## Reducing Unplanned Hospitalizations of Nursing Home Residents: a Process Evaluation of the INTERCARE Study

The INTERCARE study tested a complex intervention to reduce unplanned hospitalizations in 11 Swiss nursing homes. The evaluation showed favorable outcomes, leading to plans for scale-up. This process evaluation aims to describe the intervention components' use in practice and understand the mechanisms of change to optimize intervention components for scale-up. We used qualitative data gathered through individual and focus group interviews and meetings notes from nursing home care workers and leadership, INTERCARE nurses and physicians from five nursing homes participating in the main trial. Data for each of the six intervention elements (interprofessional collaboration, INTERCARE nurse, comprehensive geriatric assessment, advanced care planning, evidence-based tools, data-driven quality improvement) was extracted into spread sheet before starting inductive coding. Findings were summarized and consolidated in a conceptual model. Our analysis revealed that comprehensive geriatric assessment and data-driven quality improvement were frequently not used as intended. We identified four intervention mechanisms, grouped into those changing reasoning of care workers e.g., following a more structured approach to do things and those enabling existing resources e.g., availability of a responsible contact person. We also identified behavior changes in care workers, including faster reaction to changes in resident situations, more comprehensive assessment of resident situations and improved communication which contributed to reductions in hospitalizations. Understanding how interventions work in practice is crucial for informing potential adaptations to intervention and implementation strategies. Our findings can help optimize the intervention components for scale-up, ultimately reducing unplanned hospitalizations in nursing home residents.