
2025/26 Regional Cancer Program Scorecard and Quarterly Performance Review Report Indicators

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ColonCancerCheck Wait Times – Abnormal Fecal Test to Hospital Colonoscopy

Program Area: ColonCancerCheck (CCC)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	CCC Wait Times - Abnormal Fecal Test to Hospital Colonoscopy
2	Description	Percent of Ontario screen-eligible individuals, 50-74 years old, who had an abnormal FIT result and follow-up colonoscopy within 6 months, who had a wait time within 56 days (8 weeks) between an abnormal FIT and a follow-up colonoscopy
3	Rationale for Inclusion	<p>Individuals with abnormal FIT results are at a higher risk of colorectal cancer. Diagnostic delays are associated with risk of death and advanced colorectal cancer. Timely follow-up can minimize patient anxiety.</p> <p>Regional Cancer Programs (RCPs) developed processes/systems to support timely access to colonoscopy for patients with abnormal FIT results, for example:</p> <ul style="list-style-type: none"> ○ Centralized intake/booking (e.g., at the regional or facility level) ○ Standardized referral forms for intake and prioritization ○ Protected schedule/booking blocks for FIT-positive colonoscopies <p>This indicator allows RCPs to continuously improve coordination of FIT-positive procedures to ensure timely access for patients.</p>
4	Improvement Target in Scorecard	85%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Total number of Ontario screen-eligible individuals, ages 50–74, who had an abnormal FIT result and a follow-up hospital colonoscopy within 6 months, who underwent colonoscopy within 8 weeks of an abnormal FIT result}}{\text{Total number of Ontario screen-eligible individuals, ages 50–74, who had an abnormal FIT result and a follow-up hospital colonoscopy within 6 months}} \times 100$
1b	Denominator	Number of Ontario screen-eligible individuals, ages 50–74, who had an abnormal FIT result and who had a follow-up hospital colonoscopy within 6 months of their abnormal FIT result
1c	Numerator	Number of Ontario screen-eligible individuals, age 50–74, who had an abnormal FIT result and a follow-up hospital colonoscopy within 6 months, who underwent colonoscopy within 8 weeks of an abnormal FIT result
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Individuals, ages 50–74 at the abnormal FIT result date • The abnormal FIT result date is based on the report result date in FIT DSP • Each abnormal FIT is matched with one follow-up colonoscopy within 6 months in GI Endo DSP and vice versa • Follow-up colonoscopies are defined as those performed between 2–183 days after an abnormal FIT

		<ul style="list-style-type: none"> Each individual is counted only once using the first abnormal FIT with follow-up colonoscopy Hospital colonoscopies are identified by records in GI Endo DSP Wait time is calculated as the difference between the abnormal FIT result date and the colonoscopy date
2b	Exclusion Criteria	<ul style="list-style-type: none"> Individuals with a missing or invalid HIN or date of birth Individuals with an invasive colorectal cancer before the FIT result date; prior diagnosis of colorectal cancer was defined as: ICD-O-3 codes C18.0, C18.2–C18.9, C19.9, C20.9, a morphology indicative of colorectal cancer, microscopically confirmed with a pathology report Individuals with a total colectomy before the FIT result date; total colectomy was identified using OHIP fee code S169A, S170A and S172A Abnormal FITs with colonoscopies performed in an inpatient setting Abnormal FITs with colonoscopies self-delayed by the patient
3	Data Availability & Limitations	This indicator includes hospital colonoscopies only.
4	Data Source(s)	<ul style="list-style-type: none"> FIT DSP (Data Submission Portal) – FITs GI Endo DSP (Gastrointestinal Endoscopy Data Submission Portal) – Hospital colonoscopies OHIP's CHDB (Claims History Database) – Total colectomy claims OCR (Ontario Cancer Registry) – Resolved invasive colorectal cancers RPDB (Registered Persons Database) – Patient demographics
5	Considerations	<ul style="list-style-type: none"> Region is determined by the hospital where the colonoscopy procedure was performed Reporting is based on the colonoscopy date in GI Endo DSP This indicator measures the wait time for people who had an abnormal FIT result and a follow-up colonoscopy within 6 months. A 6-month window is used as colonoscopies performed more than 6 months after an abnormal screen date may have been performed for a different indication.

ColonCancerCheck – Up-to-Date for Colorectal Screening

Program Area: ColonCancerCheck (CCC)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	CCC Up-to-Date for Colorectal Screening
2	Description	Percentage of Ontario screen-eligible individuals ages 50–74 who are up to date with colorectal screening, i.e., those who had a fecal test within the past 2 years, a colonoscopy within the past 10 years, or a flexible sigmoidoscopy within the past 10 years
3	Rationale for QPR Report Inclusion	Regular screening using fecal tests can reduce colorectal cancer (CRC) mortality by detecting cancer earlier when treatment is more likely to be successful. Screening with some tests can also lower the incidence of CRC (through the detection of polyps that can be removed before they become cancerous).
4	Improvement Target in QPR Report	65%
5	Aim Target	75%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Total number of Ontario screen-eligible individuals, 50–74 years old, who had a fecal test within the past 2 years, a colonoscopy within the past 10 years, or a flexible sigmoidoscopy within the past 10 years}}{\text{Total number of Ontario screen-eligible individuals, ages 50–74}} \times 100$
1b	Denominator	Total number of Ontario screen-eligible individuals, ages 50-74 in the reporting period
1c	Numerator	Number of screen-eligible people, ages 50–74, who had a fecal test in the past 2 years, a colonoscopy in the past 10 years, or a flexible sigmoidoscopy in the past 10 years
2a	Inclusion criteria	<ul style="list-style-type: none"> Ontario residents ages 50-74 at the index date Index date is defined as the date in the middle of the reporting period Individuals are considered up to date with colorectal screening if they: <ul style="list-style-type: none"> had a FIT within the last 2 years OR had a colonoscopy in the last 10 years OR had a flexible sigmoidoscopy in the last 10 years FITs are identified in FIT DSP Only valid FITs are included. FITs with either normal or abnormal results are considered valid Colonoscopies are identified in OHIP by fee codes Z555A, Z491A-Z499A, or in CIRT or GI Endoscopy DSP Flexible sigmoidoscopies are identified in OHIP by fee code Z580A Multiple claims with the same HIN and service date are assumed for a single procedure Each individual is counted once regardless of the number of tests performed
2b	Exclusion criteria	<ul style="list-style-type: none"> Individuals with a missing or invalid HIN, date of birth or postal code Individuals with an invasive colorectal cancer prior to the reporting period; prior diagnosis of colorectal cancer is defined as: ICD-O-3 codes C18.0, C18.2-C18.9,

		<p>C19.9, C20.9, a morphology indicative of colorectal cancer, microscopically confirmed with a pathology report</p> <ul style="list-style-type: none"> Individuals with a total colectomy prior to the reporting period; total colectomy is defined in OHIP by fee codes S169A, S170A, S172A
3	Data Availability & Limitations	<ul style="list-style-type: none"> Ontario transitioned from gFOBT to FIT in June 2019. Between June and Dec 2019, both gFOBTs and FITs were available. Sine January 2020, FIT became the only screening test for (average risk) colorectal cancer screening.
4	Data Source(s)	<ul style="list-style-type: none"> FIT DSP (Data Submission Portal) – FITs RPDB (Registered Persons Database) – Demographics PCCF+ – Residence and socio-demographic info OHIP's CHDB (Claims History Database) – Total colectomy claims, colonoscopy claims, flexible sigmoidoscopy claims GI Endoscopy DSP (Gastrointestinal Endoscopy Data Submission Portal) – Hospital colonoscopy records OCR (Ontario Cancer Registry) – Resolved invasive colorectal cancers
5	Considerations	<ul style="list-style-type: none"> Region is determined using PCCF+; residential postal code was used to identify region Reporting is based on the date the completed kit was received by the lab

Ontario Breast Screening Program Wait Times – Abnormal Screening Mammogram to Diagnosis with Tissue Biopsy

Program Area: Ontario Breast Screening Program (OBSP)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	OBSP Wait Times - Abnormal Screening Mammogram to Diagnosis with Tissue Biopsy
2	Description	Percentage of screen-eligible people, ages 40-74, with an abnormal OBSP screening mammogram, who were diagnosed (benign or breast cancer) with a tissue biopsy within seven weeks of abnormal screen date.
3	Rationale for Scorecard Inclusion	While most women with an abnormal mammogram do not have breast cancer, additional assessment is required for definitive diagnosis. Providing timely, well-coordinated follow-up with the appropriate interventions may improve a participant's experience as well as decrease their anxiety.
4	Improvement Target in Scorecard	85%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Total number of screen-eligible people with an abnormal OBSP screening mammogram, who were diagnosed within seven weeks of the abnormal mammogram date}}{\text{Total number of screen-eligible people with an abnormal OBSP screening mammogram, who required a tissue biopsy (core or surgical) for a definitive diagnosis}} \times 100$
1b	Denominator	Total number of screen-eligible people, ages 40-74, with an abnormal OBSP screening mammogram in the reporting period, who required a tissue biopsy (core or surgical) for a definitive diagnosis.
1c	Numerator	<p>Total number of screen-eligible people, ages 40-74, with an abnormal OBSP screening mammogram in the reporting period, who were diagnosed (benign or breast cancer) within seven weeks of the abnormal screening mammogram date among those who required a tissue biopsy (core or surgical) for a definitive diagnosis.</p> <ul style="list-style-type: none"> ○ Date of diagnosis for benign cases was defined as date of last biopsy or procedure with benign finding. ○ Date of diagnosis for breast cancer cases was defined as date of first FNA or tissue (core or open) biopsy procedure for breast cancer).
2a	Inclusion Criteria	<ul style="list-style-type: none"> • OBSP (average risk) participants, ages 40-74, who had an abnormal OBSP screening mammogram in ICMS. • Mammograms were identified by OBSP mammogram records in ICMS for screening purposes. • People with abnormal OBSP screening mammograms were identified as those referred for further testing by the screening radiologist in ICMS. • All mammograms in ICMS were counted, including those with partial views.
2b	Exclusion Criteria	<ul style="list-style-type: none"> • People with a final result of "unknown/lost to follow-up" or without a definitive diagnosis.

3	Data Availability & Limitations	<ul style="list-style-type: none"> • This indicator includes only OBSP screening mammograms • There is an eight-month reporting lag for this indicator, as sites have up to eight months to close off assessment cases and enter the information into the ICMS.
4	Data Source(s)	<ul style="list-style-type: none"> • Integrated Client Management System (ICMS)
5	Considerations	<ul style="list-style-type: none"> • Region is based on the region of the centre where the abnormal OBSP screening mammogram was performed. • Reporting is based on the abnormal OBSP screening mammogram date • This indicator does not include OHIP billings for people screened outside of the OBSP. • It is recognized that system pressures and data capture challenges may impact performance and the ability to reach the Annual Improvement Target. Despite this, ongoing provincial-regional discussion and knowledge-sharing across regions can help improve performance and access.

Ontario Breast Screening Program – Participation

Program Area: Ontario Breast Screening Program (OBSP)

Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	OBSP Participation Rate
2	Description	Percentage of Ontario screen-eligible people, ages 50-74, who completed at least one screening mammogram within a 30-month period
3	Rationale for Scorecard Inclusion	<p>Regular breast screening is important because it can find cancer early, when it is less likely to have spread to other parts of the body. Treatment may also have a better chance of working when breast cancer is found early.</p> <p>In Fall 2024, the OBSP was expanded to eligible people ages 40-49. This change will allow more individuals to receive the benefits of being screened in an organized cancer screening program and will also increase access to breast screening for people without a family doctor or nurse practitioner. However, the program is being designed to support people ages 40-49 to make an individualized decision about whether screening is right for them because the benefits of screening may be lower, and the risks may be higher. As such, measuring participation rate by expanding the denominator to include all eligible females ages 40-49 could provide misleading data because some people may opt not to screen. Therefore, the OBSP participation indicator will focus on individuals ages 50-74. However, supplementary data on participation among people ages 40-49 will be provided in the QPR Report. This data will offer additional insight into the impact of the expansion and support performance management discussions.</p>
4	Improvement Target in Scorecard	65%
5	Aim Target	70%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Total number of Ontario screen-eligible women, ages 50-74, who completed at least one screening mammogram in a 30-month period}}{\text{Total number of Ontario screen-eligible women, ages 50-74 in the reporting period}} \times 100$
1b	Denominator	Total number of Ontario screen-eligible women, ages 50-74 in the reporting period.
1c	Numerator	<p>Total number of Ontario screen-eligible women, ages 50-74, who completed at least one screening mammogram in a 30-month period.</p> <ul style="list-style-type: none"> Identifying screening mammograms: OBSP screening mammograms were identified in ICMS.

		<p><u>Non-OBSP screening mammograms</u> were identified using fee code X178 (screening bilateral mammogram) in OHIP.</p> <ul style="list-style-type: none"> • All mammograms in ICMS were counted, including those with partial views. • Each woman was counted once regardless of the number of mammograms performed in a 30-month period; if a woman had both a program and a non-program mammogram within a 30-month period, the program status was selected.
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Ontario screen-eligible women, ages 50-74 at the index date. • Index date was defined as the midpoint of the reporting period.
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Women with a missing or invalid HIN, date of birth, postal code or region • Women with a prior diagnosis of breast invasive cancer or ductal carcinoma in situ before the reporting period; prior diagnosis of breast cancer was defined as: ICD-O-3 codes: C50, a morphology indicative of ductal carcinoma in-situ or invasive breast cancer, microscopically confirmed with a pathology report • Women with a mastectomy before the reporting period. Mastectomy was defined in OHIP by fee codes E505, E506, E546, R108, R109, and R117.
3	Data Availability & Limitations	<ul style="list-style-type: none"> • OHIP fee code X178 for screening bilateral mammography was introduced in October 2010. • Historical RPDB address information is incomplete; therefore, the most recent primary address was selected for reporting, even for historical study periods.
4	Data Source(s)	<ul style="list-style-type: none"> • Integrated Client Management System (ICMS) - OBSP screening mammograms and demographics • OHIP CHDB (Claims History Database) - Non-OBSP screening mammogram and mastectomy claims • Ontario Cancer Registry (OCR) - Invasive and ductal carcinoma in situ breast cancers • Registered Persons Database (RPDB) – Demographics • Postal Code Conversion File Plus (PCCF+) - Residence information
5	Considerations	<ul style="list-style-type: none"> • A small proportion of screening mammograms performed outside of the OBSP may have been coded as diagnostic tests (X185) and were not included in the analysis • Region was determined using PCCF+; residential postal codes was used to identify the region. • Participation for people ages 40-49 will be included in the QPR Reports for information purpose when available

Ontario Cervical Screening Program – High-Grade Cytology Test or Elevated Risk Screening Result With No Follow-Up Within Six Months

Program Area: Ontario Cervical Screening Program (OCSPP)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	OCSPP High-Grade Cytology Test or Elevated Risk Screening Result With No Follow-Up Within Six Months
2	Description	Percentage of Ontario screen-eligible people with a cervix, with a high-grade cervical cytology test (pre-HPV) or an elevated-risk screening result (post HPV) who did not undergo colposcopy or definitive treatment within 6 months
3	Rationale for QPR Report Inclusion	<p>People with a high-grade cytology result (pre-HPV) or an elevated-risk screening result (post HPV) are at higher risk of developing cervical cancer. Appropriate follow-up of high-grade results (i.e., referral to colposcopy) is the only way to determine someone's risk of developing cervical cancer and to determine if treatment is necessary.</p> <p>Ontario successfully implemented HPV testing in March 2025. The follow-up of abnormal results will continue to be important after HPV testing is implemented in primary screening. Educating providers on the OCSPP referral guidelines and establishing regional communities of practice to support effective follow up will build a strong foundation that will support regional activities post HPV implementation.</p>
4	Improvement Target in QPR	10% Note: This is an inverse indicator, lower percentage is indicative of better performance
5	Aim Target	5%

Data Specifications										
1a	Calculation Definition	<div>Total number of women with a high-grade cytology result (pre-HPV) or an elevated-risk screening result (post-HPV) who did not undergo colposcopy or definitive treatment within six months</div> <div><div><div>Total number of Ontario Screen-eligible people who had a high-grade cervical cytology result (pre-HPV) or an elevated-risk screening result (post HPV)</div><div>X100</div></div></div>								
1b	Denominator	Total number of Ontario Screen-eligible people who had a high-grade cervical cytology result (pre-HPV) or an elevated-risk screening result (post HPV)								
1c	Numerator	Total number of people with a high-grade cervical cytology result or an elevated-risk screening result (post HPV) who did not undergo colposcopy or definitive treatment within six months								
2a	Inclusion Criteria	<div><div><div><div>• Pre-HPV implementation, people with a high-grade cytology result are identified based on the following test categories:</div><table><tr><th>Cytology test category</th><th>Version 2</th></tr><tr><td>ASC-H</td><td>4.4.5</td></tr><tr><td>AGC</td><td>4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5, 4.5.7, 4.5.9, 4.5.10, 4.5.12, 4.5.13</td></tr><tr><td>Adeno in-situ</td><td>4.5.8, 4.6</td></tr></table></div></div></div>	Cytology test category	Version 2	ASC-H	4.4.5	AGC	4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5, 4.5.7, 4.5.9, 4.5.10, 4.5.12, 4.5.13	Adeno in-situ	4.5.8, 4.6
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ASC-H	4.4.5									
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Adeno in-situ	4.5.8, 4.6									

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- Post-HPV implementation, people with an elevated risk result are identified based on the screening test results and indications:

Risk category	Screening test result	Screening test indications
Elevated risk: primary screening test	<ul style="list-style-type: none"> HPV positive: 16/18/45 (HR03) OR HPV positive: 16 (HR04) OR HPV positive: 18/45 (HR05) 	<ul style="list-style-type: none"> Average risk screening: every 5 years (SI01) Immunocompromised screening: every 3 years (SI02) 24-month follow-up test after discharge from colposcopy (SI04) Repeat after a previous HPV-positive (other high-risk types) with unsatisfactory cytology result (SI06)
Elevated risk: repeat test after a moderate risk result	<ul style="list-style-type: none"> HPV test = HPV positive: other genotype (HR06) OR HPV Test=NULL AND Cytology test = high grade (CR05-CR18) 	<ul style="list-style-type: none"> HPV-positive (other) with normal or low-grade cytology: 2-year follow-up (SI03)

Note: HPV positive: other genotype (HR06) includes HPV genotypes that are not 16, 18, or 45.

- Index date is defined as the date of the first high-grade cytology result report date in cytoBase (pre-HPV) or the final report date of an elevated risk cervical screening test in OCSF DSP (post-HPV).
- Each person is counted once regardless of the number of tests completed in the reporting period.
- Colposcopy is defined using the following fee codes in OHIP:
 - Z731 – Initial investigation of abnormal cytology of vulva and/or vagina or cervix under colposcopic technique with or without biopsy(ies) and/or endocervical curetting
 - Z787 – Follow-up colposcopy with biopsy(ies) with or without endocervical curetting
 - Z730 – Follow-up colposcopy without biopsy with or without endocervical curetting
- If no record is found for a subsequent colposcopy after a high-grade cytology result (pre-HPV) or an elevated-risk screening result (post-HPV), other definitive procedures are included; these procedures are identified through OHIP claims as:
 - Z732 – Cryotherapy
 - Z724 – Electro
 - Z766 – Electrosurgical Excision Procedure (LEEP)
 - S744 – Cervix – cone biopsy – any technique, with or without D&C
 - Z729 – Cryoconization, electroconization or CO2 laser therapy with or without curettage for premalignant lesion (dysplasia or carcinoma in-situ), out-patient procedure
- If no record is found for a colposcopy or one of the procedures listed above, the person is still assumed to be followed up if a hysterectomy was performed within six months.

		<ul style="list-style-type: none"> If a person had multiple colposcopies or multiple procedures, the earliest colposcopy or procedure is selected
2b	Exclusion Criteria	<ul style="list-style-type: none"> People with a missing or invalid HIN, date of birth or postal code
3	Data Availability & Limitations	<ul style="list-style-type: none"> Pre-HPV cytology data is available in cytoBase only. CytoBase includes cytology tests analyzed in community-based laboratories in Ontario; cytology tests analyzed in Ontario hospitals and Community Health Centres are not captured. HPV data is available from March 2025 when HPV testing was introduced as the primary test in screening under the Ontario Cervical Screening Program (OCSP).
4	Data Source(s)	<ul style="list-style-type: none"> CytoBase – Cytology tests (pre-HPV) OCSP DSP (Data Submission Portal) –HPV tests and cytology tests (post-HPV) OHIP's CHDB (Claims History Database) –Colposcopy, treatment, and hysterectomy claims OCR (Ontario Cancer Registry) –Resolved invasive cervical cancers PCCF+ (Postal CodeOM Conversion File Plus) –Residence information
5	Considerations	<ul style="list-style-type: none"> Ontario transitioned from cytology test to HPV as the recommended cervical screening test from March 2025. There is a 9-month reporting lag for this indicator, as six months of follow-up are required to determine if a person had a colposcopy and an additional 3-month data lag to receive colposcopy claims data in OHIP. Region was determined using PCCF+; residential postal code was used to identify region.

Ontario Cervical Screening Program – Participation

Program Area: Ontario Cervical Screening Program (OCSF)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	OCSF Participation Rate
2	Description	Percentage of screen-eligible people, age 25-69, in Ontario who completed at least one screening HPV test in the past 66 months or cytology (Pap) test in the past 42 months
3	Rationale for Scorecard Inclusion	<p>Regular cervical screening is important because it significantly reduces cervical cancer incidence, morbidity (e.g., loss of fertility, which can result from treatment) and cervical cancer-related mortality.</p> <p>Improving cervical screening participation is a key pillar in the World Health Organization and Canadian Partnership Against Cancer's strategy to eliminate cervical cancer</p> <p>The OCSF participation methodology has been updated to reflect HPV test implementation as the primary screening test for cervical cancer</p>
4	Improvement Target in Scorecard	60%
5	Aim Target	85%
Data Specifications		
1a	Calculation Definition	$\frac{\text{Total number of Ontario screen-eligible females, ages 25–69, who had at least one cytology (Pap) test in the past 42 months), or screening HPV test in the past 66 months}}{\text{Total number of Ontario screen-eligible females, ages 25-69 in the reporting period}} \times 100$
1b	Denominator	Total number of Ontario screen-eligible females, ages 25-69 in the reporting period
1c	Numerator	<p>Total number of Ontario screen-eligible females, ages 25-69, who have completed at least one cytology (Pap) test in the past 42 months (36 months + 6-month buffer period) or screening HPV test in the past 66 months (60 months + 6-month buffer period).</p> <ul style="list-style-type: none"> Before HPV testing, cytology (Pap) test was the recommended cervical screening test. People who had a cytology test before HPV testing started might still be up to date with cervical screening for up to 42 months after HPV testing is implemented in the OCSF. Identifying HPV and cytology tests: Before HPV testing, cytology (Pap) tests were identified through CytoBase and OHIP using the following fee codes. Note: Once HPV testing has been launched, those who had cytology (Pap) test prior to the HPV launch, as identified from CytoBase and OHIP, were included for up to 42 months. <ul style="list-style-type: none"> E430A: Papanicolaou smear - periodic - when papanicolaou smear is performed outside of hospital, to G365 G365A: Periodic-Pap smear E431A: When Papanicolaou smear is performed outside of hospital, to G394.

		<ul style="list-style-type: none"> • G394A: Additional for follow-up of abnormal or inadequate smears • L713A: Lab.med.-anat pathology,hist,cyt-cytol-gynaecological specimen • L733A: Cervicovaginal specimen (monolayer cell methodology) • L812A: Cervical vaginal specimens including all types of cellular abnormality, assessment of flora, and/or cytohormonal evaluation • Q678A: Gynaecology –pap smear –periodic –nurse practitioners • L643A: Lab Med –Microbiol –Microscopy –Smear Only, Gram/Pap Stain <u>Following HPV testing implementation, HPV became the primary cervical screening test.</u> • Screening HPV tests with a valid test result were included and identified through the OCSP DSP based on the lab report date. • The reflex cytology tests performed following the screening HPV test were not included. • Each person is counted once regardless of the number of cervical screening tests completed in the reporting period.
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Ontario screen-eligible females ages 25-69 at the index date • Index date was defined as the midpoint of the reporting period.
2b	Exclusion criteria	<ul style="list-style-type: none"> • People with a missing or invalid HIN, date of birth, region or postal code • Screening tests with an invalid and unsatisfactory result. • People diagnosed with an invasive cervical cancer prior to the reporting period; prior diagnosis of cervical cancer was defined as: ICD-O-3 codes C53, a morphology indicative of cervical cancer, microscopically confirmed with a pathology report. • People who had a colposcopy and/or treatment within 18 months prior to the reporting period. • Colposcopy and/or treatment are identified through OHIP, using the following fee Codes: <u>Colposcopy</u> • Z731 - Initial investigation of abnormal cytology of vulva and/or vagina or cervix under colposcopic technique with or without biopsy(ies) and/or endocervical curetting • Z787 - Follow-up colposcopy with biopsy(ies) with or without endocervical curetting • Z730 - Follow-up colposcopy without biopsy with or without endocervical curetting <u>Treatment</u> • Z732 –Cryotherapy • Z724 –Electro • Z766 –Electrosurgical Excision Procedure (LEEP) • S744 –Cervix –cone biopsy –any technique, with or without D&C • Z729 –Cryoconization, electroconization or CO2 laser therapy with or without curettage for premalignant lesion (dysplasia or carcinoma in-situ), out-patient procedure • People with a hysterectomy prior to the reporting period • People with a hysterectomy were identified through OHIP, using the following fee codes: <ul style="list-style-type: none"> ○ E862A – When hysterectomy is performed laparoscopically, or with laparoscopic assistance ○ P042A – Obstetrics – labour – delivery – caesarean section including hysterectomy ○ Q140A – Exclusion code for enrolled female patients aged 35-70 with hysterectomy ○ S710A – Hysterectomy - with or without adnexa (unless otherwise specified) – with omentectomy for malignancy

		<ul style="list-style-type: none"> • S727A – Ovarian debulking for stage 2C, 3B or 4 ovarian cancer and may include hysterectomy • S757A – Hysterectomy – with or without adnexa (unless otherwise specified) – abdominal – total or subtotal • S758A – Hysterectomy - with or without adnexa (unless otherwise specified) – with anterior and posterior vaginal repair and including enterocoele and/or vault prolapse repair when rendered • S759A - Hysterectomy - with or without adnexa (unless otherwise specified) – with anterior or posterior vaginal repair and including enterocoele and/or vault prolapse repair when rendered • S762A - Hysterectomy - with or without adnexa (unless otherwise specified) – radical trachelectomy - excluding node dissection • S763A - Hysterectomy - with or without adnexa (unless otherwise specified) – radical (Wertheim or Schauta) - includes node dissection • S765A – Amputation of cervix • S766A- Cervix uteri - Exc - cervical stump – abdominal • S767A- Cervix uteri - exc - Cervical stump – vaginal • S816A - Hysterectomy - with or without adnexa (unless otherwise specified) - vaginal
3	Data availability and limitations	<p>1) It is difficult to determine whether a cytology (Pap) test in cytoBase/OHIP was done for screening or diagnostic purposes, therefore, some Pap tests included in these analyses may have been performed for diagnostic purposes</p>
4	Data Sources	<p>2) OCSPP DSP (Data Submission Portal) – Screening HPV tests (after HPV testing implementation)</p> <p>3) CytoBase –Cytology tests before HPV testing implementation</p> <p>4) OHIP's CHDB (Claims History Database) –Cytology tests before HPV testing implementation, colposcopy, treatment, and hysterectomy claims</p> <p>5) OCR (Ontario Cancer Registry) –Resolved invasive cervical cancers</p> <p>6) RPDB (Registered Persons Database) –Demographics</p> <p>7) PCCF+ (Postal CodeOM Conversion File Plus) –Residence information</p> <p>8) Ontario Ministry of Health Postal Code Crosswalk file –Ontario Health Regions</p>
5	Considerations	<p>9) Region was determined using PCCF+; residential postal codes was used to identify the region.</p> <p>10) Ontario transitions from cytology (Pap) test to HPV as the recommended cervical screening test in March 2025.</p> <p>11) With the implementation of HPV testing, the cervical screening interval for most eligible people changes from every 3 years to every 5 years.</p> <p>12) The inclusion of cytology (Pap) tests within 42 months is time limited and the methodology will be updated when the transition period has been completed for people moving from primary cytology screening to primary HPV testing.</p> <p>13) This indicator measures participation over a 42-month period for cytology (Pap) tests and 66-month period for screening HPV tests. A 6-month buffer was added to the respective 36-month and 60-month screening interval for cytology (Pap) test and screening HPV test to allow for additional time to book appointments.</p> <p>14) The Ontario Cervical Screening Program recommends cervical screening for age-eligible people (cis-women as well as transmasculine and non-binary people), however due to only binary sex data available in RPDB the term “female” is used for this indicator.</p> <p>15) The screen-eligible population for this indicator is calculated using the Registered Persons Database that defines sex as “male” or “female” only. This binary-only definition is a limitation of the data; defining sex in this way is not inclusive of all gender diversity (e.g., trans, nonbinary and Two-Spirit people) and may result in the exclusion of some people who are eligible for cervical screening, as well as the</p>

		<p>inclusion of some people who are not eligible for screening.</p> <p>16) Screening tests with an invalid and unsatisfactory result are excluded for this indicator as people with these results would not be considered up-to-date with screening. This is a methodological change from the current cervical screening participation indicator. However, given the rarity of these results, significant impacts from this change are not anticipated.</p>
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Smoking Cessation Program- Tobacco Use Screening

Program Area: Population Health and Prevention
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Tobacco Use Screening
2	Description	The percentage of new ambulatory cancer cases that were screened for tobacco use (RCC only).
3	Rationale for Scorecard Inclusion	<p>Integrating smoking cessation as part of cancer care is critical to maximize the benefit of cancer treatment, decrease treatment-related toxicity, and reduce their risk of recurrence or developing a second cancer.</p> <p>The regional cancer programs (RCPs) receive annual funding to implement smoking cessation programs in regional cancer centres (RCCs), based on OH-CCO's framework for smoking cessation.</p> <p>Screening patients for tobacco use is the required first step in the evidence-based model for tobacco use cessation outlined in <i>the Framework for Smoking Cessation in the RCPs</i>.</p>
4	Improvement Target in Scorecard	80%
5	Aim Target	100%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Number of new ambulatory cancer cases screened for their tobacco use within 60 days of their first clinic visit}}{\text{Number of new ambulatory cancer cases}} \times 100$
1b	Denominator	Number of new ambulatory cancer cases in the reporting period.
1c	Numerator	<p>Number of new ambulatory cancer cases screened for their tobacco use within 60 days of their first clinic visit.</p> <p>Patients screened for their tobacco use within 60 days of their first clinic visit. Patients screened before their first clinical visit were also included. The date when a patient is asked about their smoking status (i.e., SMK_ASK_Date) is used to determine their tobacco use. All valid dates are considered. The patient's smoking status is based on patient self-reported as being a current tobacco user or indicated they had used tobacco within the past 6 months. Valid values for the smoking status question include: SMK_ASK = 1 (Yes), 2 (No) or 9 (Refusal/Don't Know).</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> Patients registered at a RCC during the reporting period.

		<ul style="list-style-type: none"> Patients with a clinic visit in Radiology (RAD), Systemic (SYS), Surgery (SUR), or Psychosocial Oncology (PSO) programs. Patients diagnosed with benign or malignant cases (ICD codes C000-D489)
2b	Exclusion Criteria	<ul style="list-style-type: none"> Multiple/subsequent primaries in the past 12 months In-patient clinic visits Missing clinic visit dates
3	Data Availability & Limitations	<ul style="list-style-type: none"> This indicator is dependent on the data submitted by RCCs via ALR. The accuracy and completeness of data presented may be affected by issues such as staff training, compliance or IT limitations at specific RCCs.
4	Data Source(s)	<ul style="list-style-type: none"> Activity Level Reporting (ALR) – Disease, Clinic Visit, Smoking Cessation tables
5	Considerations	<ul style="list-style-type: none"> Once received at OH-CCO, the data undergoes general quality assurance checks as outlined in the Master List of QA checks in the online Data Book guide. Both the numerator and denominator are subject to further restrictions as determined through consultation between OH-CCO, the Advisory Committee and the Regional Smoking Cessation Champions.

Smoking Cessation Program- Accepted Tobacco Cessation Referral(s)

Program Area: Population Health and Prevention
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Accepted Tobacco Cessation Referral(s)
2	Description	The percentage of current or recent tobacco users who accepted a referral for smoking cessation support (RCC only).
3	Rationale for Scorecard Inclusion	<p>Integrating smoking cessation as part of cancer care is critical to maximize the benefit of cancer treatment, decrease treatment-related toxicity, and reduce their risk of recurrence or developing a second cancer.</p> <p>The RCPs receive annual funding to implement smoking cessation programs in RCCs, supported by OH-CCO's framework for smoking cessation.</p> <p>Referral for tobacco use is the required third step in the evidence-based model for tobacco use cessation outlined in the <i>Framework for Smoking Cessation in the RCPs</i> and a high level of acceptance is indicative of the effective delivery of an opt out, 3As brief tobacco use cessation model</p>
4	Improvement Target in Scorecard	35%
5	Aim Target	50%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Number of current or recent tobacco users who accepted a referral for smoking cessation support}}{\text{Number of current or recent tobacco users registered at a RCC for a cancer diagnosis in the reporting period, who are not currently receiving smoking cessation support}} \times 100$
1b	Denominator	Number of current or recent tobacco users registered at a RCC for a cancer diagnosis in the reporting period, who are not currently receiving smoking cessation support.
1c	Numerator	<p>Number of current or recent tobacco users who accepted a referral for smoking cessation support.</p> <p>Includes internal referral (SMK_ACT = 1), external referral (SMK_ACT = 2), or both (SMK_ACT = 3)</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> New ambulatory cancer patients who were registered at a RCC in the reporting period and who were screened for current or recent tobacco use within 60 days of their first clinic visit.

		<ul style="list-style-type: none"> Patients self-reported as being a current tobacco user or indicated they had used tobacco within the past 6 months (i.e. SMK_ASK = 1).
2b	Exclusion Criteria	<ul style="list-style-type: none"> Current or recent tobacco users who declined a referral because they are receiving smoking cessation support, i.e. SMK_ACT = 5 (Declined: receiving support)
3	Data Availability & Limitations	This indicator was dependent on the data submitted by RCCs via ALR. The accuracy and completeness of data presented may be affected by issues such as staff training, compliance or IT limitations at specific RCCs.
4	Data Source(s)	<ul style="list-style-type: none"> Activity Level Reporting (ALR) – Disease, Clinic Visit, Smoking Cessation tables
5	Considerations	<ul style="list-style-type: none"> Once received at OH-CCO, the data undergoes general quality assurance checks as outlined in the Master List of QA checks in the online Data Book guide. Both the numerator and denominator are subject to further restrictions as determined through consultation between OH-CCO, the Advisory Committee and the Regional Smoking Cessation Champions.

Symptom Management Program- Symptom Assessment with Patient Reported Outcomes Rate

Program Area: Symptom Management, Your Symptoms Matter Patient Reported Outcomes (PRO)
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Symptom Assessment with Patient Reported Outcomes Rate
2	Description	<p>Scorecard: Percentage of cancer patients who visited a Regional Cancer Centre (RCC), and were screened at least once per month for symptom severity using one of the following Patient Reported Outcome Measures (PROMs): ESAS-r+, EPIC-CP, or MDASI-H&N.</p> <p>QPR Report: Percentage of cancer patients who visited a participating facility (i.e., Regional Cancer Program Systemic Treatment Program [RSTP] level 1-3 sites, inclusive of Regional Cancer Centres and eligible partner sites), and were screened at least once per month for symptom severity using one of the following Patient Reported Outcome Measures (PROMs): ESAS-r+, EPIC-CP, or MDASI-H&N.</p>
3	Rationale for Scorecard Inclusion	<p>PROMs are validated symptom assessment tools that can help improve patient outcomes, help patients articulate and prioritize their symptom concerns with their clinician, as well as reduce emergency department visits and hospital admissions due to symptom burden.</p> <p>PROMs used by Ontario Health (Cancer Care Ontario) within Regional Cancer Programs (RCPs) (i.e., ESAS-r, ESAS-r+, MDASI, PHQ-9 and EPIC) are part of a suite of symptom management tools referred to as Your Symptoms Matter (YSM). We would like to ensure all patients are offered the opportunity to complete YSM.</p> <p>Some types of cancer require tracking of symptoms that are unique to that type of diagnosis. For that reason, EPIC and MDASI were implemented to capture symptoms for early-stage prostate and head and neck cancer patients, respectively.</p>
4	Improvement Target in Scorecard	35%
5	Aim Target	85%
Data Specifications		
1a	Calculation Definition	<p>Number of Cancer Patients who were screened at least once with ESAS-r, ESAS-r+, EPIC or MDASI in a given month</p> <p style="text-align: right;">X 100</p> <hr/> <p>Number of cancer patients seen at a site in a given month</p>
1b	Denominator	Number of cancer patients seen at a site in a given month

1c	Numerator	Number of cancer patients seen at a site who were screened at least once with YSM (i.e., ESAS-r, ESAS-r+, EPIC, or MDASI) in a given month
2a	Inclusion Criteria	<ul style="list-style-type: none"> RSTP level 1-3 sites ambulatory sites are included (inclusion of level 4 sites is anticipated for FY 2026/27) Telephone visits and Ontario Telemedicine Network (OTN) visits submitted to the Activity Level Reporting (ALR) database are included in the denominator of this indicator
2b	Exclusion Criteria	<ul style="list-style-type: none"> Patients with a non-cancer diagnosis (e.g. non-neoplastic diagnosis, benign neoplasms, uncertain/unspecified diagnosis, unknown diagnosis) Patients with the following clinical practice subgroups based on the diagnosis information: <ul style="list-style-type: none"> 92: IN SITU MELANOMA 93: IN SITU SKIN 154: IN SITU MELANOMA-OTH & UNSPEC GENITAL ORGS 158: IN SITU MELANOMA-DIGESTIVE SYSTEM 160: IN SITU MELANOMA-MALE GENITAL ORGANS 163: IN SITU MELANOMA-OTHER GYN ORGANS 165: IN SITU MELANOMA -ORAL CAVITY 167: IN SITU MELANOMA-EYE 168: IN SITU MELANOMA-NASAL CAVITY & MIDDLE EAR 172: IN SITU MELANOMA-ACCESSORY SINUS Patients with missing or invalid health card numbers (e.g., value of 0 or 1) Out of province patient health card numbers Group visits (i.e., patients who only received a group visit in the reporting period)
3	Data Availability & Limitations	<ul style="list-style-type: none"> Most facilities use electronic platforms (e.g., kiosks, tablets) for patients to report their symptom assessment. Other facilities rely on paper forms. Paper forms require manual data entry and may not be as accurate as direct electronic reporting. Data for EPIC only reflects the launch of EPIC starting in October 2016. EPIC is collected at the 14 Regional Cancer Centres (RCCs) and select level 2-3 partner sites. Data for MDASI is only collected at select RCCs in Ontario: Kingston Health Sciences Centre (starting in March 2019) and Princess Margaret Cancer Centre (starting in April 2024). ESAS-r+ is collected at all RSTP level 1-3 sites. The denominator was calculated using an ALR metric (T2PS) that identifies cancer cases with at least one visit to the RCCs or partner sites in the reporting period for the following: (1) clinic visits for radiation, systemic, surgery, preventative oncology, or palliative/psychosocial oncology, (2) radiation planning/treatment visits, or (3) antineoplastic systemic or supportive/adjunctive therapy visits. This metric reflects the cancer system activity submitted by the RCCs and their partner sites. The quality of the reported data will be impacted by what is submitted. <p>Rates are calculated for all cancers combined by:</p> <ul style="list-style-type: none"> Fiscal quarter and Fiscal year Total province and site
4	Data Source(s)	<ul style="list-style-type: none"> ALR database, ISAAC Symptom Management Database

5	Considerations	<ul style="list-style-type: none">• For reporting purposes, only one submission per case is used for calculating the indicator for each month. Patients with more than one primary cancer will contribute to the indicator counts more than once a month. This will be reflected in both the numerator and denominator. For example, if a patient is seen in the same month for multiple cancer cases, then the denominator will count each primary case, and this count will contribute to the numerator depending on if the patient was screened with a PRO measure in that month or not.• Monthly counts are summed to calculate the quarterly rates. A unique patient count over longer time intervals would not accurately reflect the proportion of patients screened since patients can complete these PROMs multiple times in a year or quarter.• Disease site information is derived by linking the patient health card number in the Symptom Management Database with the patient health card number in the ALR database.
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Oncology Registered Nurse Competence for Systemic Treatment Administration Template

- The Oncology Registered Nurse Competence for Systemic Treatment Administration template documents Registered Nurse compliance with the *Systemic Cancer Treatment Administration: Initial and Continuing Competence Standards*. The purpose is to ensure a safe level of care for patients receiving these treatments and the RNs administering these treatments.
- The template includes fields to collect facility-level information and is separated by inpatient and outpatient units. It aims to capture:
 - The number of registered nurses actively administering systemic treatment that have completed their initial and maintenance competency requirements as of March 31 of the fiscal year.
 - The number of registered nurses actively administering systemic treatment that are not up to date with either the initial competency or maintenance of competency requirements, as well as plans for meeting the requirements.
- All full time and part time registered nurses and all temporary, causal and permanent registered nurses who actively administer systemic treatment must be accounted for.
- The template will be shared in the fourth quarter of the fiscal year as an additional tab within the QPR Report.

Cancer Surgery Wait Time-Referral to Consult (Wait 1)

Program Area: Access to Care/ Surgical Oncology Program
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Cancer Surgery Wait Times - Referral to Consult (Wait 1)
2	Description	Referral to consult: Percentage of patients seen within target for all priority categories (all reporting facilities)
3	Rationale for Scorecard Inclusion	Ontario Wait Time Strategy has identified Wait 1 as a critical component of the surgical patient wait time journey in order to provide a more complete and transparent measure of access to surgery. Through the Surgical Oncology Program and Access to Care, there are many supports in place for improvement – analysis, education, provincial trends, etc.
4	Improvement Target in Scorecard	90%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	(Total number of cancer surgery patients who had their first consultation with a specialist within the wait 1 priority access targets / Total number of cancer surgery patients with referral and consult dates) x 100
1b	Denominator	Total number of cancer surgery patients with referral and consult dates
1c	Numerator	<p>Total number of cancer surgery patients who had their first consultation with a specialist within the Wait 1 priority access targets</p> <p>Priority 2 = 10 Days</p> <p>Priority 3 = 21 Days</p> <p>Priority 4 = 35 Days</p> <p>The percent of cancer surgery patients seen by specialist within access target is weighted based on volume by priority level. Dates Affecting Readiness to Consult (DARCs) are deducted from patient wait times: The period of time between the referral and consult date when the patient is unavailable for a first consultation due to patient-related reasons are subtracted from the overall Wait 1</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Closed (or completed) wait list entries with actual procedure dates within date range • Patients ≥18 years on the day the procedure was completed • Treatment Cancer procedures only. Procedures classified as "NA" are currently included. • Skin-carcinoma, skin-melanoma and lymphomas
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Individuals <18 years old • Priority 1 procedures and cases with missing priority • Diagnostic, palliative and reconstructive cancer procedures • Cases where there is no suspicion of cancer or known cancer • Wait list entries identified by hospitals as data entry errors • Operative episodes that take place outside of a fully equipped operating room

		<ul style="list-style-type: none"> • Wait list entries without consult and referral dates (No Referral/ Follow up cases)
3	Data Availability & Limitations	Guidelines are implemented to ensure the facilities submit their data through WTIS in close to real time at source. A 2-business-day rule has been put in place for opening a wait list entry in the system when the decision for treatment is made and closing the entry after the procedure is performed. This rule is established to ensure compliance with timely data submissions. Wait 1 data is entered at the time of Decision to Treat. It is possible to allow for an audit trail back to the original source of data in the physician's office or the hospital scheduling system
4	Data Source(s)	<ul style="list-style-type: none"> ○ Wait Times Information System (WTIS), Ontario Cancer Registry (thyroid cancer only)
5	Considerations	<ul style="list-style-type: none"> ○ Wait 1 data capture is RETROSPECTIVE and is entered once the Decision To Treat has been made ○ When there are multiple consultations, only the first consultation with the clinician is captured to calculate Wait 1

Cancer Surgery Wait Time- Decision to Treat to Treatment (Wait 2)

Program Area: Access to Care/ Surgical Oncology Program
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Cancer Surgery Wait Times - Decision to Treat to Treatment (Wait 2)
2	Description	Percent of cancer surgery patients treated within 14, 28 and 84 days access target for priority 2, 3 and 4 cases, respectively
3	Rationale for Scorecard Inclusion	Ontario Wait Time Strategy has identified Wait 2 as a critical component of the surgical patient wait time journey in order to provide a more complete and transparent measure of access to surgery. Through the Surgical Oncology Program and Access to Care, there are many supports in place for improvement – analysis, education, provincial trends, etc.
4	Improvement Target in Scorecard	90%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	(Total number of cancer surgery patients who had their surgical treatment from decision for surgery within the wait 2 priority access targets/ Total number of cancer surgery patients who had their surgical treatment within the reporting period) x 100%
1b	Denominator	Total number of cancer surgery patients who had their surgical treatment within the reporting period after applying exclusion criteria
1c	Numerator	<p>Total number of cancer surgery patients treated within the Wait 2 priority access target</p> <p>Priority 2 = 14 Days</p> <p>Priority 3 = 28 Days</p> <p>Priority 4 = 84 Days</p> <p>The percent of cancer surgery patients treated within access target is weighted based on volume by priority level. Dates Affecting Readiness to Treat are deducted from patient wait times: The periods of time between the Decision To Treat (DTT) date and the Actual Procedure date when the patient is unavailable for the procedure due to patient-related reasons are subtracted from the overall Wait 2.</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> Closed (or completed) wait list entries with actual procedure dates within date range Patients ≥18 years on the day the procedure was completed. Treatment Cancer procedures only. Procedures classified as "NA" are currently included. Skin – carcinoma, skin – melanoma, and lymphomas
2b	Exclusion Criteria	<ul style="list-style-type: none"> Individuals <18 years old Priority 1 procedures and cases with missing priority Diagnostic, palliative, and reconstructive cancer procedures Cases where there is no suspicion of cancer or known cancer Wait list entries identified by hospitals as data entry errors Operative episodes that take place outside of a fully equipped operating room
3	Data Availability & Limitations	Guidelines are implemented to ensure the facilities submit their data through WTIS in close to real time at source. A 2-business-day rule has been put in place for opening a

		wait list entry in the system when the decision for treatment is made and closing the entry after the procedure is performed. This rule is established to ensure compliance with timely data submissions. It is possible to allow for an audit trail back to the original source of data in the physician's office or the hospital scheduling system.
4	Data Source(s)	Wait Time Information System (WTIS)
5	Considerations	<ul style="list-style-type: none"> • Wait 2 data capture is PROSPECTIVE and is opened within two business days of Decision to Treat date and closed within two business days of Procedure completion • It is recognized that system pressures and data capture challenges may impact performance and ability to reach the Annual Improvement Target. Despite this, ongoing provincial-regional and knowledge-sharing discussions across regions can help to improve performance and access.

Systemic Treatment Wait Time- Referral to Consult

Program Area: Systemic Treatment Program
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Systemic Treatment Wait Times-Referral to Consult
2	Description	Referral to Consult: percentage of patients seen within 14 days (RSTP Level 1, 2 and 3 facilities)
3	Rationale for Scorecard Inclusion	We are responsible to our patients to provide timely and equitable delivery of appropriate services. The timelines are to ensure that patients can rely on a consultation with a medical oncologist/hematologist within a reasonable timeframe to avoid impacts to outcomes. The referral to consult wait time indicator monitors for any inappropriate delays and supports quality improvement efforts locally and provincially.
4	Improvement Target in Scorecard	75%
5	Aim Target	85%

Data Specifications		
1a	Calculation Definition	$(\text{Total \# of patients within Referral to Consult wait time target} / \text{Total \# of Valid Cases}) \times 100$
1b	Denominator	Number of valid cases
1c	Numerator	Number of patients within referral to consult wait time target
2a	Inclusion Criteria	<ul style="list-style-type: none"> Systemic Referral to Consult patients are those patients with both a valid Referral and Consult Date receiving a consult at the systemic treatment Level 1-3 facilities Only new systemic consults (based on C1S counts) are included Only C1S, cancer range only (C00 to D49) are included
2b	Exclusion Criteria	<ul style="list-style-type: none"> Diagnosis site not between 'C00' and 'D49' Consult date is null Referral date is null Referral date is greater than Consult Date
3	Data Availability & Limitations	<ul style="list-style-type: none"> Only new systemic patients are included (excludes re-treats) The referral to consult activity is limited to consult activity provided within the Level 1, 2 and 3 systemic treatment facilities
4	Data Source(s)	<ul style="list-style-type: none"> Activity Level Reporting (ALR) database, Ontario Health-Cancer Care Ontario
5	Considerations	

Systemic Treatment Wait Time between Surgery and Adjuvant Chemotherapy for Patients with Breast, Colon and Gynecological Cancer

Program Area: Systemic Treatment Program
Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Systemic Treatment Wait Times – Surgery to Adjuvant Chemotherapy
2	Description	Percentage of patients receiving adjuvant chemotherapy within 60 days of surgery among those receiving adjuvant chemotherapy within 180 days of surgery
3	Rationale for QPR Report Inclusion	Delays in starting chemotherapy after surgery are associated with inferior outcomes
4	Improvement Target in QPR	70%
5	Aim Target	80%

Data Specifications								
1a	Calculation Definition	$\frac{\text{Number of patients receiving chemotherapy within 60 days of surgery}}{\text{Number of patients receiving chemotherapy within 180 days of surgery}} \times 100\%$						
1c	Denominator	<p>Denominator:</p> <p>Number of colon, breast, or gynaecological cancer patients receiving chemotherapy within 180 days of surgery</p> <p>The following CCI and OHIP fee codes are used to extract records of surgical cancer resections:</p> <table border="1"> <thead> <tr> <th>Disease Site</th><th>CCI Codes</th><th>OHIP Fee Codes</th></tr> </thead> <tbody> <tr> <td>Breast</td><td>1YM87-1YM92, 1YK87,1YK89,1YK90, 1YL87,1YL89</td><td>R107, R108, R109, R111, R117, R148, R149</td></tr> </tbody> </table>	Disease Site	CCI Codes	OHIP Fee Codes	Breast	1YM87-1YM92, 1YK87,1YK89,1YK90, 1YL87,1YL89	R107, R108, R109, R111, R117, R148, R149
Disease Site	CCI Codes	OHIP Fee Codes						
Breast	1YM87-1YM92, 1YK87,1YK89,1YK90, 1YL87,1YL89	R107, R108, R109, R111, R117, R148, R149						

		<p>Colon¹</p> <p>1NK87DN, 1NK87RE, 1NM87DA, 1NM87DE, 1NM87DF, 1NM87DN, 1NM87LA, 1NM87PN, 1NM87RD, 1NM87RE, 1NM87RN, 1NM89DF, 1NM89RN, 1NM91DF, 1NM91DN, 1NM91RD, 1NM91RE, 1NM91RN, 1NM91DE, 1NM87DX, 1NM87TF, 1NM89DX, 1NM91DX, 1NM91TF, 1NM87DY, 1NM89TF, 1NM91TG, 1NM87TG, 1NM91DY, 1NM87GB, 1NM87WJ, 1NM89GB, 1NM89WJ</p>	S162, S166, S167, S168, S169, S170, S171, S172, S177, S188, S195, Z765
		<p>Gynae-cologic²</p> <p>1RB89, 1RD89, 1RF87, 1RF89, 1RM87, 1RM89, 1RM91, 1RN89, 1RN91, 1RS87, 1RS89, 1RW87, 1RW88, 1RW91, 1RW92, 1RY87</p>	S710, S763, S727, S757, S745, S782, S816, E853, S776, S781, S750

¹ CCI codes for Colon Cancer tends to extract a large proportion of "partial excisions" on the date of diagnosis that may contain polypectomies. However, given the denominator is restricted to patients that had adjuvant chemotherapy following surgery, DAD/NACRS was used to extract additional patients not captured by OHIP alone.

² CCI and OHIP fee codes include ovarian and endometrial cancer resections.

- Surgery date was defined as the intervention date from DAD, registration date from NACRS and service date from OHIP
- In cases of multiple surgeries, the earliest surgery date in the reporting period was kept.

Systemic Treatment Definition:

- Systemic treatment records were extracted from ALR, NDFP, DAD and NACRS
- ALR: Systemic treatment visits where the patient received oral or non-oral antineoplastic systemic therapy (i.e., S25 metric was greater than or equal to 1) were included.
 - **Gynaecological Cancers only:** Patients treated with regimens listed in Table A1 of Appendix A were included.
- DAD/NACRS: Systemic treatment was defined using Canadian Classification of Health Interventions (CCI) procedure codes that indicated total body pharmacotherapy was administered with antineoplastic agents (subset of the procedure code = "1ZZ35").
 - In DAD, the admission date is considered treatment date.
 - In NACRS, the registration date was considered treatment date.
- NDFP: enrollment and treatment systemic treatment data
 - **Gynaecological Cancers only:** Patients treated with drugs listed in Table A2 of Appendix A were included.

If the same treatment visits appear in multiple data sources, the following hierarchy rule was applied to select which record remained in cohort: ALR > NDFP > DAD > NACRS. The first occurrence of a treatment denotes the start of treatment.

1b	Numerator	<p>Numerator is a subset of the denominator.</p> <p>Number of patients receiving systemic treatment within 60 days of surgery</p>
2a	Inclusion Criteria	
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Patients less than 18 or greater than 105 years of age at surgery • Missing or invalid health card number (HCN) • Abandoned, cancelled, or procedures performed outside of the hospital. • Drugs identified as hormonal based on ALR classification list • CCI procedure codes that identified total pharmacotherapy performed using immunostimulant or immunosuppressive agents or endocrine therapy • Patients who receive any neoadjuvant systemic therapy or any radiation prior to their surgery. • Patients receiving systemic treatment at level 4 facilities • Breast/Colon Cancer only: Patients who received regimens and/or drugs listed in Appendix B (based upon manual inspection of regimens).
3	Data Availability & Limitations	<p>DAD records provide data on inpatient systemic therapy treatments. ALR records provide data on outpatient systemic therapy but are limited to treatments completed at regional cancer centres (RCCs) and their partner sites. NACRS records supplement ALR data on outpatient systemic therapy treatments.</p> <ul style="list-style-type: none"> • OHIP and Ontario Drug Benefit (ODB) records are excluded from the systemic treatment definition due to the inability to accurately determine the treatment facility for performance management purposes. Thus, it is possible that results underrepresent overall systemic treatment, particularly oral chemotherapy prescriptions. • In ALR, for oral medications or treatments involving injection depots, only the date that the prescription is entered into Computerized provider order entry (CPOE) is captured. It does not capture dispensing and compliance. • In DAD and NACRS, the dose/quantity that is received or expected duration of treatment is not considered. • For take-home medications, compliance with the treatment regimen is not guaranteed. <p>Physicians have a 6-month period from the date of service to resubmit their claims. Surgical records found in OHIP may take at least 6 months to stabilize.</p>
4	Data Source(s)	<ul style="list-style-type: none"> • Activity Level Reporting (ALR) • Discharge Abstract Database (DAD) • National Ambulatory Care Reporting System (NACRS) • New Drug Funding Program (NDFP) – eClaims • Ontario Health Insurance Plan (OHIP) • Registered Persons Database (RPDB)
5	Considerations	<ul style="list-style-type: none"> • Wait Times are reported by the date (fiscal quarter) of surgical treatment by systemic treatment facility. Given the look-ahead period of 6 months following surgery, results will be reported 2 quarters behind. • Drugs and regimens may be added to the exclusion list if inappropriate or to the inclusion list if appropriate for this patient population.

Systemic Treatment Wait Time between Diagnosis and First Systemic Treatment for Aggressive Non-Hodgkin's Lymphoma (NHL), Hodgkin's Lymphoma (HL) and Neoadjuvant Breast Cancer

Program Area: Systemic Treatment Program
Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Systemic Treatment Wait Times – Diagnosis to Treatment
2	Description	Percentage of aggressive Non-Hodgkin's Lymphoma (NHL), Hodgkin's Lymphoma (HL) and neoadjuvant breast cancer patients receiving systemic treatment within 30 days of diagnosis
3	Rationale for QPR Report Inclusion	Timely initiation of treatment is important and may be related to long term outcome and/or curability.
4	Improvement Target in QPR	60%
5	Aim Target	70%

Data Specifications		
1a	Calculation Definition	<p>1. Aggressive NHL and HL:</p> $\frac{\text{Number of patients with aggressive NHL and HL receiving systemic treatment within 30 days of diagnosis}}{\text{Number of patients diagnosed with aggressive NHL and HL receiving systemic treatment within 180 days of diagnosis}} \times 100\%$ <p>2. Neoadjuvant Breast Cancer:</p> $\frac{\text{Number of breast cancer patients receiving systemic treatment as their first line of treatment within 30 days of diagnosis}}{\text{Number of breast cancer patients receiving systemic treatment as their first line of treatment within 180 days of diagnosis}} \times 100\%$

1c	Denominator	<p>1. Aggressive NHL and HL:</p> <p>Denominator: Number of patients with aggressive NHL and HL receiving Systemic Treatment within 180 days of diagnosis</p> <p>The following histology codes (ICD-O-3) were used to identify aggressive NHL:</p> <ul style="list-style-type: none"> • 9679/3 Mediastinal (thymic) large B-cell lymphoma • 9680/3 Malignant lymphoma, large B-cell, diffuse, NOS • 9680/3 Anaplastic large B-cell lymphoma • 9680/3 Diffuse large B-cell lymphoma associated with chronic inflammation • 9680/3 EBV positive diffuse large B-cell lymphoma of the elderly • 9684/3 Malignant lymphoma, large B-cell, diffuse, immunoblastic, NOS • 9688/3 T-cell rich large B-cell lymphoma • 9702/3 Anaplastic large cell lymphoma, ALK negative • 9705/3 Angioimmunoblastic T-cell lymphoma • 9708/3 Subcutaneous panniculitis-like T-cell lymphoma • 9714/3 Anaplastic large cell lymphoma, T cell and Null cell type • 9714/3 Anaplastic large cell lymphoma, NOS • 9714/3 Anaplastic large cell lymphoma, ALK positive • 9716/3 Hepatosplenic T-cell lymphoma • 9737/3 ALK positive large B-cell lymphoma <p>The following histology codes (ICD-O-3) were used to identify HL:</p> <ul style="list-style-type: none"> • 9650/3 Hodgkin lymphoma, NOS • 9651/3 Hodgkin lymphoma, lymphocyte-rich • 9652/3 Hodgkin lymphoma, mixed cellularity, NOS • 9653/3 Hodgkin lymphoma, lymphocytic deplet., NOS • 9654/3 Hodgkin lymph., lymphocyt. deplet., diffuse fibrosis • 9655/3 Hodgkin lymphoma, lymphocyt. deplet., reticular • 9663/3 Hodgkin lymphoma, nodular sclerosis, NOS • 9664/3 Hodgkin lymphoma, nod. scler., cellular phase • 9665/3 Hodgkin lymphoma, nod. scler., grade 1 • 9667/3 Hodgkin lymphoma, nod. scler., grade 2 <p>2. Neoadjuvant Breast Cancer:</p> <p>Denominator: Number of breast cancer patients receiving systemic therapy as their first line of treatment within 180 days of diagnosis</p> <ul style="list-style-type: none"> • Breast cancer cases are identified using the ICD-O-3 topography code C50. <p>Systemic Treatment Definition</p> <ul style="list-style-type: none"> • Systemic treatments were extracted from ALR, DAD, and/or NDFP (eClaims) for all disease sites. NACRS was used to identify systemic treatments only for patients with breast cancer. • ALR: Systemic treatment visits where the patient received oral or non-oral antineoplastic systemic therapy (i.e., S25 metric was greater than or equal to 1) were included. <ul style="list-style-type: none"> ○ Neoadjuvant breast cancer only: Patients treated with regimens listed in Table C2 of Appendix C were included.
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		<ul style="list-style-type: none"> DAD/NACRS: Systemic treatment was defined using Canadian Classification of Health Interventions (CCI) procedure codes that indicated total body pharmacotherapy was administered with antineoplastic agents (subset of the procedure code = "1ZZ35"). <ul style="list-style-type: none"> In DAD, admission date was considered the treatment date. In NACRS, registration date was considered the treatment date. NDFP: enrollment and treatment systemic treatment data <ul style="list-style-type: none"> Neoadjuvant breast cancer only: Patients treated with drugs listed in Table C3 of Appendix C are included
1b	Numerator	<p>Numerator is a subset of the denominator.</p> <p>1. Aggressive NHL and HL: Numerator: Number of patients with aggressive NHL and HL receiving systemic treatment within 30 days of diagnosis</p> <p>2. Neoadjuvant Breast Cancer: Numerator: Number of patients with breast cancer receiving systemic treatment as their first line of treatment within 30 days of diagnosis</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> Malignant incident cases with a method of cancer confirmation of 1 to 7. Cases with ICD-O-3 behaviour code 3 (malignant, primary site). NHL & HL only: <ul style="list-style-type: none"> Patients with multiple primaries (i.e. other cancer diagnosis within the last 3 years)
2b	Exclusion Criteria	<ul style="list-style-type: none"> Patients less than 18 or greater than 105 years of age at diagnosis Missing or invalid health card number (HCN) Patients with method of diagnostic confirmation indicated as "Clinical diagnosis" or "Unknown whether or not microscopically confirmed cases" (OCR Method of Confirmation Code = 8, 9) Patients diagnosed at autopsy or whose date of death was on or before their date of diagnosis Patients receiving treatment at level 4 systemic treatment facilities Neoadjuvant breast cancer only: <ul style="list-style-type: none"> Patients whose diagnosis occurred after first treatment Patients with multiple primaries (i.e. other cancer diagnosis within the last 3 years of breast cancer diagnosis) Patients who have surgery or receive radiation as their first treatment following diagnosis Patients who have at least one systemic treatment visit with palliative intent within 180 days of diagnosis Patients receiving first systemic treatment on the same day as radiation treatment <p><i>Exclusions applied to define systemic treatment:</i></p> <ul style="list-style-type: none"> Hormonal systemic therapy drugs

		<ul style="list-style-type: none"> CCI procedure codes that identify total pharmacotherapy administered with immunostimulant or immunosuppressive agents were excluded for all disease sites. For neoadjuvant breast cancer, endocrine therapy was also excluded. Abandoned, cancelled, or procedures performed outside of the hospital. NHL & HL only: <ul style="list-style-type: none"> Patients who received the regimens and/or drugs listed in Table C1 in Appendix C (based upon manual inspection of regimens/drugs). Patients receiving radiation treatment prior to their first chemotherapy
3	Data Availability & Limitations	<p>DAD records provide data on inpatient systemic therapy treatments. ALR records provide data on outpatient systemic therapy but are limited to treatments completed at regional cancer centres (RCCs) and their partner sites. NACRS records supplement ALR data on outpatient systemic therapy treatments.</p> <ul style="list-style-type: none"> In ALR, for oral medications or treatments involving injection depots, only the date that the prescription is entered into Computerized provider order entry (CPOE) is captured. It does not capture dispensing and compliance. In DAD and NACRS, the dose/quantity that is received or expected duration of treatment is not considered. For take-home medications, compliance with the treatment regimen is not guaranteed. OHIP and Ontario Drug Benefit (ODB) records are excluded from the systemic treatment definition due to the inability to accurately determine the treatment facility for performance management purposes. Thus, it is possible that results underrepresent overall systemic treatment, particularly oral chemotherapy prescriptions.
4	Data Source(s)	<ul style="list-style-type: none"> Activity Level Reporting (ALR) Discharge Abstract Database (DAD) National Ambulatory Care Reporting System (NACRS) New Drug Funding Program (NDFP) - eClaims Ontario Cancer Registry (OCR) Registered Persons Database (RPDB)
5	Considerations	<ul style="list-style-type: none"> Wait Times are reported by the date (fiscal quarter) of treatment. Delays in diagnoses and case resolutions in the Ontario Cancer Registry may lead to lags in reporting or affect data availability. Drugs and regimens may be added to the exclusion list if inappropriate or to the inclusion list if appropriate for this patient population. Systemic treatment visits can occur prior to diagnosis given the nature of NHL & HL diagnosis. Patients that received systemic treatment visit 3 months prior to diagnosis were included and subsequently flagged as having a wait time of 0 days. Diagnosis date is derived from the OCR. The earliest date from amongst all the source records (DAD, NACRS, ALR, ePath) associated to the case is chosen to be the diagnosis date on the OCR case record. If source records receive updates or new source records arrive and are associated with the existing case, the case will be recreated to consider the new/updated information <ul style="list-style-type: none"> Only Pathology reports with a definitive diagnosis or a reportable ambiguous term (e.g. consistent with diffuse large B cell lymphoma) related to diagnosis are used to derive diagnosis date. If the same treatment visits appear in multiple data sources, the following hierarchy rule was used to select which record remains in cohort:



		<ul style="list-style-type: none">○ ALR > DAD > NDFP for NHL & HL and○ ALR > NDFP > DAD > NACRS for neoadjuvant breast cancer. <p>The first occurrence of a treatment denotes the start of treatment.</p>
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Systemic treatment in last 30 days of life

Program Area: Systemic Treatment Program

Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Systemic Treatment in the Last 30 Days of Life
2	Description	Percentage of cancer patients who received systemic treatment in the last 30 days of life
3	Rationale for QPR Report Inclusion	<p>The aim is to optimize goals of care discussions at the end of life, and to reduce treatment that occurs at the end of life that can worsen quality of life and have no positive impact on survival.</p> <p>Among patients with cancer, receipt of systemic therapy near the end-of-life (EOL) does not improve outcomes and worsens patient and caregiver experience. Systemic treatment within the last thirty days of life is a key quality of care indicator and is one parameter used in the assessment of aggressiveness of care.</p> <p>To improve performance on this indicator, RCPs can Implement MMRs, support infrastructure for robust goals of care discussions and education for preparing patients for having goals of care discussions at end of life and peer review</p>
4	Improvement Target in QPR Report	<p>15%</p> <p>Note: This is an inverse indicator, lower percentage is indicative of better performance</p>
5	Aim Target	10%

Data Specifications		
1a	Calculation Definition	Number of patients receiving palliative antineoplastic systemic treatment in the last 30 days before death/ Number of patients who died and had any systemic treatment OR clinic visit within one year before death
1b	Denominator	Number of patients who died and had <u>any</u> systemic clinic OR treatment activity in their last year of life
1c	Numerator	<p>Numerator is a subset of the denominator.</p> <p>Number of patients receiving palliative antineoplastic systemic treatment in the last 30 days before death.</p> <ul style="list-style-type: none"> ALR: Palliative systemic treatment visits where S25 metric was greater than or equal to 1 DAD: Systemic treatment visits using CCI (subset of the procedure code = "1ZZ35") <ul style="list-style-type: none"> In DAD, admission date was considered treatment date.

2a	Inclusion Criteria	<ul style="list-style-type: none"> • Systemic therapy defined as chemotherapy, targeted therapy and immunotherapy.
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Deaths due to suicide or medical assistance in dying (MAID) • Patients who died outside Ontario • Patients <18 at time of death • Missing or invalid health card number (HCN) • Patients that did <u>not</u> have a systemic treatment visit or clinic visit (C1S, C2S or S25) in the last year of life • Patients with acute leukemia (e.g. Acute Lymphocytic Leukemia, Acute Myeloid Leukemia, Acute Monocytic Leukemia, Other Acute Leukemia) in the <u>last year of life</u> are excluded as chemotherapy is commonly used to control symptoms for this patient population. • Patients whose deaths occurred within 30 days of a major cancer-related operative procedure
3	Data Availability & Limitations	<ul style="list-style-type: none"> • There is a 6-month delay in the availability of date of death data. Cause of death may not be cancer related; information on cause of death is lagged by at least 2 years. • In ALR, for oral medications or treatments involving injection depots, this indicator would capture the date that the prescription is entered into Computerized provider order entry (CPOE). It does not capture dispensing and compliance. • In DAD, the dose/quantity that is received or expected duration of treatment is not taken into account. As such, it is possible that oral treatments or injections that overlap with the treatment window (i.e., last 30 days of life) are not currently captured and we may underestimate systemic treatments received through these modalities.
4	Data Source(s)	<ul style="list-style-type: none"> • Activity Level Reporting (ALR) • Discharge Abstract Database (DAD) • National Ambulatory Care Reporting System (NACRS) • Ontario Cancer Registry (OCR) • Registered Persons Database (RPDB)
5	Considerations	<ul style="list-style-type: none"> • This indicator is reported by fiscal quarter using date of death • Systemic therapy includes chemotherapy, targeted therapy and immunotherapy. • Palliative intent could only be derived from ALR records.

Radiation Treatment Wait Time- Referral to Consult

Program Area: Radiation Treatment Program
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Radiation Wait Times- Referral to Consult
2	Description	Percentage of patients that are seen within the referral to consult wait times target for radiation therapy (14 days) (includes all radiation clinic visits reported by radiation treatment facilities).
3	Rationale for QPR Report Inclusion	We are responsible to our patients to provide timely and equitable delivery of appropriate services. The timelines are to ensure that patients can rely on a consultation with a radiation oncologist within a reasonable time frame to avoid impacts to outcomes. The referral to consult wait time indicator monitors for any inappropriate delays and supports quality improvement efforts locally and provincially.
4	Improvement Target in QPR Report	85%
5	Aim Target	85%

Data Specifications		
1a	Calculation Definition	$(\text{Total \# of patients within Referral to Consult wait time target} / \text{Total \# of Valid Cases}) \times 100$
1b	Denominator	Total # of Valid Cases
1c	Numerator	Total # of patients within Referral to Consult wait time target (14 days)
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Radiation Referral to Consult patients are those patients with both a valid Referral and Consult Date receiving a Consult reported by a radiation treatment facility • Only new consults for a particular disease site are included
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Diagnosis site not between 'C00' and 'D49' • Consult date is null • Referral date is null • Referral date is after the Consult date
3	Data Availability & Limitations	<ul style="list-style-type: none"> • Data for the interval referral to consult is available only from April 2007 onwards • Only new radiation patients are included (excludes re-consults)
4	Data Source(s)	Activity Level Reporting, Cancer Care Ontario
5	Considerations	

Radiation Treatment Wait Time- Ready to Treat to Treatment

Program Area:

Radiation Treatment Program

Inclusion:

Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Radiation Wait Times – Ready to Treat to Treatment
2	Description	Percentage of patients that are treated within the ready to treat to treatment wait times targets (1,7, 14 days) for radiation therapy (all radiation treatment facilities).
3	Rationale for QPR Report Inclusion	We are responsible to our patients to provide timely and equitable delivery of appropriate services. The timelines are to ensure that patients can receive treatment within a reasonable time frame to avoid impacts to outcomes. The ready to treat to treatment wait time indicator monitors for any inappropriate delays and supports quality improvement efforts locally and provincially.
4	Improvement Target in QPR Report	85%
5	Aim Target	85%

Data Specifications		
1a	Calculation Definition	(Total # of patients within Ready to Treat to Treatment wait time targets / Total # of Valid Cases) X 100
1b	Denominator	Total # of Valid Cases
1c	Numerator	Total # of patients within Ready to Treat to Treatment wait time targets (1, 7, 14 days)
2a	Inclusion Criteria	Radiation Ready to Treat to Treatment patients are those patients with both a valid Ready to Treat and Start of Treatment date who have received a treatment at a radiation treatment facility.
2b	Exclusion Criteria	<ul style="list-style-type: none"> Only new treated cases for a particular disease site are included. Exclusions: <ul style="list-style-type: none"> Diagnosis site not between 'C00' and 'D49' Ready to Treat date is null Start of Treatment date is before Ready to Treat date
3	Data Availability & Limitations	<ul style="list-style-type: none"> Data for the interval ready to treat to treatment is available only from April 2007 onwards Only new radiation treated cases (patients) are included (excludes re-treats)
4	Data Source(s)	<ul style="list-style-type: none"> Activity Level Reporting, Cancer Care Ontario
5	Considerations	

Pathology Post-Surgical Turn Around Time- All Sites

Program Area: Pathology Laboratory Medicine
Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Pathology Post-Surgical Turn Around Times
2	Description	Pathology post-surgical turn-around time for all malignant cancer resection disease sites: percentage of reports received within 14 calendar days (all public reporting facilities)
3	Rationale for Inclusion	Pathologic assessment of cancer specimens is a critical component of the patient journey and relates directly to treatment planning and patient management. Timeliness is an important component of quality assurance and positive patient outcomes. Reporting the turnaround time for malignant cancer pathology resections provides a foundation for program planning, quality monitoring, and enhances patient care by improving efficiency of clinical processes. It brings accountability into the system to ensure that the patient receives the appropriate diagnosis in a timely manner.
4	Improvement Target in QPR Report	85%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	<p>Number of days from 'specimen collection date' to 'Original report sign off date' of initial 'Final Report' for all cancer reports received</p> $\frac{\text{Cancer resection reports received within 14 calendar days from date of surgery}}{\text{Total cancer resection reports received}}$
1b	Denominator	Total cancer resection reports received
1c	Numerator	Cancer resection reports received within 14 calendar days from date of surgery
2a	Inclusion Criteria	<ul style="list-style-type: none"> All malignant cancer resections* <ul style="list-style-type: none"> ICDO-3 behaviour of 3 (malignant) Report type: surgical pathology resection only <p>*Exception for benign Brain and Spinal cord, and in-situ Breast, Urinary Bladder, Urethra, Renal Pelvis and Ureter</p>
2b	Exclusion Criteria	<ul style="list-style-type: none"> All non-cancer resections <ul style="list-style-type: none"> ICDO-3 behaviours of 0 (benign)*, 1 (borderline)*, 2 (in situ)** and 6 (metastatic) Consults Addendums, amendments All report types other than surgical pathology resection reports Biomarker reports are not included in pathology turnaround time Reports from private labs and pediatric hospitals Non-reportable disease sites**** <p>*Exception of Brain and Spinal cord **Exception of Breast DCIS, Urinary Bladder, Urethra, Renal Pelvis and Ureter</p>

		****Report received for the optimal use of eCC resection templates: Ewing Sarcoma/ Primitive Neuroectodermal tumour Resection, Neuroblastoma, Retinoblastoma, Rhabdomyosarcoma, Uveal Melanoma
3	Data Availability & Limitations	<ul style="list-style-type: none"> • EDW data source inclusion and exclusion rules apply • Indicator change to collect data at 3 months post specimen collection month (previously data taken at 2 months post specimen taken date)
4	Data Source(s)	Cancer Care Ontario Path Data Mart, Enterprise Data Warehouse (EDW)
5	Considerations	Quarterly data with 3-month delay, data available in iPort

Cancer Imaging Wait Time- CT Biopsy

Program Area: Cancer Imaging Program
Inclusion: Scorecard and QPR Reports

Indicator Specifications		
1	Indicator Name	Cancer Imaging Wait Times - CT Guided Biopsy
2	Description	Percentage of CT-guided biopsies - Priority 3 Cases - completed within access target (all Clinical Indications combined)
3	Rationale for Inclusion	<p>CT-guided biopsy (CT-Bx) is a critical early step for cancer patients. Patients need a biopsy before they know whether they have cancer (or not) – having timely access to this procedure supports timely care for everything that comes after, and long waits for CT-Bx are often cited as a barrier, particularly for lung cancer.</p> <p>Factors influencing access to CT-Bx are multifactorial (e.g., CT, resourcing, recovery beds, etc.) – by sharing the data, the RCPs can have informed, local conversations about appropriate supports.</p> <p>Note: Most– but not all– CT-guided biopsies are performed for suspected lung cancers. However, there are other disease-sites this is relevant for. This indicator captures all. There are also other image-guided biopsy procedures (e.g., ultrasound-guided), relevant for cancer, that are not captured by this indicator and not currently feasible due to lack of data availability. This indicator provides a starting point for RCP discussion and can be supplemented by local data for other procedures where it exists.</p>
4	Improvement Target	55%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Volume of Priority Level 3 CT-guided procedures completed within the provincial Priority Level 3 access target of 10 days}}{\text{Total volume of Priority Level 3 CT-guided procedures}}$
1b	Denominator	Total volume of Priority Level 3 CT-guided procedures
1c	Numerator	Volume of Priority Level 3 patients whose CT-guided procedure was completed within the provincial access target of 10 days
2a	Inclusion Criteria	<ul style="list-style-type: none"> • All closed wait list entries with scan dates within the reporting period • All Clinical Indication for Scan (includes Cancer Staging and/or Diagnosis, and Other) • Patients are 18 years and older on the day the CT-guided procedure was completed • Patients assigned as Priority Level 3 for scan
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Procedure no longer required or cancelled scans • Patients assigned as Priority Level 1,2,4 • Cases with missing priority level • Wait list entries identified by hospitals as data entry error • Specified Date Procedures/Timed Scans

3	Data Availability & Limitations	<ul style="list-style-type: none"> • Data includes all CT-guided procedures given Priority Level 3, performed in a CT-suite. In addition to CT-guided biopsies, this may include other procedures (e.g., ablations). Not all procedures may be performed to confirm or exclude cancer. Procedures performed outside of a CT suite (e.g., dedicated interventional suite) are not captured. In practice it is expected that most of the procedures captured represent CT-guided biopsies for cancer. • Hospitals with small volumes will be more severely impacted by extreme waits. For example, an unusually long or short wait time for a single patient in a reporting period for hospitals that do not scan a lot of patients will have a greater impact on the percentage of patients who received a scan within the target time. • Since Wait Time data is reported at the hospital corporation or facility level, facilities with multiple sites will be reported together even though data is collected at each site. • There are other factors that affect wait times for a diagnostic exam that do not relate to a hospital's efficiency or the availability of resources, e.g., patient choice.
4	Data Source(s)	Wait Times Information System
5	Considerations	<ul style="list-style-type: none"> • Quarterly data • It is recognized that system pressures and data capture challenges may impact performance and ability to reach the Annual Improvement Target. Despite this, ongoing provincial-regional and knowledge-sharing discussions across regions can help to improve performance and access.

Cancer Imaging Wait Times – FDG PET scans

Program Area: Cancer Imaging Program
Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Cancer Imaging Wait Times – FDG PET scans
2	Description	Percentage of FDG PET scans completed within the - 10 calendar days access target (referral to scan).
3	Rationale for QPR Report Inclusion	<p>PET scans support in appropriately staging patients, which directly influences treatment decisions. The next steps for patient care, such as treatment planning, cannot happen until the PET scan has been performed.</p> <p>With advisement from the PET Steering Committee, OH-CCO manages all aspects of PET scanning, including quality, funding, etc.. We assist RCPs with service planning for volume expectations, identify issues related to access, and help with inter-regional re-referrals where needed (make connections between programs). Depending on the program, the RCPs were not historically integrated into PET centre operations – and yet PET scans are a key component of the RCP’s care continuum. Having the indicator helps bridge that gap and ensures there can be meaningful discussions on access-related issues.</p> <p>RCPs can work with the PET centres to ensure consistent, high-quality care through planning of operations. (e.g., whether additional scanning days/hours are required, etc.).</p>
4	Improvement Target in QPR Report	50%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	$\frac{\text{Volume of FDG PET scans completed within the access target of 10 calendar days (referral to scan)}}{\text{Total volume of FDG PET scans completed}}$
1b	Denominator	Total volume of FDG PET scans completed in the reporting period, for indications where a 10 calendar day target applies. See list of indications provided in 2a.
1c	Numerator	<p>Total volume of FDG PET scans completed within the Aim Target (10 calendar days) in the reporting period within the list of indications provided in 2a.</p> <p>NOTE: wait time is from referral date (date the PET centre receives referral) to scan date. No negative wait times were observed.</p>
2a	Inclusion Criteria	<ul style="list-style-type: none"> BR-001 – Breast Cancer (locally advanced) – Staging DM-001 – Melanoma – Staging or Isolated Metastatic Recurrence

		<ul style="list-style-type: none"> • GI-001 – Colorectal - Recurrence • GI-003 – Esophageal Cancer – Staging • GI-004 – Anal Canal Cancer – Staging • GU-001 – Germ Cell Tumours - Recurrence • GU-002 – Seminoma – Residual Disease • GU-003 – Bladder Cancer (Muscle Invasive) – Staging • GY-001 – Cervical Cancer – Staging • GY-002 – Gynecologic Cancer - Recurrence • HM-003 – Lymphoma - Staging • HN-001 – SCC – Unknown Primary of the Head & Neck • HN-002 – Nasopharyngeal Cancer Staging • HN-003 – Thyroid Recurrence • HN-004 – Node Positive H&N Cancer - Staging • HN-006 – Anaplastic Thyroid - Staging • HN-007 – Medullary Thyroid – Staging/Recurrence • SC-001 – Sarcoma – Staging/Recurrence • SC-002 – Plexiform Neurofibroma – Diagnosis • TH-001 – NSCLC Staging • TH-002 – SCLC Staging • TH-003 - SPN • TH-004 – Mesothelioma – Staging
2b	Exclusion Criteria	<ul style="list-style-type: none"> • GI-002 – s Colorectal - Limited Metastatic Disease • HM-001 – Lymphoma – Interim Treatment Response – Hodgkin’s • HM-002 – Lymphoma – End of Treatment Response - Residual Disease • HM-004 – Lymphoma – Interim Treatment Response – Non-Hodgkin’s (pediatric only) • HN-005 – HN Cancer - Re-Staging Post Chemotherapy • Scans performed for Registry indications and the PET Access Program
3	Data Availability & Limitations	<ul style="list-style-type: none"> • Results are presented by regional cancer programs of where the PET Centres are located, not where the patients may reside. • There may be some variation (e.g., +/- 1-2 days) in capturing “Date of Referral” by PET Centres.
4	Data Source(s)	<ul style="list-style-type: none"> ○ PET DSP
5	Considerations	<p>This analysis uses 10 calendar days as wait time target for all included indications. As the majority of PET scans are for cancer staging, this target is aligned with the access target for semi-urgent CT and MRI scans (Priority Level 3).</p> <p>There are variations in scan volumes and case mix of indications across PET centres.</p> <p>This analysis includes only oncology FDG PET scan data submitted via the PET DSP.</p> <p>This data excludes non-oncology indications (e.g., cardiac, neurology), non-FDG indications (e.g. PSMA, Ga68-DOTATATE, Amyloid), PET Access data submitted via the PET eTool, active Registries accruing patients and data submitted via fax and excel spreadsheets. This report captures approximately 60% of all funded PET scans in the province but scan volumes vary widely from PET Centre to PET Centre (0% to 90% depending on each PET Centres specific breakdown of scans by stream of access).</p>

Focal Tumour Ablation Wait Times- Consult to Treatment

Program Area: Cancer Imaging Program

Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Cancer Imaging Wait Times – Focal Tumour Ablation
2	Description	Percentage of procedures completed within access target (consult to procedure) for all disease sites
3	Rationale for QPR Report Inclusion	<p>Focal Tumour Ablation is an image-guided, minimally invasive treatment option for some patients – introduction and support for these emerging procedures was identified as a priority for patient care. This indicator helps monitor access to these treatments across the province, including volumes and wait times.</p> <p>OH-CCO has an Interventional Oncology Steering Committee that advises on clinical guidance and quality issues – including access. The wait times indicator ensures the RCPs recognize access issues and intervene where needed.</p> <p>RCPs can ensure that hospitals (and DI departments) are planning for growth in the context of all other pressures.</p>
4	Improvement Target in QPR Report	45%
5	Aim Target	90%

Data Specifications		
1a	Calculation Definition	Percentage of first funded Focal Tumour Ablation (FTA) procedures completed within access target from consultation for all disease sites.
1b	Denominator	Total funded volumes of focal tumour ablation (thermal ablation and Transarterial Chemoembolization-TACE) performed.
1c	Numerator	<ul style="list-style-type: none"> For thermal ablation-Kidney: Number of first funded thermal ablation-kidney procedures patients had within 28 days from consultation; For thermal ablation-Liver: number of first funded thermal ablation-Liver procedures patients had within 14 days from consultation; For thermal ablation-Lung: number of first funded thermal ablation-Lung procedures patients had within 14 days from consultation; For transarterial chemoembolization (TACE)-Liver: number of first funded TACE-Liver procedure within 14 days from consultation
2a	Inclusion Criteria	<ul style="list-style-type: none"> Include the first funded thermal ablation/TACE procedures patients received within a selected timeframe for the following disease sites: thermal ablation-Kidney, thermal ablation-Liver, thermal ablation-Lung and TACE-Liver. Thermal ablation procedures include: Cryoablation, Microwave and Radio Frequency Ablation

		<ul style="list-style-type: none"> Please refer to the Provincial Plan for Focal Tumour Ablation Services for funding criteria. Note the Provincial Plan was last updated in 2021.
2b	Exclusion Criteria	<ul style="list-style-type: none"> Transarterial Radioembolization (TARE) procedures
3	Data Availability & Limitations	<p>Data availability: Dependent on timeframe selected.</p> <p>Limitations: Extremely low volumes for certain disease sites (e.g., Thermal Ablation-Lung) or certain sites are observed. Please take into account the randomness bias when using wait time metrics and % within target.</p>
4	Data Source(s)	SSO-IS EDW
5	Considerations	Significant variation in procedure volumes across region of treating facilities due to the fact certain sites might only conduct certain procedures for specific disease site(s).

Head and neck dietitian visits

Program Area: Psychosocial Oncology

Inclusion: QPR Reports

Indicator Specifications		
1	Indicator Name	Head and Neck Cancer Patients Seen by Dietitian
2	Description	Percentage of head and neck cancer patients that started curative radiation within a defined time period and were seen by a dietitian at a Regional Cancer Centre (RCC) 90 days before or 14 days after the start of their treatment
3	Rationale for QPR Report Inclusion	<p>Head and neck cancer patients are at risk of becoming malnourished before and during their treatment and early intervention and support by a registered dietitian improves their outcomes.</p> <p>Initiatives to support RCPs in their local efforts:</p> <ul style="list-style-type: none"> ○ Through the Systemic Treatment QBP, nutrition services for H&N patients are funded ○ PSO facilitates a nutrition community of practice for outpatient dietitians across the province. Models of care and sharing of best practices is a core objective ○ Piloting MDASI H&N – a secondary screening tool for head and neck patients and part of the tool assess nutrition risk. When rolled out provincially, this tool can help centres prioritize referrals <p>To improve performance on this indicator RCPs can:</p> <ul style="list-style-type: none"> ○ Ensure standard screening, assessment and referral processes for all H&N patients undergoing radiation treatment ○ Ensure sufficient FTEs are in place to meet the demand for dietitian services for this population
4	Improvement Target in QPR Report	80%
5	Aim Target	80%

Data Specifications		
1a	Calculation Definition	(Number of head and neck cancer patients seen by a registered dietitian 90 days before or 14 days after beginning curative radiation treatment /Number of head and neck cancer patients who started curative radiation treatment in a specified period) X 100
1b	Denominator	Number of head and neck cancer patients who started curative radiation treatment in a specified period
1c	Numerator	Number of head and neck cancer patients seen by a registered dietitian 90 days before or 14 days after beginning curative radiation treatment
2a	Inclusion Criteria	<ul style="list-style-type: none"> • Patients diagnosed in a specified period with: <ul style="list-style-type: none"> ○ LIP

		<ul style="list-style-type: none"> ○ BASE OF TONGUE ○ OTHER UNSPECIFIED PARTS OF TONGUE; GUM ○ FLOOR OF MOUTH ○ PALATE ○ OTHER & UNSPECIFIED PARTS OF MOUTH ○ PAROTID GLAND ○ OTHER UNSPECIFIED MAJOR SALIVARY GLANDS ○ TONSIL ○ OROPHARYNX ○ NASOPHARYNX ○ PYRIFORM SINUS ○ HYPOPHARYNX ○ OTHER LIP ORAL CAVITY & PHARYNX ○ NASAL CAVITY & MIDDLE EAR ○ ACCESSORY SINUSES ○ LARYNX • Patients with cervical esophageal cancer defined with a topography of C15.0 and the following morphologies (ICD-O-3): <ul style="list-style-type: none"> ○ 8051/3 Verrucous carcinoma, NOS ○ 8052/3 Papillary squamous cell carcinoma ○ 8070/3 Squamous cell carcinoma, NOS ○ 8071/3 Squamous cell carcinoma, keratinizing, NOS ○ 8072/3 Squamous cell carcinoma, large cell, nonkeratinizing, NOS ○ 8073/3 Squamous cell carcinoma, small cell, nonkeratinizing ○ 8074/3 Squamous cell carcinoma, spindle cell ○ 8075/3 Squamous cell carcinoma, adenoid ○ 8076/3 Squamous cell carcinoma, microinvasive ○ 8078/3 Squamous cell carcinoma with horn formation ○ 8083/3 Basaloid squamous cell carcinoma ○ 8070/2 Squamous cell carcinoma in situ, NOS ○ 8076/2 Squamous cell carcinoma in situ, questionable stromal invasion • Patients that received treatment at a RCC within 12 months of diagnosis • Treatment is defined as radiation therapy • Patients receiving radiation therapy with curative, adjuvant and neoadjuvant intent (these intents could be submitted as “Primary” intent as of January 2021; curative, adjuvant, neoadjuvant and palliative intent types were decommissioned in April 2021)
2b	Exclusion Criteria	<ul style="list-style-type: none"> • Patients with invalid health card numbers (e.g., invalid, out of province) • Patients receiving radiation therapy for palliative (metastatic) or unknown intent • Head and neck cancer cases with more than one radiation therapy protocol in the first 365 days from diagnosis • Head and neck cancer cases with a palliative radiation therapy protocol (HN_SHORTCOURSE HIGH, HN_SHORTCOURSE_LOW, or HN_SHORTCOURSE_SBRT)
3	Data Availability & Limitations	
4	Data Source(s)	<ul style="list-style-type: none"> • Activity Level Reporting
5	Considerations	<ul style="list-style-type: none"> • Reporting for this indicator is limited to patients that are receiving care at Regional Cancer Centres only. • Low volumes for head and neck patients will impact the metric. • Only some regional cancer centres offer treatment to head and neck patients.

		<ul style="list-style-type: none">• Patients may be receiving dietitian services elsewhere. Dietitian visits outside of cancer centres are not captured.• This indicator only measures outpatient care services; patients receiving early feeding tube insertions (admitted as inpatient) would not be included.
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Appendix A

Wait Times between Surgery and Adjuvant Chemotherapy for Patients with Gynaecological Cancer – Included Regimens and Drugs

Table A1. ALR regimens included in the systemic treatment definition for patients with gynaecological cancer

Regimen Code	Regimen Description
CRBPPACL	LUNG-NSCLC, GYNE, GI, GU, PRIMARY UNKNOWN, MELANOMA, BREAST, HEAD AND NECK, THYROID, OTHER - PACLITAXEL, CARBOPLATIN
CRBPPACL(IP)	GYNECOLOGICAL - PACLITAXEL - CARBOPLATIN (INTRAPERITONEAL)
CRBP	GYNECOLOGICAL, GENITOURINARY, GI, GERM CELL, BLADDER, PRIMARY UNKNOWN, CENTRAL NERVOUS SYSTEM, HEAD AND NECK, BREAST - CARBOPLATIN
CISPPACL(IP)	GYNECOLOGICAL- PACLITAXEL - CISPLATIN (INTRAPERITONEAL)
CRBPPACL+BEVA	LUNG-NSCLC OR GYNE-OVARIAN, CERVICAL - PACLITAXEL, CARBOPLATIN, BEVACIZUMAB
CISP(RT)	GU-BLADDER, HEAD AND NECK OR OTHERS - CISPLATIN PLUS RADIOTHERAPY (Q2W OR Q3W)
CISP	GYNE, SARCOMA, GU-GERM CELL OR BLADDER, PRIMARY UNKNOWN, HEAD AND NECK, LUNG, SKIN - CISPLATIN (Q21D) WITH OR WITHOUT RADIOTHERAPY
CRBPDOCE	LUNG - NON-SMALL CELL OR GYNECOLOGY, DOCETAXEL, CARBOPLATIN
CRBPPACL(W)	LUNG - NSCLC OR GYNECOLOGICAL OR PRIMARY UNKNOWN OR MELANOMA OR BREAST OR HEAD AND NECK OR GASTROINTESTINAL - PACLITAXEL, CARBOPLATIN (WEEKLY)
CISPETOP(3D)	CNS OR GI OR GYNE OR BREAST OR LUNG OR GU OR HEAD AND NECK OR THYMOMA OR NEUROENDOCRINE OR SKIN OR PRIMARY UNKNOWN OR HEMATOLOGY - CISPLATIN, ETOPOSIDE IV (DAYS 1 TO 3 OR LESS)
NIRP	GYNE-OVARIAN - NIRAPARIB
NCT03740165	P3 gyn ov 1L chemo+pemb+olap maint
OLAP	BREAST, GYNE-OVARIAN, GU-PROSTATE, GI-PANCREAS - OLAPARIB
CISPPACL	LUNG-NSCLC OR GYNECOLOGICAL-OVARIAN OR CERVICAL - PACLITAXEL, CISPLATIN
OLAP(MNT)	GYNE-OVARIAN - OLAPARIB (MAINTENANCE)
2018-000413-20(CUR)	P3 gyn ov 1L nira/TSR-042, parp/ICI
NCT03737643	P3 Gyn ov 1L chemo+bev/durv+/-olap
CISPDOXO	SARCOMA OR GYNECOLOGICAL OR GASTROINTESTINAL OR PRIMARY UNKNOWN OR OTHERS - CISPLATIN, DOXORUBICIN
CRBPETOP	LUNG, CNS, GYNECOLOGICAL, NEUROENDOCRINE, GASTROINTESTINAL, HEAD AND NECK, SKIN, GENITOURINARY-TESTIS - ETOPOSIDE, CARBOPLATIN
NCT04159155	P2/3 Gyn endo adj CRBPPACL/CISP(RT)
2018-000413-20	P3 gyn ov 1L nira/TSR-042, parp/ICI
CRBP(RT)	GU, GYNE, GI, HEAD AND NECK, OR SKIN - CARBOPLATIN PLUS RADIOTHERAPY
NCT04269200	P3 gyn adv End 1L chem+durv+/-olap
CRBPDOXO	GYNECOLOGICAL, NET, PRIMARY UNKNOWN,SARCOMA - DOXORUBICIN, CARBOPLATIN
NCT04095364	P3 gyn adv ov letr+/-CRBPPACL AI
CRBPNPAC	BREAST, MELANOMA, GYNE - NAB-PACLITAXEL (ABRAXANE), CARBOPLATIN
CISPETOP(PO)	LUNG, GYNE, CNS, GU, NET - CISPLATIN, ETOPOSIDE ORAL
NCT02489006	P2 neoadj rec Ov plat sens olaparib
NCT03522246	P3 gyn ov 1L ruca/nivo maint

Table A2. Drugs in the NDFP (eClaims) database included in systemic treatment definition for patients with gynaecological cancer

Drug Name
PACLITAXEL
DOCETAXEL
BEVACIZUMAB (MVASI)
BEVACIZUMAB (AVASTIN)
BEVACIZUMAB (ZIRABEV)
NAB-PACLITAXEL
BEVACIZUMAB (BAMBEVI)

Appendix B

Wait Times between Surgery and Adjuvant Chemotherapy for Patients with Colon and Breast Cancer – Excluded Regimens and Drugs

ALR Regimen Code	ALR Regimen Description
ABEM	BREAST - ABEMACICLIB
ABEMFLVS	BREAST - ABEMACICLIB, FULVESTRANT
ABIRPRED	GENITOURINARY-PROSTATE - ABIRATERONE, PREDNISONE
BEVA	GASTROINTESTINAL, GYNECOLOGICAL, LUNG, CNS, PRIMARY UNKNOWN, BREAST - BEVACIZUMAB
CAPE(RT)	GASTROINTESTINAL, BREAST - CAPECITABINE (WITH RADIOTHERAPY)
CAPEDOCE	BREAST, GASTROINTESTINAL-GASTRIC - CAPECITABINE, DOCETAXEL
CAPELAPA	BREAST - CAPECITABINE, LAPATINIB
CAV	LUNG-SMALL CELL, GI, GYNE, GU, BREAST - CYCLOPHOSPHAMIDE, DOXORUBICIN, VINCRISTINE (SEE VAC FOR SARCOMA OR ENDOCRINE)
CLDN	HEMATOLOGY OR BREAST OR HYPERCALCEMIA OR OTHER DSG RELATED BONE METASTASIS, CLODRONATE
CRBPETOP(RT)	LUNG, SKIN, OTHERS - CARBOPLATIN, ETOPOSIDE WITH RADIOTHERAPY
CRBPGEMC	GU-BLADDER, LUNG, GYNECOLOGY, GASTROINTESTINAL, HEAD AND NECK, BREAST, UNKNOWN PRIMARY, OTHERS - GEMCITABINE, CARBOPLATIN
CRBPVINO	LUNG-NSCLC, BREAST - CARBOPLATIN, VINORELBINE
CYCL	HEMATOLOGY, PRIMARY UNKNOWN, GYNECOLOGICAL, CNS - CYCLOPHOSPHAMIDE IV (+ OR - MESNA)
CYCL(PO)	HEMATOLOGY-LEUKEMIA, LYMPHOMA, OR BREAST, GENITOURINARY, GYNECOLOGICAL - CYCLOPHOSPHAMIDE PO
CYCL(PO)DEXA	HEMATOLOGY - CYCLOPHOSPHAMIDE, DEXAMETHASONE
CYTAMTRX(IT)	HEMATOLOGY - METHOTREXATE IT, CYTARABINE IT (+/- HYDROCORTISONE)
DASA	HEMATOLOGY - DASATINIB
DCRBDOXO	SARCOMA -SOFT TISSUES, DACARBAZINE, DOXORUBICIN
DENO	BREAST, GENITOURINARY-PROSTATE, HEMATOLOGY-MYELOMA, LUNG, OTHER CANCERS - DENOSUMAB
DEXAIXAZLENA	HEMATOLOGY-MYELOMA - DEXAMETHASONE, IXAZOMIB, LENALIDOMIDE
DEXALENA	HEMATOLOGY-MYELOMA - LENALIDOMIDE, DEXAMETHASONE (OR PREDNISONE)
DOCE	BREAST, GASTROINTESTINAL, GENITOURINARY, LUNG, HEAD AND NECK, GYNE - DOCETAXEL Q21D
DOCE(W)	BREAST, GASTROINTESTINAL, GENITOURINARY, LUNG, HEAD AND NECK, GYNE - DOCETAXEL (WEEKLY)
DOCE+PERT+TRAS	BREAST - DOCETAXEL, PERTUZUMAB, TRASTUZUMAB
DOCE+TRAS	BREAST, HEAD AND NECK - DOCETAXEL, TRASTUZUMAB
DOCEGEMC	LUNG - NSCLC OR BREAST OR GASTROINTESTINAL - PANCREATIC OR GYNECOLOGICAL - GERM CELL TUMOURS OR SARCOMA (ENDOMETRIAL) - GEMCITABINE, DOCETAXEL
DOXO	BREAST, GYNE, SARCOMA, PRIMARY UNKNOWN, GU, HEAD AND NECK, GI OR ENDOCRINE - DOXORUBICIN 50 TO 75 MG/M2
DOXOIFOS	SARCOMA OR GYNECOLOGICAL, IFOSFAMIDE-DOXORUBICIN (+ MESNA)
ETRG	GYNECOLOGICAL - ESTROGEN OR ESTROGEN LIKE DRUG
FLVS	BREAST - FULVESTRANT

ALR Regimen Code	ALR Regimen Description
FOLFIRI	GI -COLORECTAL, HEPATOBILIARY - IRINOTECAN,LEUCOVORIN, FLUOROURACIL BOLUS + CIV 46H X 1
FOLFIRI+BEVA	GASTROINTESTINAL - COLORECTAL, IRINOTECAN,FLUOROURACIL CIV, LEUCOVORIN, BEVACIZUMAB
FOLFIRI+CETU	GASTROINTESTINAL - COLORECTAL, IRINOTECAN,FLUOROURACIL CIV, LEUCOVORIN, CETUXIMAB
FOLFIRI+PNTM	GASTROINTESTINAL-COLORECTAL - IRINOTECAN,FLUOROURACIL, LEUCOVORIN, PANITUMUMAB
FOLFOXIRI	GASTROINTESTINAL - COLORECTAL, OXALIPLATIN,FLUOROURACIL CIV, LEUCOVORIN, IRINOTECAN
FULCVR	BREAST OR GASTROINTESTINAL -FLUOROURACIL-LEUCOVORIN BOLUS IV DAYS 1 TO 3OR 4 OR 5 (SEE FULCVR(RT) IF WITH RT)
FULCVR(W)	BREAST OR HEAD AND NECK OR GASTROINTESTINAL -FLUOROURACIL BOLUS WEEKLY, LEUCOVORIN
GEMC	GI-PANCREAS, LUNG-NSCLC, GU-BLADDER,GYNECOLOGICAL, BREAST, HEMATOLOGY, HEAD ANDNECK, SARCOMA, UNKNOWN PRIMARY - GEMCITABINE
GEMC(RT)	GI-PANCREAS, GU-BLADDER - GEMCITABINE (WITH RADIOTHERAPY)
HYDR	HEMATOLOGY - CHRONIC MYELOID LEUKEMIA OR CNS, HYDROXYUREA
LANREOTIDE	DO NOT USE
LETRPALB	BREAST - LETROZOLE, PALBOCICLIB
LETRRIBO	BREAST - LETROZOLE, RIBOCICLIB
LPRL	GENITOURINARY-PROSTATE, GYNECOLOGICAL,BREAST - LEUPROLIDE
MEDR	GYNECOLOGICAL -ENDOMETRIAL OR BREAST,MEDROXYPROGESTERONE
MEGE	GYNECOLOGICAL-ENDOMETRIAL, BREAST, OTHERS -MEGESTROL
MFOLFOX6+BEVA	GASTROINTESTINAL - COLORECTAL, OXALIPLATIN,FLUOROURACIL BOLUS + CIV 46H X 1, LEUCOVORIN,BEVACIZUMAB (ALL GIVEN DAY 1)
MTRXVINO	SARCOMA -SOFT TISSUES, VINOELBINE - METHOTREXATE
MTRXVNBL	SARCOMA -SOFT TISSUES, VINBLASTINE - METHOTREXATE
NCT02511106	P3 NSC adj OSIM +/- adj SOC chemo
NCT04095364	P3 gyn adv ov letr+/-CRBPPACL AI
NCT05113251	P1 ad sol tum LGK974+/-PDR001 Wnt
NERT	BREAST - NERATINIB
NPAC	BREAST OR GASTROINTESTINAL-PANCREAS ORGENITOURINARY-BLADDER OR OTHERS - NAB- PACLITAXEL (ABRAXANE)
NPAC(W)	BREAST, GI-PANCREAS, MELANOMA, GU-BLADDER,OTHERS - WEEKLY NAB-PACLITAXEL (ABRAXANE)

ALR Regimen Code	ALR Regimen Description
OSIM	LUNG-NSCLC - OSIMERTINIB
OXAL	GASTROINTESTINAL - COLORECTAL OR SARCOMA, OXALIPLATIN
PACL	KAPOSI'S SARCOMA, BREAST, GYNE, LUNG-NSCLC, GI, GU, HEAD AND NECK, ANGIOSARCOMA - PACLITAXEL
PACL(W)	BREAST, LUNG, HEAD AND NECK, GU, ENDOCRINE, GYNE, GI, THYROID, ANGIOSARCOMA, MELANOMA - PACLITAXEL WEEKLY
PACL(W)+PERT+TRAS	BREAST - PACLITAXEL (WEEKLY), PERTUZUMAB, TRASTUZUMAB
PACL+PERT+TRAS	BREAST - PACLITAXEL, PERTUZUMAB, TRASTUZUMAB
PEMB	MELANOMA, LUNG, GI, GU, GYNE, HEMATOLOGY, HEAD AND NECK, BREAST - PEMBROLIZUMAB
PEMB(FIXED)	GU-UROTHELIAL, MELANOMA - PEMBROLIZUMAB (FIXED DOSE)
PEMB(MNT)	LUNG-NSCLC, HEAD AND NECK, GI-ESOPHAGEAL, GYNE-CERVICAL - PEMBROLIZUMAB (MAINTENANCE)
PERT+TRAS	BREAST - PERTUZUMAB, TRASTUZUMAB
PMDR	HEMATOLOGY-MYELOMA OR ADVANCED BREAST OR HYPERCALCEMIA OR OTHER DSG RELATED BONE METASTASIS - PAMIDRONATE
TRAS	BREAST, GI-GASTRIC, GYNE-ENDOMETRIAL - TRASTUZUMAB
TRAS(W)	BREAST - TRASTUZUMAB WEEKLY
TRIP	GENITOURINARY-PROSTATE, BREAST, GYNE - TRIPTORELIN
VAC	SARCOMA OR ENDOCRINE - VINCRISTINE, DOXORUBICIN, CYCLOPHOSPHAMIDE + OR - MESNA (SEE CAV FOR LUNG AND OTHER DISEASE SITES)
VACTC	SARCOMA-EWING'S, RHABDOMYOSARCOMA - VINCRISTINE, DACTINOMYCIN, CYCLOPHOSPHAMIDE
VINO+TRAS	BREAST - TRASTUZUMAB, VINORELBINE
XELOX+BEVA	GASTROINTESTINAL - COLORECTAL, CAPECITABINE, OXALIPLATIN, BEVACIZUMAB

New Drug Funding Program (NDFP) Drug Name

ATEZOLIZUMAB

AVELUMAB

BENDAMUSTINE

BEVACIZUMAB (BAMBEVI)

BORTEZOMIB

DARATUMUMAB IV

DARATUMUMAB SC

DENOSUMAB

DURVALUMAB

GEMCITABINE

GEMTUZUMAB OZOGAMICIN

IPILIMUMAB

LIPOSOMAL DOXORUBICIN

NIVOLUMAB

PAMIDRONATE

PEMETREXED

POLATUZUMAB VEDOTIN

RITUXIMAB IV (RITUXAN)

RITUXIMAB IV (TRUXIMA)

RITUXIMAB SC

ROMIDEPSIN

Appendix C

Systemic Treatment Wait Time between Diagnosis and First Systemic Treatment for Aggressive Non-Hodgkin's Lymphoma (NHL), Hodgkin's Lymphoma (HL) and Neoadjuvant Breast Cancer

Table C1. Regimens and/or drugs excluded from the definition of systemic treatment for aggressive NHL and HL patients

Regimen Code	Regimen Description
ABIRPRED	GENITOURINARY-PROSTATE - ABIRATERONE, PREDNISONE
ACAL	HEMATOLOGY-CLL, MANTLE CELL LYMPHOMA - ACALABRUTINIB
AC-PACL(DD)	BREAST, DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) + FILGRASTIM Q14D
AC-PACL(DD)+TRAS	BREAST - DOXORUBICIN, CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) + FILGRASTIM Q14D, TRASTUZUMAB
AC-PACL(W)	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) WEEKLY
AFAT	LUNG-NSCLC, GYNECOLOGICAL - AFATINIB
ALEC	LUNG-NSCLC - ALECTINIB
ALEM	HEMATOLOGY- ALEMTUZUMAB SC
ALEM(IV)	HEMATOLOGY - ALEMTUZUMAB IV
ATEZ	GU-UROTHELIAL, LUNG-NSCLC - ATEZOLIZUMAB
AZCT	HEMATOLOGY-MDS OR AML - AZACITIDINE
AZCT(MNT-PO)	HEMATOLOGY-AML - AZACITIDINE (PO) (MAINTENANCE)
AZCTVENE	HEMATOLOGY-AML - AZACITIDINE, VENETOCLAX
BEACOPP(ESC)	DO NOT USE
BEAM	HEMATOLOGY- LYMPHOMA, CARMUSTINE, ETOPOSIDE, CYTARABINE, MELPHALAN
BEND	HEMATOLOGY-CLL, NHL - BENDAMUSTINE
BEND+OBIN	HEMATOLOGY-FOLLICULAR LYMPHOMA - BENDAMUSTINE, OBINUTUZUMAB
BEND+RITU	HEMATOLOGY-CLL, NHL - BENDAMUSTINE, RITUXIMAB
BORT	HEMATOLOGY-MYELOMA, MANTLE CELL LYMPHOMA, AMYLOIDOSIS - BORTEZOMIB
BORTDEXADARA	HEMATOLOGY-MYELOMA - BORTEZOMIB, DEXAMETHASONE, DARATUMUMAB
BORTDEXALENA	HEMATOLOGY - MYELOMA, LENALIDOMIDE, BORTEZOMIB, DEXAMETHASONE
BREN	HEMATOLOGY- HODGKIN LYMPHOMA, SALCL, PCALCL, PTCL-NOS, AITL, MYCOSIS FUNGOIDES - BRENTUXIMAB VEDOTIN
CABAPRED	GENITOURINARY-PROSTATE - CABAZITAXEL, PREDNISONE
CAPE	BREAST OR GASTROINTESTINAL OR HEAD AND NECK - CAPECITABINE
CAPE(RT)	GASTROINTESTINAL, BREAST - CAPECITABINE (WITH RADIOTHERAPY)
CARFDEXALENA	HEMATOLOGY-MYELOMA - CARFILZOMIB, DEXAMETHASONE, LENALIDOMIDE
CEDADECI	HEMATOLOGY-MDS, CMML - CEDAZURIDINE, DECITABINE
CEMI	SKIN-SQUAMOUS OR BASAL CELL, GYNE-CERVICAL - CEMIPILIMAB
CEP	HEMATOLOGY - LYMPHOMA, LOMUSTINE-ETOPOSIDE-PREDNISONE(ALL PO)
CEPP	HEMATOLOGY - NON-HODGKIN'S LYMPHOMA, CYCLOPHOSPHAMIDE - ETOPOSIDE - PREDNISONE (+ or - PROCARBAZINE)
CETU(RT)	HEAD AND NECK - CETUXIMAB (WITH RADIOTHERAPY)

Regimen Code	Regimen Description
CHLO	HEMATOLOGY-CLL, NHL - CHLORAMBUCIL
CHLO+OBIN	HEMATOLOGY-CLL, FOLLICULAR LYMPHOMA - CHLORAMBUCIL, OBINUTUZUMAB
CHLO+RITU	HEMATOLOGY - NON-HODGKIN'S LYMPHOMA, CHLORAMBUCIL, RITUXIMAB
CHLVPP	HEMATOLOGY - HODGKIN'S LYMPHOMA, CHLORAMBUCIL-VINBLASTINE-PROCARBAZINE-PREDNISONE
CHOP+OBIN	HEMATOLOGY-FOLLICULAR LYMPHOMA - CYCLOPHOSPHAMIDE, DOXORUBICIN, VINCRISTINE, PREDNISONE, OBINUTUZUMAB
CHOP+R-DHAP+R	HEMATOLOGY-NON-HODGKIN'S LYMPHOMA - CYCLOPHOSPHAMIDE, DOXORUBICIN, VINCRISTINE, PREDNISONE, RITUXIMAB THEN DEXAMETHASONE, HIGH DOSE CYTARABINE, CISPLATIN, RITUXIMAB
CISPDOXO	SARCOMA OR GYNECOLOGICAL OR GASTROINTESTINAL OR PRIMARY UNKNOWN OR OTHERS - CISPLATIN, DOXORUBICIN
CISPETOP(RT)	LUNG, CISPLATIN(DAYS 1,8)-ETOPOSIDE(DAYS 1 TO 5) IV + CONCURRENT RADIOTHERAPY
CISPFU(RT)	GASTROINTESTINAL, HEAD AND NECK, GYNECOLOGICAL, LUNG - CISPLATIN, 5FU (CIV) WITH RADIOTHERAPY
CISPGEMC(W)	GI, BREAST, LUNG, GYNE, GU, OTHERS - CISPLATIN, GEMCITABINE (BOTH DRUGS GIVEN ON TREATMENT DAYS)
CISPPEME	LUNG-MESOTHELIOMA, NSCLC, GASTROINTESTINAL-PERITONEAL MESOTHELIOMA - PEMETREXED, CISPLATIN
CLAD+RITU	HEMATOLOGY - CLADRIBINE - RITUXIMAB
CNOP	HEMATOLOGY-LYMPHOMA - CYCLOPHOSPHAMIDE, MITOXANTRONE, VINCRISTINE, PREDNISONE
CNOP+RITU	HEMATOLOGY-LYMPHOMA - CYCLOPHOSPHAMIDE, MITOXANTRONE, VINCRISTINE, PREDNISONE, RITUXIMAB
CRBP	GYNECOLOGICAL, GENITOURINARY, GI, GERM CELL, BLADDER, PRIMARY UNKNOWN, CENTRAL NERVOUS SYSTEM, HEAD AND NECK, BREAST - CARBOPLATIN
CRBP(RT)	GU, GYNE, GI, HEAD AND NECK, OR SKIN - CARBOPLATIN PLUS RADIOTHERAPY
CRBPETOP	LUNG, CNS, GYNECOLOGICAL, NEUROENDOCRINE, GASTROINTESTINAL, HEAD AND NECK, SKIN, GENITOURINARY-TESTIS - ETOPOSIDE, CARBOPLATIN
CRBPETOP(PO)	LUNG, CNS, OTHERS - CARBOPLATIN, ETOPOSIDE (PO)
CRBPETOP+DURV	LUNG-SCLC - CARBOPLATIN, ETOPOSIDE, DURVALUMAB
CRBPGEMC	GU-BLADDER, LUNG, GYNECOLOGY, GASTROINTESTINAL, HEAD AND NECK, BREAST, UNKNOWN PRIMARY, OTHERS - GEMCITABINE, CARBOPLATIN
CRBPPACL(RT)	LUNG, GYNECOLOGICAL, GASTROINTESTINAL - PACLITAXEL, CARBOPLATIN (WITH RADIOTHERAPY)
CRBPPACL+NIVL+IPIL	LUNG-NSCLC - CARBOPLATIN, PACLITAXEL, NIVOLUMAB, IPILIMUMAB
CRBPPEME	LUNG, GI-MESOTHELIOMA - PEMETREXED, CARBOPLATIN
CRBPPEME+PEMB	LUNG-NSCLC - CARBOPLATIN, PEMETREXED, PEMBROLIZUMAB
CRBPVINO	LUNG-NSCLC, BREAST - CARBOPLATIN, VINORELBINE
CRMS	CENTRAL NERVOUS SYSTEM, CARMUSTINE (AKA BCNU)
CVP	HEMATOLOGY - CHRONIC LYMPHOCYTIC LEUKEMIA OR NON HODGKIN'S LYMPHOMA, CYCLOPHOSPHAMIDE IV- VINCRISTINE - PREDNISONE
CVP(PO)	HEMATOLOGY - CHRONIC LYMPHOCYTIC LEUKEMIA OR NON HODGKIN'S LYMPHOMA, CYCLOPHOSPHAMIDE PO- VINCRISTINE - PREDNISONE
CVP(PO)+R	HEMATOLOGY, LYMPHOMA - CYCLOPHOSPHAMIDE PO, VINCRISTINE, PREDNISONE, RITUXIMAB
CVP+R	HEMATOLOGY-NON HODGKIN'S LYMPHOMA, CYCLOPHOSPHAMIDE, VINCRISTINE, PREDNISONE, RITUXIMAB
CYBORD	HEMATOLOGY, MYELOMA - CYCLOPHOSPHAMIDE, BORTEZOMIB, DEXAMETHASONE
CYBORD+DARA(SC)	HEMATOLOGY-AMYLOIDOSIS, MULTIPLE MYELOMA - CYCLOPHOSPHAMIDE, BORTEZOMIB, DEXAMETHASONE, DARATUMUMAB (SUBCUT)
CYCL	HEMATOLOGY, PRIMARY UNKNOWN, GYNECOLOGICAL, CNS - CYCLOPHOSPHAMIDE IV (+ OR - MESNA)
CYCL(HD)MTRX	HEMATOLOGY - CYCLOPHOSPHAMIDE (HIGH DOSE), METHOTREXATE, MESNA
CYCL(PO)	HEMATOLOGY-LEUKEMIA, LYMPHOMA, OR BREAST, GENITOURINARY, GYNECOLOGICAL -

Regimen Code	Regimen Description
	CYCLOPHOSPHAMIDE PO
CYCL(PO)PRED	HEMATOLOGY -MYELOMA OR GENITOURINARY, CYCLOPHOSPHAMIDE PO - PREDNISONE
CYCLDOCE	BREAST, DOCETAXEL, CYCLOPHOSPHAMIDE
CYCLPRED	HEMATOLOGY -MYELOMA,CYCLOPHOSPHAMIDE IV - PREDNISONE
CYSPDEXAETOP(IND)	HEMATOLOGY-HLH - CYCLOSPORINE, DEXAMETHASONE, ETOPOSIDE (INDUCTION)
CYTA	HEMATOLOGY - CYTARABINE CIV OR IV
CYTA(HD)	HEMATOLOGY, CNS - CYTARABINE HIGH DOSE (CIV OR IV)
CYTA(IT)	HEMATOLOGY OR ANY CNS (MET) - CYTARABINE IT (INCLUDES CYTARABINE LIPOSOMAL), (+/- HYDROCORTISONE)
CYTADAUN	HEMATOLOGY - DAUNORUBICIN, CYTARABINE
CYTAMTRX	HEMATOLOGY - METHOTREXATE, CYTARABINE
CYTAMTRX(IT)	HEMATOLOGY - METHOTREXATE IT, CYTARABINE IT (+/- HYDROCORTISONE)
DABRTRAM	LUNG-NSCLC, MELANOMA, CNS - DABRAFENIB, TRAMETINIB
DANAFARBER(CNS)	HEMATOLOGY - ALL - VINCRIStINE, MERCAPTOPURINE, DOXORUBICIN, METHOTREXATE, CYTARABINE (+/- HYDROCORTISONE)
DANAFARBER(CONT)	HEMATOLOGY - ALL - VINCRIStINE, DEXAMETHASONE (OR PREDNISONE), MERCAPTOPURINE, METHOTREXATE, CYTARABINE
DARADEXALENA	HEMATOLOGY-MYELOMA - DARATUMUMAB, DEXAMETHASONE, LENALIDOMIDE
DARODOCE	GU-PROSTATE - DAROLUTAMIDE, DOCETAXEL
DASA	HEMATOLOGY - DASATINIB
DENO	BREAST, GENITOURINARY-PROSTATE, HEMATOLOGY-MYELOMA, LUNG, OTHER CANCERS - DENOSUMAB
DEXAETOP	HEMATOLOGY - ETOPOSIDE, DEXAMETHASONE
DEXALENA	HEMATOLOGY-MYELOMA - LENALIDOMIDE, DEXAMETHASONE (OR PREDNISONE)
DEXASELI	HEMATOLOGY-MYELOMA - DEXAMETHASONE, SELINEXOR
DHAP+RITU	HEMATOLOGY - HODGKIN'S LYMPHOMA OR NON-HODGKIN'S LYMPHOMA, DEXAMETHASONE - CYTARABINE (HIGH DOSE) - CISPLATIN (OR CARBOPLATIN) - RITUXIMAB
DOCE	BREAST, GASTROINTESTINAL, GENITOURINARY, LUNG, HEAD AND NECK, GYNE - DOCETAXEL Q21D
DOCEPRED	GENITOURINARY-PROSTATE, DOCETAXEL, PREDNISONE
DOXO	BREAST, GYNE, SARCOMA, PRIMARY UNKNOWN, GU, HEAD AND NECK, GI OR ENDOCRINE - DOXORUBICIN 50 TO 75MG/M2
DURV	LUNG, GU-UROTHELIAL - DURVALUMAB
ENFO	GU-UROTHELIAL - ENFORTUMAB VEDOTIN
EPO	OTHER - ERYTHROPOIETIN OR DARBOPOETIN
ESHAP	HEMATOLOGY -NON-HODGKIN'S AND HODGKIN'S LYMPHOMA, ETOPOSIDE - METHYLPREDNISOLONE - CYTARABINE (HD) - CISPLATIN
ETOP	GI, GU, SKIN, HEMATOLOGY, LUNG, OTHERS - ETOPOSIDE IV
ETOP(PO)	HEMATOLOGY, LUNG, GYNE-OVARY, CNS, BREAST, GU, SKIN, SARCOMA - ETOPOSIDE
ETOP(PO)PRED	HEMATOLOGY-LYMPHOMA - ETOPOSIDE (ORAL), PREDNISONE
ETOPIFOSMTRX	HEMATOLOGY - IFOSFAMIDE, MESNA, METHOTREXATE, ETOPOSIDE
ETOPMELP(HD)	HEMATOLOGY - ETOPOSIDE, MELPHALAN (HIGH DOSE)
EXEM	BREAST, GYNE-ENDOMETRIAL - EXEMESTANE
FC	HEMATOLOGY , FLUDARABINE – CYCLOPHOSPHAMIDE
FC(PO)	HEMATOLOGY - FLUDARABINE PO, CYCLOPHOSPHAMIDE PO
FC(PO)+R	HEMATOLOGY - FLUDARABINE PO, CYCLOPHOSPHAMIDE PO, RITUXIMAB
FC+R	HEMATOLOGY , FLUDARABINE - CYCLOPHOSPHAMIDE -RITUXIMAB (AKA FCR)
FILG	OTHER - FILGRASTIM, INCLUDES PEG FORMULATION
FLAG	HEMATOLOGY - LEUKEMIA, FLUDARABINE, CYTARABINE, FILGRASTIM
FLUD	HEMATOLOGY - FLUDARABINE
FLVSPALB	BREAST - FULVESTRANT, PALBOCICLIB
FLVSRIBO	BREAST - FULVESTRANT, RIBOCICLIB
FOLFIRI	GI -COLORECTAL, HEPATOBILIARY - IRINOTECAN, LEUCOVORIN, FLUOROURACIL BOLUS + CIV

Regimen Code	Regimen Description
	46H X 1
FOLFIRI+BEVA	GASTROINTESTINAL - COLORECTAL, IRINOTECAN, FLUOROURACIL CIV, LEUCOVORIN, BEVACIZUMAB
FOLFIRI+PNTM	GASTROINTESTINAL-COLORECTAL - IRINOTECAN, FLUOROURACIL, LEUCOVORIN, PANITUMUMAB
FOLFIRINOX	GASTROINTESTINAL, PANCREAS - IRINOTECAN, OXALIPLATIN, FLUOROURACIL (BOLUS AND CIV), LEUCOVORIN
FULCVR(RT-GAST)	GASTROINTESTINAL-GASTRIC - FLUOROURACIL BOLUS, LEUCOVORIN WITH RADIOTHERAPY
GCVP+RITU	HEMATOLOGY-DLBCL - GEMCITABINE, CYCLOPHOSPHAMIDE, VINCRISTINE, PREDNISONE, RITUXIMAB
GDCRBP	HEMATOLOGY - LYMPHOMA, GEMCITABINE - DEXAMETHASONE - CARBOPLATIN
GDCRBP+RITU	HEMATOLOGY-LYMPHOMA, GEMCITABINE - DEXAMETHASONE - CARBOPLATIN- RITUXIMAB
GDP	HEMATOLOGY- LYMPHOMA, GEMCITABINE - DEXAMETHASONE - CISPLATIN
GDP+OBIN	HEMATOLOGY - GEMCITABINE, DEXAMETHASONE, CISPLATIN, OBINUTUZUMAB
GDP+RITU	HEMATOLOGY- LYMPHOMA, GEMCITABINE - DEXAMETHASONE - CISPLATIN- RITUXIMAB
GEFI	LUNG-NSCLC, HEAD AND NECK - GEFITINIB
GEMC	GI-PANCREAS, LUNG-NSCLC, GU-BLADDER, GYNECOLOGICAL, BREAST, HEMATOLOGY, HEAD AND NECK, SARCOMA, UNKNOWN PRIMARY - GEMCITABINE
GEMCNPAC(W)	GASTROINTESTINAL, PANCREAS - NAB-PACLITAXEL (ABRAXANE) WEEKLY, GEMCITABINE
GEMCPGLDXVINO	HEMATOLOGY - GEMCITABINE, VINORELBINE, LIPOSOMAL DOXORUBICIN
HYDR	HEMATOLOGY - CHRONIC MYELOID LEUKEMIA OR CNS, HYDROXYUREA
HYPERCVAD	HEMATOLOGY- LYMPHOMA OR LEUKEMIA, CYCLOPHOSPHAMIDE DOXORUBICIN (OR DAUNORUBICIN OR AMSACRINE) - VINCRISTINE - DEXAMETHASONE - METHOTREXATE (IT)- CYTARABINE (IT) THEN METHOTREXATE (HD)+ LEUCOVORIN - CYTARABINE (HD)
IBRU	HEMATOLOGY-MANTLE CELL LYMPHOMA-DLBCL, CLL - IBRUTINIB
ICARBOE	LUNG-SMALL CELL, CNS, GENITOURINARY-WILMS, SARCOMA - IFOSFAMIDE, CARBOPLATIN, ETOPOSIDE, MESNA (SEE ICE FOR HEMATOLOGY)
ICE	HEMATOLOGY - IFOSFAMIDE, CARBOPLATIN, ETOPOSIDE, MESNA
IDEL	HEMATOLOGY-FOLLICULAR LYMPHOMA - IDELALISIB
IDEL+RITU	HEMATOLOGY-CLL - IDELALISIB, RITUXIMAB
IMAT	HEMATOLOGY-CML, ALL, MDS/MPD, CEL/HES, SARCOMA-GIST/DFSP, MELANOMA - IMATINIB
IVAC+RITU	HEMATOLOGY - CYTARABINE, ETOPOSIDE, IFOSFAMIDE, MESNA, METHOTREXATE (IT), RITUXIMAB
IVIG	OTHERS - IMMUNOGLOBULINS
LANREOTIDE	DO NOT USE
LENA	HEMATOLOGY - MDS, MULTIPLE MYELOMA, LENALIDOMIDE
LENA(MNT)	HEMATOLOGY-MYELOMA, DLBCL - LENALIDOMIDE (MAINTENANCE)
LENA+TAFA	HEMATOLOGY-NON HODGKIN LYMPHOMA - LENALIDOMIDE, TAFASITAMAB
LETRPALB	BREAST - LETROZOLE, PALBOCICLIB
LETRRIBO	BREAST - LETROZOLE, RIBOCICLIB
LOMU	CENTRAL NERVOUS SYSTEM OR MELANOMA, LOMUSTINE
LORL	LUNG-NSCLC - LORLATINIB
MELP(HD)	HEMATOLOGY - MELPHALAN (HIGH DOSE)
MELPDEXA	HEMATOLOGY - MELPHALAN, DEXAMETHASONE
MFOLFIRINOX	GASTROINTESTINAL-PANCREAS - IRINOTECAN, OXALIPLATIN, LEUCOVORIN, FLUOROURACIL CIV
MFOLFOX6	GI-COLORECTAL-HEPATOBIILIARY, GASTRIC, NET, GU-URACHAL, GYNE-OVARIAN - OXALIPLATIN, FLUOROURACIL BOLUS + CIV 46H X 1, LEUCOVORIN (ALL GIVEN DAY 1)
MFOLFOX6+BEVA	GASTROINTESTINAL - COLORECTAL, OXALIPLATIN, FLUOROURACIL BOLUS + CIV 46H X 1, LEUCOVORIN, BEVACIZUMAB (ALL GIVEN DAY 1)
MINIBEAM	HEMATOLOGY , CARMUSTINE-ETOPOSIDE-CYTARABINE-MELPHALAN
MTRX	GYNECOLOGICAL-GESTATIONAL TROPHOBLASTIC NEOPLASIA OR HEAD AND NECK -

Regimen Code	Regimen Description
	METHOTREXATE IV OR IM (LOW DOSE) + OR - LEUCOVORIN
MTRX(IT)	HEMATOLOGY OR CNS (MET) - METHOTREXATE IT
MTRX(PO)	HEMATOLOGY - METHOTREXATE PO
NCT01716806	P2 hem HL/PTCL bren +/- dac/ben/niv
NCT02273375	P3 NSCLC adjuv MEDI4736 or placebo
NCT02436707	P2 NHL R-GDP +/- ibrutinib
NCT02500407	P1 R/R NHL CLL IA +/- OBIN pre
NCT03075696	P1 hem RR NHL 2L obin+RO7082859 TCB
NCT03274492	P3 hem DLBCL 1L polat ved CD79b ADC
NCT03349450	P2 Hem RR DLBCL 2L+ Survivac Vac
NCT03598608	P1/2 heme pemb+MK4280 LAG3
NCT03682796	P1 hem RR BCL TRPH-222 ADC CD22
NCT03703297	P3 SCLC con durv+/-trem PDL1/CTLA4
NCT03836261	P3 Hem CLL 1L acal+venet+/-obin BTK
NCT03907488	P3 hem HL 1L AVD+nivo/bren PD1/CD30
NCT03924869	P3 NSCLC adj XRT+/- pembro
NCT04035434	P1/2 hem R/R NHL CTX-110 CAR-T
NCT04161248	P1 Hem R/R BCL R-GDP+vene BCL2
NCT04182204	P1 hem DLBCL R/R chemo+pola CD96b
NCT04404283	P3 hem DLBCL RR 3L+ Lena+R+/-brent
NCT04510636	P2 hem R/R HL pembro+benda
NCT04529772	P3 hem DLBCL CHOP-R+acal BTK inh
NCT04860466	P1 hem NHL R/R CC96673 CD47/20
NCT05139017	P2/3 hem rrDLBCL SOC+zil ROR1 ADC
NCT05144841	P2 hem AML RR 3L+ zilo ROR1 ADC
NCT05171647	P3 hem NHL RR mosu+pola CD20 BsAb
NCT05180097	P2 hem cHL RR GDP vs PEMB+Brent
NIVL	SKIN-MELANOMA, LUNG, GI, GU, HEMATOLOGY, HEAD AND NECK - NIVOLUMAB
NIVL(MNT)	SKIN-MELANOMA, GU-RENAL CELL - NIVOLUMAB (MAINTENANCE)
NIVL+IPIL	SKIN-MELANOMA, GU-RENAL CELL, GI-COLORECTAL, MESOTHELIOMA - NIVOLUMAB, IPILIMUMAB
NIVL+IPIL(MNT)	LUNG-NSCLC - NIVOLUMAB, IPILIMUMAB (MAINTENANCE)
NOT AVAILABLE	NO CORRESPONDING CCO FORMULARY REGIMEN
OBIN(MNT)	HEMATOLOGY-FOLLICULAR LYMPHOMA - OBINUTUZUMAB (MAINTENANCE)
PACL	KAPOSI'S SARCOMA, BREAST, GYNE, LUNG-NSCLC, GI, GU, HEAD AND NECK, ANGIOSARCOMA - PACLITAXEL
PEMB	MELANOMA, LUNG, GI, GU, GYNE, HEMATOLOGY, HEAD AND NECK, BREAST - PEMBROLIZUMAB
PEMB(FIXED)	GU-UROTHELIAL, MELANOMA - PEMBROLIZUMAB (FIXED DOSE)
PLER	HEMATOLOGY - PLERIXAFOR
PMDR	HEMATOLOGY-MYELOMA OR ADVANCED BREAST OR HYPERCALCEMIA OR OTHER DSG RELATED BONE METASTASIS - PAMIDRONATE
PMDR(HYPER CA)	HYPERCALCEMIA - PAMIDRONATE
PRAL	HEMATOLOGY - PRALATREXATE
PRED	HEMATOLOGY OR OTHERS - PREDNISONE
PRED(HD)	HEMATOLOGY-CLL - PREDNISONE (HIGH DOSE)
PREDVNB(IND)	HEMATOLOGY - PREDNISONE, VINBLASTINE (INDUCTION)
PROC	CENTRAL NERVOUS SYSTEM, PROCARBAZINE
RITU	HEMATOLOGY - RITUXIMAB
RITU(MNT)	HEMATOLOGY-LYMPHOMA - RITUXIMAB MAINTENANCE
RITU(MNT-SC)	HEMATOLOGY-LYMPHOMA - RITUXIMAB MAINTENANCE (SUBCUTANEOUS)
ROMI	HEMATOLOGY-CTCL - ROMIDEPSIN

Regimen Code	Regimen Description
RUXO	HEMATOLOGY-MYELOFIBROSIS - RUXOLITINIB
SMILE	HEMATOLOGY - NASAL ENKTL - DEXAMETHASONE, METHOTREXATE, LEUCOVORIN, IFOSFAMIDE, MESNA, ASPARAGINASE, ETOPOSIDE
SUPPORTIVE	ANTIEMETICS, ANXIOLYTICS, LAXATIVES, STEROIDS, ANTIHISTAMINES, LMWH, ANALGESICS, DIURETICS, NSAIDS, IRRITANTS, OTHER BISPHOSPHONATES, RESCUE/ANTIDOTE, CHEMOPROTECTANT, CHELATORS, GROWTH FACTORS, SUPPLEMENTS, ANTIBIOTICS, VACCINES, IMMUNOSUPPRESSANTS, PROPHYLAXIS, R XN MGT, ETC
TAF(MNT)	HEMATOLOGY-NON HODGKIN LYMPHOMA - TAFASITAMAB (MAINTENANCE)
TMZL	CENTRAL NERVOUS SYSTEM OR MELANOMA OR NEUROENDOCRINE, TEMOZOLOMIDE WITH OR WITHOUT CONCURRENT RADIOTHERAPY
TMZL(RT)-TMZL	CENTRAL NERVOUS SYSTEM - TEMOZOLOMIDE (WITH RADIOTHERAPY) FOLLOWED BY ADJUVANT TEMOZOLOMIDE
VAC	SARCOMA OR ENDOCRINE - VINCISTINE, DOXORUBICIN, CYCLOPHOSPHAMIDE + OR - MESNA (SEE CAV FOR LUNG AND OTHER DISEASE SITES)
VEVE	HEMATOLOGY-CLL - VENETOCLAX
VEVE(MNT)	HEMATOLOGY-CLL - VENETOCLAX (MAINTENANCE)
VEVE+RITU	HEMATOLOGY-CLL - VENETOCLAX, RITUXIMAB
VNBL	CNS, KAPOSI'S SARCOMA, GYNE, HEMATOLOGY, ENDOCRINE - VINBLASTINE
VNCR	HEMATOLOGY OR CNS - VINCISTINE + OR - PREDNISONE OR DEXAMETHASONE
VRNS	HEMATOLOGY - VORINOSTAT
XELOX	GI-COLORECTAL, GASTRIC OR UNKNOWN PRIMARY - CAPECITABINE, OXALIPLATIN
XELOX+NIVL	GI-GASTROESOPHAGEAL - CAPECITABINE, OXALIPLATIN, NIVOLUMAB
ZANU	HEMATOLOGY-WALDENSTROM, MANTLE CELL LYMPHOMA - ZANUBRUTINIB
ZOLE	GENITOURINARY-PROSTATE OR BREAST OR RENAL CELL OR OTHER DSG RELATED BONE METASTASES OR HYPERCALCEMIA - ZOLEDRONIC ACID
ZOLE(HYPER CA)	HYPERCALCEMIA - ZOLEDRONIC ACID
U	Unknown

Table C2. Systemic regimens included in the definition of systemic treatment in ALR for neoadjuvant breast cancer patients

Regimen Code	Regimen Description
AC	BREAST OR SARCOMA, DOXORUBICIN-CYCLOPHOSPHAMIDE
AC(DD)	BREAST - DOXORUBICIN, CYCLOPHOSPHAMIDE (DOSE DENSE)
AC(DD)+PEMB	BREAST - DOXORUBICIN, CYCLOPHOSPHAMIDE (DOSE DENSE), PEMBROLIZUMAB
AC+PEMB	BREAST - DOXORUBICIN, CYCLOPHOSPHAMIDE, PEMBROLIZUMAB
AC-CRBPPACL	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL, CARBOPLATIN
AC-DOCE	BREAST, DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN TAXOTERE (DOCETAXEL) Q21D
AC-DOCE+TRAS	BREAST, DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN TAXOTERE (DOCETAXEL) Q21D- TRASTUZUMAB
AC-PACL	BREAST, DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) Q21D
AC-PACL(DD)	BREAST, DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) + FILGRASTIM Q14D

Regimen Code	Regimen Description
AC-PACL(DD)+PERT+TRAS	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) + FILGRASTIM Q14D, PERTUZUMAB, TRASTUZUMAB
AC-PACL(DD)+TRAS	BREAST - DOXORUBICIN, CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) + FILGRASTIM Q14D, TRASTUZUMAB
AC-PACL(W)	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) WEEKLY
AC-PACL(W)+PERT+TRAS	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) WEEKLY, PERTUZUMAB, TRASTUZUMAB
AC-PACL(W)+TRAS	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL) WEEKLY, TRASTUZUMAB
AC-PACL+TRAS	BREAST - DOXORUBICIN-CYCLOPHOSPHAMIDE (AC) THEN PACLITAXEL (TAXOL), TRASTUZUMAB - Q21D
CRBPDOCE+PEMB	BREAST - CARBOPLATIN, DOCETAXEL, PEMBROLIZUMAB
CRBPDOCE+PERT+TRAS	BREAST - CARBOPLATIN, DOCETAXEL, PERTUZUMAB, TRASTUZUMAB
CRBPDOCE+TRAS	BREAST - TRASTUZUMAB, DOCETAXEL, CARBOPLATIN
CRBPPACL(W)	LUNG - NSCLC OR GYNECOLOGICAL OR PRIMARY UNKNOWN OR MELANOMA OR BREAST OR HEAD AND NECK OR GASTROINTESTINAL - PACLITAXEL, CARBOPLATIN (WEEKLY)
CRBPPACL(W)+PEMB	BREAST - PACLITAXEL, CARBOPLATIN (WEEKLY), PEMBROLIZUMAB
CYCLDOCE	BREAST, DOCETAXEL, CYCLOPHOSPHAMIDE
CYCLDOCE+PEMB	BREAST - DOCETAXEL, CYCLOPHOSPHAMIDE, PEMBROLIZUMAB
CYCLDOCE+TRAS	BREAST, DOCETAXEL, CYCLOPHOSPHAMIDE, TRASTUZUMAB
FEC+PEMB	BREAST - FLUOROURACIL, EPIRUBICIN, CYCLOPHOSPHAMIDE, PEMBROLIZUMAB
FEC100	BREAST, FLUOROURACIL-EPIRUBICIN 75MG TO 100MG/M2-CYCLOPHOSPHAMIDE IV
FEC-D	BREAST, FLUOROURACIL-EPIRUBICIN 100MG/M2-CYCLOPHOSPHAMIDE IV THEN DOCETAXEL
FEC-D+TRAS	BREAST, FLUOROURACIL-EPIRUBICIN 100MG/M2-CYCLOPHOSPHAMIDE IV THEN DOCETAXEL, TRASTUZUMAB
NCT03036488	P3 TNBC (neo)adj PEMB+SOC chemo
NCT03493854	P3 BR neo 1L chemo+tras+pert IV/SC
NCT05415215	P3 adj br chemo-pert/tras IV vs SC
PACL(W)+PEMB	BREAST - PACLITAXEL (WEEKLY), PEMBROLIZUMAB
PACL(W)+PERT+TRAS	BREAST - PACLITAXEL (WEEKLY), PERTUZUMAB, TRASTUZUMAB
PACL(W)+TRAS	BREAST- TRASTUZUMAB,PACLITAXEL WEEKLY

Table C3. Drugs used to define systemic treatment in the NDFP (eClaims) database for neoadjuvant breast cancer patients

Drug Name
Trastuzumab*
Pembrolizumab
Paclitaxel

*NOTE: All trastuzumab products (including biosimilars) from NDFP are included for neoadjuvant breast cancer patients.