

<b>Service</b>	Metro South Palliative Care Service (MSPCS)
<b>Outcome Measures</b>	Anticipatory and Responsive Care Outcome Measures
<b>Project Coordinators</b>	Dr Greg Parker & Dr Arvind Gunasekaran
<b>PCOC Improvement Facilitator</b>	Emily Beric
<b>Project Time Frame</b>	Ongoing
<b>Project Title</b>	Development of a Palliative Care Digital Clinical Dashboard
<b>Problem Description</b>	<p>Healthcare organisations are complex, ever-changing environments. Healthcare organisations are progressively adopting innovative digital health solutions such as the use of clinical dashboards, to respond to the increasing need of providing fast, efficient services. (Helminki et al., 2022; O'Malley et al., 2010)</p> <p>Clinical dashboards are being widely adopted in healthcare settings because they improve patient care through (Helminki et al., 2022; Xie et al., 2022):</p> <ul style="list-style-type: none"> <li>- Improving access to timely and relevant clinical information</li> <li>- Improving clinical decision making</li> <li>- Allowing health care professionals to visualise actionable data</li> <li>- Displaying information in a visually efficient way</li> <li>- Their ability to create reports.</li> </ul> <p>The PCOC Assessment and Response Framework supports clinicians to consistently determine patient and family/carer needs and respond to these needs. This information is valuable in driving clinical decision making, however this information can be lost when embedded within progress notes and not displayed elsewhere, such as a clinical dashboard.</p> <p>The MSPCS identified this as a problem and decided to create an innovative inpatient palliative care dashboard that includes patient information and allows direct visualisation of the PCOC assessment scores and palliative care phases, which supports triaging, onward referrals, clinical decision making and enhances clinical efficiencies.</p>
<b>Purpose of the Project</b>	To enhance the use and clinical efficiencies of the PCOC Assessment and Response Framework within every day routine clinical practice, to drive patient care and improve patient outcomes.
<b>Context</b>	<p>The MSPCS team are a large, tertiary service in Queensland. The MSPCS provides a specialist palliative care service with consultancy, shared and direct care elements that works in collaboration with primary and tertiary care providers to enhance quality end-of-life care and ease the suffering of people diagnosed with advanced progressing life-limiting conditions. MSPCS comprises multidisciplinary teams that provide face-to-face, telephone and telehealth consultations.</p> <p>Given the population size served, large catchment area, multiple services and large team of health professionals, a digital solution to streamline the use of PCOC through the development of an inpatient clinical dashboard was identified as being beneficial.</p>
<b>Interventions</b>	<ol style="list-style-type: none"> <li>1. Conducted a review of PCOC outcome reports and benchmark results.</li> <li>2. Recognised the need to improve anticipatory and responsive care benchmarks.</li> <li>3. Proposed an inpatient clinical dashboard linked to ieMR to facilitate recognition of the value of PCOC information to drive routine clinical care, aiming to embed PCOC and improve patient outcomes.</li> <li>4. Collaborated with the Metro South HHS Data and Analytics team to create and validate the clinical dashboard, with relevant PCOC fields embedded.</li> <li>5. Launched the clinical dashboard across the MSPCS.</li> <li>6. Organise feedback from the clinical team regarding the content and visualisation of PCOC data</li> </ol>
<b>Team/Staff Involved</b>	MSPCS Team

	Data and Analytics Team Digital Health Clinical Consultation Service Queensland Specialist Palliative Care Digital Working Group PCOC Team
<b>Measures/Interventions</b>	A key intervention in developing the dashboard includes a colour coding system whereby severe scores are flagged in red so high priority intervention is clearly identified. In addition, another key intervention is that there is visualisation of proportion of scores completed helps to ensure complete clinical PCOC assessments. The PCOC reports were reviewed, and feedback was obtained from staff following the launch of the clinical dashboard.
<b>Analysis/Results/Interpretation</b>	Review of the PCOC reports demonstrated some improvements in anticipatory and responsive care benchmarks, and positive feedback was obtained from staff. It is anticipated that greater completion of assessment scores will be seen, as well as more responsive patient care. Further analysis of benefits of the project will be analysed in the future.
<b>Summary</b>	Overall, the development of an inpatient Palliative Care Digital Clinical Dashboard has improved access to timely and relevant clinical information, that clinicians can use to determine care needs and drive their clinical decision making, in an efficient way, with improvements in patient care evident.
<b>Conclusion</b>	There is a strong evidence base suggesting that digital health innovations improve clinical care, decision making and efficiencies (Helminksi et al., 2022; Xie et al., 2022). The development of an inpatient Palliative Care Digital Clinical Dashboard for the MSPCS has demonstrated this. The use of dashboards is being widely adopted across the healthcare setting and suggests benefits in other services across the state and country also developing a dashboard that embeds PCOC assessment scores and phases that can be used in real time patient care.
<b>Outputs</b>	See Appendix A – Image of Inpatient Palliative Care Digital Clinical Dashboard
<b>References</b>	<p>Helminksi, D., Kurlander, J., Renji, A., Sussman J., et al. (2022). Dashboards in Health Care Settings: Protocol for a Scoping Review. <i>JMIR research protocols</i>, 11(3). Doi: 10.2196/34894</p> <p>O'Malley, A., Grossman, J., Cohen, G., Kemper, N., &amp; Pham, H. (2010). Are Electronic Medical Records Helpful for Care Coordination? Experiences of Physician Practices. <i>Journal of General Internal Medicine</i>, 25(3), 177–185. <a href="https://doi.org/10.1007/s11606-009-1195-2">https://doi.org/10.1007/s11606-009-1195-2</a></p> <p>Xie, C., Chen, Q., Hincapie, C., Hofstetter, L., Maher, C., Machado, G. (2022). Effectiveness of clinical dashboards as audit and feedback or clinical decision support tools on medication use and test ordering: a systematic review of randomized controlled trials. <i>Journal of the American Medical Informatics Association</i>, 29(10), 1773-1785. Doi: <a href="https://doi.org/10.1093/jamia/ocac094">10.1093/jamia/ocac094</a></p>



Palliative Care Clinical Dashboard

Current Inpatient List

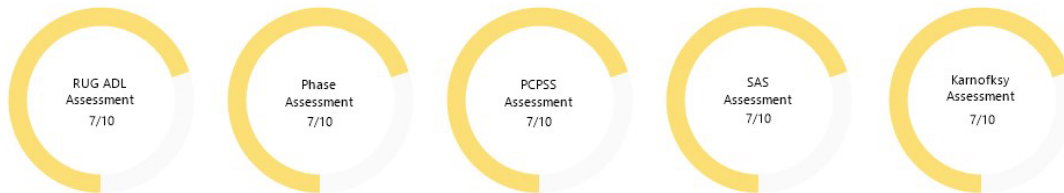
Facility

Ward

Consultant

Palliative Assessment Compliance (24HR)

Complete vs incomplete palliative assessments for the last 24 hours.



Clinical Prioritisation Indicators

Identified cohorts of palliative patients for prioritised clinical care.

Last BM >= 3 Days 1

24HR PRN Count >=6 1

NIKI Checks Required 3

Phase <-> PowerPlan 1

PCPSS Segment > 2 3

SAS Segment > 6 0

Oral Cares Required 1

MRN	Name	Facility	Ward	Bed	Admission Date	Phase	Karnofsky	RUG-ADL	PCPSS > 2	SAS > 6	NIKI Status	NIKI Check< 4HRS	Unopened Bowel Days	Palliative Powerplan	SAS since Last PRN	Oral Care Required?	RUG since Phase Change
					23/02/2024 6:33:00 PM	Deteriorating	30 - Almost completely bedfast	17	No	No	Active	No	-	Deteriorating	Yes	Yes	N/A
					7/03/2024 2:05:00 PM	Deteriorating	50 - Considerable assistance and frequent medical care	10	No	No	Active	No	1	Deteriorating	Yes	No	N/A
					1/03/2024 5:26:34 PM	Deteriorating	50 - Considerable assistance and frequent medical care	8	Yes	No	-	-	4	Deteriorating	Yes	No	N/A
					4/03/2024 4:14:00 PM	Stable	60 - Occasional assistance but able to care for most needs	4	No	No	-	-	-	Stable	-	No	-
					6/03/2024 1:48:47 PM	Terminal	10 - Comatose or barely rousable	18	No	No	Active	No	2	Terminal	Yes	No	-
					8/03/2024 2:45:00 PM	Deteriorating	30 - Almost completely bedfast	17	Yes	No	Active	Yes	0	-	No	No	N/A
					7/03/2024 5:31:18 AM	Deteriorating	30 - Almost completely bedfast	14	Yes	No	Active	Yes	0	Deteriorating	Yes	-	N/A
					12/03/2024 11:20:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
					26/02/2024 2:31:50 PM	-	-	-	-	-	-	-	0	-	-	-	-
					22/02/2024 12:31:14 PM	-	-	-	-	-	-	-	-	-	-	-	-