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CIRRNET-NETZWERKTREFFEN, 20.06.2024

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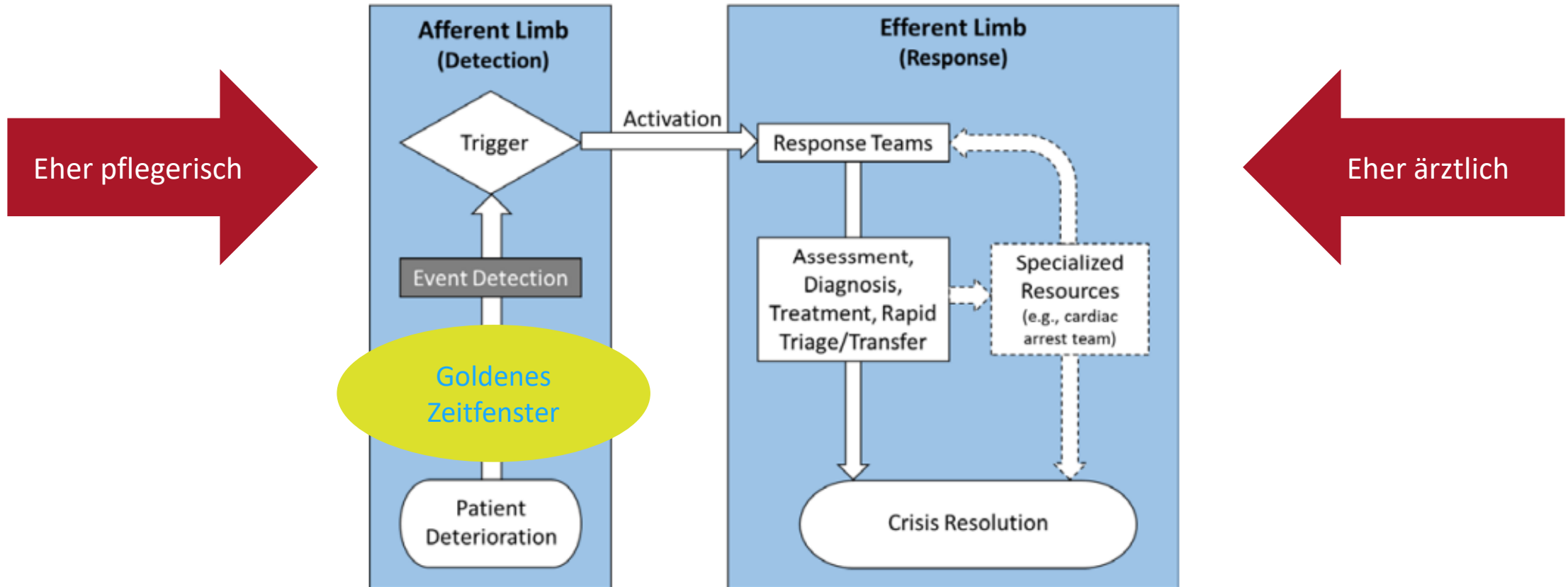
# FAILURE TO RESCUE

## INTRODUCTION

- Globally, over 10% of hospitalized patients suffer adverse events
- In US, estimated 98,000 hospital deaths result yearly from preventable errors (World Health Organization, 2021).
- **Failure to rescue**: critical preventable error, no universal definition
- Seminal work by Silber et al. (1992): found failure to rescue correlated more strongly to hospital factors than surgery complication rate

## MODELL ZU FAILURE TO RESCUE

Figure 1: Conceptual Model for Rapid Response System<sup>8</sup>



<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/making-healthcare-safer/mhs3/failure-to-rescue-1.pdf>

## AVAILABLE KNOWLEDGE

### Organizational literature

#### **Burke et al. (2022): systematic review with narrative synthesis**

- Methods to “recognize, relay, and react” across the organization
- “3Rs of Failure to Rescue,” nurse-related levers in [afferent limb](#), which include nurse training, early warning systems and rapid response teams.

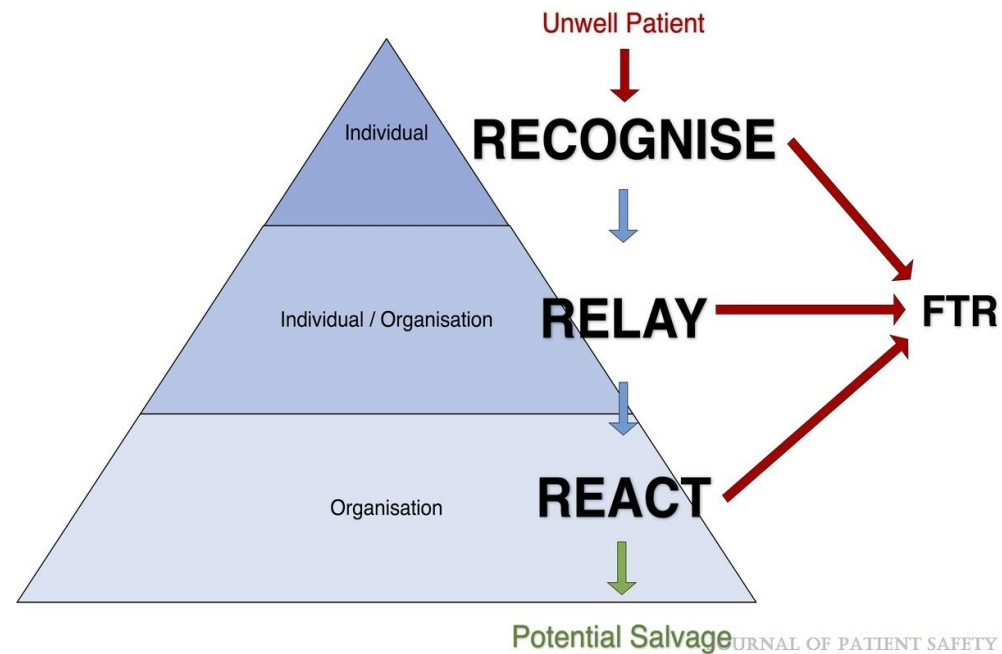
### Nursing literature

#### **Doyon and Raymond (2023): systematic review & bibliometric analysis**

- Examines nursing literature on surveillance and patient safety since 1992
- Education with high relevance but low topic development

## THE 3RS PARADIGM UNDERPINNING FAILURE TO RESCUE

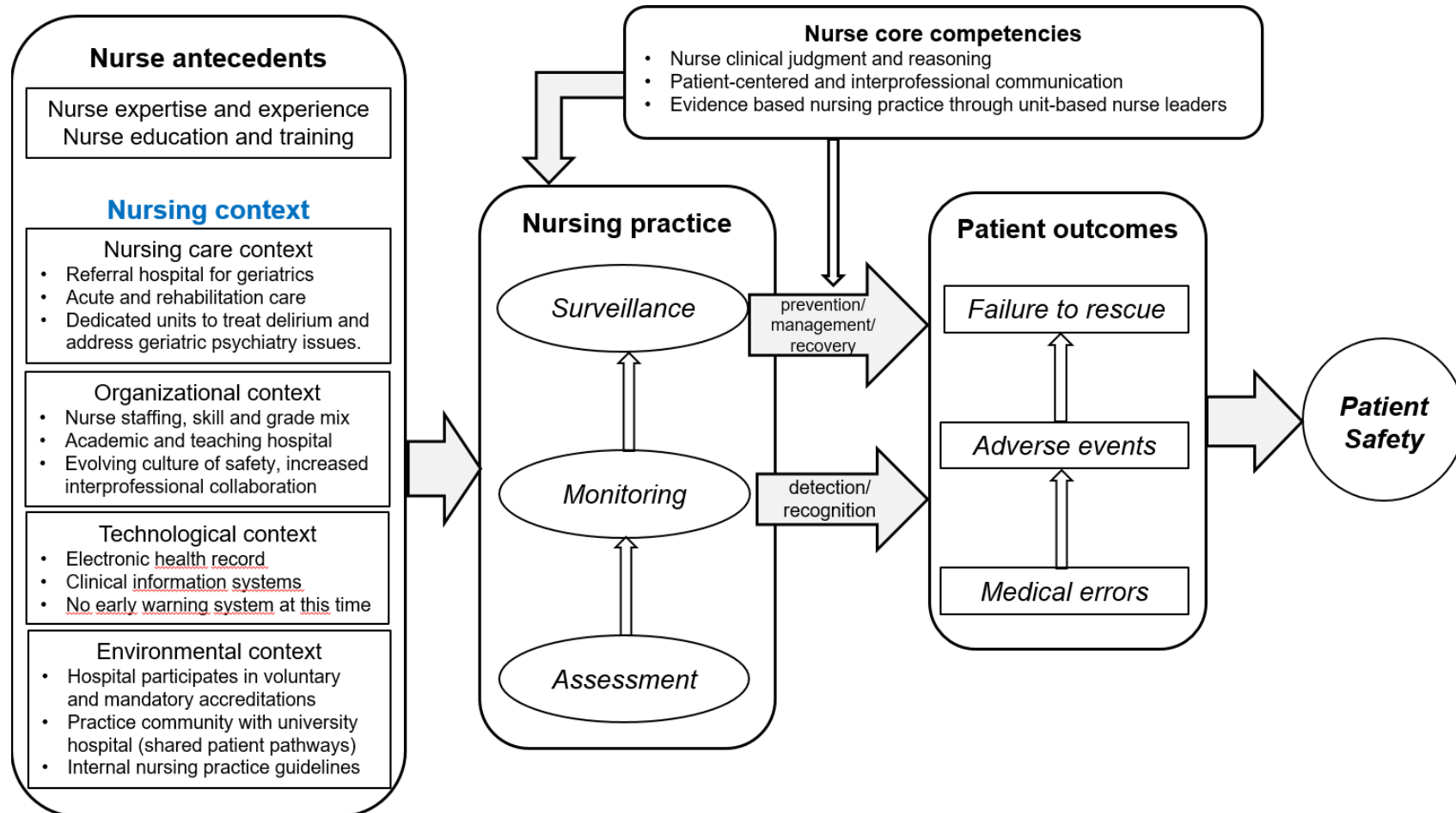
Burke, J. R., Downey, C., & Almoudaris, A. M. (2022). Failure to rescue deteriorating patients: A systematic review of root causes and improvement strategies. *Journal of Patient Safety*, 18(1), e140-e155. <https://doi.org/10.1097/pts.0000000000000720>



**BURKE ET AL. (2022)**

3Rs	Area of Intervention	Barriers Identified	Suggested Interventions Based on Current Evidence Base
<b>RECOGNISE</b>	<b>1. Staffing Levels &amp; Education</b>	1.1 Recognition of antecedent signs or symptoms in a timely manner is likely to be central to patients surviving their complication and being 'rescued'. <sup>15,18,21</sup> 1.2 Adequate staffing of wards by well-trained nurses increase the chances of timely recognition of complications. <sup>13,18,19,21</sup>	A. Establish appropriate minimum physician and nurse staffing levels. <sup>13,20,26</sup> B. Improve work environments for healthcare staff. <sup>21</sup> C. Encourage and facilitate nursing staff to undertake post graduate degrees. <sup>23,24</sup>  D. Implement minimum review times to reduce voids in care due to patient flow/turnover. <sup>28</sup>
	<b>2. Detection, Early Warning Score Systems and Check Lists</b>	2.1 Failure to recognise observations, signs and symptoms of deterioration. <sup>28</sup> 2.2 Lack of familiar, standardised early warning score system. <sup>38,39</sup>	E. Initiate Failure to Rescue training with formal teaching on effective utilisation of EWS. <sup>38,39,91</sup>
	<b>3. Surveillance, Communication &amp; Electronic Monitoring</b>	3.1 Current lack of evidence of efficacy of electronic monitoring systems. <sup>51,52</sup> 3.2 Communication barriers between patients and healthcare professionals. <sup>47</sup>	F. Implement patient centric communication styles and communication training. <sup>47</sup> G. Consider implementation of electronic EWS systems. <sup>51,52</sup>
	<b>4. Medical Emergency &amp; Rapid Response Teams</b>	4.1 Significant variations in the design and reporting of published METs/RRTs. <sup>44,55,56,58,59</sup>	H. METs/RRTs may be nurse led with a senior intensivist available to review upon the request. <sup>44,55,56,58,59</sup>
<b>RELAY</b>	<b>5. Relaying Information</b>	5.1 Lack of integration of handover/escalation tools such as SBAR. <sup>70,92,93</sup> 5.2 Lack of concordance in decision-making models used by nursing staff. <sup>70,92,93</sup>	I. Implementation of agreed escalation protocols Integration multidisciplinary teams into ward rounds. <sup>70,92,93</sup> J. Implement the use of SBAR and allied handover tools. <sup>70,92,93</sup>
<b>REACT</b>	<b>6. Reaction and response to a deteriorating patient</b>	6.1 Capability of the team, institution and resource to support necessary response to FTR. <sup>33,34,74</sup> 6.2 Institutional culture to investigation when recovery deviates from normal trajectory. E.g. 'threshold to scan' <sup>75-78</sup>	K. Implement agreed response times reflective of clinical severity of patient deterioration. <sup>33,34,74</sup> L. Implement team scenario based simulation. <sup>78</sup>

## ANALYTICAL FRAMEWORK, ADAPTED FROM DOYON AND RAYMOND (2018)



<sup>a</sup> Adapted from analytical framework by Doyon and Raymond, 2018, with nursing context reflecting local conditions.

## LITERATURE REVIEW SUMMARY

**Nurses' Role in Failure to Rescue** (Mushta et al., 2018) → empirical references of nurse-sensitive indicators

**Nursing Surveillance and Clinical Judgment** (Odell et al., 2009; Massey et al., 2017) → nursing observation (assessing and knowing patient), team communication

- *Nurse Worry or Nurse Concern*

(Douw et al., 2015; Romero-Brufau et al., 2019) → quantifying nurse concerns, worry factor

### **Nurse Training to Reduce Failure to Rescue**

Systematic review by Liu et al. (2023) → simulation vs. non-simulation, outcome measures

- *Additional individual studies on training*

(Harvey et al., 2014; Bell-Gordon et al., 2014; Warren et al., 2021)



## HIGHER LEVEL IMPACTS OF TRAINING (PATIENT SAFETY)

### Training Impact using **Kirkpatrick's Model**

- Level 1 Reaction (participant response to the training)
- Level 2 Learning (knowledge and skills learned)
- Level 3 Behavior (have participants applied what they learned to practice), and
- Level 4 Results (patient-level outcomes)



A photograph of a modern building courtyard with a blue sky and a 'Thank you!' sign. The building has a light-colored facade and many windows. The sign is a blue rectangle with white text, positioned in the center of the courtyard. The sky is a clear, bright blue with some light clouds. The building's architecture is clean and minimalist, with a grid-like pattern of windows. The courtyard is a central open space between the building wings.

Thank you!