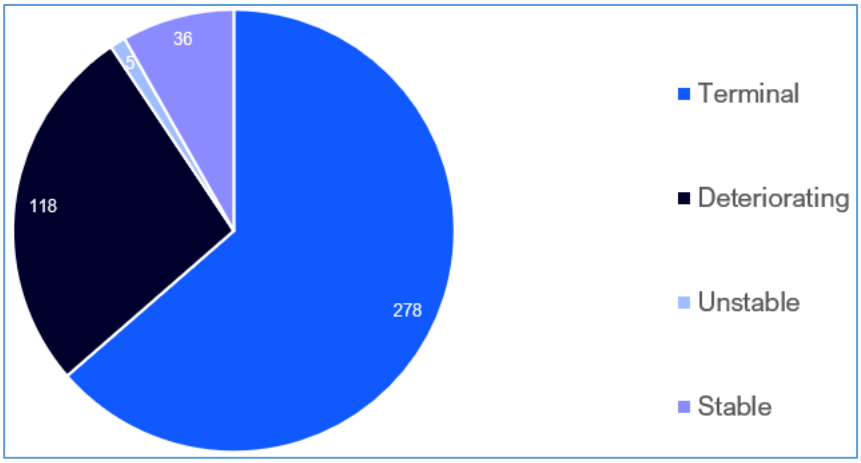
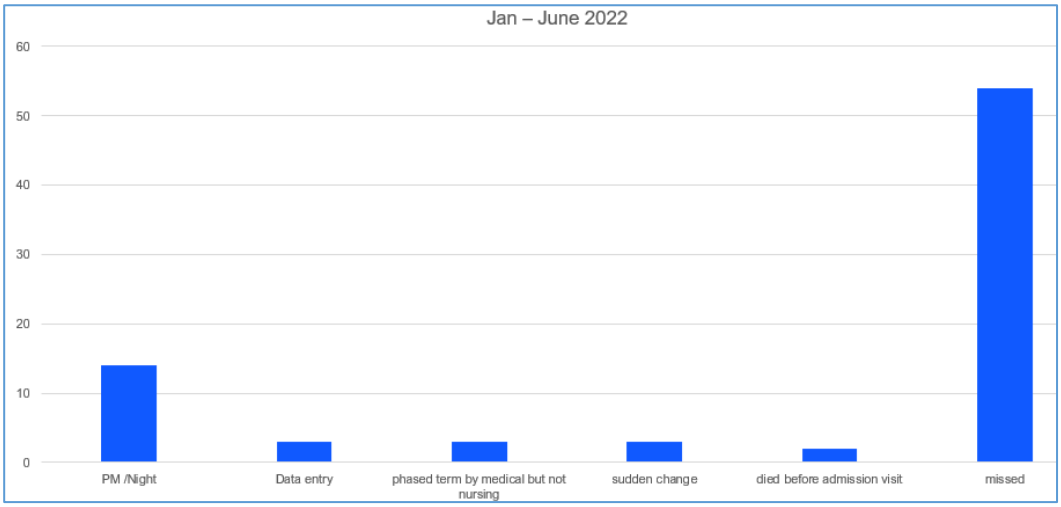
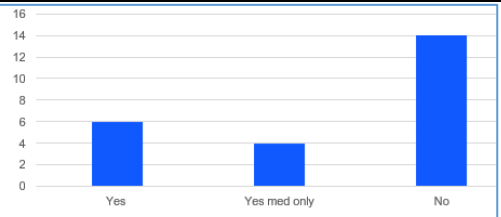
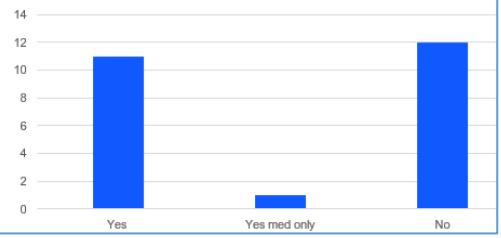
Instructions: ▪ *Use this template to guide your project and complete your project to report the outcomes* ▪ *Refer to the Quality Improvement & Change Guide* ▪ *The report and associated documents are placed in the public domain for other services to use. Please acknowledge the source. If you wish to modify the content, please contact the project coordinator or service directly.*	
Service: Silverchain Western Sydney	
Outcome Measure: Deaths Outside the Terminal Phase	
Project Coordinator: Clare Warren (Clinical Nurse Consultant Quality, Safety and Risk Officer)	
PCOC Improvement Facilitator: Le-Tisha Kable and Anna McPherson	
Project Time Frame:	Start date: 2022 Finish date: 2024
Agenda item at Service Team meeting / Committee	The QI project was an agenda item at the Quality Meeting for the Western Sydney Silverchain team.
Project Title	Recognising dying and reducing the number of people dying outside of the terminal phase to ensure that patients receive appropriate end of life care.
Problem Description	Supporting patients to die at home requires a well-coordinated partnership between healthcare professionals and patients and their families or carers. Palliative care clinicians play a key role in facilitating this process by utilising their skills and clinical judgement to recognise when a patient is likely to die within days or entering the terminal phase. Identification of imminent death should then trigger conversations with the patient, family and carers to explain the proximity of death, address fears and concerns and to plan care which ensures that dying is managed as calmly, respectfully and comfortably as possible. In 2022, 36% of the patients who died at home in the care of Silverchain's Western Sydney Palliative Care Service died outside of terminal phase (PCOC supplementary data for reports January to June 2022 and July to December 2022). The phase in which patients died is shown in the graph below: 
Purpose of the Project	The service developed a mission statement which aimed to reduce the rate of people dying outside of terminal phase in Western Sydney Community Palliative Care Service, with the target of 15% by 2025, and a stretch goal to further reduce this to less than 10% by 2026.
Context	This project was conducted as part of the Quality Improvement Lead Training Program run by the Australian Council on HealthCare Standards (ACHS) Improvement Academy.

Interventions	To address this problem, the team decided to use Harrison and Rubin's (2002) Clinical Practice Improvement model which follows several steps: 1.) A process to define the project and create a mission statement, 2.) Performing a diagnostic review to inform interventions based around a series of PDSA cycles, 3.) Assessing the impact and outcomes of the project and planning how to sustain any improvements in the future. A comprehensive diagnostic review was undertaken to further understand the problem and inform interventions. It was informed by the PCOC supplementary data on 'deaths outside of terminal' for the first report of 2022 which showed that 79 people had died without being phased as terminal. Case review showed the reasons that correct phase was not recorded, as shown in the graph below. The most prevalent reason (N=54) was that the phase was missed, followed by a misconception that night staff did not need to complete PCOC scores (N= 14). Issues due to data entry whereby the patient was phased terminal in the notes but not in the Assessment and Response Form in the electronic medical record (ECR) (N=3), death before admission visit (N=2), a sudden change in the patient's condition/acute event (N=3) and phased terminal by medical but not nursing (only nursing complete the Assessment and Response Form) (N=3) were also reasons for the terminal phase not being correctly assigned.  This was followed by an audit using the PCOC Deaths outside of terminal Case Review Form. A sample of 24 charts from across 2022 was reviewed. As per the graphs below, the results showed that for 15 of the patients there had been an increase in RUG-ADL and a decrease in AKPS in the days prior to death but that conversations where families/caregivers were notified of the changes were only documented for 9 patients.

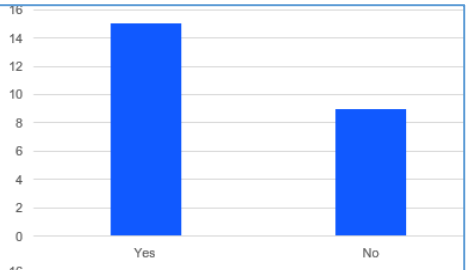
1. Was there documented evidence in the medical records that the patient was dying?



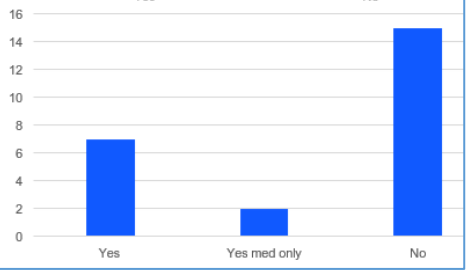
2. Was appropriate clinical care recorded for the dying person?



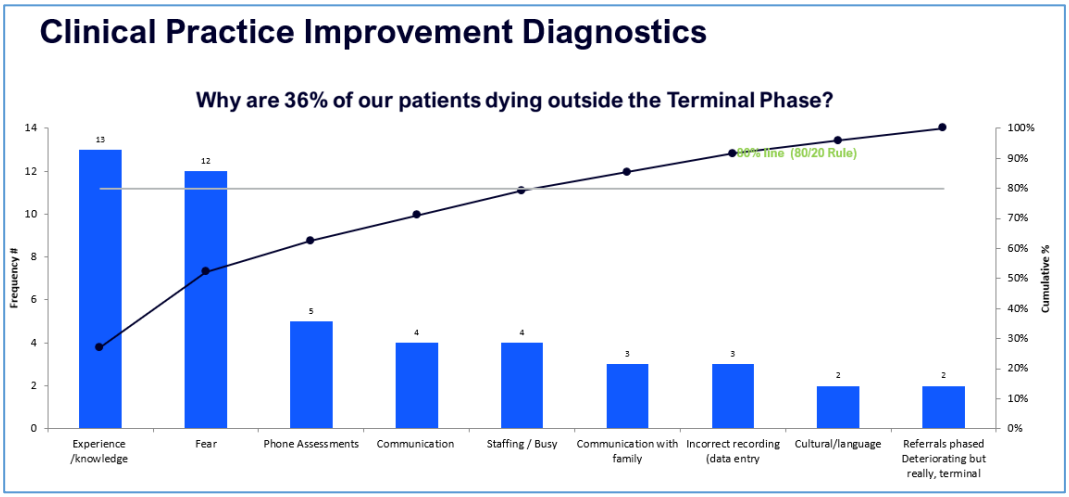
3. Had there been an increase in the RUG-ADL score, and a decrease in the AKPS score in the days prior to death?



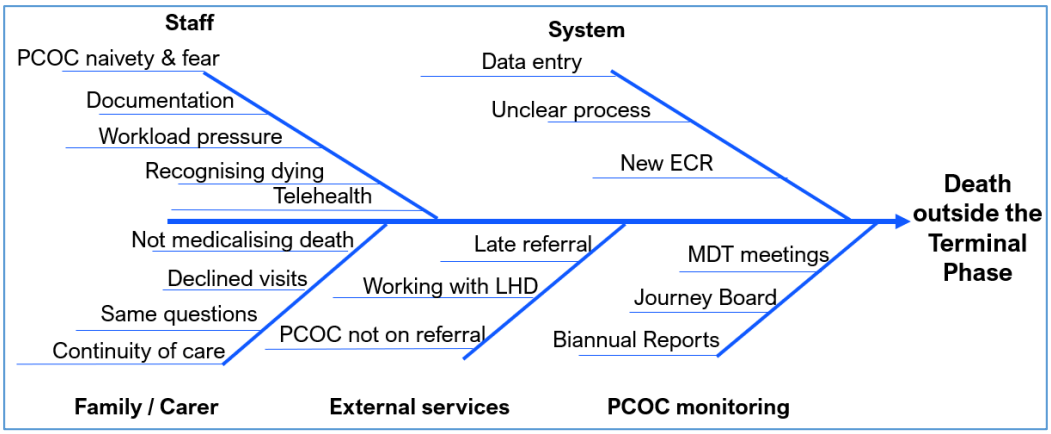
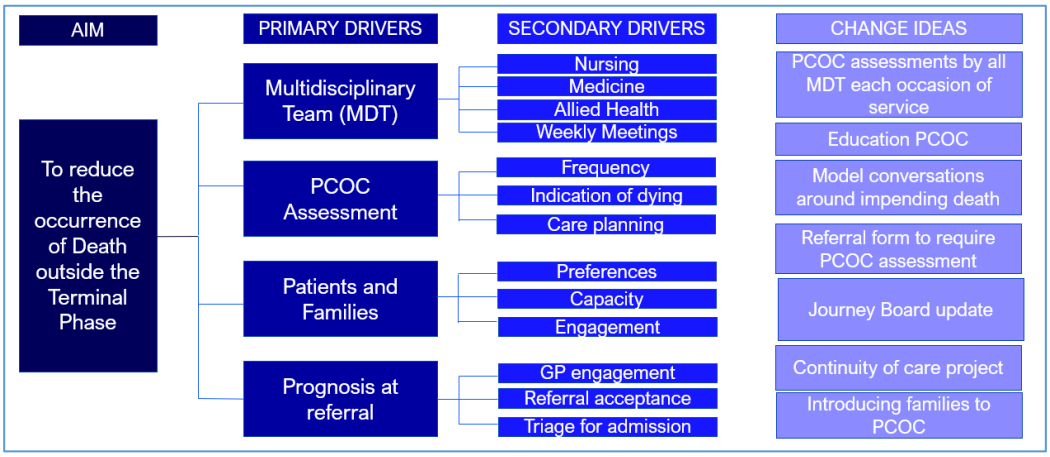
4. Were families/carers notified of changes?



The team then did a staff survey asking for the reasons "Why did 36% of our patients die outside the terminal phase?'. This revealed that experience/knowledge and fear (around getting it wrong and around explaining to the family that death was likely to be within days) were the main reasons elicited from staff. See the graph below for other reasons.



A review of logged consumer feedback and clinical reviews from M&Ms was also undertaken. This showed that there were issues around perceptions of asking patients the same questions at each visit, and issues around continuity of care within their team.

	The last step in the diagnostic review was to complete a fishbone diagram to map out the contributing factors under system, staff, family/carer, external services and PCOC monitoring lenses- as shown below.  This was followed by developing a 'Driver Diagram' mapping primary/ secondary drivers and change ideas against the primary aim of reducing the occurrence of death outside the terminal phase.  They then targeted the following interventions: 1. Implemented PCOC education to the team on the Phase tool, and particularly the terminal phase. This also focused on recognising early signs of impending death and how to have courageous conversations. 2. The creation of a buddy system between less experienced and more experienced clinicians. 3. Encouraging all staff, including medical and allied health to complete PCOC assessments. 4. PCOC audits were added to the audit schedule and an audit was conducted in April/May of deaths at home which showed that 23% of the 66 deaths were outside terminal phase (N=15). 5. A redesign of the Electronic Clinical Record (ECR) to promote ease and consistency of recording PCOC assessments.
Team/Staff Involved	Clare Warren (Clinical Nurse Manager) Caroline Marasovic (Director of Clinical Operations NSW) Prudence Edgar (CNC, Palliative Care Western Sydney)

Measures/Interventions	The primary measure chosen to evaluate the success of the project was the PCOC supplementary data on deaths outside of the terminal phase, with the intention to review this for each report until the end of 2024. The team also planned to utilise the following additional measures: • Continue to assess results in PCOC Terminal Phase Audits • Seek staff feedback • Monitor consumer feedback • Benchmark with Western Australian Services • Attend a PCOC Community of Practice to share/learn best practice.
Analysis	Both qualitative data (surveys, feedback), quantitative data (PCOC supplementary data and benchmarking) and mixed methodologies (audits and case reviews) were used to analyse the results of the project.
Results	The PCOC data showed a significant reduction in deaths outside of terminal from 36% in 2022 to 27% in 2023. The service appeared on track to reach the target of 15% by 2025. However, due to unforeseen changes in the funding arrangements, the service ceased operation in June 2024 and did not receive another PCOC report.
Interpretation	Despite the project ceasing before the intended date, the QI project is noteworthy for its comprehensive and structured approach which focused on the clinical impacts of failing to recognise terminal phase rather than just viewing it as a 'data entry problem'. Case reviews revealed that the most common reason for terminal phase not being assigned was that it was 'missed', and it is likely that appropriate end of life care was not delivered to these patients and their families. This was supported by the finding that in more than 50% of patients there was no documentation to demonstrate that the correct clinical care was delivered, including notifying the family/carers of the change in the patient's condition. The project then undertook an exploratory process using multiple sources to determine the reasons for the findings including a staff survey, consumer feedback and M&M reviews. They then used fishbone and driver diagrams as ways of further elucidating contributing factors/drivers and change ideas which led to the implementation of several actions: education, a buddy system, all staff scoring PCOC and regular audits. The survey finding that staff lacked confidence in assigning terminal phase enabled the implementation of education and a buddy system. Over the course of the project staff were noted to: (i) have increased confidence in recognising dying, or (ii) be more willing to ask their case coordinator for assistance if they were unsure of the correct phase. It is anticipated that these conversations led to better planning for terminal phase (i.e. ensuring equipment was available, or that the GP was available to support death at home).
Summary	With the service closing in 2024 it is difficult to demonstrate the effectiveness of the QI project beyond the improvement in the proportion of deaths outside of the terminal phase in their 2023 PCOC supplementary data. There were however several changes that occurred at the service and organisational levels which may be sustained: 1.) The PCOC Assessment and Response form was built into a new Electronic Care Record that was built and piloted with the Western Sydney service. This ECR allowed tracking of symptoms over time and had a colour-coded display and embedded responses to provide better oversight of patient's needs. 2.) The PCOC terminal phase audit was built into the MARS audit system so that they can continue to routinely audit deaths outside the terminal phase and focus on improving elements of the care they deliver at the end of life. 3.) The project fed into an internal Continuity of care project which focused on improving continuity of care through better access and sharing of information and care planning.

Conclusion	Despite the Western Sydney service closing, the recommendations from this activity were shared nationally within the Silverchain Palliative care network and presented to the Best Care Committee and Best Care Governance Committee by the Executive Director.
Outputs	An extract from the ECR shows an example of the visual display/dashboard which was developed by the service to help guide clinical care.
References	Harrison BT, Rubin G NSW Health Easy Guide to Clinical Practice Improvement 2002

- For further guidance on completing a Quality Improvement project refer to the *Standards for Quality Improvement Reporting Excellence (SQUIRE) Guideline* *http://squire-statement.org/index.cfm?fuseaction=Page.ViewPage&pageId=471* .
- *For further information on Australian quality improvement resources visit CareSearch* *https://www.caresearch.com.au/caresearch/tabid/5642/Default.aspx*