

# Novel Ways to Analyse and Cope Alert-Fatigue Phenomenon in Intensive Care Units

Introduction

Current state

Methods and Results

Summary and Conclusions

Dr. Shai Rozenes, Dr. Adi Fux,  
Dr. Ilya Kagan MD,  
Dr. Moran Hellerman MD,  
Dr. Boaz Tadmor MD,  
Prof. Arriel Benis

# Introduction

Rabin  
Medical  
Center



Alert  
Fatigue



Rabin Medical Center (RMC), is one of the most prominent and largest medical facilities in Israel.

## Alert Fatigue

Alarms drown healthcare professionals with irrelevant information due to lack of time or cognitive resources



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# Current state

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Intensive  
Care Units  
ICU

## Research Methodology

- Meeting the staff
- Introducing the ideas
- Interviews: Physicians and Nurses
- Performing current state analysis
- Building the simulation model
- Validating the current state results
- Developing a novel model
- Validating the future state results

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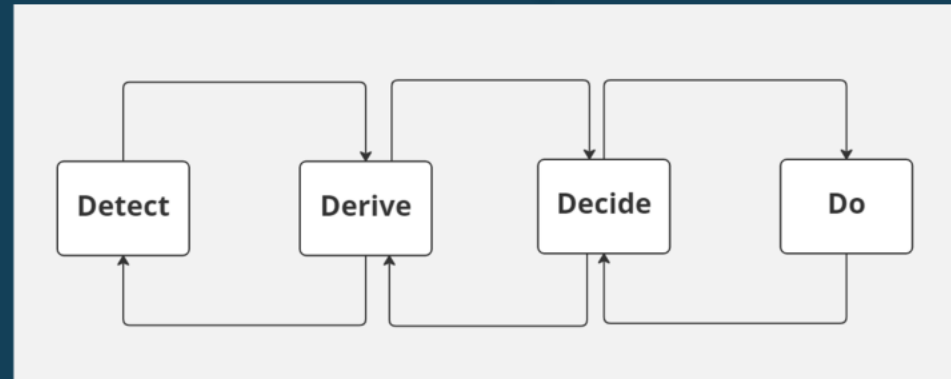
Methods and Results

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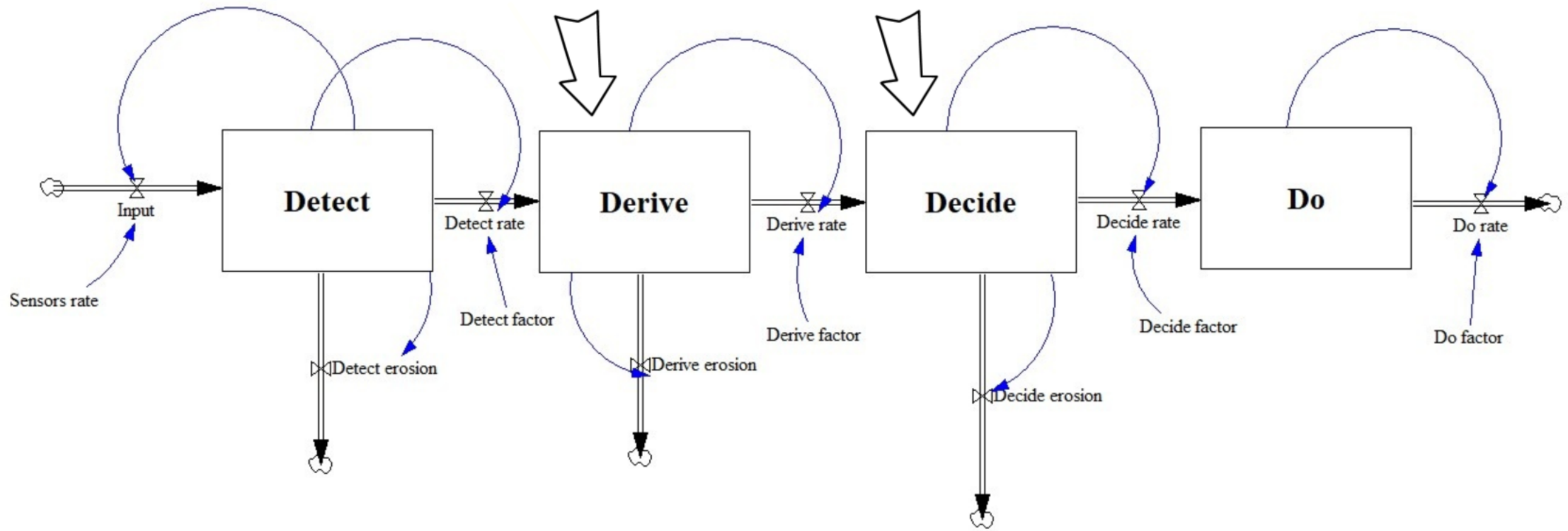
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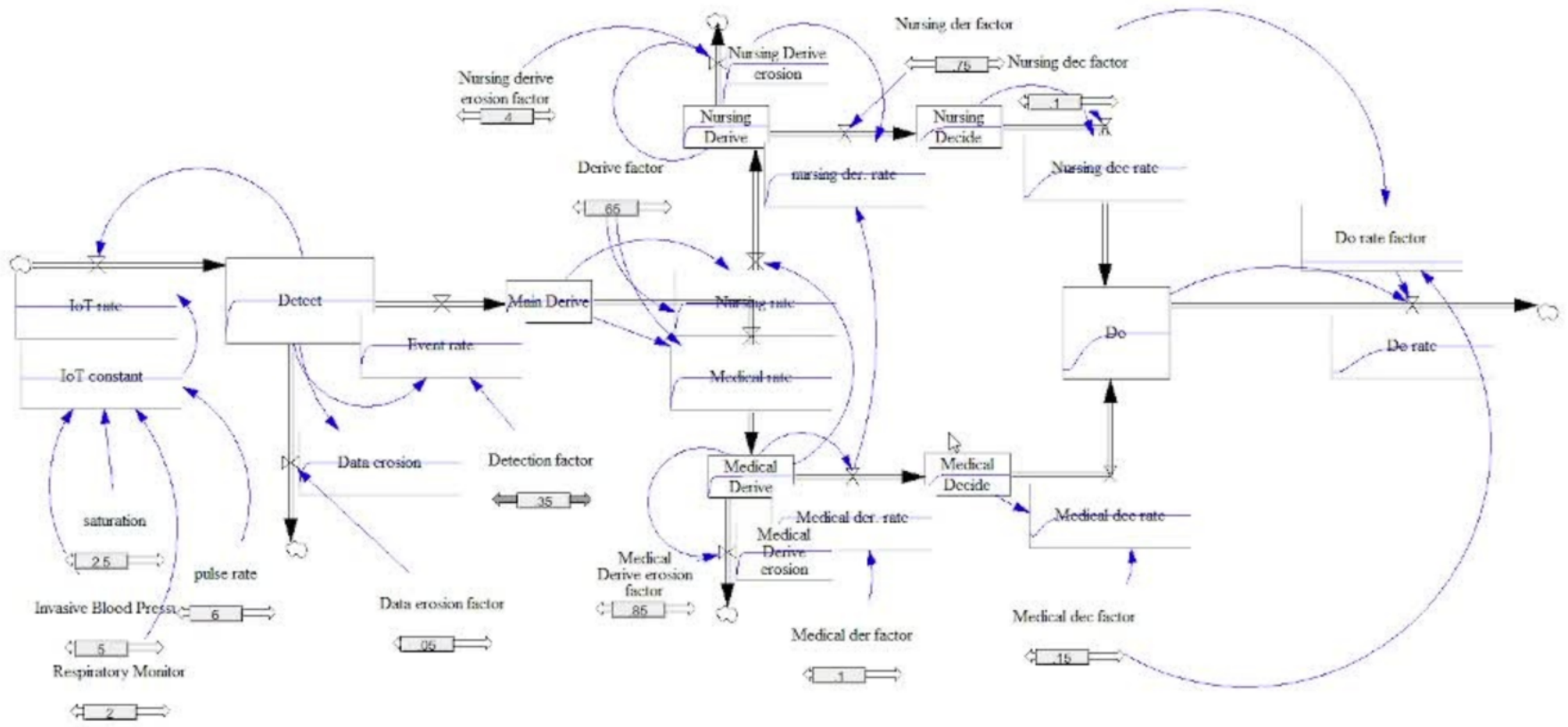
# The 4D Model

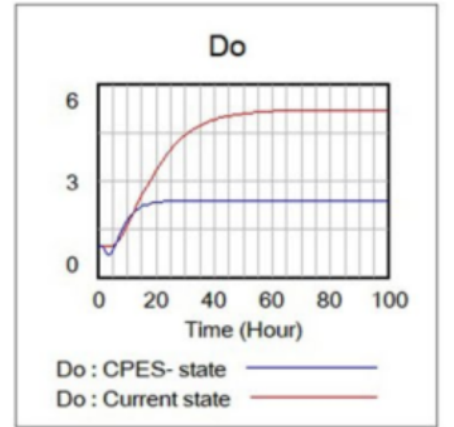
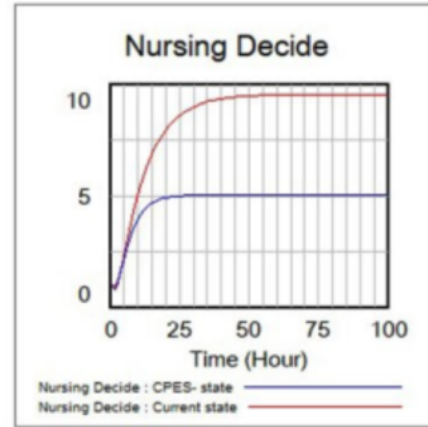
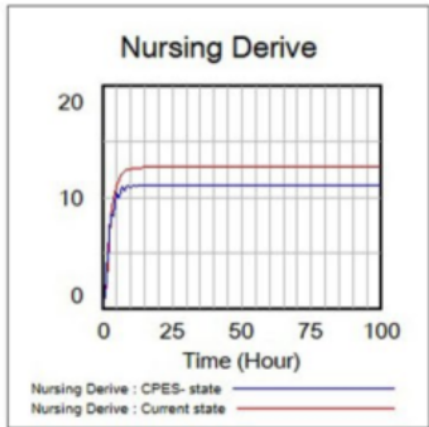
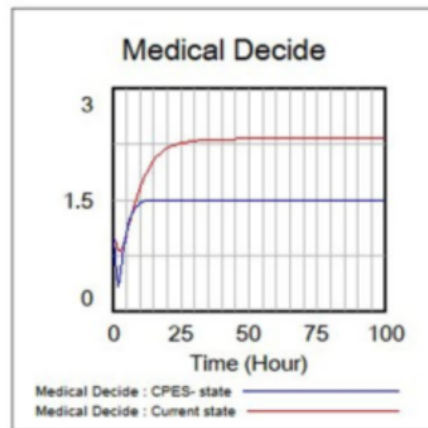
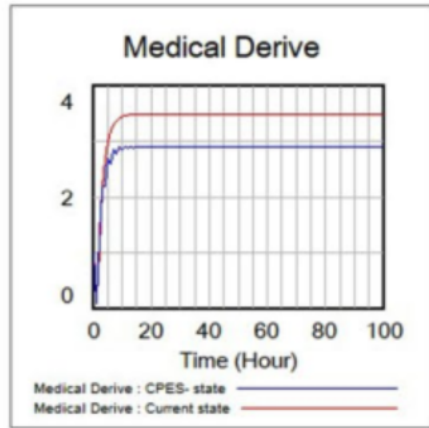
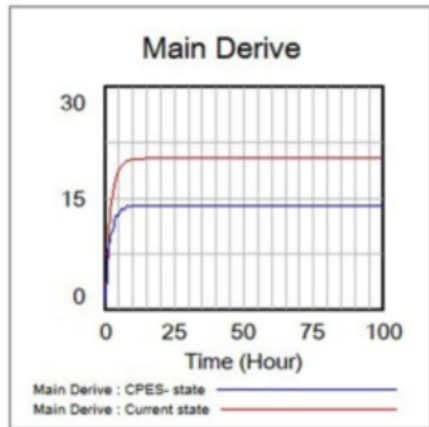
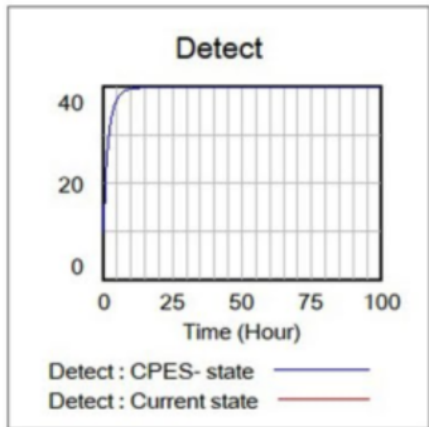


SD Model



Stop, Save, Run, Zoom, and other simulation control icons.





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- Our aim is to introduce an innovative model designed to mitigate alert fatigue within ICUs
- We developed a SD model demonstrate a substantial reduction in the required performance of medical activities (i.e., interventions) when employing the the model as compared to the current static model

Future  
studies

## Future studies

Future studies should explore the potential utilization of this method in other domains within the medical field, as well as in diverse applications such as agriculture, finance and the entire service science

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