

The effect of a comprehensive care intervention on patient reported Health-related Quality of Life in elderly with complex sub-acute care needs.

An inverse propensity score weighted, controlled prospective study.

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Background:

- Rising numbers of frail, multi-morbid elderly with complex, long-term needs (CLNs)
- At risk for sub-optimal care outcomes and escalating costs.
- The Patient-Centered Care Team (PACT) is an intervention for CLNs patients in the context of emergency hospital admissions
- Previous publication on PACT showed: ↓ emergency care use, ↑ planned care, and ↓ mortality by 40%. (1)

Research question:

Does the PACT intervention also improve patient reported Health related Quality of Life ?

Material and Methods:

- Patients: age over 60 with multimorbidity and CLNs referred to PACT (intervention)
- Controls: Matched to a PACT patient (control), during an emergency hospitalization.

HR-QoL measures:

- Medical outcomes survey, short form 12, v1 physical (SF-12-PSC) and mental score (SF-12-MSC) ,
- Euro-QoL (EQ-5D),
- Patient Generated Index (PGI).

Analyses:

- Doubly robust adjustment for design imbalances according to DAG – see Fig 1.
- Inverse propensity score (PS) weighting.
 - Multi-variate linear regression outcomes analysis.

Results:

- Intervention group improved more than Controls – both in crude and adjusted analyses. See table 1 for details.
- The SF-12 PSC change in the intervention group was 3 times the minimally clinically important difference (MCID) (2).

Conclusion:

A comprehensive care program, with a strong focus on person-centred care for multimorbid frail elderly, improved patient reported HR-QoL in a clinically meaningful way, compared to the control group.

Trial registration: ClinicalTrials.gov (identifier: NCT02541474) and published protocol (1)

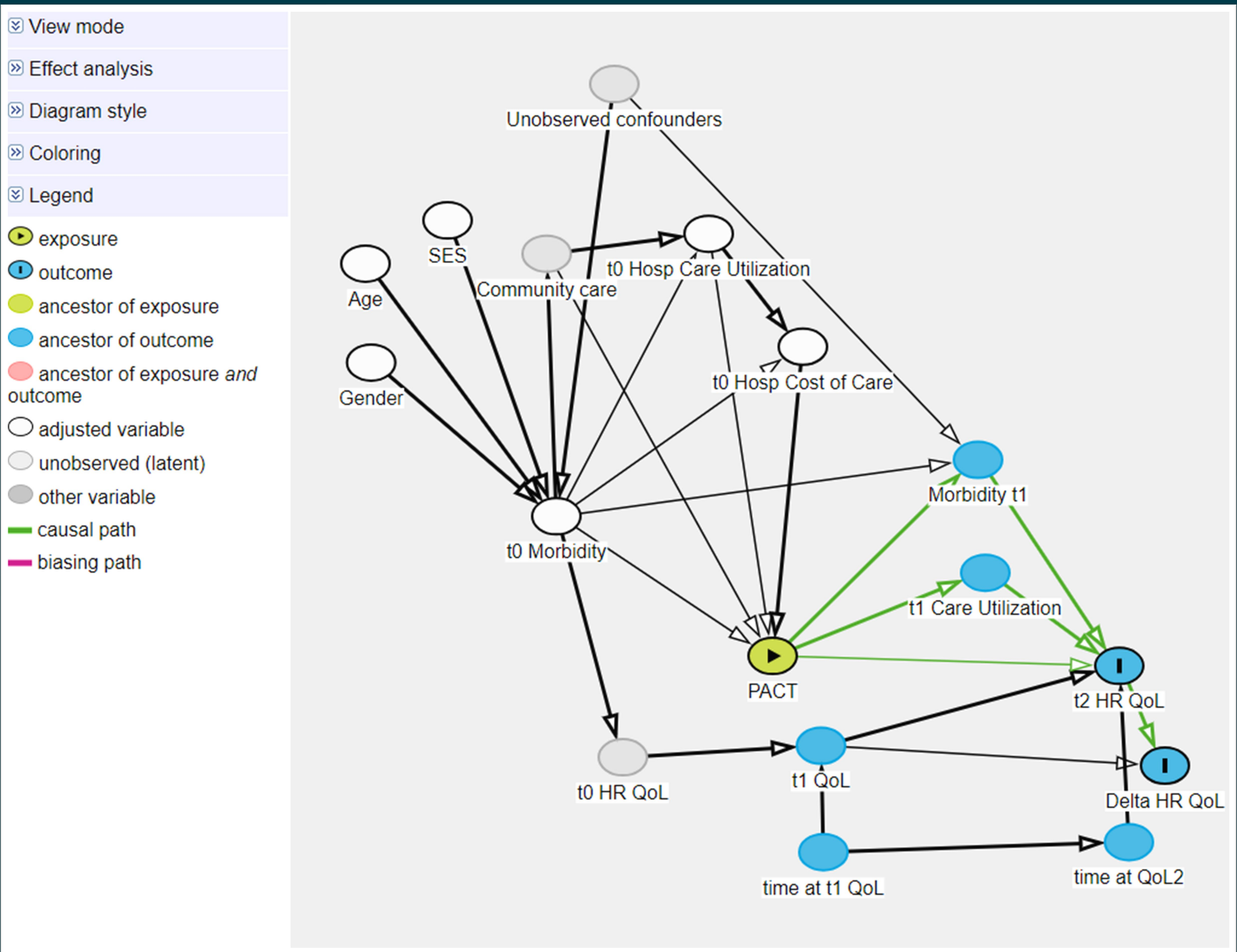


Figure 1: Direct Acyclic Graph of causal framework for effect of PACT and Health Related Quality of Life (HR-QoL). For underpinning script used at dagitty.net, see Appendix C . (Abbreviations: t0 is 1 year prior to baseline, t1 is at baseline, t2 at 3 months follow-up. SES: Socio-Economic Status. Hosp: Hospital.) Patient Centered Team Study on Patient Reported Health Related Quality of Life, Norway 2016-2018.

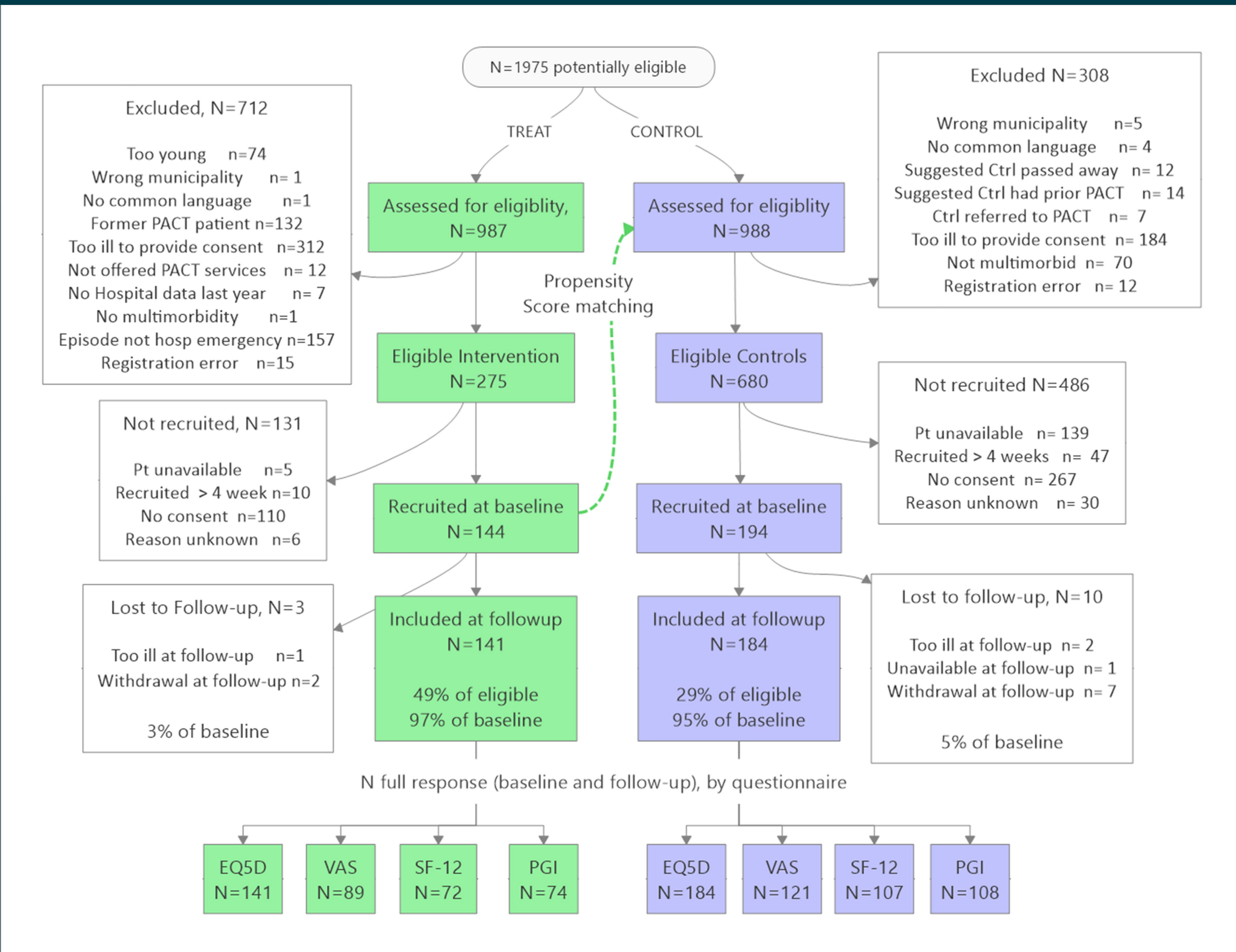


Figure 1: Flow-chart showing the flow of recruitment in the study. Patient Centered Team Study on Patient Reported Health Related Quality of Life, Norway 2016-2018

	N	Δ - Diff in difference	[95% Conf. Interval]	p
Change SF12 Phys	174	3,84	0,38 7,29	0,03
Change EQ5D	313	0,16	0,05 0,27	0,00
Change PGI	177	0,67	0,05 1,29	0,03
Change SF12 Mental	174	-0,68	-5,41 4,05	0,78
Change VAS	199	2,84	-6,18 11,87	0,54

Table 1: Adjusted analyses of differences in change in HR-QoL measures by intervention group. Patient Centered Team Study on Patient Reported Health Related Quality of Life, Norway 2016-2018.

References:

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