NATIONAL QUALITY IMPROVEMENT PROJECT - MDS

Minimum Data Set (MDS)

FY2023 summary report

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Prepared by:

Minimum Data Set Sub-committee
National Palliative Care Quality Improvement Workgroup

On behalf of Singapore Hospice Council

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Summary and Key Findings

Introduction

The demand for palliative care services continues to rise in tandem with Singapore's ageing population and the growing burden of complex chronic illnesses. The refreshed *National Strategy for Palliative Care 2023* (NSPC 2023) has articulated a renewed vision anchored on three strategic domains: Access, Quality, and the Palliative Care Environment.[1] A critical pillar of this strategy is the routine measurement and tracking of clinical and operational outcomes across the sector.

In response to this national imperative, the National Palliative Care Minimum Data Set (MDS) has evolved from its foundational role of profiling patient demographics to becoming a longitudinal, system-level quality improvement instrument. The MDS facilitates benchmarking across institutions and provides an empirical basis for informing service design, workforce planning, and policy development.

This FY2023 report marks the third consecutive year of trend reporting, now incorporating data from FY2021 to FY2023.

Methods

This report presents national-level findings from the FY2023 MDS cycle, encompassing data collected from 1 April 2023 to 31 March 2024. All participating specialist palliative care providers submitted de-identified patient-level data using a standardised template and instruction manual endorsed by the Singapore Hospice Council.

To facilitate longitudinal and patient-level analysis, referral records were matched across institutions using a combination of masked identifiers and demographic variables. Matching was performed based on identical last 5 characters of NRIC, gender, year of birth (±1 year), and date of death (±1 day). This process enabled integration of fragmented records to construct comprehensive care trajectories.

Data wrangling—including cleaning, validation, record linkage, and visualisation—was conducted using R (version 4.2.2), Tableau Prep Builder (version 2022.1.1), and Tableau (version 2022.1.8). Critical variables such as date of referral, acceptance, assessment, discharge, and death were validated for chronological consistency and completeness.

In total, 20 institutions submitted data, although three outpatient services were unable to provide full outpatient cohort information. Missingness and data quality issues were resolved through iterative queries with institutional representatives, and data inconsistencies were adjudicated via consensus.

Key Findings

Overall, 20 institutions participated in the Singapore National Palliative Care Minimum Data Set (MDS) for FY2023 (April 2023 to March 2024).

1. Increased Access to Specialist Palliative Care

A total of 12,325 newly referred, unique patients received specialist palliative care services in FY2023, reflecting a continued upward trend from 11,834 in FY2022 and 10,891 in FY2021. However, unlike the preceding year where growth was predominantly driven by non-cancer referrals, the proportions of cancer and non-cancer patients remained stable in FY2023.

2. Persistent Late Referrals, Especially for Non-Cancer Diagnoses

The overall median time from first palliative care assessment to death remained short at 21 days (IQR 5–69 days), with a marked contrast between cancer (31 days) and non-cancer patients (9 days). This lag reflects entrenched barriers to early palliative integration, particularly for patients with non-malignant conditions.[2-4] International evidence suggests a 3–4-month window is necessary to fully realise palliative care's benefits.[5]

3. Mixed Trends in Community-Based End-of-Life Care

Among the 9,572 decedents, 47.9% died in acute hospitals, 33.5% at home, and 14.4% in inpatient hospices. The modest decline in hospital deaths observed in FY2022 was not sustained. Instead, FY2023 saw an uptick in hospital deaths. The proportion of home deaths has remained largely stagnant. This is likely because, while announcements to support compassionate discharge and facilitate home deaths were made in July 2023, key enablers such as expanded home hospice capacity are only expected by 2025 and enhanced support measures for home discharge were only later launched in October 2024.[6-8]

4. Stable but Uneven Improvements in Timeliness of Care

The median time from referral to acceptance remained unchanged at 1 day for both home care and Inpatient Hospice and Palliative Care Service (IHPCS). However, the median time from acceptance to first assessment in home care increased slightly to 3 days, reversing earlier gains. General trend indicates that IHPCS has maintained or improved timeliness from referral to first patient assessment, whereas home care has experienced growing delays, with 35.7% of referrals now waiting >7 days before their first assessment.

Future Plan

Moving forward, a separate national benchmarking initiative is underway. This new effort will focus on integrating patient-reported outcomes and symptom burden measures, in line with international registry practices. These indicators are designed to complement the MDS and will enable deeper insight into care quality and alignment with patient centred outcomes. The sub-committee remains committed to strengthening the data infrastructure that supports a resilient, person-centred palliative care ecosystem in Singapore.

References

1. 2023 NSPC Review Workgroup. 2023 National Strategy for Palliative Care. Ministry of Health, Singapore; 2023. https://www.moh.gov.sg/docs/librariesprovider5/resources-statistics/reports/2023-national-strategy-for-palliative-care-(nspc)-report.pdf

2. Seow H, O'Leary E, Perez R, Tanuseputro P. Access to palliative care by disease trajectory: a population-based cohort of Ontario decedents. BMJ Open. 2018;8(4):e021147. doi:10.1136/bmjopen-2017-021147

3. Tobin J, Rogers A, Winterburn I, et al. Hospice care access inequalities: a systematic review and narrative synthesis. BMJ Support Palliat Care. 2022;12(2):142-151. doi:10.1136/bmjspcare-2020-002719

4. Quinn KL, Wegier P, Stukel TA, Huang A, Bell CM, Tanuseputro P. Comparison of palliative care delivery in the last year of life between adults with terminal noncancer illness or cancer. JAMA Netw Open. 2021;4(3):e210677. doi:10.1001/jamanetworkopen.2021.0677

5. Davis MP, Temel JS, Balboni T, Glare P. A review of the trials which examine early integration of outpatient and home palliative care for patients with serious illnesses. Ann Palliat Med. 2015;4(3):99-121. doi:10.3978/j.issn.2224-5820.2015.04.04

6. Lai L. MOH to boost palliative care at home, better support caregivers. The Straits Times. June 3, 2022. Accessed May 19, 2025. https://www.straitstimes.com/singapore/health/boost-for-palliative-care-fewer-people-to-die-in-hospitals-by-2027-ong-ye-kung

7. Channel NewsAsia. Home palliative care capacity to increase 50% to 3,600 places by 2025. CNA. March 19, 2024. Accessed May 19, 2025. https://www.channelnewsasia.com/singapore/moh-more-home-palliative-care-spaces-higher-hospice-capacity-4205496

8. Ministry of Health, Singapore. Update on National Strategy for Palliative Care. Press release. March 19, 2024. Accessed May 19, 2025. https://www.moh.gov.sg/newsroom/update-on-national-strategy-for-palliative-care

9. Hui D, Kim SH, Roquemore J, Dev R, Chisholm G, Bruera E. Impact of timing and setting of palliative care referral on quality of end-of-life care in cancer patients. Cancer. 2014;120(11):1743-1749. doi:10.1002/cncr.28628

10. Organisation for Economic Co-operation and Development (OECD). Time for Better Care at the End of Life. Paris: OECD Publishing; 2023. doi:10.1787/722b927a-en