

**The aim of this study is to provide insight on how a Dutch ICU implemented non-physician providers (NPP), besides residents, and what this staffing model adds to the care on the ICU” Kreeftenberg et al (2018).**

Abstract:

**INTRODUCTION:** Literature in Europe regarding implementation of nurse practitioners or physician assistants in the intensive care unit (ICU) is lacking, while some available studies indicate that this concept can improve the quality of care and overcome physician shortages on ICUs. The aim of this study is to provide insight on how a Dutch ICU implemented non-physician providers (NPP), besides residents, and what this staffing model adds to the care on the ICU.

**METHODS:** This paper defines the training course and job description of NPPs on a Dutch ICU. It describes the number and quality of invasive interventions performed by NPPs, residents, and intensivists during the years 2015 and 2016. Salary scales of NPPs and residents are provided to describe potential cost-effectiveness.

**RESULTS:** The tasks of NPPs on the ICU are equal to those of the residents. Analysis of the invasive interventions performed by NPPs showed an incidence of central venous catheter insertion for NPPs of 20 per fulltime equivalent (FTE) and for residents 4.3 per FTE in one year. For arterial catheters the NPP inserted 61.7 per FTE and the residents inserted 11.8 per FTE. The complication rate of both groups was in line with recent literature. Regarding their salary: after five years in service an NPP earns more than a starting resident.

**CONCLUSION:** This is the first European study which describes the role of NPPs on the ICU and shows that practical interventions normally performed by physicians can be performed with equal safety and quality by NPPs.

Full Text

Reference:

Kreeftenberg, H.G., Aarts, J.T., de Bie, A., Bindels, A.J.G.H., Roos, A.N. and van der Voort, P.H.J. (2018) An alternative ICU staffing model: implementation of the non-physician provider. *The Netherlands Journal of Medicine*. 76(4), p.176-183.