

LETTERS TO THE EDITOR

Information technology in critical care: An opportunity to improve our health care[☆]



Tecnología de la información en cuidados críticos: una oportunidad de mejora de los cuidados

There are currently several different electronic information systems on the market that are specifically designed for critical care units and that facilitate the management and administration of patients, data and resources, improving the care and quality of the work undertaken by healthcare professionals.¹

The care of critical patients requires very complex decision-making. Electronic information systems designed for this purpose help nurses² and doctors to make decisions based on the analysis of the large volume of data from the monitoring systems, medical devices and computer systems they use on each patient, improving health outcomes and the safety and management of these units. With studies showing that critical care nurses can need to make 238 decisions per hour,² these systems are valuable tools in the healthcare institutions where they are used.

Electronic records such as IntelliSpace Critical Care and Anesthesia (ICCA) in critical care units currently enable the integration of continuous monitoring of the patient using bedside monitors that provide graphs and trends of the physiological parameters analysed, transcribing these data directly into the electronic records, simulating the old paper charts. In addition, they include a host of functionalities of which we highlight: connection to other more specific monitoring systems such as infusion pumps² and respirators, the management of treatments and diagnostic tests, the calculation of nutrients and fluids, the recording of assessment, evaluation, scales, care plans and doctors' and nurses' discharge reports and the storage and exploitation of data, among many other features.

There are international studies that have assessed the implementation of the ICCA system and the benefits of its

use in different settings, in adult critical care and anaesthesia units, and in paediatrics,³ of which we highlight

- It enables bedside monitoring and trend analysis of the different parameters, and evaluation of the effect of a given nursing and/or medical intervention. It can be used as a strategy to reduce "alarm fatigue" due to health professionals being overexposed to alarms that are often false or clinically insignificant which can lead to safety problems.⁴
- Improved quality of care, since, on the one hand, it allows a reduction in the number of medication errors⁵ relating to prescription and failing to administer a dose³ or the transcription of medical orders, and adverse events. If we focus on the field of paediatric critical care, electronic prescription improves patient safety, since this population does not allow for standardised medication guidelines, and therapy must always be tailored, taking age and weight into account,³ among other factors. Moreover, it becomes a support tool in decision-making^{1,2} ensuring that the recommendations stipulated in clinical practice guidelines are followed and promoting more effective and safer management of the care provided.
- Improved efficiency¹ and staff satisfaction by automating tasks and reducing recording time.⁵ An ICU requires a large amount of data to be recorded from general and invasive monitoring, perfusion pumps and medication, ventilation systems and data from multiple diagnostic tests. Since all the information on the patient is centralised and can be accessed remotely, communication and teamwork between the different professionals involved in the process of patient care is improved.
- It facilitates access to data, for professionals who directly care for critical patients and researchers and managers, who through its analysis can assess both the quality and efficiency of care and the impact of improvement strategies.¹

All these benefits highlight the fact that in critical care units, information and communication technology has become a fantastic tool to improve patient care and facilitate the work of all professionals involved.

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The right to be an organ donor is the responsibility of us all[☆]



El derecho a ser donante de órganos es una responsabilidad de todos

Dear Editor,

Spain has been a world leader in organ donation since 1992 and since 2016 has been the only country in the world with more than 100 transplanted patients per million inhabitants each year. However, there remains a waiting list, and therefore between 5% and 6% of patients are still dying while on the transplant waiting list.¹

The contribution of controlled asystole donation in recent times has resulted in an exponential increase in the total number of organ and tissue donors, currently comprising almost 25% of total donors in our setting.²

Without doubt, the incorporation of intensive care to lead the process has maintained and promoted the success of the Spanish transplant model.³

These new scenarios, and the need to reduce waiting lists, mean health professionals, particularly nurses, must be fully involved through their closeness to the patient and his or her family, and be a fundamental link in the care of the family in the grieving process, as well as in helping to make decisions regarding the option of organ and tissue donation.⁴

For all these reasons, updating knowledge and disseminating results are fundamental tasks for hospital transplant coordination in the area of training for professionals and in the social context,⁵ with a commitment to raising public awareness of organ and tissue donation.

It is obvious and inherent to our profession that all professionals must respect the wishes of the patient in end-of-life care.⁶ Therefore, the necessary regulatory structures within the organisation must be organised so as to make it a priority for health professionals to check the patient's wishes in this regard by consulting the register of advance directives.

With regard to the consensus on limitation of therapeutic effort, this must be clear and, although it falls to the doctor to determine when a patient has no curative options to avoid therapeutic obstinacy, article 21 of Law 2/2010 on rights and guarantees of the dignity of the individual in the process of death⁷ determines that this limitation will take place after hearing the nurse's judgement and in agreement with it. It is important to endorse this, making it incontestable that trained and conscientious professionals in this field will honour the true meaning of our profession, which is above all to offer dignified and quality care to the patient at the end of his/her life.

Finally, I would like to take the opportunity to remind readers of the need to extend nursing research in this field, through important journals such as this. I would suggest that it in this context that our profession still has much to contribute.

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To all the nurses who care for us daily in Spanish ICUs.

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