Category :**Nutritional support**

A164 - *"an automated electronic medical tool to recall nutritional intake and present feeding adequacy in the critically ill : it all starts with an excel file"*

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Introduction:

Feeding adequacy in the Intensive Care Unit (ICU) remains an issue. Both under- and overfeeding are present and are harmful to ICU patients [1]. Daily calculations can help optimize clinical practice by giving a quick and clear overview of intentional and non-intentional nutritional intake. A structured, systematic approach is often lacking. In this study, the development and implementation of an electronic feeding adequacy tool was investigated.

Methods:

Intensivists and medical nutrition experts designed the content of the tool, facilitated the implementation plan and introduced a quality control system. The Information Technologists (IT) integrated the tool in the hospitals' medical system. This tool allowed ICU healthcare practitioners to chart feeding adequacy daily.

Results:

Automated 24 hour-recall of energy and protein content, electrolytes, vitamins and trace elements of artificial nutrition (i.e. parenteral and enteral nutrition) and non-intentional calories (e.g., propofol, glucose) was launched. In 2021, the tool was used 5278 times for 8832 possible treatment days (60%). In 2022, the tool was used 4440 times and in 2023, the tool was already used for 4244 times.

Conclusion:

Designing, implementation and use by cooperation between medical doctors, dieticians and IT of an automated electronic medical tool proved to be feasible in clinical practice.

References:

1. Zusman, O., et al., *Resting energy expenditure, calorie and protein consumption in critically ill patients: a retrospective cohort study.* Crit Care, 2016. **20**(1): p. 367.

Image :

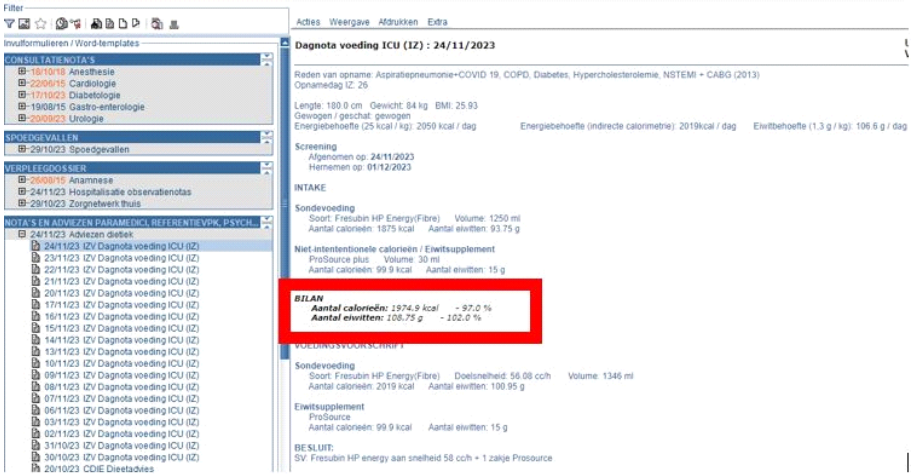

Fig.1 Example of the automated electronic medical where nutritional adequacy was

calculated and nutritional prescription is noted by the ICU dietician.