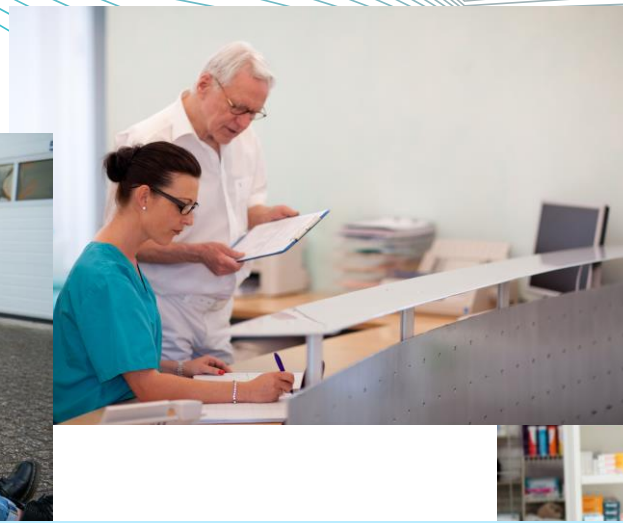


# Development and evaluation of the Resilience Analysis Grid in Dutch hospitals (RAG-NL)

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# How can we implement and measure *Safety II* in daily practice in NED?



# Study aim



**Systemic Potentials Management**

Enhancing resilience of hospital departments by making the Resilience Analysis Grid  
available for Dutch hospital context



# Methods

The RAG will be tested for suitability of the Dutch hospital context. The project consists of **three phases with each phase building on the previous phase**:

- 1) RAG questions will be adapted to the Dutch hospital context
- 2) RAG-NL reflection workshops will take place in which the RAG-NL will be further evaluated
- 3) An implementation plan will be created

# Methods – RAG-NL e-learning module

RAG-NL



Home Welkom! De e-learning Meer

- RAG.NL vragenlijst
- Programma workshop
- Begeleiders & onderzoekers workshop
- Deelnemende organisaties
- Verdiepende informatie
- Covid-19
- Contact

RAG-NL

Home Welkom! De e-learning Meer

Welkom bij de e-learning modules. De modules bestaan uit een reeks korte video's met daarin een aantal vragen verwerkt. Het doornemen van de video's kost ongeveer 30 minuten van uw tijd.

Wij willen u vragen om na het doorlopen van de drie modules de vragenlijst in te vullen. De vragenlijst is beschikbaar via [deze link](#) of via het tabblad RAG.NL vragenlijst rechtsboven. De uitkomsten van de vragenlijst worden met elkaar gedeeld tijdens de workshop.



Module I Complex adaptieve systemen



Module II Safety - II



Module III Resilience & de workshop

MediRisk





# Methods – RAG-NL e-learning module - questionnaire

*Table 1: Examples of detailed issues relating to the ability to respond*

Event list	What are the events for which the system has a prepared response?
Background	How were these events selected (tradition, regulator requirements, design basis, experience, expertise, risk assessment, industry standard, etc.)?
Relevance	When was the list created? How often is it revised? On which basis is it revised? Who is responsible for maintaining and evaluating the list?
Threshold	When is a response activated? What is the triggering criterion or threshold? Is the criterion absolute or does it depend on internal / external factors? Is there a trade-off between, e.g., safety and productivity?

*Table 3: Examples of detailed issues relating to the ability to learn*

Selection criteria	Which events are investigated and which are not (frequency, severity, value, etc.)? How is the selection made, which criteria are used? Who makes the selection?
Learning basis	Does the system try to learn from successes (things that go right) as well as from failures

*Table 2: Examples of detailed issues relating to the ability to monitor*

Indicator list	How have the indicators been defined? (By analysis, by tradition, by industry consensus, by the regulator, by international standards, etc.)
Relevance	When was the list created? How often is it revised? On which basis is it revised? Who is responsible for maintaining the list?
Indicator type	How many of the indicators are of the 'leading,' type and how many are of the 'lagging'? Do indicators refer to single or aggregated measurements?

Hollnagel, 2015

# Results – Development RAG-NL questions



## Worked well

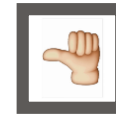
Chose a broad starting point when developing questions

Direct participation of users: Ask the work floor to participate in translation

## Needs improvement

Choosing the right questions beforehand/ questions need to evolve within the working units

Difference between academic language and work floor language



# Results – Development RAG-NL workshops

- 1) Self-developed RAG-NL webpage
- 2) Participants fill out the RAG-NL questions individually
- 3) Participants meet in workshop to discuss their answers, similarities and discrepancies were highlighted



One workshop so far

Change takes time. We need a change of thinking in safety (as we all surely know!)

RAG-NL



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# Discussion and future plans



- 1) We chose to develop questions based on the original RAG questions beforehand, wise or not wise?
- 2) Using RAG in daily practice is time consuming, any ideas on how to make it more 'user friendly' / is that desirable?
- 3) Cultural change precedes behavioral change
- 4) We are currently applying for funding for a second round, using RAG-NL iteratively on different organizational levels

Research  
for better care

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