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IMPLEMENTING INTERFACES FOR INFORMATION TRANSFER IN ACUTE STROKE CARE: PROCESS EVALUATION OF THE USE CASE EMERGENCY WITHIN THE CAEHR (CARDIOVASCULAR DISEASES – ENHANCING HEALTHCARE THROUGH CROSS-SECTORAL ROUTINE DATA INTEGRATION) PROJECT

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INTRODUCTION

The CAEHR project was funded as a Digital Hub within the Medical Informatics Initiative. In the Use Case Emergency, we aim to establish interfaces for automatic transfer of routine data from Emergency Medical Service (EMS), regional hospitals and telemedical consultations with a tertiary stroke center in Germany. The implementation of the CAEHR project will be accompanied by a comprehensive evaluation concept. The aim of the process evaluation is to evaluate the requirements, expectations, and barriers from the perspective of the healthcare providers in the context of new digital interfaces as well as to examine how these barriers can be addressed in the implementation process of the novel interfaces.

METHODS

Following the guidelines for process evaluations of complex interventions of the Medical Research Council, a logical model was developed that describes context and components of the intervention. Mixed-methods-approaches (structured interviews, surveys, document analyses) are used to collect input from medical and nursing staff of the stroke center, the participating EMS staff and health care researchers. The data will be analysed descriptively or via content analysis and quantified if adequate.

RESULTS

Following the purposive sampling approach, to date 7 of 9 planned interviews could be conducted and transcribed with stroke center personal. Preliminary results revealed shortcomings in communication documentation processes between emergency and hospital stroke centers (e.g. errors with patients' names, transposed digits) which may be improved using novel digital interfaces. The online survey and the in-depth interviews conducted with EMS personal will be completed in 06/2023. Analysis of the survey and interviews is completed by 09/2023 and will be presented in the session.

CONCLUSIONS/OUTLOOK

The implementation of technical interfaces in the context of CAEHR may improve information transfer before hospital admission and may help to further improve pathways in acute stroke care.