A Shocking Admission: Patient Exclusion From Intensive Care Therapy

G. HOWARD
Intensive Care Unit, Waikato Hospital, Hamilton, NEW ZEALAND

ABSTRACT

Objective: Quantitative description of intensive care unit (ICU) triage practice.

Methods: Prospective audit of patients refused access to the Waikato ICU over a one year period.

Results: For the period August 2003 to September 2004, 280 referrals to the ICU were refused. Ninety five referrals (34%) were refused on the grounds that the patient would be too sick to benefit from ICU treatment, and 124 (44%) were considered too well. Sixty one referrals were declined on the basis that there was insufficient resource (beds or nurses).

Conclusions: In our hospital a significant number of patients referred for intensive care therapy are refused access. Triage occurs as a result of resource limitation and/or because the patient is seen as too sick or too well to benefit. Despite this being part of our daily practice, it has been, to date, poorly quantified. Until the process is demystified it cannot be understood or debated by doctors, the public and political figures. (Critical Care and Resuscitation 2005; 7: 97-101)

Key words: Triage, futility, refusal

Changes in the perception of “self” in the developed world over the second half of the last century have been well recognised in non-medical sectors of the community. The catchphrase “What is right for me?” has supplanted a more altruistic traditional culture. Increasingly, quality of life is no longer measured in terms of independent function or activity, but by each individual’s perception of what gives them pleasure. Certainly politicians have not failed to recognise the importance and value of an aging cohort, increasing in number, and with an interest in being influential. The impact on a once largely paternalistic medical practice has been significant. Although reported in the medical literature, there has been little discussion in the public forum about the correct and appropriate application of an increasing myriad of technical and therapeutic interventions. Central to this debate is the intensivist. Although patients have become more frail and elderly, they and their family are less accepting of death than we might expect. Inevitably these patients will be presented to the intensivist for ongoing care. Not all of them will, however, receive intensive care therapies.

As a profession we have traditionally focussed our attention on the beneficiaries of our care. Intensivists have also, on occasion, documented the numbers of patients accepted for ICU care who are not able to be accommodated because of overt resource limitation. What is not clear, is both the number of patients triaged to not receive ICU treatment, and the standards applied in the triage process. In many parts of Australasia this standard might be the opinion of the intensivist on duty, or even on occasions his registrar, as to whether ICU treatment would be appropriate for a given patient. Common practice might include the opinion of a second specialist in difficult or disputed cases. Despite the recommendation of the Society of Critical Care Medicine (SCCM) ethics committee that all ICU’s should have a committee to oversee the performance of this triage responsibility, it would not appear to be common practice. Indeed, consensus statements and guidelines issued by the SCCM suggest that a triage officer be appointed on a daily basis, and that preferably this person would not be the subsequent care provider for that patient in the ICU.
Without debating the merit of this statement, this is clearly not a widely accepted practice in Australasia. In order to better understand our triage practice, the ICU at The Waikato hospital has attempted to quantify the numbers, and outcomes, of patients not admitted to ICU, and the reasons for their exclusion.

METHODS
The Waikato hospital ICU is the tertiary referral centre for the Waikato region, and includes cardiac surgical and paediatric disciplines. The ICU admits approximately 1200 patients per annum. Data on refusal of patient access to ICU treatment forms part of the ICU quality assurance activity, and is sanctioned by the Hospital quality and risk department under the New Zealand Health Practitioners Competence Assurance Act of 2003.  The data presented in this paper was collected prospectively from August 2003 to September 2004.

The ‘on duty’ Intensivist was solely responsible for triage during this period. The Waikato intensivists are all full-time employees of the hospital, and carry a similar clinical workload.

For each patient referred to the ICU, but not admitted, a notifying sheet was completed contemporaneously and forwarded to a single nominated ICU consultant. The data set included general patient details, the origin of the referral and the reason for refusal (“too well”, “too sick to benefit”, “no beds” or “no nurses”). Data was screened for completion and entered onto an ACCESS (Microsoft®) database. A data administrator followed up on patient outcome.

RESULTS
For the period August 2003 to September 2004, 280 referrals to the ICU were refused (figure 1).

Forty one out of the 95 (43%) referrals refused for being “too sick to benefit” survived to leave the hospital. Furthermore, five (5%) were subsequently admitted to the ICU following review at a later point by a different intensivist. Despite being considered “too well to benefit” from ICU therapy, 8 of 124 referrals refused for this reason subsequently died. Individual variation in intensivist triage is reflected in figure 3.

DISCUSSION
The essence of ICU triage is to extend resource to those who will benefit. At present there is no reliable reproducible bedside test to distinguish those who will benefit from those who will not. Equally confronting is the absence of a tool for post hoc analysis – how good were we in hindsight? We have examined some parameters which offer some insight into our performance.

Patients refused for being too sick to benefit, that survive
Forty one out of the 95 (43%) referrals refused for being too sick to benefit survived to leave the hospital. This figure might be interpreted as cases where we “got it wrong” in the sense that the patient survived and therefore treatment, albeit less invasive, was not futile. It is provocative to consider that intensive therapy might have created more survivors in this group, or even decreased resource use by this group by shortening length of stay and/or ultimate disability.

Patients refused for being too sick to benefit, that are nevertheless admitted to ICU subsequently
Five patients (5%) in the “too sick to benefit” group were subsequently admitted to the ICU, following review at a later point by a different intensivist. In this group surgery appears as a confounder, as post-interventional care often provides a compelling, if not always rational, motivation to admit to ICU.
The number of patients refused ICU for being too well, that then go on to die.

Despite being considered too well to benefit from ICU therapy, 8 of 124 referrals refused for this reason subsequently died. These deaths occurred both after coming to ICU at a later stage, or never having come to ICU at all. This parameter may reflect more on the follow-up system put in place following initial contact, rather than just the predictive ability of the triage agent.

The purpose in presenting this audit is to take a step towards promoting the importance and significance of the patient triage process, and to do this in a quantifiable way. The human behavioural and organisational impact of imposing such a process in itself provided valuable insight into what we do.

In order to record refusals, we first had to clarify what would constitute a referral. On the face of it a simple concept, but in reality understood by many and clear to few. Referral (as opposed to friendly advice) comes in many guises. Intensive care staff tend to interface with patients and staff in a number of ways, including medical emergency team (MET), trauma teams and cardiac arrest teams to name a few. In addition, the manner in which we are approached to see patients varies. For instance being asked to “give an opinion” may not be seen as a request for admission by one intensivist, while it clearly would for others. In terms of our practice we would classify a refusal as a patient that is seen by an ICU team, at the request of the primary carers, who is not then admitted to the ICU. Furthermore, it is our observation that problems arise when the possible outcomes of a patient review are not understood and communicated by both reviewing and referring teams. In other words, it is not just a judgement call about when to admit someone who might benefit from ICU, now or at some point in the future. It is also about ensuring a system exists, and is communicated to all, to identify when a judgement of “too well” is incorrect, or later becomes so (figure 4). As part of refusing a patient, we have had to acknowledge that we were part of their care, if only by imposing limitations on what would be done. This statement seems obvious, but is clearly under-appreciated.

The data we have collected has supported our forays into adequate resource allocation, using numbers of elective surgical cases cancelled for lack of beds or, more importantly, nurses.

The more challenging aspect has been re-examining the relationship between resource allocation and appropriateness of ICU intervention. Resource limitation in the ICU is a problem for most of us. The number of beds and particularly nurses is finite although variable. The relative importance, assigned by dollar value, of providing critical care when weighed against other modalities (e.g., primary care) and
treatment forms (e.g., more stroke rehabilitation units) falls into the realm of health economists and managers. Mechanisms which may facilitate prioritisation of the dollar are not perfect by any means, whether it be Quality Adjusted Life Year (QALY) or other measure. However, even if they were, the amount of resource available would at some point fall short of demand.

**Figure 4.** Proposed outcomes following ICU review of a patient referred for treatment.

Identifying patients who are too sick to benefit presents further problems. The SCCM states that ICU admission criteria should select patients who are likely to benefit.\(^6\) By inference, those who are too sick to benefit should not be treated. However, futility may be easy to recognise, but clearly it is hard to define.\(^8\) Even if one uses probability of survival alone, where would a beneficent society place the cut off, 10 percent, or perhaps 30 percent?

The issue of quality of survival is even more vexed. A 10% chance of survival in a young bone marrow transplant recipient in ICU, who might survive and be “normal”, might outweigh a 30% chance of survival in an 80 year old underweight patient, with a fractured neck of femur and post-operative respiratory failure. SCCM guidelines do not list age as one of the criteria that should be used to triage or exclude treatment.

In our opinion, severity scoring (APACHE II/III, SAPS, SOFA, MODS etc.) has largely been consigned to the bin of retrospective performance benchmarking for those patients who are already in ICU. This seems appropriate, as their predictive ability for each individual is probably no better than the bedside physician, and their use as a pre-admission tool ill-advised.\(^9\)

In contrast to the “too sick” group, it seems obvious that patients who are “too well” to benefit from ICU should not be admitted. In many hospitals this too is not that simple. In the absence of an HDU structure, where should a young person with severe splenic trauma (managed non-operatively) and clearly at theoretical risk of sudden haemorrhage and death be, if not in ICU?

The interplay between degree of illness, expectation of benefit and amount of resource available cannot be ignored. The last bed phenomenon throws some of these factors into relief. Should the last bed in the ICU be given to someone to whom some, but clearly little, benefit may accrue despite the real risk that someone who may benefit more, may present overnight. One may argue that the first to present should be first to be treated. However, in a busy ICU it is not usually “if” another patient will be referred, but when. Not to be underestimated in current operating conditions is the difficulty in identifying the last staffed bed. The futility of treatment, as a paternalistic decision-making refuge for intensivists, may pale into insignificance in the presence of a patient (or family) bent on treatment.

As a profession we have to acknowledge that patients not only have treatment withheld, but indeed are refused access to ICU therapies completely.\(^10\) Statements relating to ICU triage in Australia have appeared in medical journals for more than a decade, although this concept is not widely advertised in the public (or political) forum.\(^11\) Recently, a proposal by Dr Bob Wright to limit access to a Metropolitan ICU led to a prominent airing on public television. Mr Tony Abbott, the Australian Federal Minister of Health stated in this program that: “We should do whatever we reasonably can to save and enhance life. I would be shocked if any significant sections of the medical profession were saying that there are some people who shouldn’t be treated”.\(^12\)

Inescapably, fair and equitable distribution of resource and care has led to restriction of services in areas of health care such as ICU. This is a daily fact of life for intensivists, which impacts on individual patients and families. However, until we quantify what we do and what drives us, we cannot engage politicians, the public, or even each other in one of the most central issues to intensive care – who do we not treat (euphemism: triage)? Equally, state and federal institutions, and the public at large, should be encouraged to debate and participate in this issue without regression to an atmosphere of political grandstanding and litigation.

Received: 31 December 2004
Accepted: 13 April 2005

REFERENCES

3. O’Donell H et al. Preferences for cardiopulmonary resuscitation among patients 80 years or older: the views of patients and their physicians. J Am Med Dir Assoc 2003;4:139-144


