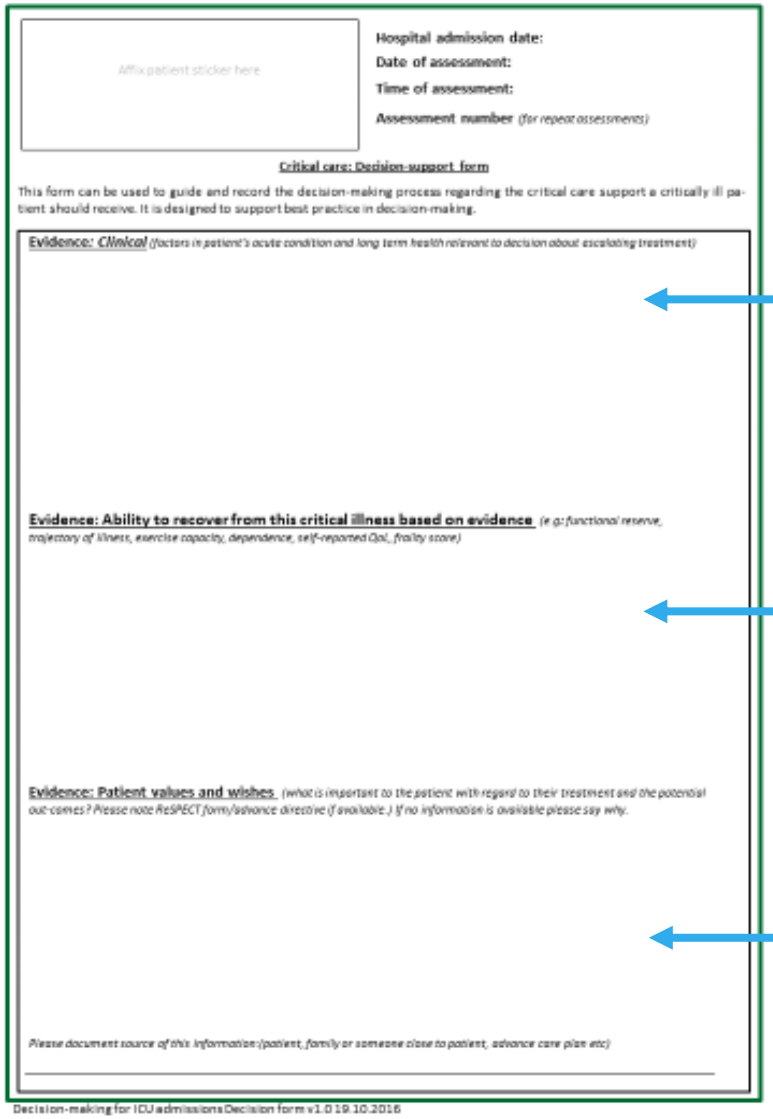
Treating people who are critically ill
Information for patients

You have been given this information sheet because the doctors and nurses caring for you have asked the intensive care team for advice about your treatment. When someone becomes suddenly very unwell (critically ill), there are different options about what is the right treatment for them. This leaflet is about these options. We hope that this information will help you to understand what is happening, and to take part in discussions about your care. This will help the doctors and nurses make sure you get the treatment that is right for you. You do not need to read this, or take part in any discussions, if you do not want to.

Treating people who are critically ill
Information for family and friends

You have been given this information sheet because someone close to you has been referred to the intensive care team. When someone becomes suddenly very unwell (critically ill), there are different options about the treatment they should receive. This leaflet tells you about these options. We hope that this information will help you to understand what is happening, and to help you when you speak to the doctors and nurses about the treatment.

Funded by NIHR



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Evidence: Clinical *(factors in patient's acute condition and long term health relevant to decision about escalating treatment)*

Evidence: Ability to recover from this critical illness based on evidence *(e.g: functional reserve, trajectory of illness, exercise capacity, dependence, self-reported QoL, frailty score)*

Evidence: Patient values and wishes *(what is important to the patient with regard to their treatment and the potential outcomes? Please note ReSPECT form/advance directive (if available.) If no information is available please say why.*

Please document source of this information (patient, family or someone close to patient, advance care plan etc)

Decision-making for ICU admissions Decision form v1.0 19.10.2016

Decision support framework

Evidence (clinical):
(factors in patient's acute condition and long term health relevant to decision about escalating treatment)

Evidence (ability to recover from critical illness)
(e.g: functional reserve, trajectory of illness, exercise capacity, dependence, self-reported QoL, frailty score)

Evidence (patient's values and wishes)
(what is important to the patient with regard to their treatment and the potential outcomes? Please note ReSPECT form/advance refusal of treatmentif available.) If no information is available please say why.)

Please document source of this information:(patient, family or someone close to patient, advance care plan etc)

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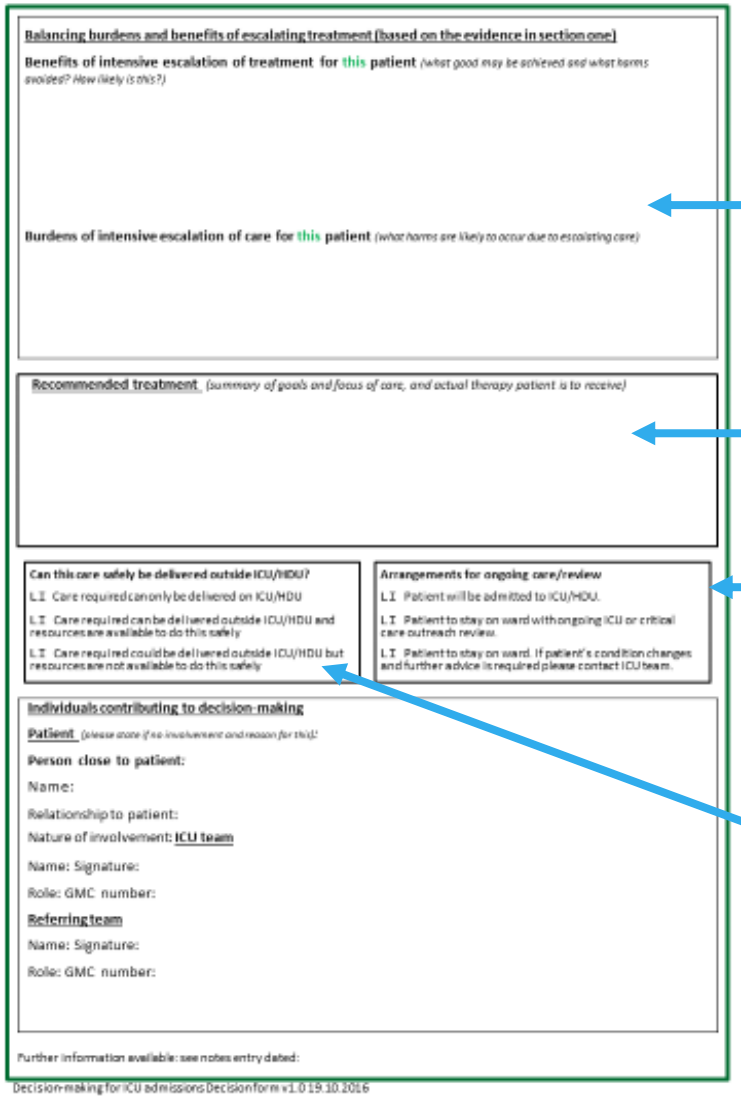

Balancing burdens and benefits of escalating treatment (based on the evidence in section one)

Benefits of intensive escalation of treatment for this patient *(what good may be achieved and what harms avoided? How likely is this?)*

Burdens of intensive escalation of care for this patient *(what harms are likely to occur due to escalating care)*

Recommended treatment *(summary of goals and focus of care, and actual therapy patient is to receive)*

Can this care safely be delivered outside ICU/HDU?

- Care required can only be delivered on ICU/HDU
- Care required can be delivered outside ICU/HDU and resources are available to do this safely
- Care required could be delivered outside ICU/HDU but resources are not available to do this safely

Arrangements for ongoing care/review

- Patient will be admitted to ICU/HDU.
- Patient to stay on ward with ongoing ICU or critical care outreach review.
- Patient to stay on ward. If patient's condition changes and further advice is required please contact ICU team.

Individuals contributing to decision-making

Patient *(please state if no involvement and reason for this)*:

Person close to patient:

Name:

Relationship to patient:

Nature of involvement: ICU team

Name: Signature:

Role: GMC number:

Referring team

Name: Signature:

Role: GMC number:

Further information available: see notes entry dated:

Decision-making for ICU admissions Decision form v1.0 19.10.2016

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.....

Person close to patient*:*

Name: .....

Relationship to patient: .....

Nature of involvement: .....

ICU team

Name: Signature: .....

Role: GMC number: .....

Referring team

Name: Signature: .....

Role: GMC number .....

Further information available: see notes entry dated .....

Funded by NIHR

Why use the forms?

- They helps to structure decision making
- They prompt for what needs to be considered and may be missed in a pressured situation
- They facilitate ethically justifiable decision making (this is how we would want it to be)
- They don't include information that you shouldn't normally record so it is not additional work
- They provide a transparent record for future review (audit/learning/litigation defence)
- The patient and family leaflets help to structure conversations and support their involvement.

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How to use them?

- **Their use should not delay timely urgent treatment of seriously ill patients**
- Some boxes may require little information in some patients (or information may not be available)
- But noting absence of information provides a prompt to revisit this at a later time and obtain relevant information for further review and decision making

Funded by NIHR

How to use them?

- Paper version; available on wards and ICU; file in patient notes
- May be able to download and print off from Trust website
- Electronic version; has been developed but need Trust IT system to incorporate it

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Case 1: 79 year old female patient

- Admitted 3 days ago with pneumonia now has worsening NEWS score referred to Outreach for consideration of admission to ICU for organ support
- BP 90/50, HR 105, SpO2 91%, FiO2 0.80, RR: 32, 2000ml ivi in last 3 hours, u.o. 15ml/hr, conscious, History of DM, CKD, osteoporosis, arthritis, 1 fall in last year, takes a long time to climb stairs as not very strong. Walks with a stick.
- Daughter says she is very active, enjoys life, would hate to be "in a home"

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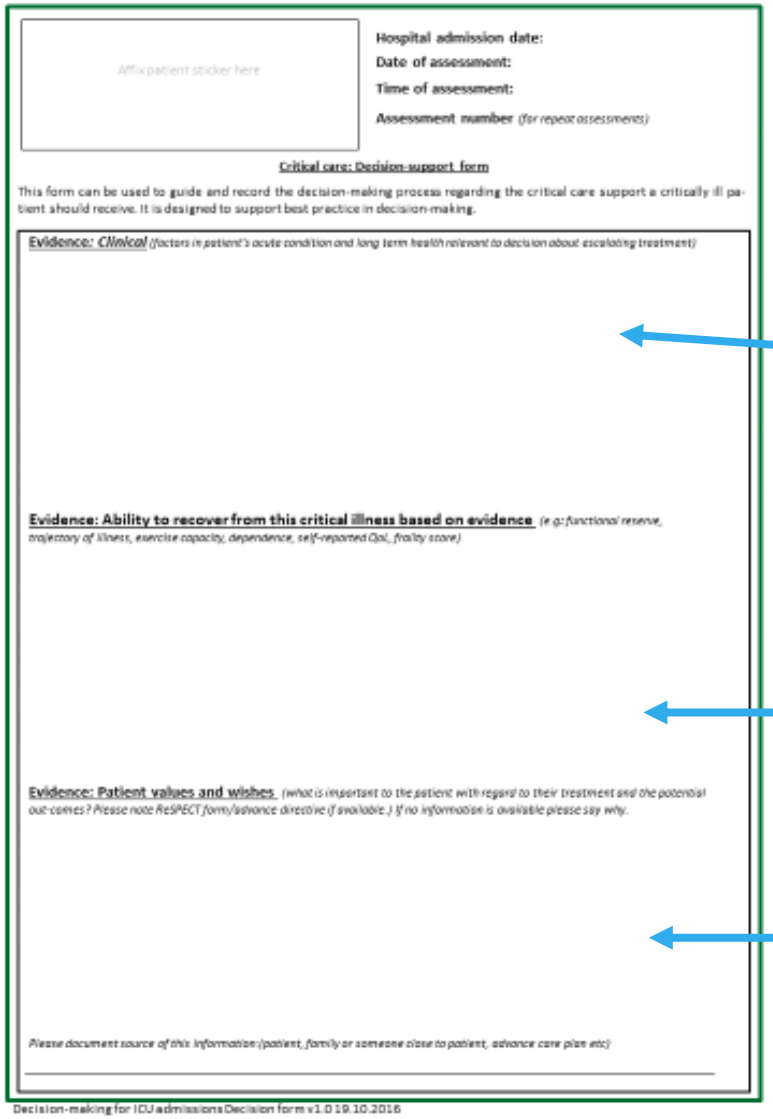

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Evidence: Patient values and wishes *(what is important to the patient with regard to their treatment and the potential out-comes? Please note ReSPECT form/advance directive (if available.) If no information is available please say why.*

Please document source of this information (patient, family or someone close to patient, advance care plan etc)

Decision-making for ICU admissions Decision form v1.0 19.10.2016

Decision support framework

Evidence (clinical):

79 year old female with new diagnosis of pneumonia, 3 days of treatment, now has worsening physiology:
BP 90/50, HR 105,
SpO2 91%, FiO2 0.80, RR: 32
2000ml ivi in last 3 hours, u.o. 15ml/hr,
GCS 14/15
History of DM, CKD, osteoporosis, arthritis,

Evidence (ability to recover from critical illness)

1 fall in last year, takes a long time to climb stairs as not very strong. Walks with a stick. Frailty score 4 to 5
Reflects patient likely to have prolonged/incomplete recovery

Evidence (patient's values and wishes)

Daughter says she is very active, enjoys life, would hate to be "in a home". Patient too unwell to discuss.

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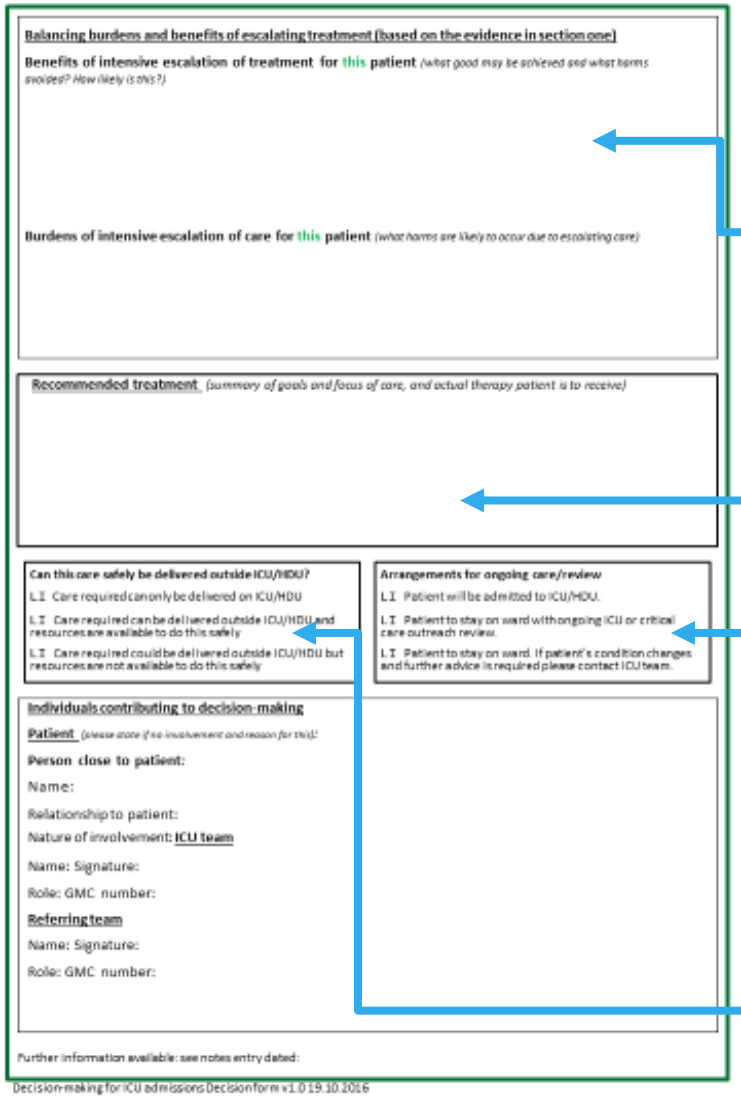

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L3 Care required could be delivered outside ICU/HDU but resources are not available to do this safely

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L1 Patient will be admitted to ICU/HDU.

L2 Patient to stay on ward with ongoing ICU or critical care outreach review.

L3 Patient to stay on ward. If patient's condition changes and further advice is required please contact ICU team.

Individuals contributing to decision-making

Patient *(please state if no involvement and reason for this)*:

Person close to patient:

Name:

Relationship to patient:

Nature of involvement: ICU team

Name: Signature:

Role: GMC number:

Referring team

Name: Signature:

Role: GMC number:

Further information available: see notes entry dated:

Decision-making for ICU admissions Decision form v1.0 19.10.2016

Balancing burdens and benefits of escalating treatment

Benefits of intensive escalation of treatment for this patient

Patient unlikely to survive without 'pressor and ventilatory support. Very likely to need renal replacement therapy as well. Short term organ support may allow more time for antibiotics to resolve pneumonia

Burdens of intensive escalation of care for this patient

Functional status post critical illness may be be severely curtailed, this is likely to be unacceptable (according to daughter). Full organ support will be distressing and prolonged in all likelihood.

Recommended treatment

This lady should be admitted for non-invasive ventilation and vasopressor support as ceiling of care. Not for acute RRT or invasive ventilation as deterioration to point of requiring these would show failure of therapy, and no chance of recovery acceptable to patient.

Arrangements for ongoing care/review

- ✓ Patient will be admitted to ICU/HDU.

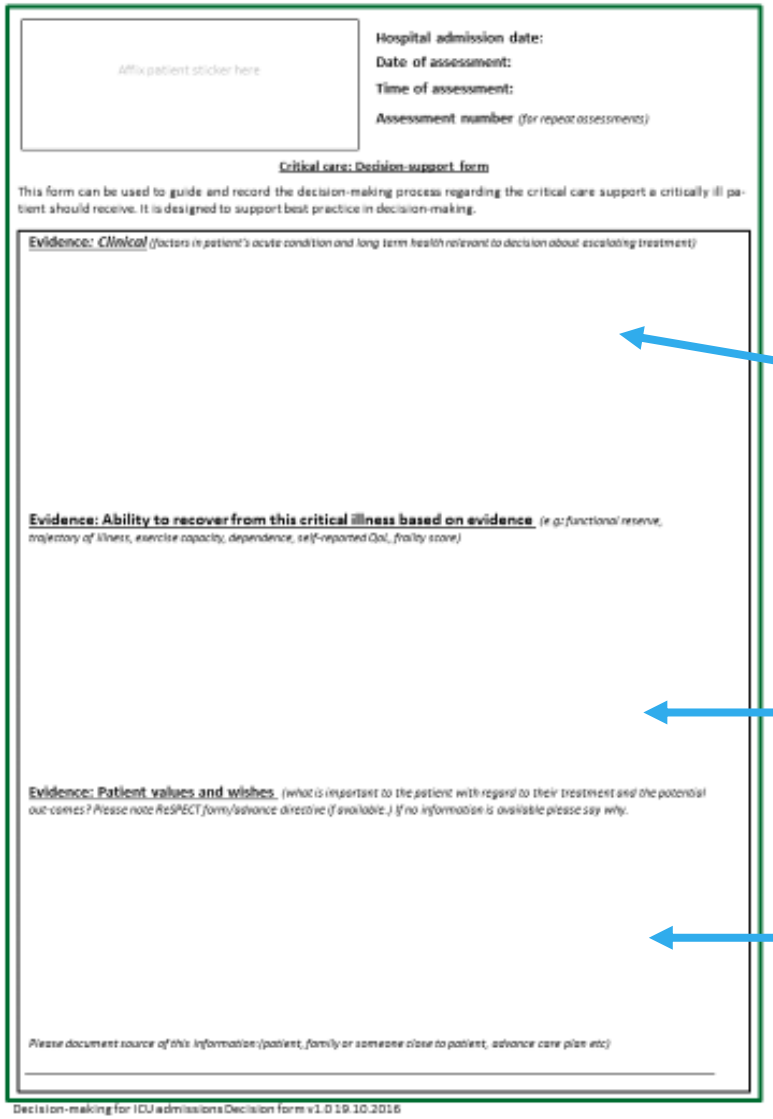
- ✓ Care required can only be delivered on ICU/HDU

Funded by NIHR

Case 2: 35 year old female patient

- Admitted 1 day ago with sepsis: unknown source.
- She has suddenly got much worse on ward, with a low blood pressure and high respiratory rate. Outreach have called ICU team directly as they are worried.
- BP 76/50, HR 115, SpO2 88%, FiO2 0.85, RR: 30, 2000ml ivi in last 1 hour, u.o. unknown, conscious but scared.
- History of asthma and ulcerative colitis. Previous caesarean section
- Works as a nursery nurse.

Funded by NIHR



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Critical care: Decision-support form

This form can be used to guide and record the decision-making process regarding the critical care support a critically ill patient should receive. It is designed to support best practice in decision-making.

Evidence: Clinical *(factors in patient's acute condition and long term health relevant to decision about escalating treatment)*

Evidence: Ability to recover from this critical illness based on evidence *(e.g: functional reserve, trajectory of illness, exercise capacity, dependence, self-reported QoL, frailty score)*

Evidence: Patient values and wishes *(what is important to the patient with regard to their treatment and the potential outcomes? Please note ReSPECT form/advance directive (if available.) If no information is available please say why.*

Please document source of this information (patient, family or someone close to patient, advance care plan etc)

Decision-making for ICU admissions Decision form v1.0 19.10.2016

Decision support framework

Evidence (clinical):
35 year old female
PUO? Urinary sepsis
Now has severe sepsis/septic shock/resp failure
?AKI
History of UC (well controlled), asthma (well controlled),
ABG: pH: 7.25, PO2: 9.0, PaCO2: 3.0, BE: -6.0, lactate: 5.0,
FiO2: 0.85.
BP 76/50, HR 115, SpO2 88%, RR: 30

Evidence (ability to recover from critical illness)
Fit young woman, full time work, good nutritional status

Evidence (patient's values and wishes)
No information available: patient too unwell, no family present.

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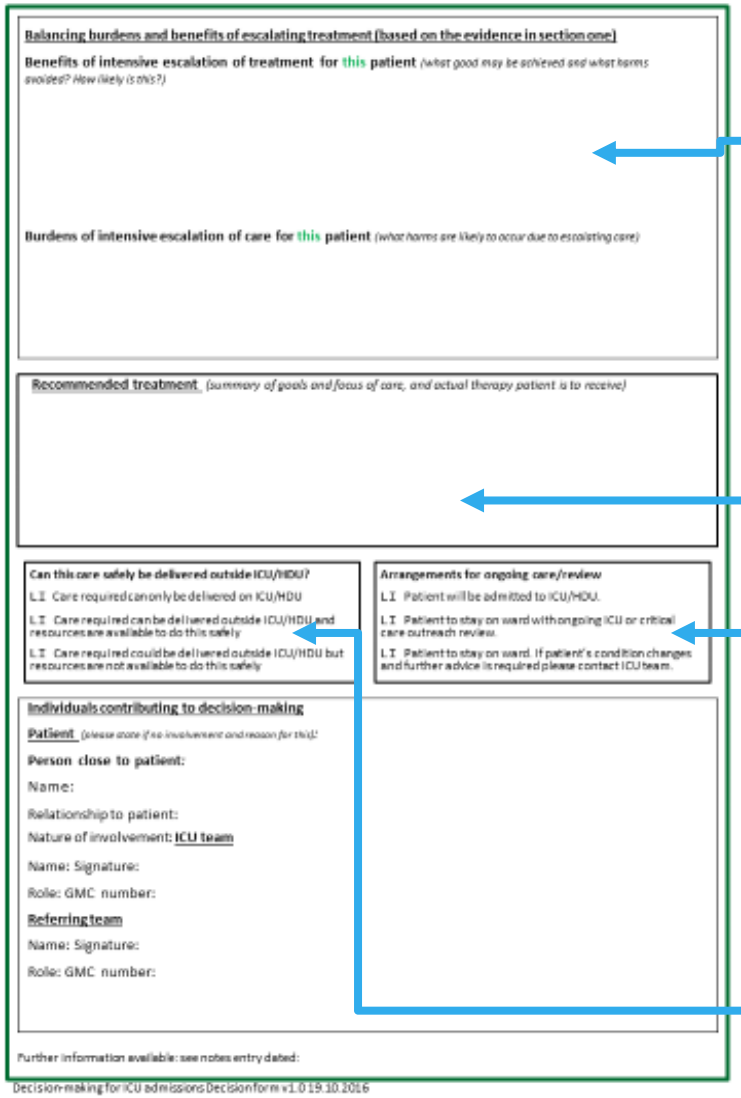

Balancing burdens and benefits of escalating treatment (based on the evidence in section one)

Benefits of intensive escalation of treatment for this patient *(what good may be achieved and what harms avoided? How likely is this?)*

Burdens of intensive escalation of care for this patient *(what harms are likely to occur due to escalating care)*

Recommended treatment *(summary of goals and focus of care, and actual therapy patient is to receive)*

Can this care safely be delivered outside ICU/HDU?

L1 Care required can only be delivered on ICU/HDU

L2 Care required can be delivered outside ICU/HDU and resources are available to do this safely

L3 Care required could be delivered outside ICU/HDU but resources are not available to do this safely

Arrangements for ongoing care/review

L1 Patient will be admitted to ICU/HDU.

L2 Patient to stay on ward with ongoing ICU or critical care outreach review.

L3 Patient to stay on ward. If patient's condition changes and further advice is required please contact ICU team.

Individuals contributing to decision-making

Patient *(please state if no involvement and reason for this)*:

Person close to patient:

Name:

Relationship to patient:

Nature of involvement: ICU team

Name: Signature:

Role: GMC number:

Referring team

Name: Signature:

Role: GMC number:

Further information available: see notes entry dated:

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Balancing burdens and benefits of escalating treatment

Benefits of intensive escalation of treatment for this patient

Organ support necessary for survival

Burdens of intensive escalation of care for this patient

Burdens of therapy clearly outweighed by benefit survival in this young woman

Recommended treatment

This lady should be admitted to ICU:

arterial line

CVC plus noradrenaline (metarminol infusion in interim)

Likely to need IPPV (decide on CPAP vs. intubation after next ABG)

CXR, BC, sputum culture, urine culture

- ✓ Care required can only be delivered on ICU/HDU

Arrangements for ongoing care/review

- ✓ Patient will be admitted to ICU/HDU.

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Further information

- Name and contact details of Trust champions
- Slides available on Trust intranet?
- Link to study website (slides and forms)

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