



## What is the ICU Charts app?



### [Dr. Maria Vargas](#)

Researcher

\*\*\*\*\*@\*\*\*gmail.com

Department of Neurosciences  
and Reproductive and Odon -  
University of Naples

[LinkedIn](#) [Twitter](#)

Patient care within an intensive care unit (ICU) is challenging and can lead well-intentioned critical care physicians to neglect some of the fundamental aspects of daily care. Care of the critically ill patient is often punctuated with physiologic changes that require immediate attention. Given the frequency of emergent and urgent interventions, ICU clinicians may be distracted from important, but less urgent, tasks that are still essential for optimal patient care. For this reason having a tool to standardise the daily clinical examination can potentially improve the care of critically ill patients.

Because of the complexities of caring for the critically ill patient, the use of protocols, algorithms, bundles, checklists and scores in the ICU has become increasingly common. However, these tools ensure that attention is paid to a specific aspect of patient care, e.g. CAM-ICU is a tool to evaluate delirium, Richmond Agitation Sedation Scale assesses the adequacy of sedation.

Daily clinical examinations at the bedside are part of good care. A number of studies have indicated that daily rounds at the bedside by intensivists may result in better outcomes. When conducting bedside rounds, it is easy to question the continued need for ventilatory support for a patient undergoing mechanical ventilation or the adequacy of nutrition for a patient with a feeding solution bag hung above the bed. A protocol is not needed to ensure these questions are asked and answered, and all members of the ICU team can question these aspects of patient care. Due to the complexity and rapid physiologic changes the the clinical examination at ICU bedside should be done

more than once or twice a day! How to evaluate the complexity of critically ill patients without neglecting anything? We can consult different scores, scales, checklists, but how to have all these tools in one pocket is the question.

## Description

ICU Charts is the first app that standardises the daily clinical examination at the ICU bedside. This application is based on an innovative and standardised approach, which can rely on solid scientific bases rising from a review of the latest international literature. ICU Charts is developed to visit the patient in ICU every day and even several times a day, with a standardised methodology according to the latest scientific evidence. Using this app, you'll be able to do a detailed report of the patient's daily conditions and treatments.

ICU Charts contains 6 sections, from A to F (Awakening, Breathing, Circulation, Delirium, Exercise and Mobility, Feeding), including 31 clinical and instrumental tasks to manage the daily clinical examination of critically ill patients. In the Awakening section you'll evaluate if the patient is ready for a spontaneous awakening trial, and which type and dosage of sedative and analgesic drugs they are getting. In the Breathing section you'll evaluate the mechanical ventilation, spontaneous breathing trial, risk of pneumonia, clinical pulmonary infection score, SOFA score and type and dosage of antibiotics. The Circulation section includes the haemodynamic status, fluid evaluation and the need for inotropes and vasopressors. The Delirium section is for the evaluation of the CAM-ICU, the Richmond Agitation Sedation Scale and pharmacologic and non-pharmacologic interventions for delirium/sedation. In the Exercise/mobility section you will add why the patient is getting physical therapy or not. In the Feeding section you can control the nutritional status, the caloric intake, the blood sugar level and the appropriate insulin dosage.

This app may facilitate input into care plans, encouraging participation from all team members about "where to go from here". It also serves as a central data repository for clinicians who may not have attended rounds. ICU Charts gives us the chance to save and print the patient's assessment facilitating comparison with the latest clinical evaluation and then simplifying the medical decisions. Regarding patient care, ICU Charts may be considered a patient safety tool, minimising errors of omission (e.g. omitting feeding) and commission (e.g. continuing high-dose sedation). Using ICU Charts, the duration of daily clinical examination for each patient performed by an intensivist with 10 years of experience is reduced from 16 minutes to 4 minutes and by an intensivist with 5 years of experience is reduced from 26 minutes to 6 minutes. Another feature of this app is its application in the field of telemedicine. Telemedicine is a pretty new concept for critical care medicine. Telemedicine in ICU means that a remote intensivist communicates with an ICU in another location via audiovisual/electronic methods to provide care for the patients in that ICU. In limited resource settings, where distance or medical staff shortages are critical factors, ICU Charts may allow the delivery of healthcare services by all ICU professionals, using information and communication technologies, for the exchange of valid information for evaluation, diagnosis, treatment, and prevention of acute disease, all in the interests of advancing the health care of critically ill patients.

## Format

Available for [Android](#) and [iOS](#)

## Offline use

Yes

## Audience level

Intensive care physicians, paramedics, nurses, students

## Language

English

## **Updates available**

December 2017

## **Cost**

\$8.99

Published on : Mon, 26 Mar 2018