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The use of FRAM in a government investigation in health care in Sweden.

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Background

The Swedish Ministry of Healthcare and Social services in 2017 commissioned the National Board of Health and Welfare to investigate the risks for patient harm in cases of shortages in staffing in and lack of competency in health care staff, especially in emergency care and obstetrics. As a part of that government investigation we performed a FRAM analysis.

Method

Based on observations and interviews in two emergency departments and two obstetric departments we modelled emergency room care and obstetric care in two different models, with 49 and 41 functions in each model.

In two simplified models key functions were removed: those describing the supply of workplaces with staff with adequate competencies; those concerning documentation; and those concerning procedures. This was done since in the complete models these functions have dependencies with almost all functions that describe the clinical tasks of healthcare staff at the workplaces. This means that the other dependencies between functions may not be obvious in the models, they "drown" among these functions. This does not mean that these functions (staffing, documentation and procedures) are of no significance; on the contrary, their many dependencies in the complete models show their importance.

Result and discussion

Work in emergency and obstetric departments are by nature varied and the conditions for the work performed there are variable. In the FRAM models the functions related to the need for staff with adequate competencies have many couplings with other functions. The dependencies between the functions is large, which means that the potential for resonance is high, which in practice means that the possibility of undesirable consequences (risk of patient harm) is large and not always transparent or predictable.

The analysis shows that the central clinical tasks in both the emergency and obstetric departments are related to monitoring, assessing and taking decisions on patients. It is also clear from the analysis that such functions as staffing with staff with adequate competencies for their tasks have many dependencies with the functions that describe these clinical tasks. These clinical tasks are important for patient safety. This may appear banal, but the analysis shows this.

As this FRAM analysis shows, the risks do not arise as simple consequences for specific reasons, but because of complex relationships and dependencies between the many activities that together constitute the daily life of a department. Therefore, there are no simple solutions to the problems.