

## Publication

### Evaluating the implementation fidelity to a successful nurse-led model (INTERCARE) which reduced nursing home unplanned hospitalisations

#### JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

**ID** 4662504

**Author(s)** Guerbaai, Raphaëlle A.; DeGeest, Sabina; Popejoy, Lori L.; Simon, Michael; Wellens, Nathalie I. H.; Denhaerynck, Kris; Zúñiga, Franziska

**Author(s) at UniBasel** [Guerbaai, Raphaëlle-Ashley](#) ; [De Geest, Sabina M.](#) ; [Simon, Michael](#) ; [Denhaerynck, Kris](#) ; [Zúñiga, Franziska](#) ;

**Year** 2023

**Title** Evaluating the implementation fidelity to a successful nurse-led model (INTERCARE) which reduced nursing home unplanned hospitalisations

**Journal** BMC Health Services Research

**Volume** 23

**Number** 1

**Pages / Article-Number** 138

**Keywords** Advance-care planning; Complex intervention; Implementation fidelity; Implementation science; Nurse-led models of care

**Mesh terms** Humans; Nurse's Role; Nursing Homes; Skilled Nursing Facilities; Hospitalization; Advance Care Planning

Implementation fidelity assesses the degree to which an intervention is delivered as it should be. Fidelity helps to determine if the outcome(s) of an intervention are attributed to the intervention itself or to a failure of its implementation. Little is known about how fidelity impacts the intended outcome(s) and what elements or moderators can affect the fidelity trajectory over time. We exemplify the meaning of implementation fidelity with INTERCARE, a nurse-led care model that was implemented in eleven Swiss nursing homes (NHs) and showed effectiveness in reducing unplanned hospital transfers. INTERCARE comprises six core elements, including advance care planning and tools to support inter- and interprofessional communication, which were introduced with carefully developed implementation strategies.; A mixed-methods convergent/triangulation design was used to investigate the influence of implementation fidelity on unplanned transfers. A fidelity questionnaire measuring the degree of fidelity to INTERCARE's core components was fielded at four time points in the participating NHs. Two-monthly meetings were conducted with NHs (September 2018-January 2020) and structured notes were used to determine moderators affecting fidelity (e.g., participant responsiveness). We used the fidelity scores and generalized linear mixed models to analyze the quantitative data. The Framework method was used for the qualitative analysis. The quantitative and qualitative findings were integrated using triangulation.; A higher overall fidelity score showed a decreasing rate of unplanned hospital transfers post-intervention (OR: 0.65 (CI = 0.43-0.99),  $p = 0.047$ ). A higher fidelity score to advance care planning was associated with lower unplanned transfers (OR = 0.24 (CI 0.13-0.44),  $p < 0.001$ ) and a lower fidelity score for communication tools (e.g., ISBAR) to higher rates in unplanned transfers (OR = 1.69 (CI 1.30-2.19),  $p < 0.003$ ). In-house physicians with a collaborative approach and staff's perceived need for nurses working in extended roles, were important moderators to achieve and sustain high fidelity.; Implementation fidelity is challenging to measure and report, especially in complex interventions, yet is crucial to better understand how such interventions may be tailored for scale-up. This study provides both a detailed description of how fidelity can be measured and which ingredients highly contributed to reducing unplanned NH transfers.; The INTERCARE study was registered at clinicaltrials.gov Protocol Record

NCT03590470.

**Publisher** BMC

**ISSN/ISBN** 1472-6963

**edoc-URL** <https://edoc.unibas.ch/93645/>

**Full Text on edoc** Available;

**Digital Object Identifier DOI** 10.1186/s12913-023-09146-8

**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/36759902>

**ISI-Number** WOS:000933964600008

**Document type (ISI)** Journal Article