

## CONFERENCE ABSTRACT

# Can local networks for patients with dementia (DementiaNet) be value-adding initiatives? A longitudinal cohort analysis on medical and long-term care claims data

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**Introduction:** Dementia is an incurable, neurodegenerative syndrome among aging adults that has been marked as one of the world's biggest public health priorities of modern times. Dementia is often coupled with complex patterns of multimorbidity, requiring strong coordination between care professionals. DementiaNet is an initiative to address this challenge by means of structural support in transitioning towards network-based dementia care through local dementia care networks. Whilst such local care networks have shown to improve quality of care for patients (Richters et al. Plos One 2018), the implications on total healthcare costs remain unknown. This study addresses this knowledge gap.

**Methods:** We analysed medical and long-term care claims data between 2015-2019 from one of the four largest Dutch healthcare insurers (4.1 million beneficiaries). Mixed regression models were used to compare patients included in local care networks with patients outside those networks. Total healthcare costs across all domains was the primary outcome of this study. Costs for primary care, hospital care, nursing care, pharmacy, and long-term care were included as secondary outcome measures. Differences in the risk of admission, intensive care stay, emergency department visit, extended length of stay (LoS), primary care crisis admission, and admission into nursing homes were also assessed.

**Findings:** A total of 38,525 patients with dementia were identified, of which 485 patients belonged to a local network. No significant differences were found between patients included in local networks and the control group for total healthcare costs. Across cost domains, we found a significant decrease of 19.7 (95% CI: 7.6 – 30.3) in hospital costs and significant increase of 10.2% (95% CI: 2.3 – 18.6) in primary care costs. In addition, local care network participation relates to a significant decrease in the risk of an increased length of stay (Odds Ratio [OR] 0.88; 95% CI: 0.77 – 0.96). The intervention group showed significant lower rates of admission into a nursing home setting at baseline, but after controlling for confounders, these differences disappeared.

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**Conclusions:** We found no relationship between local care network participation and total healthcare costs. Local networks did result in lower hospital care costs and slightly higher primary care costs. We found no effects for long-term care costs, indicating that these savings were not achieved through cost shifting to this sector.

**Implications for applicability/transferability, sustainability, and limitations:** This study is the first to show that creating local care networks for dementia is a value-adding initiative – improving quality of care without increasing total healthcare costs. Policymakers worldwide should actively evaluate such local networks as they seem to contribute in transforming fragmented dementia care into sustainable, integrated care processes.