

Lung Cancer Quality Performance Indicator Specifications

LCQI01 Route to Diagnosis

2021

Released 2021 teaho.govt.nz

Citation: Te Aho o Te Kahu. 2021. *Lung Cancer Quality Performance Indicator Specifications: LCQI01 Route to Diagnosis.* Wellington: Te Aho o Te Kahu.

Published in March 2021 by the Te Aho o Te Kahu PO Box 5013, Wellington 6140, New Zealand

ISBN 978-1-99-002985-1 (online) HP 7600



This document is available at teaho.govt.nz



This work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to: share ie, copy and redistribute the material in any medium or format; adapt ie, remix, transform and build upon the material. You must give appropriate credit, provide a link to the licence and indicate if changes were made.

Contents

Introduction	1
Sources of data for indicator	1
LCQI01 Route to diagnosis	2
Measure items	2
Case eligibility criteria (denominator)	3
Numerator criteria	4

Introduction

This information is provided to make it easier for analysts to replicate our calculations. For each measure we have provided supporting information, a table and a flow diagram.

This document provides specifications for the following measure.

Measure	Measure abbreviation	Measure type
Proportion of people with lung cancer who are diagnosed following presentation to an emergency department	emergency	Quality improvement

Sources of data for indicator

- New Zealand Cancer Registry (NZCR) a population-based register of all primary malignant diseases diagnosed in New Zealand, excluding squamous and basal cell skin cancers
- National Minimum Dataset (NMDS)¹ a collection of public and private hospital discharge information, including coded clinical data for inpatients and day patients
- National Non-Admitted Patients Collection (NNPAC) includes event-based purchase units that relate to medical and surgical outpatient events and emergency department events

More information on these data sources can be found on the Ministry of Health's website: **www.health.govt.nz**.

¹ Hospital events in NMDS are coded using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) for diagnoses and the Australian Classification of Health Interventions (ACHI) for procedures. Both ICD-10-AM and ACHI are from the Independent Hospital Pricing Authority, Australia.

LCQI01 Route to diagnosis

Proportion of people with lung cancer who are diagnosed following presentation to an emergency department.

Measure type: quality improvement

Measure items

NZCR NHI Patient identifier NZCR Cancer event ID Cancer registration identifier NZCR Date of initial diagnosis Date person first diagnosed with lung cancer NZCR Diagnosis year Calendar year of first diagnosis NZCR Site Primary organ of origin of the cancer (ICD-10-AM 8th Edition code) NZCR Morphology code 4-digit code (ICD-0-3) for microscopic or cellular anatomy of the cancer NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB of domicile DHB name based on domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of deat	Dataset	Data item	Description	
NZCR Date of initial diagnosis Date person first diagnosed with lung cancer NZCR Diagnosis year Calendar year of first diagnosis NZCR Site Primary organ of origin of the cancer (ICD-10-AM 8th Edition code) NZCR Morphology code 4-digit code (ICD-0-3) for microscopic or cellular anatomy of the cancer NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_N Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – metastases NZCR Behaviour code Neoplastic be	NZCR	NHI	Patient identifier	
NZCR Diagnosis year Calendar year of first diagnosis NZCR Site Primary organ of origin of the cancer (ICD-10-AM 8th Edition code) NZCR Morphology code 4-digit code (ICD-O-3) for microscopic or cellular anatomy of the cancer NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Prioritised ethnicity NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags <td>NZCR</td> <td>Cancer event ID</td> <td>Cancer registration identifier</td>	NZCR	Cancer event ID	Cancer registration identifier	
NZCR Site Primary organ of origin of the cancer (ICD-10-AM 8 th Edition code) NZCR Morphology code 4-digit code (ICD-O-3) for microscopic or cellular anatomy of the cancer NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Type of inpatient admission	NZCR	Date of initial diagnosis	Date person first diagnosed with lung cancer	
NZCR Morphology code 4-digit code (ICD-O-3) for microscopic or cellular anatomy of the cancer NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_N Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Type of inpatient admission	NZCR	Diagnosis year	Calendar year of first diagnosis	
NZCR Basis Basis of diagnosis NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB mame based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Type of inpatient admission	NZCR	Site		
NZCR DHB of domicile DHB code for domicile of patient at diagnosis NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Type of inpatient admission	NZCR	Morphology code	·	
NZCR DHB DHB name based on domicile of patient at diagnosis NZCR Age at diagnosis Age of patient at diagnosis in years NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	Basis	Basis of diagnosis	
NZCRAge at diagnosisAge of patient at diagnosis in yearsNZCRPrioritised ethnicityEthnic group derived from patient's ethnicityNZCRSexSex of patientNZCRDeprivation quintileNZDep2013 index of social deprivation quintile based on patient's domicileNZCRDate of deathDate patient diedNZCRTNM_TStage at diagnosis – tumourNZCRTNM_NStage at diagnosis – nodeNZCRTNM_MStage at diagnosis – metastasesNZCRTNM_MStage at diagnosis – metastasesNZCRBehaviour codeNeoplastic behaviour of the cancerNZCRMultiple tumour flagsPerson diagnosed with more than one tumourNZCRRegistration status codeStatus of registration processingNMDSPurchase unit codeType of inpatient admission	NZCR	DHB of domicile	DHB code for domicile of patient at diagnosis	
NZCR Prioritised ethnicity Ethnic group derived from patient's ethnicity NZCR Sex Sex of patient NZCR Deprivation quintile NZDep2013 index of social deprivation quintile based on patient's domicile NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	DHB	DHB name based on domicile of patient at diagnosis	
NZCRSexSex of patientNZCRDeprivation quintileNZDep2013 index of social deprivation quintile based on patient's domicileNZCRDate of deathDate patient diedNZCRTNM_TStage at diagnosis – tumourNZCRTNM_NStage at diagnosis – nodeNZCRTNM_MStage at diagnosis – metastasesNZCRTNM_MStage at diagnosis – metastasesNZCRBehaviour codeNeoplastic behaviour of the cancerNZCRMultiple tumour flagsPerson diagnosed with more than one tumourNZCRRegistration status codeStatus of registration processingNMDSPurchase unit codeType of inpatient admission	NZCR	Age at diagnosis	Age of patient at diagnosis in years	
NZCRDeprivation quintileNZDep2013 index of social deprivation quintile based on patient's domicileNZCRDate of deathDate patient diedNZCRTNM_TStage at diagnosis – tumourNZCRTNM_NStage at diagnosis – nodeNZCRTNM_MStage at diagnosis – metastasesNZCRTNM_MStage at diagnosis – metastasesNZCRBehaviour codeNeoplastic behaviour of the cancerNZCRMultiple tumour flagsPerson diagnosed with more than one tumourNZCRRegistration status codeStatus of registration processingNMDSPurchase unit codeType of inpatient admission	NZCR	Prioritised ethnicity	Ethnic group derived from patient's ethnicity	
NZCR Date of death Date patient died NZCR TNM_T Stage at diagnosis – tumour NZCR TNM_N Stage at diagnosis – node NZCR TNM_M Stage at diagnosis – metastases NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	Sex	Sex of patient	
NZCRTNM_TStage at diagnosis – tumourNZCRTNM_NStage at diagnosis – nodeNZCRTNM_MStage at diagnosis – metastasesNZCRBehaviour codeNeoplastic behaviour of the cancerNZCRMultiple tumour flagsPerson diagnosed with more than one tumourNZCRRegistration status codeStatus of registration processingNMDSPurchase unit codeType of inpatient admission	NZCR	Deprivation quintile	·	
NZCRTNM_NStage at diagnosis – nodeNZCRTNM_MStage at diagnosis – metastasesNZCRBehaviour codeNeoplastic behaviour of the cancerNZCRMultiple tumour flagsPerson diagnosed with more than one tumourNZCRRegistration status codeStatus of registration processingNMDSPurchase unit codeType of inpatient admission	NZCR	Date of death	Date patient died	
NZCR TNM_M Stage at diagnosis – metastases NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	TNM_T	Stage at diagnosis – tumour	
NZCR Behaviour code Neoplastic behaviour of the cancer NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	TNM_N	Stage at diagnosis – node	
NZCR Multiple tumour flags Person diagnosed with more than one tumour NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	TNM_M	Stage at diagnosis – metastases	
NZCR Registration status code Status of registration processing NMDS Purchase unit code Type of inpatient admission	NZCR	Behaviour code	Neoplastic behaviour of the cancer	
NMDS Purchase unit code Type of inpatient admission	NZCR	Multiple tumour flags	Person diagnosed with more than one tumour	
	NZCR	Registration status code	Status of registration processing	
NMDS Event start date Date of admission	NMDS	Purchase unit code	Type of inpatient admission	
	NMDS	Event start date	Date of admission	

Dataset	Data item	Description	
NNPAC	Purchase unit code	Type of outpatient attendance	
NNPAC	Date time of service	Date and time of outpatient service	
NNPAC	Attendance code	Attendance of outpatient event	

Case eligibility criteria (denominator)

Diagram reference	Assessment	ltem	Codes
1	First or only diagnosis of malignant neoplasm	Primary site	First diagnosis of lung cancer (trachea C33 or bronchus C34)
2	Exclude manually censored case	Exclusion	Registration codes not R_C (registered complete) or R_R (registered)
			No incident cancer (exclude people with multiple tumour flags = yes)
			People diagnosed following death certificate only (basis = 0)
			People domiciled outside of New Zealand (DHB_code = 999)
			Cancer morphologies of melanoma, sarcoma and other unusual morphologies (codes 8333, 8720, 8772, 8800, 8801, 8803, 8805, 8815, 8890, 9040, 9041, 9133)
3	Diagnosis date	Date of initial diagnosis	2015–18
4	Male or female	Sex	M or F
5	Adult patient 18 years and older at diagnosis	Age at diagnosis	18 years and older
6	Invasive tumours	Behaviour code	3

Numerator criteria

Diagram reference	Assessment	Item	Codes
7	Numerator: Number of people with lung cancer who are diagnosed following presentation to an emergency department	emergency	 Inpatient (NMDS) Emergency medicine admission Purchase unit code = M05.01 Outpatient (NNPAC) Outpatient attendance Purchase unit code like ED% Attendance code = ATT ED admission/presentation within 2 weeks prior to diagnosis date

