



Integrative Hospital Treatment in Older patients to benchmark and improve Outcome and Length of stay – the *In-HospitoOL* study

A quasi-experimental multicenter comparative effectiveness health care research trial

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Challenges, goals

Health care costs are high and rising also due to an aging, polymorbid population (Fig. 1). In view of this demographic evolution, resource allocation becomes a priority. There is lack of evidence-based tools and benchmarks namely for elderly, polymorbid patients to improve integrative in-hospital care and transition process in real-life of an acute care hospital setting. We propose the *In-HospitoOL* study to investigate the effect of improved inter-professional collaboration and discharge planning on length of hospital stay and other patient-centered outcomes.

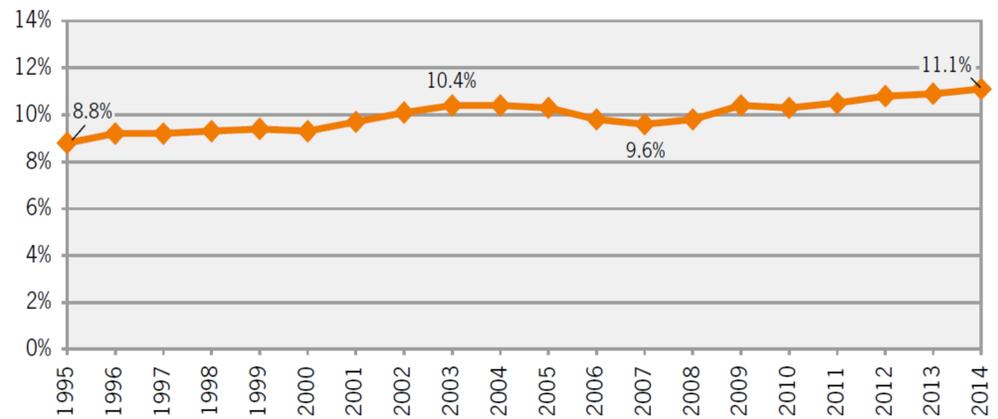


Fig. 1 Health expenditure Switzerland in relation to gross domestic product (GDP)¹

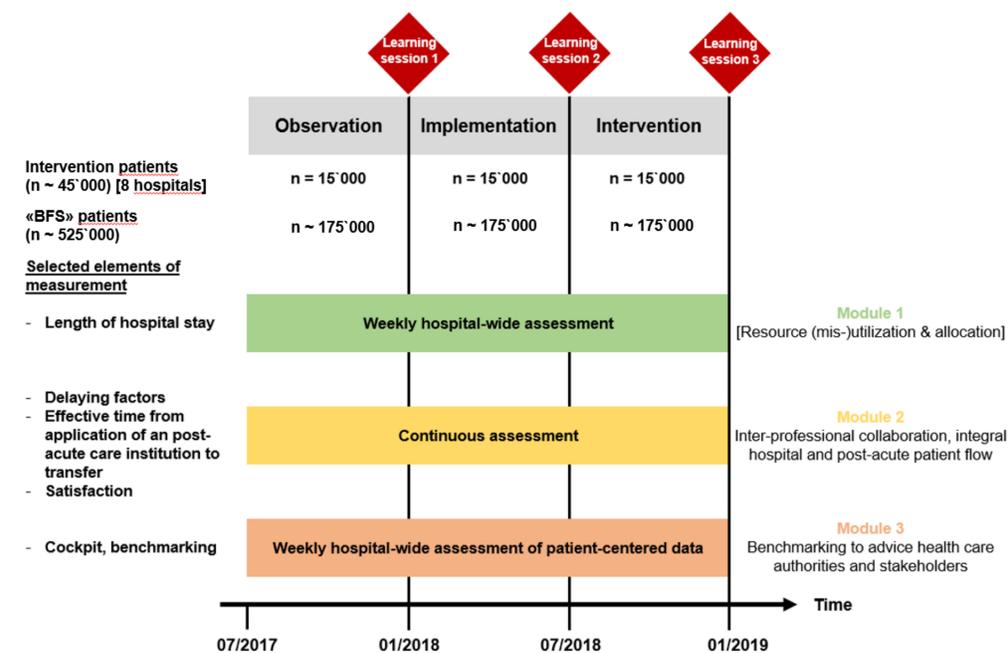


Fig. 2 Main study timeline²

Research question, methodology, approach

In-HospitoOL combines several patient discharge measures and was developed involving multiple professions. An electronic monitoring and reporting system enables clinical user oriented benchmarking (key element 9 of the SAMW Charta) to assess hospital processes, quality, delays in hospital transition and barriers for discharge stratified by profession (including 30-day telephone interviews). For external validation, *In-HospitoOL* will be implemented in eight Swiss hospitals. We will use a quasi-experimental approach and compare length of stay before and after hospital-wide implementation of the management tool in relation to changes in length of stay in hospitals not using the tool. We target to include 45'000 patients over an 18-month period (Fig. 2).

Expected results

We expect a total inclusion rate of 45'000 patients across all three 6-month study periods (observation, implementation, intervention). Based on our monocentric experience we expect the *In-HospitoOL* to have a strong effect on inter-professional team work in this polymorbid setting which results in reduction in length of stay of at least 1 day. We also expect that patient outcomes are not negatively affected by the intervention (e.g. intensive care unit admission, mortality, unplanned readmission, patient satisfaction). A safe reduction of length of stay will have positive implication on overall hospital costs.

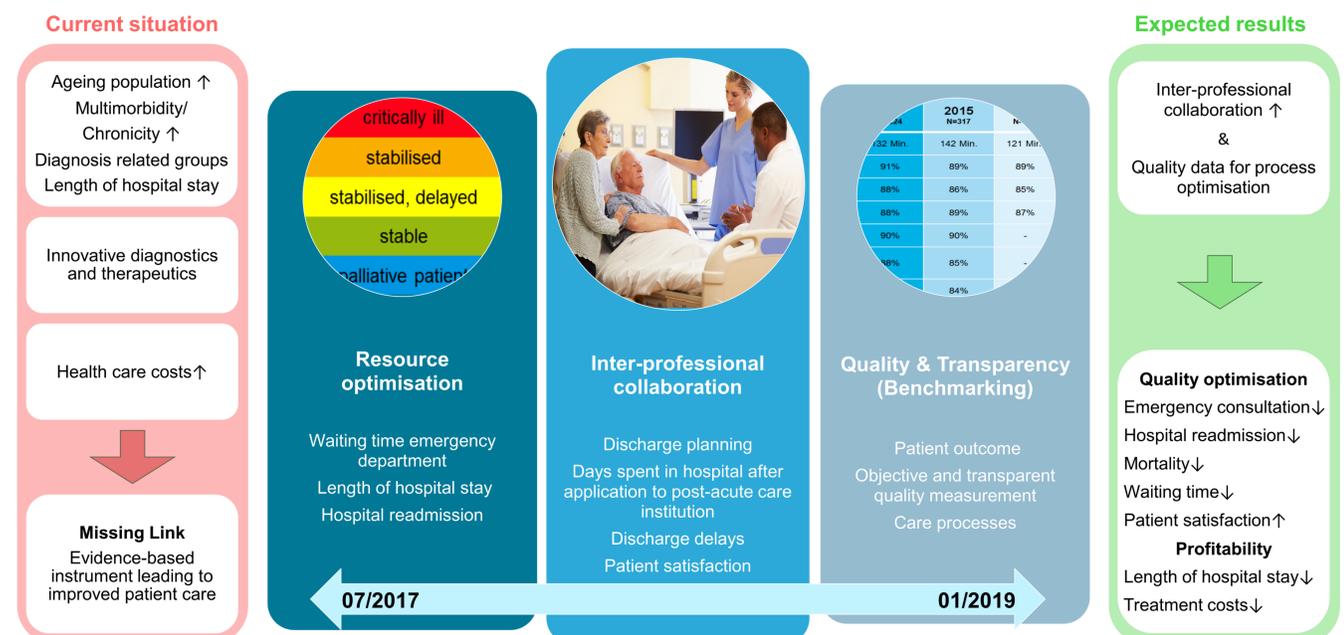


Fig. 3 Study content

Conclusion

The trial will yield concise information on whether and how *In-HospitoOL* improves inter-professional team work and thereby reduces length of stay without negatively impacting subjective and objective markers of patient outcomes. The large amount of collected patient data will enable comparison of transition processes within different hospitals and establish a benchmarking for patient care quality (Fig. 3).

References

¹ BFS (2016). Statistics on Health Care Costs and Funding (COU). Neuchâtel.
² Mueller, B., Kutz, A., Schuetz, P., de Geest, S. (2016). Full Proposal: Research Plan NRP 74 «Smarter Health Care»