Evaluating Outcomes Based Care for Vulnerable Older People: Challenges and lessons learned from a complex program evaluation

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**Background:** In 2017, the NSW Central Coast Local Hospital District (CCLHD) designed and implemented the Outcomes Based Care program to vulnerable older people healthy and at home. Two not for profit providers were commissioned to deliver their own form of care coordination for one year. Provider payments were based on their capacity to reduce unplanned public hospital bed days for an allocated patient cohort.

**Objectives:** Our study objectives were to explore how provider and service characteristics, along with patient behaviours, and mediators and moderators of service delivery, may have impacted outcomes. These included hospital utilisation, health outcomes and patient experience with care coordination.

**Methods:** The process evaluation explored mechanisms of impact and contextual factors, including the risk stratification approach, frailty of the patient cohort and impact of the funding incentives for care coordination between the CCLHD, community providers and hospitals. Evaluation criteria were developed after a systematic literature review. Information was collected through patient surveys, interviews with patients, providers, the CCLHD and additional program documentation.

**Results:** The primary outcomes showed a significant reduction in hospital activity for both the intervention and the control group. While there was an overall decrease in hospital use, modelling results suggest Outcomes Based Care increased ED visits for the intervention group. The risk stratification approach resulted in the selection of a cohort of older patients with more complex patients than anticipated. The funding incentives shifted financial risk to providers, but all allocated unplanned hospital bed days were used within six months with the contract needing to be renegotiated. Survey data suggests providers supported patients in the self-management of their medical conditions but is unclear whether the level of patient engagement was appropriate to achieve intended outcomes. Providers note the lack of General Practitioner and patient engagement hampered efforts to improve health outcomes.

**Discussion:** International experience presents similar results for care coordination approaches. A review of 15 randomised trials developed within the US found only three coordinated care programs experienced a significant difference in hospitalisations. One program increased hospitalisations by
19 per cent. Similar findings were identified in the UK with significantly increased ED visits and unplanned hospitalisations compared to control groups, though these weren't part of a commissioning pilot.

Limitations: Survey data was intended to be collected at enrolment and again when Outcomes Based Care finished. They were not administered as planned and the timings varied for each survey and between the enrolled and control groups. Response rates also varied by survey type and mode of administration. One provider, in particular did not capture adequate evaluation data.

Conclusions: The study has important evidence based implications for the development of approaches designed to keep older people healthy and at home and to incentivise the delivery of care.

Lessons learned: Fourteen evaluation recommendations explore health outcomes, cost effectiveness, patient experience and unintended consequences that specifically relate to outcomes based commissioning designed to keep older people healthy and at home.

Suggestions for future research: Further models of outcomes based funding should be piloted within the NSW healthcare system.