Cancer Services Performance Indicator Audit 2020

Information and method

Background

The Victorian cancer service performance indicator (CSPI) program was established in 2007 to measure and monitor progress with Victorian Government policy. The four key priorities for reform have been identified as the focus for service improvement at the Integrated Cancer Service (ICS) and state-wide levels:

- Multidisciplinary care;
- Care coordination across the cancer care pathway;
- Supportive care;
- Reducing unwarranted variation in practice.

The cancer service performance indicator program has evolved over the years.

Historically there have been 5 standard indicators collected:

- Documented evidence of multidisciplinary team recommendations
- Documented evidence of disease staging in the multidisciplinary team meeting recommendations
- Documented evidence of ECOG in the multidisciplinary team meeting recommendations
- Documented evidence of supportive care screening
- Documented evidence of communication of the initial treatment plan to the General Practitioner (GP)

In 2018 only (for 2017 data), additional indicators were collected for pancreatic cancer patients. This data was used to inform service improvement activity and the implementation of recommendations following the first Pancreatic Tumour Summit held in 2017.

- Referral to the first management/admitting service
- Date of referral
- Date first seen by Health Service
- Documentation of staging
- Date of referral to palliative care service or first documented consultation by palliative care
- Advance care plan alert

In 2019 (for 2018 data) one indicator was removed from the standard indicators; *documented evidence of communication of the initial treatment plan to the GP* and the remaining 4 were collected.

The 2020 audit (for 2019 data) was not undertaken due to the impacts of COVID-19 and limitations on ICS team members having access central medical records.

Introduction

The indicator program is one component of several cancer quality evaluation and benchmarking strategies including the state-wide multidisciplinary team meeting (MDM) survey, cancer patient experience survey, cancer clinical indicators, clinical audit, program evaluation and peer review initiatives such as the Victorian Tumour Summits. These quality and evaluation initiatives underpin the model for safety and quality in Victorian cancer services as outlined in *Clinical Excellence in Cancer Care* (Department of Human Services, 2007).

This performance indicator program is consistent with *"a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change"* (NICE, 2002).

The 2021 audit (for 2020 data) will include the 5 standard indicators (note the re-introduction of the *documented evidence of communication of the initial treatment plan to the GP)* and 4 additional pancreatic cancer indicators that were first collected in the 2018 audit (note the removal of the advance care plan alert indicator). This additional information will inform the data presented and analysed at the upcoming repeat Pancreatic Tumour Summit.

2020 Audit Overview

- Patients will be identified based on cancer diagnosis (actual or inferred) and treatment during 2020. This will allow for patients to have undertaken treatment planning and/or commenced treatment.
- All ICS will receive a data collection file pre-populated with details of their patient sample
- All tumour streams to be included in audit
- Cancer diagnosis date 1 Jan 2020 - 31 Dec 2020 (actual or inferred)
- The ICS will be required to audit additional indicators for pancreatic cancer cases to inform the upcoming Victorian Tumour Summit.
- The following table (Table 1) outlines the timeframes for the audit round for 2020

Table 1: Schedule for data collection and submission of data to Department of Health (DH)

Information session with ICS	13 July 2021
Sample to be provided to ICS	13 July 2021
Data collection	27 July – 21 September 2021
Submit Pancreatic Data	24 August 2021
Submit remaining audit data	21 September 2021

Patient sample

The cancer service performance indicator program requires a consistent method for the identification of the patient sample, ensuring an adequate sample size. The target population for the indicator program is newly diagnosed Victorian cancer patients meeting the criteria outlined below. A centralised sample selection process will identify patients for inclusion in the audit using the Victorian Admitted Episode Dataset (VAED). It is acknowledged that there are still limitations to this method as this will not be based on the linked VAED-Victorian Cancer Registry (VCR) data or capture patients who have only been treated with radiotherapy or oral therapy or who are under active surveillance alone.

Identification of the patient sample

The VAED will be used to identify patients for the audit.

- ICD-10-AM diagnostic and procedural codes **(attachment 1)** will be used to identify a patient with a cancer diagnosis who has undergone treatment. The use of these codes will allow ICS to identify patients who have had treatment and not just watchful observation within the required timeframe and locally.
- Selection will ensure each patient has not had a prior admission for the same ICD cancer code/s within the prior five years (i.e. are newly diagnosed).
- The ICD-10-AM diagnostic codes only include malignant codes; benign, in-situ and uncertain tumours will continue to be excluded.
- The diagnostic codes will be used to categorise patients into established tumour stream groupings, for example genitourinary instead of prostate. Tumour stream grouping can be found in the "Definitions" section of this information sheet
- Patients were included in the sampling for PICS if they were less than 18 years of age in their first admission. Patients were only retained where the first campus of treatment was of one of The Royal Children's Hospital or Monash Children's Hospital.
- Patients sampled for metropolitan and regional ICS were included if the patient's age was 18 or older in their first admission, and their campus of treatment was not one of the PICS campuses.

Size and type of patient sample

The CSPI program requires an adequate sample size to ensure the results are meaningful and can identify change in performance over time. Clinical epidemiological advice was sourced by Cancer Support, Treatment and Research unit (formerly Cancer Strategy and Development unit) to estimate the required sample size. The sample size required to estimate percentage to within +/-5% with 95% confidence was considered. The final sample for the regional ICS is lower than the epidemiological advice recommends but this is in part to account for the need for regional patients to travel for the treatment of some tumour streams. Similarly, the metropolitan ICS sample is somewhat inflated to account for the referral of patients from outside of the ICS for rarer tumour stream care.

The minimum number of records to be audited has been specified in the table following (Table 2). If this number cannot be achieved, a note to this effect (including an explanation as relevant) is to be provided to the department when the data are submitted. All identified pancreatic cancer patients in the data collection form are to be audited in addition to the specified minimum sample.

Table 2: 2017 Audit Requirements - minimum record numbers and tumour streams

ICS	Minimum Records	Tumour Streams
Metro	650	All
Regional	250	All
Paeds	90	Paediatrics
Total	3290	

Notes to Table 2:

Record numbers will include additional cases above the minimum sample size. ICS are encouraged to capture data above the required minimum if considered important locally.

Exclusion criteria

The following exclusion criteria apply:

- Patients did not receive their primary treatment at the recorded health service (i.e. prior treatment elsewhere).
- Multidisciplinary treatment recommendation from a health service in another ICS that is not part of a formal linked MDM.
- Non-Victorian residents treated in Victorian health services.
- Patients with tumours in more than one tumour stream that were newly diagnosed in 2020.
- For patients treated in metropolitan or regional ICS campuses, patients younger than 18 were excluded.
- For patients treated in PICS campuses, patients aged 18 years or older were excluded.

Performance indicators

Table 3 Performance indicators

Indicator	Required response
1a. Documented evidence of multidisciplinary team recommendations	Yes/No
1b. Date of the first documented multidisciplinary team discussion	dd/mm/yyyy
1c. Whether the first documented multidisciplinary team discussion was prospective	Yes/No
2. Documented evidence of disease staging in the multidisciplinary team recommendations	Yes/No
3. Documented evidence of patient Eastern Cooperative Oncology Group (ECOG) performance status in the multidisciplinary team recommendations	0, 1, 2, 3, 4, 5, No evidence = 99
4. Documented evidence of supportive care screening	Yes/No
5. Documented evidence of communication of the initial treatment plan to the GP	Yes/No

Additional Pancreatic only indicators	Response
6a. Referral to the first management/admitting service	GP ED Surgeon Medical oncologist Radiation oncologist Inter-health service Intra-health service Unknown Other (please specify)
6b. Date of referral	(date dd/mm/yyyy)
7. Date first seen by Health Service	(date dd/mm/yyyy)

8a. Stage: Resectability	Borderline resectable Resectable Unresectable Other/Unknown.
8b Stage: Clinical stage	Early stage (Including AJCC stage I or II) Locally advanced (Including AJCC stage III) Metastatic Unknown
8c Stage: TNM-T Value	0-4, Unknown
8d Stage: TNM-N Value	0-3, Unknown
8e Stage: TNM-M Value	0-1, Unknown
8f Stage: Comments	If Stage recorded is “Unknown” (99) specify why Unknown – i.e. waiting for imaging, pathology etc
9. Date of referral to palliative care service /first documented consultation by palliative care (whichever comes first)	dd/mm/yyyy

Rationale on the performance indicators

Indicator 1 Multidisciplinary team meetings

Multidisciplinary care is a key component to providing best practice care for cancer patients. Documentation of multidisciplinary team recommendations in the medical record ensures such information is accessible to all team members. *Achieving best practice cancer care – A guide for implementing multidisciplinary care* (DHS, 2007) states ‘recommendations are recorded in the patient’s medical record and signed by the presenting or treating clinician’. Effective communication between all team members involved in a patient’s care is critical for maximising patient care coordination. This performance measure provides an indication of the level of documentation of multidisciplinary team meeting recommendations in the central medical record.

Numerator	Total number of new cancer patients with documented evidence of multidisciplinary team recommendations
Denominator	Total number of new cancer patients audited

Acceptable evidence:

- Written summary of recommendations located in the central medical record.
- MDM outcomes or recommendations form filed in the central medical record.
- Printout from MDM management software of recommendations and filed in the central medical record.
- Recommendations outlined in correspondence between medical clinicians with a copy filed in the central medical record.

Not acceptable evidence:

- Reference in the central medical record to an MDM discussion having taken place, but without the recommendations being outlined.
- A brief statement such as “medical oncology opinion” or similar.
- Correspondence regarding treatment recommendations from another health service/ICS cannot be used as evidence for a different health service/ICS except under a formal intra-ICS outreach service arrangement.

Indicator 2 Documented evidence of cancer staging in the multidisciplinary team meeting recommendations

Staging is the cornerstone of treatment planning. MDMs across the state are working hard to include appropriately credentialed specialists to inform both clinical and histopathological staging. The optimal care pathways outline staging requirements for each tumour stream. Staging should be recorded using the AJCC staging (TNM), SEER or other accepted staging system for the disease type as endorsed by local tumour groups or multidisciplinary teams. One example of a well-accepted ‘other’ staging system is ‘Dukes staging’ for colorectal cancer, another is ‘FIGO’ for gynaecological cancer.

Numerator	Total number of new cancer patients with documented evidence of cancer staging in the MDM recommendations
Denominator	Total number of new cancer patients with documented MDM recommendations

Acceptable evidence:

- As per evidence required for indicator 6.1 including a diagnosis with clinico-pathological stage noted
- Descriptions of stage Surveillance Epidemiology and End Results (SEER): localised, regional (locally advanced, with nodal involvement) or distant (advanced, metastatic) are all acceptable.
- For Small Cell Lung Cancer (SCLC) the use of the terms; invasive, limited or extensive are appropriate.
- For Haematology staging systems see the definitions
- For CNS tumours the WHO grading system of grades I-IV is acceptable

Not acceptable evidence:

- The use of descriptive terms such as extensive or invasive without the use of the staging system defined above (except SCLC)

Indicator 3 Documented evidence of patient ECOG performance status in the multidisciplinary team meeting recommendations

ECOG performance status scales and criteria are used by doctors and researchers to assess how a patient's disease is progressing, assess how the disease affects the daily living abilities of the patient, and determine appropriate treatment and prognosis. The Improving Cancer Outcomes Act 2014 also requires recording of ECOG status in notifications sent to the state-wide Victorian Cancer Registry to enable appropriate risk adjustment and comparative analyses of patient health outcomes. Documentation of ECOG in the MDM recommendations would enable easy identification of ECOG for notifying VCR.

Numerator	Total number of new cancer patients with documented evidence of ECOG performance status (grade) in the MDM recommendations
Denominator	Total number of new cancer patients with documented MDM recommendations

Acceptable evidence for this audit:

- As per evidence required for indicator 6.1 including a diagnosis with ECOG performance status (grade) noted.
- The following table displays the ECOG performance status scale and criteria:

Table 4 ECOG performance status scale and criteria

Grade	ECOG
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, for example, light house work, office work
2	Ambulatory and capable of all self-care but unable to carry out any work activities; up and about more than 50 per cent of waking hours
3	Capable of only limited self-care; confined to a bed or chair more than 50 per cent of waking hours
4	Completely disabled; cannot carry on any self-care; totally confined to a bed or chair
5	Dead

Adapted from: Oken M, Creech R, Tormey D, et al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am J Clin Oncol. *1982;5:649-655.*

Indictor 4 Documented evidence of supportive care screening

Supportive care, which addresses a wide range of needs across the continuum of care for those affected by cancer, is increasingly seen as a core component of cancer care. Improving supportive care for those affected by cancer is one of the priority areas for the ICS. This measure provides an indication of the level of documented appropriate supportive care screening.

Numerator	Total number of new cancer patients with documented evidence of supportive care screening
Denominator	Total number of new cancer patients audited

Acceptable evidence:

- For adults, a completed, validated, supportive care screening tool that assesses the five inter-related domains of care (physical, social, psychological, spiritual and information) located in the central medical record (such as the Distress Thermometer and problem checklist or the National Comprehensive Cancer Network distress thermometer. Evidence of validation is usually available in the published literature.
- For paediatrics, the recently validated screening tool being used in the clinical setting in Australia.
- If the medical record includes documentation that a patient declined to complete screening, this will be considered that the individual has been screened. However, it must be noted in the comments section that screening was declined.

Not acceptable evidence:

- Informal referral notes in the central medical record.
- A note stating that screening was undertaken without detailing outcomes.
- Evidence of supportive care assessment without evidence of screening.
- A supportive care screening tool that is located in a place other than the central medical record.
- For paediatrics, the use of the social work screening tool will **no longer** be considered adequate evidence.

Indicator 5 Documented evidence of communication of the initial treatment plan to the GP

The GP (or paediatrician) is a key member of a team of care providers for patients with a new diagnosis of cancer. Timely communication of a patient's treatment plan to the GP or paediatrician will assist in enhancing the quality and coordination of care for the patient. An initial treatment plan is a single document that should include both confirmation of the cancer diagnosis and details of the next steps for the care of the patient. This measure provides an indication of the level of documentation of communication of the treatment plan to the GP or paediatrician.

Numerator	Total number of new cancer patients with evidence of communication of the treatment plan to the General Practitioner (or paediatrician)
Denominator	Total number of new cancer patients audited

Acceptable evidence:

Evidence of communication (listed below) should be dated/sent within two weeks of multidisciplinary discussion or commencement of treatment date (whichever comes first):

- Letter to, or copied to the GP or paediatrician that communicates the treatment plan (copy located in the central medical record).
- Summary of MDM recommendations sent to the patients GP or paediatrician (copy located in the central medical record).
- Record of telephone call or email in the central medical record if it is stated that the telephone call or email outlined the treatment plan
- Discharge summaries in the central medical record for the GP that provide details of the patient's treatment plan.

Not acceptable evidence:

- Medical documentation (letters or discharge summaries) that do not provide details of the treatment plan.

Note: Where health services solely hold electronically generated discharge summaries in ICT systems such as Cerner and do not add a copy to the central medical record, this is acceptable as evidence. This information is to be noted in the data collection template.

Additional Pancreatic Indicators

Indicators 6-9 were developed as a result of a recommendation made by the Pancreatic Clinical Working Party, the Pancreatic Victorian Tumour Summit in 2017.

Submission of Data

The data is to be collected using the Excel file, *CSPI Data Collection Template 2020, which* will be pre-populated with patient sample details. Absolutely no changes to this template or format are permitted. All data from each cycle will be listed on this sheet with the tumour streams grouped. ICS are to add or remove lines depending on the number of patient medical records audited. A brief comments section is provided for data explanation, complexity of interpretation concerns, notes or suggestions.

Data and information must be reviewed locally and be approved by the program manager/director prior to submission. It should be noted that the Department provides funding to the ICS to enable audits to be undertaken and compliance is a requirement of the ICS funding.

The ICS are also reminded that the collection and reporting of accurate data is required as per the Financial Management Act 1994. Adequate data must be submitted and notification of any data errors must occur in a timely manner to the Cancer Support Treatment and Research team.

Please upload the populated password protected data files to your ICS locked DH Teams folder. Please email the password in separate email to cancerreform@health.vic.gov.au.

Reporting

DH provides a high-level report that is intended for distribution and reporting at health service, ICS and state-wide levels to monitor processes of care and identify where care can be improved. Indicators provide a flag rather than a definitive answer; they indicate potential problems that may require further investigation. The indicator program is designed to contribute to a culture of evaluation, benchmarking, feedback and continuous quality improvement.

The Cancer Support Treatment and Research unit, Department of Health, encourages ICS Program Offices to produce a local level indicator report for participant member health services and to collect additional locally relevant performance data as part of this process.

Definitions

Central Medical Record

The central medical record is the source of data for the CSPI program. The central medical record is considered the main medical record for a patient, which may be electronic or paper-based. It should be a central repository to ensure easy access to all relevant information. The central medical record reinforces the standard that patient information should be available to all multidisciplinary team members in a central location to promote safe care.

To promote a consistent indicator methodology, information held in locations other than the central medical record (such as MDM software, databases, stored in ICS offices or other offices) should not be included as a source of data unless otherwise recognised by the health service as a legal component of the patient's central medical record. ICS are to advise the department where these systems occur. Printouts from databases and software programs that are then incorporated / filed in the central medical record are acceptable.

Health Services relating to the CSPI audit

All public health services, and those private health services with data custodian approved sharing agreements, will be considered for auditing if the facility treats 10 or more cases within a tumour stream. Treatment is defined in ICD-10-AM, which was reviewed by the ICS Information Managers Group (IMG) for the 2018 CSPI audit.

Victorian Cancer Patient

Victorian cancer patients are those receiving cancer treatments at a Victorian health service where their usual residence is a Victorian address.

Financial Management Act 1994 (Standing Order 3.4.13)

Public Sector Agencies must take reasonable steps to ensure that data is accurate and adequate when it is collected, and that its accuracy is maintained during subsequent use and reporting. The standard for accuracy and adequacy is to be determined by reference to what is expected for the purposes of effective risk management and financial and operational reporting.

Access: http://bfm.dtf.vic.gov.au/CA25713E0002EF44/pages/financial-management-compliance-framework-standing-directions-and-associated-rules

ICD-10-AM coding

International Statistical Classification of Diseases and Health Related Problems, 10th Revision, 2007, Australian Modification.

Multidisciplinary meeting (MDM)

A scheduled meeting of core and invited team members for the purpose of prospective treatment and care planning of newly diagnosed cancer patients as well as those requiring review of treatment plans or palliative care. Note: Retrospective case review is a valuable approach to multidisciplinary learning, review and audit of prospectively planned treatment and care; however, it cannot replace multidisciplinary prospective treatment and care planning (Department of Human Services, 2006).

Staging systems

- TNM Classification of Malignant Tumours (UICC) and American Joint Committee on Cancer (AJCC) Cancer Staging Manual
- Durie & Salmon for multiple myeloma staging
- French-American-British (FAB) for leukaemia classification
- Australian Clinico-Pathological Staging (ACPS) System for colorectal cancer
- International Federation of Gynecologists & Obstetricians (FIGO) for gynaecological cancers
- Dukes/Modified Dukes for colorectal cancer
- Ann Arbor staging system for lymphomas
- Binet Staging Classification for chronic lymphocytic leukaemia
- Rai staging system for chronic lymphocytic leukaemia
- Chronic Myeloid Leukaemia (CML) staging system
- International Staging System (ISS) for myeloma
- WHO grading system Grades I – IV for CNS tumours

Tumour streams

The following table outlines the tumour streams included in this audit, for Metropolitan and Regional ICS as well and Paediatric ICS.

Table 5 – tumour streams

Metropolitan and Regional ICS tumour streams:	**PICS tumour streams:**
Breast	Haematological cancer
Central nervous system (CNS)	Central nervous system (CNS)
Colorectal	Solid tumour
Endocrine and thyroid	
Haematological	
Genitourinary	
Gynaecological	
Head and neck	
Lung	
Melanoma	
Upper gastrointestinal	