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10th International Conference for EBHC Teachers and Developers
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The effectiveness of an integrated knowledge translation intervention on the use of NEWS2 in nursing homes. A pragmatic cluster RCT

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Background

- Aging populations creates strain on healthcare systems, globally.
- There is a need for innovative solutions to improve care, especially by streamlining uptake of relevant and reliable research in practice.
- Integrated knowledge translation (KT) has emerged as an implementation strategy that can accelerate the uptake of research into clinical practice



Aims

- The aim of this study was to implement a tailored, adaptive, and multifaceted KT program and assess its effectiveness on clinical practice in nursing homes.
- Through collaboration, partners decided which clinical problem to address.
- Stakeholders decided to address early detection of deterioration and acute illness among nursing home residents, using the National Early Warning Score-2 tool (NEWS2).



Methods

- Pragmatic cluster randomized controlled trial
- Part 1 was an educational KT component, identifying relevant knowledge-to-action gaps, delivered for nursing home staff in 2019 (15 ECTS university course).
- Part 2 was a clinical intervention, implementing NEWS2 in clinical practice (2019- 2020).
- Part 3 was a follow-up period (2020 –2021).

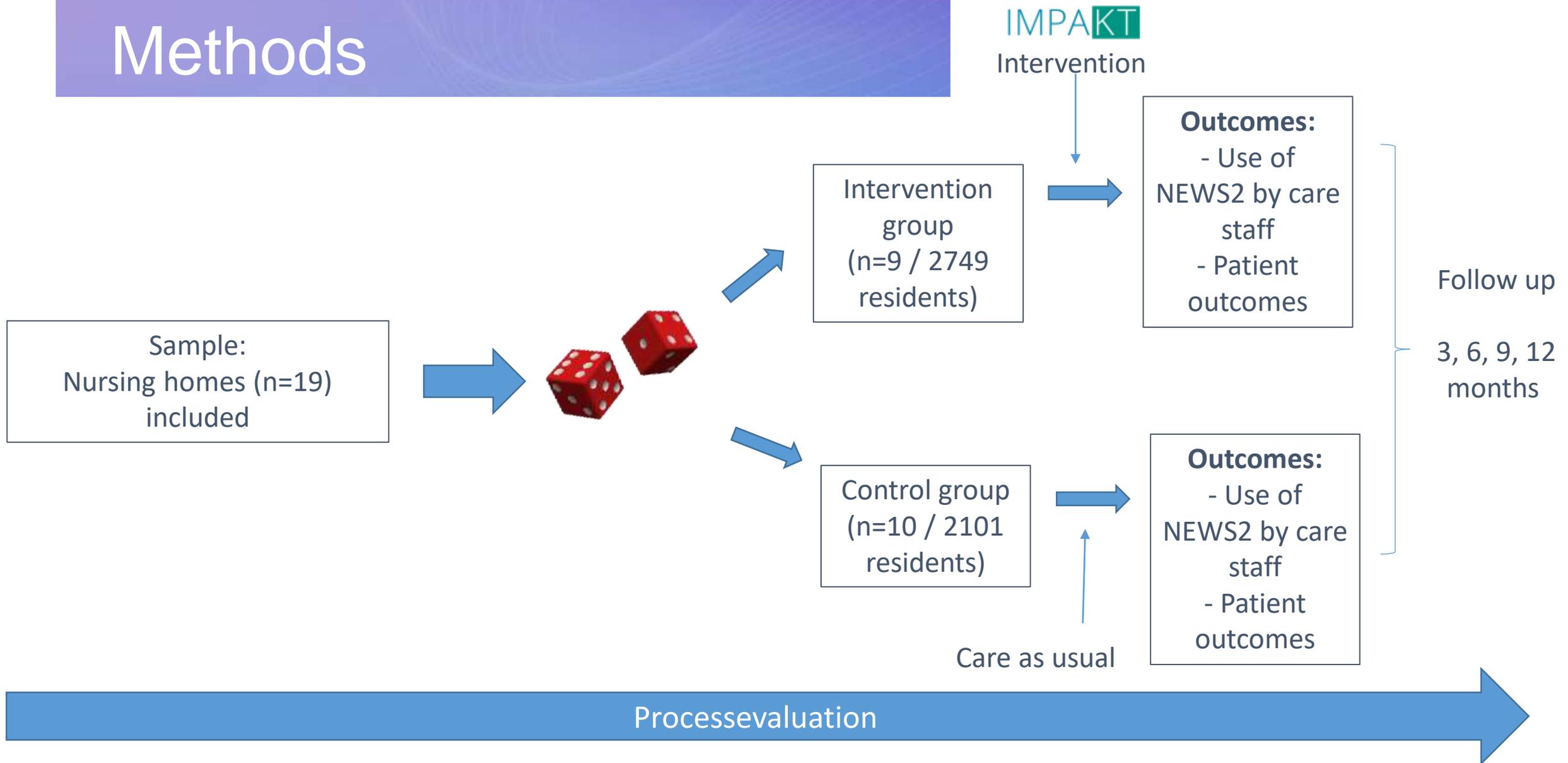


Methods

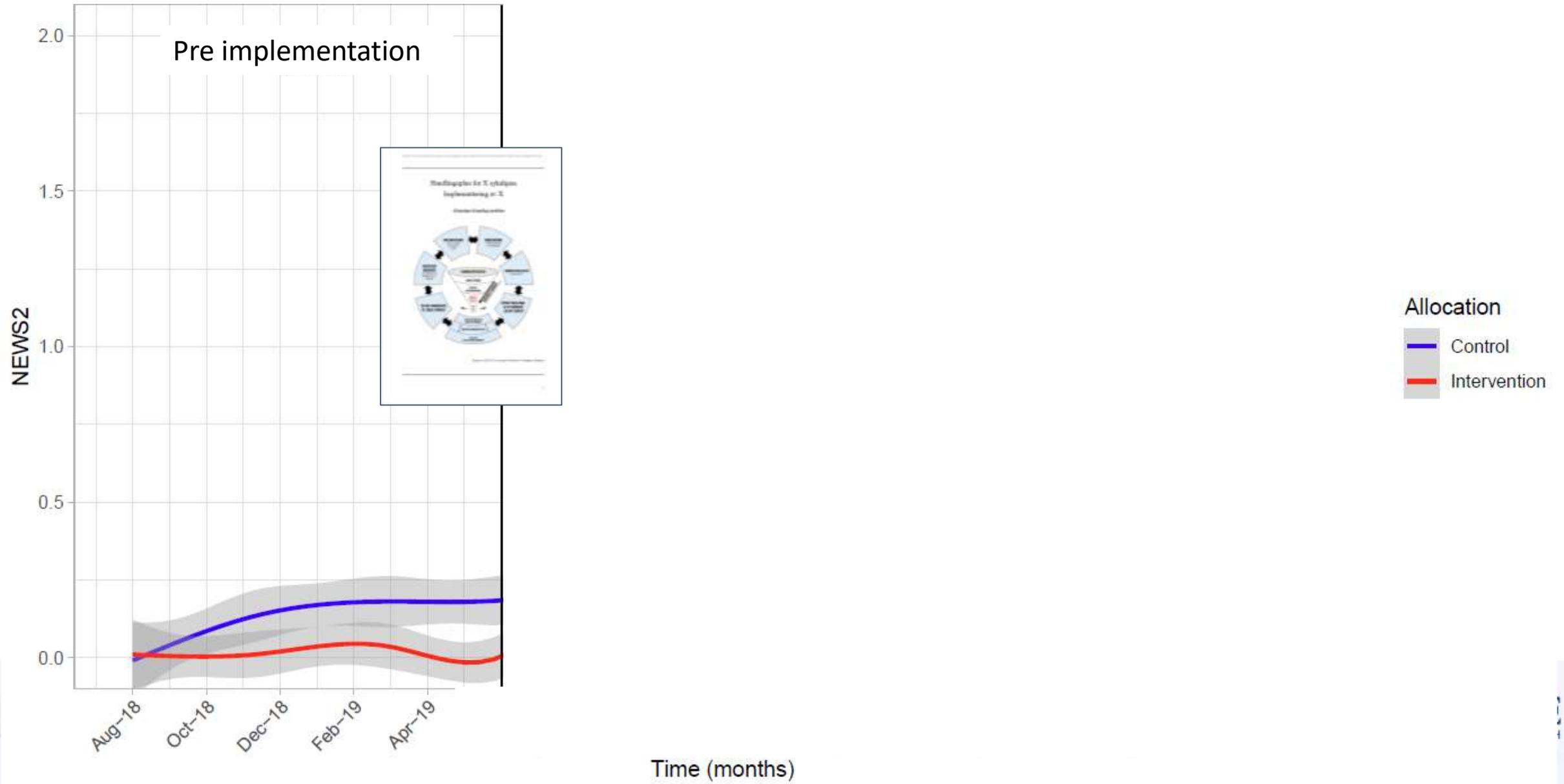
- All the nursing homes in Bergen municipality in Norway (n=21) were eligible for inclusion. Nursing homes were matched (blindly) and randomly assigned to an intervention or control group.
- Data was extracted from the Electronic Patient Journal and analyzed using multilevel regression models.



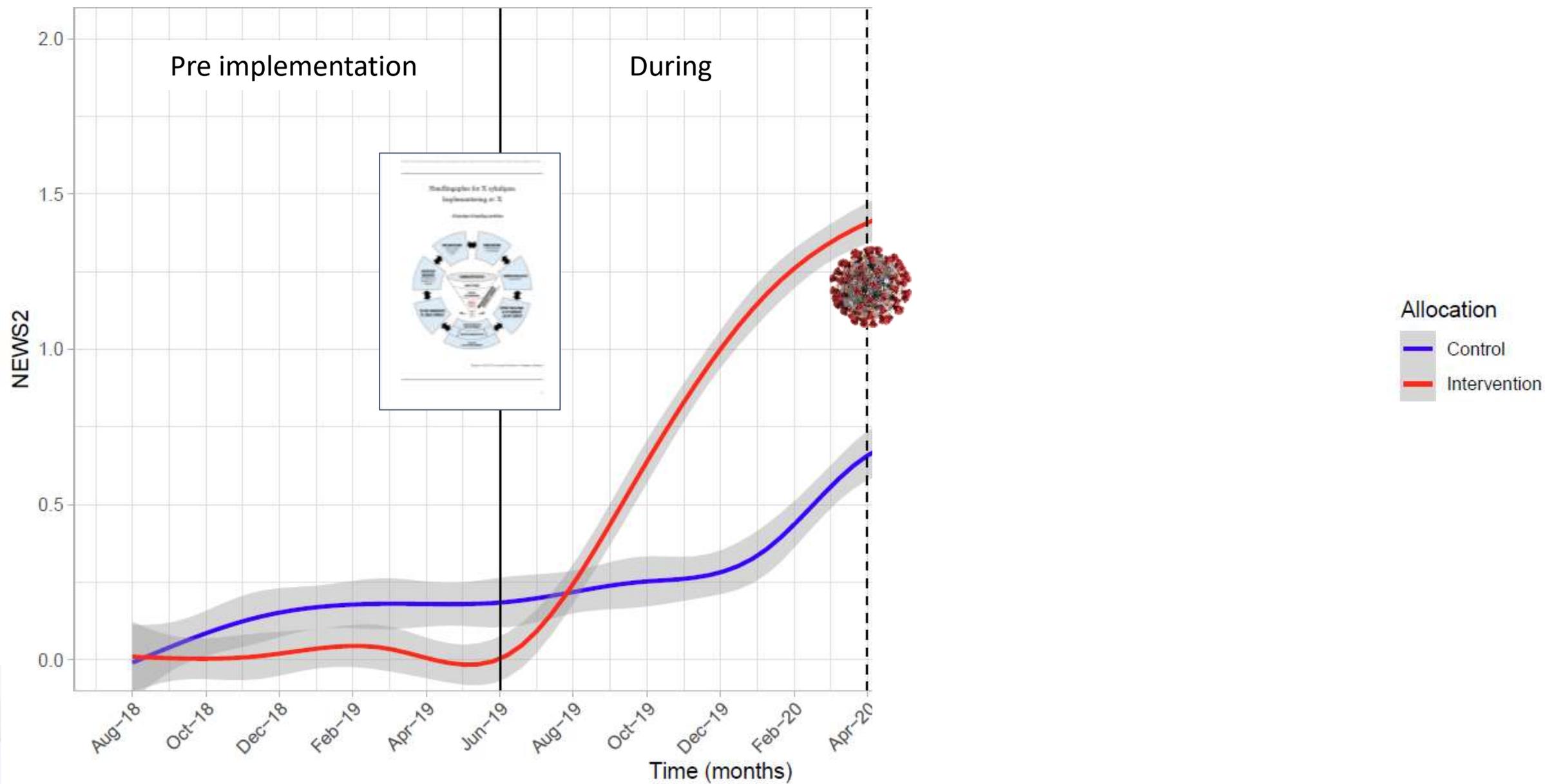
Methods



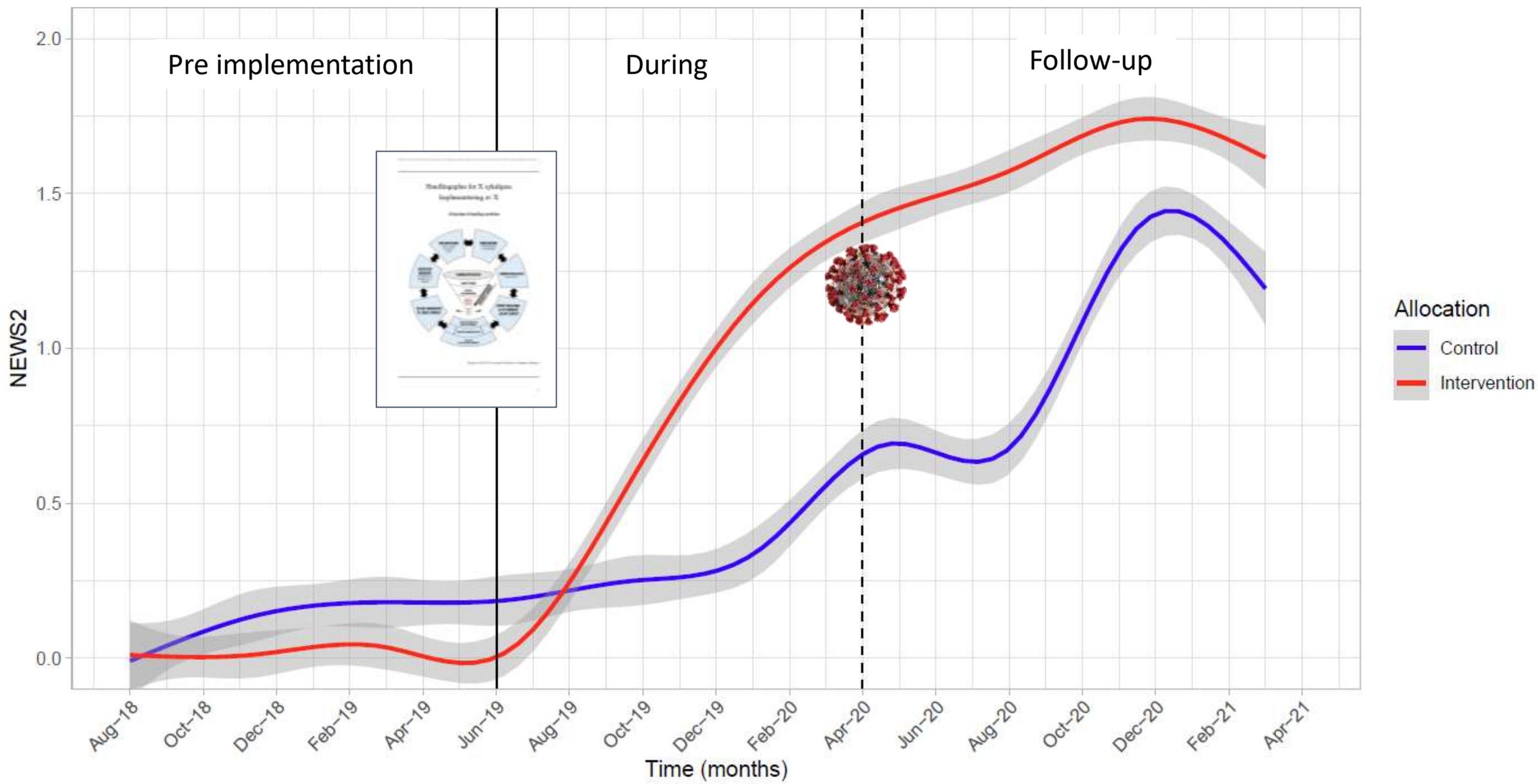
Results



Results



Results



Results

- The tailored implementation strategy, had a large effect on the use of NEWS2 among care staff in nursing homes during 2019-2020.
- During the final month of the clinical intervention period, residents in the intervention group was assessed with NEWS2, 1.44 times, which is almost four times more often than in the control group ($d = 2.42$).
- During the follow-up period (2020-2021), the use of NEWS2 increased in both the intervention and control group likely due to COVID-19 pandemic and the increased need for EWS

Conclusions

This is the first randomized trial to assess the effectiveness of an integrated KT intervention in nursing homes. This tailored implementation strategy had a large effect on the use of NEWS2 among care staff, demonstrating that integrated KT strategies can deliver very promising intervention results in the nursing home sector.



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Limitations

- This type of intervention is tailored but can be resource intensive
- Can be challenging to standardize to other contexts



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