

# ICU

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# Quality

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# QUALITY IN PRACTICE

## TOWARDS A PATIENT-CENTRED VIEW

Professor Guidet has been a university medical professor since 1997. He is a member of the research unit INSERM U1136 at the National Institute for Health and Medical Research (INSERM), the French public organisation entirely dedicated to biological, medical and public health research.

Guidet is past President (2008 – 2010) of the French Society for Intensive Care and is currently a member of the Health Research and Services outcome section of the European Society of Intensive Care Medicine (ESICM). He has written more than 250 articles published in international journals.

### What does quality of care mean in an intensive care unit?

When we speak of quality it means that we manage the patient as a whole, including not only the technical aspects, but also communication, comfort and so on, working with the intensive care team. We need to change our perspective to a patient-centred perspective, and consider not only the disease of the patient, but also plan a global integrative approach.

### Does this global integrative approach happen enough now?

Intensive care units (ICUs) have been very much oriented on techniques and procedures, but we need to consider other aspects of patient care besides technical skills. We need to work on people management and their importance in the care of the patient. It is a kind of transition from cure to care. We have to take care of the patient as a whole person, including the families and relatives.

### Who should set quality indicators? Is accreditation or standardisation helpful?

The European Society of Intensive Care Medicine (ESICM) has published a paper on quality indicators (Rhodes et al. 2012). We came up with 9 indicators: on structure (e.g., to be recognised as an intensive care unit, you need minimum criteria in terms of number of beds, equipment); on process, for example, if an ICU has a sedation protocol; and outcome indicators. We recommend that ICUs look at mortality and adjusted mortality, taking into account the severity of the patient and co-morbidities. Self-extubation rate is also an indicator, as it suggests that there may be a problem with the sedation or the weaning process. The ESICM Working Group on Quality Improvement also published a paper on minimal requirements for ICUs that sets out minimum criteria, such as the number of nurses needed according to the severity of the patient (Valentin

et al. 2011). In France we require authorisation to run an ICU: we have national criteria and these are much the same, with structure, process and outcomes criteria (Décret n°2002-465).

We published a review paper showing that in most situations in ICUs there is a relationship between volume and outcome: the more you are doing the procedure the better the outcome (Nguyen et al. 2015). This is proven for many patients, such as patients suffering from shock, acute respiratory failure or polytraumatism. If we want to deliver high-quality care, we need to work in an ICU with a high volume of activity. You cannot perform good quality of care, for example with mechanical ventilation, if you treat fewer than 80 patients every year. We realised that we need to rationalise intensive care and to merge some ICUs. On the one hand we don't want to reduce too much the number of ICUs. However, if we want to keep all ICUs open, the quality of care in the small ICUs will be sub-optimal.

### Is it a requirement that ICUs in France follow these standards?

Yes. In France we have the definition of ICUs in terms of the minimum number of beds, i.e. 8 beds (Décret n°2002-465). We are working with the Ministry of Health to maybe increase the minimum number of beds to 10 or even 12. Second we need to have intermediate care units working together with the ICUs with a minimum number of beds, i.e. half the number of ICU beds and with an appropriate nurse-patient ratio. So we have criteria to define an ICU and then the team to work in the ICU. As a consequence some ICUs were transformed into intermediate care units. So in several small hospitals, there is no

ICU but only an intermediate care unit with a network organisation enabling transfer to the referring ICU.

### And that process has gone smoothly?

Yes, because we are facing two problems. First, an ICU physician shortage. In some regions of France, it is very difficult to attract ICU physicians in public hospitals. Second, you need the whole environment around the ICU. In hospitals if you want to have an ICU, you need to have an anaesthesia department, emergency room, radiology department and so on. For some hospitals it is difficult, because if they have to close the ICU, it is a challenge for the whole hospital. We have sometimes to struggle with the mayor of the city, because they don't want to close their hospital, and if the ICU is closed many activities might be jeopardised.

### Patients' and families' views of what constitutes quality care may be quite different from the views of intensivists. How can their views be taken into consideration?

In some countries ICUs have organised long-term multidisciplinary follow up of patients. We are new to this assessment of patients a few months after their discharge from the ICU. The main information emanating from this consultation is that people suffered from pain, discomfort, noise, lights, lack of information and so on. So now we have information on the improvements we can introduce during the ICU stay. For example, we should work on the problem of sleep deprivation, we should try to avoid unnecessary noise, we have to work on the alarms, to try to reduce the

numbers of alarms, to reduce noise generated by all types of alarms (e.g. monitoring system, respiratory system, infusion pump, nutrition equipment, bed). The number of devices that have alarms and so produce noise is enormous. We need to recognise that we are antagonising the patient with a lot of noise. We should try to work together to reduce the noise.

Also we need to work on the way we are explaining to the patient their disease, the procedures we perform, and work on communication with the family. We need to work on communication skills, since we work in different shifts on the ICU. The way people communicate information and handover procedures is very important. Again this is quite new, because we are handling a lot of information and we want to make sure that important information is not lost. In this new paradigm we need to work differently in the ICU and the answer is the team. This is not just the doctor's, the nurse's, the helper's or the physiotherapist's business, this is the business of the whole team (Guidet and González-Romá V 2011).

#### How can ICU leaders avoid quality becoming just a tickbox exercise?

I think it is not a tick box; it is not work that you have to do in parallel with your daily work, it is integrated in your work and we need to consider the patient perception of the ICU stay. We need to circulate satisfaction questionnaires and to get feedback from the patients and the family. We can learn a lot from this. Sometimes we don't consider easy things that for us are little things but for patients are very important. My position is that quality is part of our work; quality assessment is not 'another thing'. It is part of our duty on a daily basis. We need to collect indicators that are able to help in the improvement of the whole process.

#### Do you have examples from your own ICU of such an improvement that was "little" to the ICU but very important to patients and their families?

An example is the policy for visiting hours in the ICU. It used to be only two hours a day and now it is the whole afternoon and evening. We are thinking of opening visiting hours to all day long. This is already the case in some French ICUs and also around the world. When you ask the patient and the family about satisfaction, they think this is much better.

We are also working with patients and families on the way we handle interviews. The way we

have conversations together with the family is different now. The way I am handling things in conversation is different—we need to sit, we need to have time, shut down the phone and we need to listen to the relatives. The way we are communicating within the ICU team, between the head nurse and the nurses and also between the team and the patient's family members is very important.

#### Is it as important to measure processes as outcomes when assessing the quality of intensive care?

The problem with collecting information about processes is to make sure that by improving the process we will ultimately improve the outcome. For example, if you had a procedure to avoid central venous catheter bloodstream-related infections, we have learned from the literature that if you apply some simple rules you will have an impact on those infections. So we need to have a protocol for insertion and catheter use. Another example is that if we don't have a weaning protocol it carries the risk of the patient receiving mechanical ventilation for a long duration, and if we don't have a weaning protocol we probably have no sedation protocol. It means that those protocols are not appropriate, are not used by the nurses and we know that nurses at the bedside are much more optimal than the doctors. So we want to make sure that these protocols are used and run by the nurses. So we start with the weaning protocol and if we use the weaning protocol then we will see what is in the weaning protocol, so the patients that should be weaned are on low sedation. This type of approach is an integrative approach.

#### Are there sufficient quality tools for intensive care?

Yes, we have enough tools. The issue is to prioritise our working patterns, because it is difficult to handle everything in the ICU. Again I like to emphasise the importance of the team (Guidet and González-Romá). The different people in the team should be in charge of different aspects of patient care according to their expertise. For example, we have a problem dealing with end-of-life decisions. Everybody needs to play a role in the end-of-life decision making process. We need to make sure that the process is patient-centred, as in most cases the patient is unable to communicate, so we need to work with the family members. We need to work with the whole team and to get the opinion of the nurses, the physicians and the family. I think it is a good

example of how we need to work together, it is not only the physician's or the nurse's business. Many different studies indicate that in more than 50% of deaths occurring in the ICU there were end-of-life discussions prior to death (Joynt et al. 2015). This is good routine and we have tools, we know how to adjust expressions, but we have to do it collectively, as sometimes nurses are not very happy as they are not allowed to do what they are supposed to do.

#### It is often said that not enough negative trials are published. Could the same be said about research into improving quality of intensive care?

My point is it that we should work on organisation and make sure that everybody is pushing in the right direction. These studies are pretty difficult to conduct, because of the involvement of families and sometimes the approach to publishing, funding and the design is difficult. Just to give you an example, in a multicentre randomised study looking at ICU admission we cannot randomise at the patient level, we need to randomise at the unit level, using a cluster design (Boumendil et al. 2016). We need to work on this type of study. We will improve the outcome of the patient, if we look at the organisation of the ICU, the admission process, the care of the patient, the discharge decision, location. I think the perspective should not be ICU-centred; the perspective should be at the hospital level, and how the hospital together with the ICU take care of critically ill patients. This will include the triage process (Guidet et al. 2013), decisions during the ICU stay, end-of-life decisions (Joynt et al. 2015), discharge policy (Guidet and Bion 2014), readmission policy, as well as the way we manage information between the ward and the ICU, the medical emergency team and so on. So we need to look at the ICU as part of the hospital, not on its own, we need to look at the pathway in the hospital and the way we work in the emergency department and the ICU. How can this information be used to create better outcomes? If we want to improve the outcome of the patient, we need to work maybe in another way, for example using sepsis care bundles in the emergency department, it's not only ICU business. How to make sure the patient gets the right treatment as soon as possible is certainly relevant. ■

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