National Histopathology Quality Improvement Programme

7th National Data Report

1 JAN - 31 DEC 2019

FACULTY OF PATHOLOGY
ROYAL COLLEGE OF PHYSICIANS OF IRELAND

Building a Better Health Service | Seirbhís Sláinte Níos Fearr á Forbairt
National Quality Improvement Team

ROYAL COLLEGE OF PHYSICIANS OF IRELAND

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FOREWORD

The National Histopathology Quality Improvement Programme was launched in January 2009 as a matter of priority following high-profile cancer misdiagnosis cases in Ireland. The purpose of the programme is to document and improve the accuracy, consistency and quality of service with the aim of improving patient safety and enhancing patient care. In 2019 the National Histopathology Quality Improvement Programme celebrated its 10-year anniversary which was acknowledged at the Faculty of Pathology's International Pathology Day.

This is the seventh annual national data report and is composed of pseudonymised and anonymised national data collected from the National Quality Assurance and Improvement System (NQAIS), from 1 January to 31 December 2019. In 2019, 29 laboratories participated in the programme and contributed to the national dataset. This report includes analysis on the first three rounds of targets and recommendations released by the programme. Targets and recommendations have been set over the lifetime of the programme, guided by the data collected. Targets have been set where the data clearly shows an achievable goal which will contribute to quality improvement. Recommendations have been set where there is a quality improvement rationale for a goal, but it is less clear whether this is applicable to all sites or is achievable.

Data is provided on a range of key quality indicators outlining the quality of histopathology practice in Ireland and enabling individual laboratories to compare their performance against the national average. Thanks to the programme, we can report on national metrics in histopathology, making Ireland the first country in the world to do so.

The data illustrates continuous quality improvement taking place in many laboratories but there remain several areas where improvements are still required. Where the data suggests that there may be areas for improvement, the findings should be confirmed locally using local hospital data. It should be noted that the conclusions drawn, and recommendations made in this report are based on the data recorded within participating hospitals and uploaded to NQAIS. Whilst the data is mature and the programme is confident in the report finding, gaps in data collection at a hospital level may be due to a wide variety of factors and therefore local confirmation remains essential.

It is imperative that all participating hospitals continue to integrate the output of this programme into their day to day quality assurance/improvement functions. In addition, we would encourage each laboratory to consider how they can harness the findings in these reports to address any necessary improvements and to celebrate improved performance. We hope that this data may also be useful in highlighting gaps in resourcing in individual laboratories. It is clear from this data that workload is increasing in histopathology laboratories across the country and laboratories cannot continue to provide a high-quality service, without adequate resourcing.

The Working Group of the National Histopathology Quality Improvement Programme would like to take this opportunity to acknowledge and commend the Clinical Leads and Local Operational Managers within each hospital for leading the work of data collection, collation and quality improvement initiatives in their hospitals.

We also wish to thank the HSE National Quality Improvement Team who provide funding for this programme, our approving bodies the Specialty QI Programme Steering Committee and the Faculty of Pathology Board and the Programme Management Team, RCPI for their continuous support

Dr Sine Phelan,
Chair of the National Histopathology Quality Improvement Programme Working Group

HISTOPATHOLOGY QI PROGRAMME ENDORSEMENTS

"Continual evaluation and review of Quality parameters is key to providing an evidence base to the quality of the Irish Histopathology Laboratory service. The Faculty of Pathology welcome this 7th report and are committed to working with and supporting all who engage in this programme for the benefits of patients of the Irish healthcare system."

Professor Louise Burke
Dean of the Faculty of Pathology

"It is a constructive, national, standardised response to concerns raised by events in the past which shows that we do learn from things that have gone wrong."

Dr Philip Crowley
National Director of the HSE Quality Improvement Team

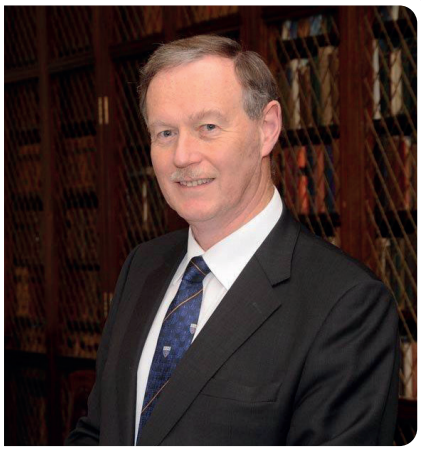
"With its annual nationwide quality evaluation system, the Irish Histopathology National Quality Improvement Programme really embodies Peter Drucker's statement 'What Gets Measured Gets Improved'. I am confident that this programme will continue to improve quality and patient safety in Ireland. Really impressive!"

Professor Omar Hameed
Regional Medical Director, Hospital Corporation of America; Adjunct Professor of Pathology, Vanderbilt University Medical Center

HISTOPATHOLOGY QI PROGRAMME ENDORSEMENTS

"With this seventh National report, I commend my histopathology colleagues and Fellows of the Faculty for this objective data driven validation of their work. Our patients and our health system can take comfort in our diagnostic accuracy of more than 99.5% now confirmed over several years. We can be proud that the Irish histopathology quality improvement programme continues to be a world leader in providing this level of re-assurance to our patients."

Professor Conor O'Keane
Director of Quality and Clinical Care, Royal College of Physicians of Ireland



"I congratulate the Faculty of Pathology who have objectively measured and benchmarked their programme as detailed in this comprehensive report - a huge amount of work and key enabler of a quality assured national cancer programme."

Professor Michael Kerin
Professor of Surgery in National University of Ireland Galway and Clinical Director of the Saolta Cancer Managed Clinical Academic Network

"Histopathologists cannot always be expected to produce infallible interpretations or reports. There is always the risk of diagnostic errors. The QI programme aims to minimise such errors by focusing on the quality of histopathology practice and by continuously measuring performance. It is critical for patient safety to have such an effective quality assurance programme in place."

Dr Gerard O'Callaghan,
Interim Chief Executive Officer Cork University Hospital

HISTOPATHOLOGY QI PROGRAMME ENDORSEMENTS

"The Histopathology QI programme is a highly practical way of ensuring that we have robust high quality data on a range of key quality indicators readily available, to act as a way of giving our hospital credibility and as a management tool by enabling us to compare ourselves against the national average Histopathology practice in Ireland. Thanks to NQAIS we can now easily assess and plan our workload to improve the quality of patient care."

Fionnuala McAree
Medical Scientist/Quality Co Ordinator- Histology
Our Lady of Lourdes Hospital, Drogheda

A MESSAGE FROM A PATIENT ADVOCATE

"The NHQI Programme plays a key role in ensuring public and patient confidence in diagnostic reporting, and as a patient representative group we are impressed by the consistent drive for improvement in the service. At the heart of the programme's work is patient safety and care.

This report is a very useful tool for patient groups as evidence to advocate for continued improvements not only at a systemic level - to support calls for greater resourcing to match increased workloads, for example - but to act as guidance to ensure individual patients' safety is paramount, and to ensure transparency in reporting on targets and the delivery of the programme."

Paul Gordon
Patient Advocate (Irish Cancer Society)
Member of the Steering Committee,
National Quality Improvement Programmes

KEY RECOMMENDATIONS

1. The findings of this report should be used to initiate improvements. The recommended approach is to employ suitable QI methodologies locally within the team such as the Plan Do Study Act (PDSA) cycle in conjunction with the 5 WHYs or value stream mapping to investigate the root cause of any issues before implementing a structured approach to the change required.

   Data show some variation, primarily reflecting variation in clinical practice. The measurement (and standardisation where appropriate) of this variation is a unique opportunity for the programme. The Working Group recommends that each department put systems in place to ensure consistent coding. In many departments this will involve clerical staff, Medical Scientists, NCHDs and Consultants.

2. To ensure that targets can be achieved, laboratory resourcing should keep pace with increasing workload.

3. Given the varying complexity within histology case types, individual laboratories are encouraged to analyse each procedure category to ensure that more complex cases (likely within P01 and P03 categories) exceed the minimal target. A review of targets will be performed in 2020.

4. Some laboratories use Q018 to indicate MDT Review Agreement, however the Working Group recommend the use of Q017 to assist in maintaining a standardised coding practice. The use of the Q019 code (MDT Review Disagreement) may necessitate the issuing of an Amended Report (Q021), the Working Group recommends regular local audits are carried out to verify these reports are issued.

5. The Working Group recommends a revision of all KQI definitions, with focus on Amended/Corrected and Supplementary reports to ensure accurate application of codes are achieved in laboratories.

6. Turnaround times (TAT) are an essential measure of the quality of histopathology service delivery and can be impacted by unexpected increases in activity and by a mismatch between resourcing and activity. The NHQI data may be a useful tool in highlighting activity and resource mismatches. The Working Group recommends that each department monitor TATs and investigate the root causes of challenges faced in achieving TAT targets. A review of TAT targets will be performed in 2020.

7. The combined national average for percentage Frozen Sections (FS) complete within 20 minutes was below the target of ≥85% in both 2018 and 2019. The Working Group recommends that participating hospitals identify their own FS data in this report to address any improvements required.

KEY FINDINGS

CHAPTER 4: WORKLOAD

1. Laboratory workload continues to increase year-on-year nationwide, with a 14.5% increase in cases between 2014 and 2019.
2. The complexity of workload continues to increase.

CHAPTER 5: INTRADEPARTMENTAL CONSULTATION

1. All minimum targets (histology, cytology, autopsy) were met in 2019 with achievable targets exceeded in Histology and FNA Non-Gynaecological Cytology.
2. Individual centres that were below minimum targets typically had low case volumes.

CHAPTER 6: MULTI-DISCIPLINARY TEAM REVIEW

1. All General Centres and Cancer Centres have been consistently above the target of greater than or equal to 95% MDT Agreement in both 2018 and 2019 for all histology (P01, P02, P03 and P04) and cytology (P06, P07) cases.

CHAPTER 7: ADDENDUM REPORTS

1. For Cytology Amended/Corrected Reports, Cancer Centres and General Centres combined were below the maximum target of 1% or less for all 12 months of 2019 with a national average of 0.3%.

CHAPTER 8: TURNAROUND TIME

1. Improvements can be seen in the percentage of small biopsy (P01) cases completed by day 5, however the target is not currently being met by either General Centres or Cancer Centres.
2. General Centres are making progress in the completion of GI Endoscopic (P02) cases by day 5, with an increase of 3% from last year, bringing it to 82.3%, whereas Cancer Centres have seen a decrease and are still below target.
3. Both General Centres and Cancer Centres have seen improvements in completing Non-Biopsy Cancer Resection (P03) cases, with General Centres exceeding the target this year. Cancer Centres also saw an increase but have not reached the target in the last two years.
4. General Centres saw a slight decrease in the percentage of Non-Biopsy Other (P04) cases complete but remain above target. Cancer Centres saw a slight improvement but are below target.
5. Both General Centres and Cancer Centres achieved well above the target for Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) cases.

CHAPTER 9: FROZEN SECTION

1. The national aggregate data reveal that all sites have reached and exceeded the target of 97% for Frozen Section Concordance Rate in 2018 and 2019.
2. Frozen Section Concordance and Deferral Rates have been within target ranges over the past two years of national data compilation. The achievement of Frozen Section Turnaround Time targets remains challenging, however.
3. The combined national average for General Centres and Cancer Centres percentage of Frozen Section cases complete on target (TAT) was 76.1% in 2019, 8.9% below target, and a drop of 4.0% compared to 2018. The national average for General Centres exceeded the target in 2019 at 86.3%, increased from 2018. Cancer Centres did not meet the target in 2018 or 2019 and experienced a drop of 6% of cases complete on target in 2019.

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INTRODUCTION TO THE PROGRAMME

CHAPTER 1:
INTRODUCTION TO THE PROGRAMME

ABOUT THE NATIONAL HISTOPATHOLOGY QUALITY IMPROVEMENT PROGRAMME

The National Histopathology Quality Improvement (NHQI) Programme was launched by the Faculty of Pathology in January 2009 in collaboration with the National Cancer Control Programme (NCCP) and Directorate of Quality and Clinical Care in the Royal College of Physicians of Ireland (RCPI). Funding was initially provided by the NCCP and was taken over by the HSE National Quality Improvement Team in 2014. RCPI continues the management of the programme.

The central goal of the NHQI Programme is to give the public greater confidence in histopathology services in Ireland, to enhance patient safety and improve patient centred care with timely, accurate and complete pathology diagnoses and reports. This is achieved in a manner that is both supportive and encouraging to the participating histopathology laboratories.

The programme aims to:

- improve patient care by minimising diagnostic errors in histopathology
- increase public confidence in diagnostic reporting by providing evidence-based assurance on the quality of this diagnostic service
- continue to develop a standardised national quality improvement system for histopathology
- enable individual laboratories to review their performance against national targets
- identify and share good practice between participating laboratories
- recognise and encourage opportunities for quality improvement locally
- improve communication between participating institutions
- actively promote a culture of quality improvement by engaging key hospital stakeholders

The programme helps to identify opportunities for improved efficiency of services and has the potential to reduce unnecessary testing and errors. Data uploaded to the National Quality Assurance and Improvement System (NQAIS) are continually reviewed by each lab at their regular QI meetings facilitating the identification of areas for improvement in real-time.

The Programme aims to give patients greater confidence in Histopathology diagnoses in Ireland by providing a national QI framework for all laboratories ensuring improved patient care and safety with timely, accurate and complete diagnoses and reports

The Faculty of Pathology has set evidence-based targets so that histopathology laboratories can monitor and track their performance in a number of key areas, for example how quickly test results are processed and reported on.

Laboratories and hospital management can now observe how they are performing in comparison to the national average and identify if there are areas that require quality improvement or other areas in which they are excelling.

Laboratories that are consistently meeting and above targets are encouraged to share their approach with other laboratories, which can result in improved standards overall.

HOSPITALS WE WORK WITH

In 2019, 29 public and private hospital laboratories participated in the National Histopathology QI Programme and contributed their data to the programme's dataset. Overleaf is a map and list of these hospitals.

PURPOSE OF THIS REPORT

This report enables informed decision making on the future steps necessary to support the ongoing quality improvement process within Irish histopathology services. The NHQI Working Group encourages participating hospitals to identify their laboratory within the report and discuss local performance against the targets, recommendations and national averages with colleagues in the laboratory, local hospital management and Quality and Patient Safety teams. Where findings suggest that there may be an area in need of improvement, these should be discussed locally using local hospital data extracted from NQAIS.

WHO IS THIS REPORT AIMED AT?

The information from this report should be used by:

Histopathologists
Medical Laboratory Scientists
Healthcare Professionals
Local Hospital Management
Group Hospital Management
Patient Organisations

WHAT THIS REPORT CANNOT DO

This report cannot and should not be used to produce league tables or to compare hospitals to one another. Comparison to other hospitals is not possible as no two hospitals will have the same patient profile. Different hospitals will specialise in treating patients with different and sometimes more complex care needs, making comparisons between hospitals ineffective.

OUTLIER MANAGEMENT

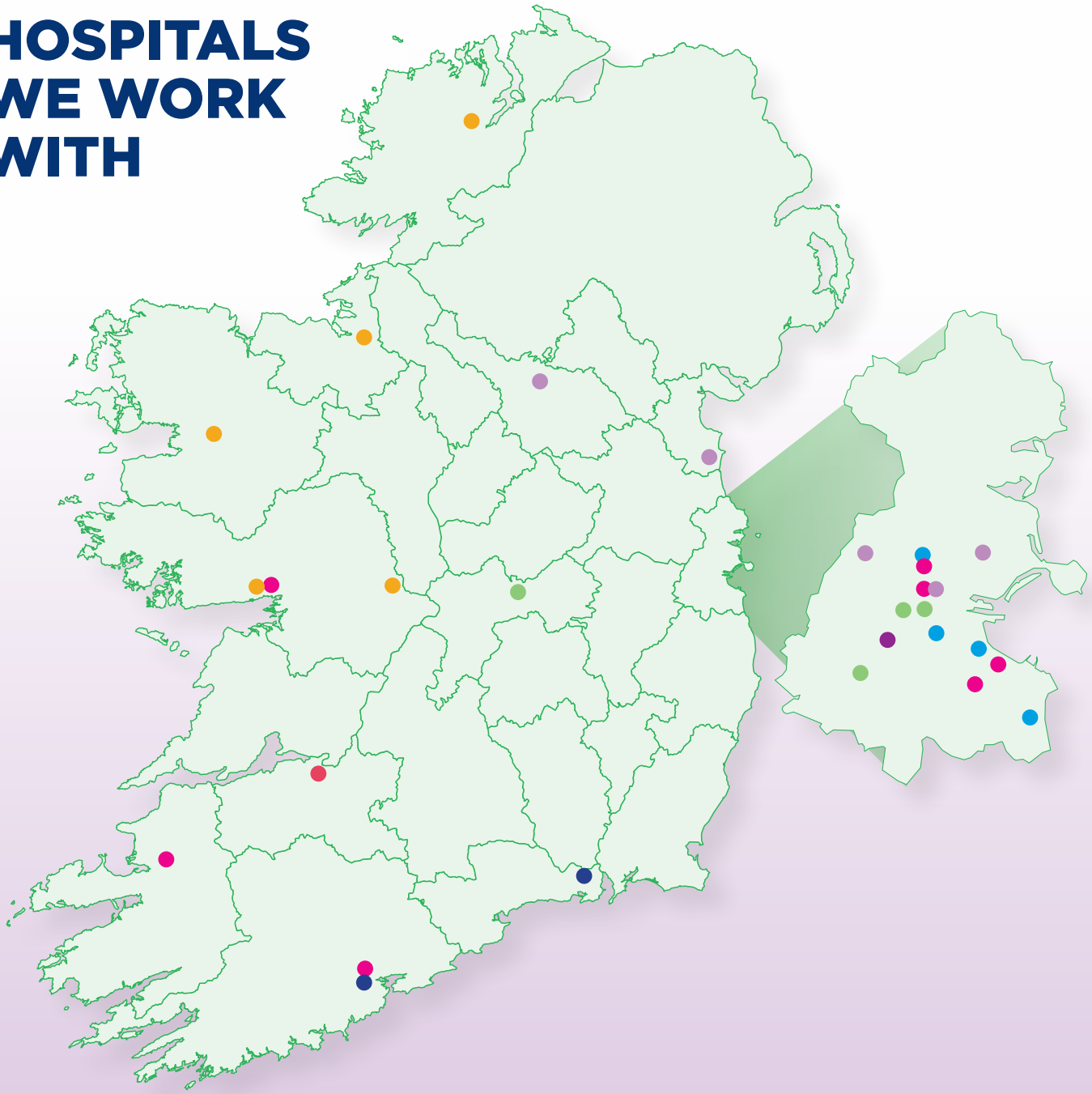
The participating hospitals are responsible for the management of outliers and resolving issues at local level. The NHQI Programme does not engage with individual sites who may be identified as outliers in this report. Locally, participants are requested to report and manage the QI data within their laboratory and to ensure the necessary actions to improve quality are initiated and / or referred to the appropriate person.

The programme further requests that participating hospitals ensure QI data reports once generated and approved by the laboratory, are reviewed by the Quality and Patient Safety Committee or appropriate local structure, linking with relevant hospital governance and programme structures as set out in the programme guidelines and taking action as required.

P AND Q CODES EXPLAINED

Throughout the report we refer to both P codes and Q codes, below are the definitions to assist you in interpreting the findings:
P Code: Procedure codes are a sub-type of classification used to identify specific cases within Histology and Cytology, for example P02 always refers to Small Biopsy.
Q Code: Quality codes are comprised of the elements associated with appropriate categorisation and actions for quality activities, for example Q017 is a case that is subject to MDT/M&M review.

HOSPITALS WE WORK WITH



- DUBLIN MIDLANDS HOSPITAL GROUP
- IRELAND EAST HOSPITAL GROUP
- CHILDREN'S HEALTH IRELAND
- UNIVERSITY OF LIMERICK HOSPITAL GROUP
- RCSI HOSPITAL GROUP
- PRIVATE HOSPITALS ASSOCIATION
- SAOLTA HOSPITAL GROUP
- SOUTH/SOUTH WEST HOSPITAL GROUP

DUBLIN MIDLANDS HOSPITAL GROUP

Midland Regional Hospital Tullamore
Arden Rd, Puttaghan, Tullamore,
Co. Offaly, R35 NY51

Tallaght University Hospital
Cookstown, Tallaght, Co. Dublin, D24 NR04

Coombe Women & Infants University Hospital
8 Cork St, Merchants Quay, Dublin, D08 XW7X

St. James's Hospital
James's Street, Ushers, Dublin 8, D08 NHY1

IRELAND EAST HOSPITAL GROUP

National Maternity Hospital
Holles St, Grand Canal Dock, Dublin, D02 YH21

Mater Misericordiae University Hospital
Eccles St, Inns Quay, Dublin 7, D07 R2WY

St. Colmcille's Hospital*
Loughlinstown, Co. Dublin, D18 E365

St. Vincent's University Hospital***
196 Merrion Rd, Dublin 4, D04 Y8V0

CHILDREN'S HEALTH IRELAND OUR LADY'S CHILDREN'S HOSPITAL/ TEMPLE STREET

Our Lady's Children's Hospital**
Our Lady's Children's Hospital, Crumlin, D12 N512

UNIVERSITY OF LIMERICK HOSPITAL GROUP

University Hospital Limerick
St Nessan's Rd, Dooradoyle,
Co. Limerick, V94 F858

RCSI HOSPITAL GROUP

Beaumont Hospital
Beaumont Rd, Beaumont, Dublin 9, D09V2N0

Rotunda Hospital
Parnell Square E, Rotunda, Dublin 1, D01 P5W9

Our Lady of Lourdes Hospital, Drogheda
Windmill Rd, Drogheda, Co. Louth, A92 VW28

Connolly Hospital Blanchardstown
Mill Rd, Abbotstown, Dublin 15, D15 X40D

Cavan/Monaghan General Hospital
Lisdaran, Cavan, H12 N889

PRIVATE HOSPITALS ASSOCIATION

Blackrock Clinic
Rock Rd, Intake, Blackrock,
Co. Dublin, A94 E4X7

Bon Secours Hospital Cork
College Rd, University College, Cork, T12 DV56

Bon Secours Hospital Dublin
9 Glasnevin Hill, Dublin 9, D09 YN97

Bon Secours Hospital Tralee****
Strand St, Tralee, Co. Kerry, V92 P663

Galway Clinic
Doughiska, Galway, H91 HHT0

Mater Private–Dublin
Eccles St, Dublin 7, D07 WKW8

Beacon Hospital
Beacon Court, Bracken Road,
Sandyford Industrial Estate, Dublin 18, D18 AK68

SAOLTA HOSPITAL GROUP

Sligo General Hospital
The Mall, Rathquarter, Sligo, F91 H684

Mayo General Hospital
Westport Rd, Curragh, Castlebar,
Co. Mayo, F23 H529

Letterkenny General Hospital
Kilmacrennan Road, Ballyboe Glencar,
Letterkenny, Co. Donegal, F92 AE81

Portiuncula Hospital
Dunlo, Ballinasloe, Co. Galway, H53 T971

Galway University Hospitals
Newcastle Rd, Galway, H91 YR71

SOUTH/SOUTH WEST HOSPITAL GROUP

Cork University Hospital****
Wilton, Cork, T12 DC4A

Waterford Regional Hospital
Dunmore Road, Waterford, X91 ER8E

* *St. Columcille's Hospital Histopathology has been moved to St. Vincent's University Hospital; however, they are still reporting on autopsy cases.*
** *Children's University Hospital, Temple Streets data has been captured in Our Lady's Children's Hospital, Crumlin's data for 2019.*
*** *St Vincent's Private Laboratory participates in the programme and its data is included in SVUH uploads.*
**** *UHK: 26% of the labs workload was not captured in this report due to the process of the re-organisation and transfer of workload to Bon Secours Hospital Tralee and Cork University Hospital. This workload represents less than 0.5% of the overall 490K cases which are the subject of this report. 22% was captured in the Bon Secours Tralee and 52% in CUH labs. The lab in UHK closed in February 2020.*

2

REPORT HIGHLIGHTS

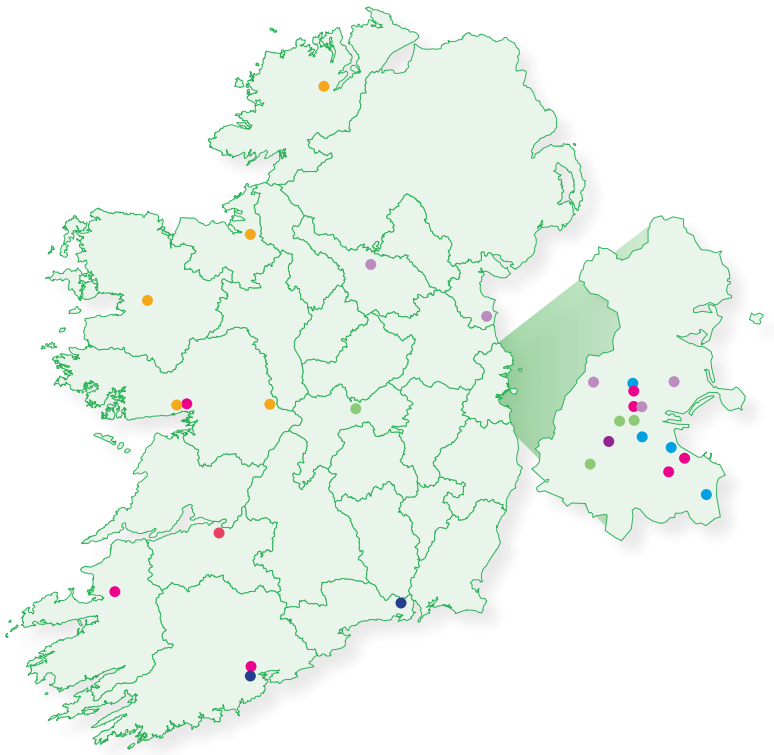
CHAPTER 2

REPORT HIGHLIGHTS

FIRST
COUNTRY IN THE WORLD
to report on national metrics in histopathology

7th National Data Report

29 Participating Laboratories



483,593
CASES

↓

837,855
SPECIMENS

↓

1,371,098
BLOCKS

↓

PROCESSED IN 2019

14.5%

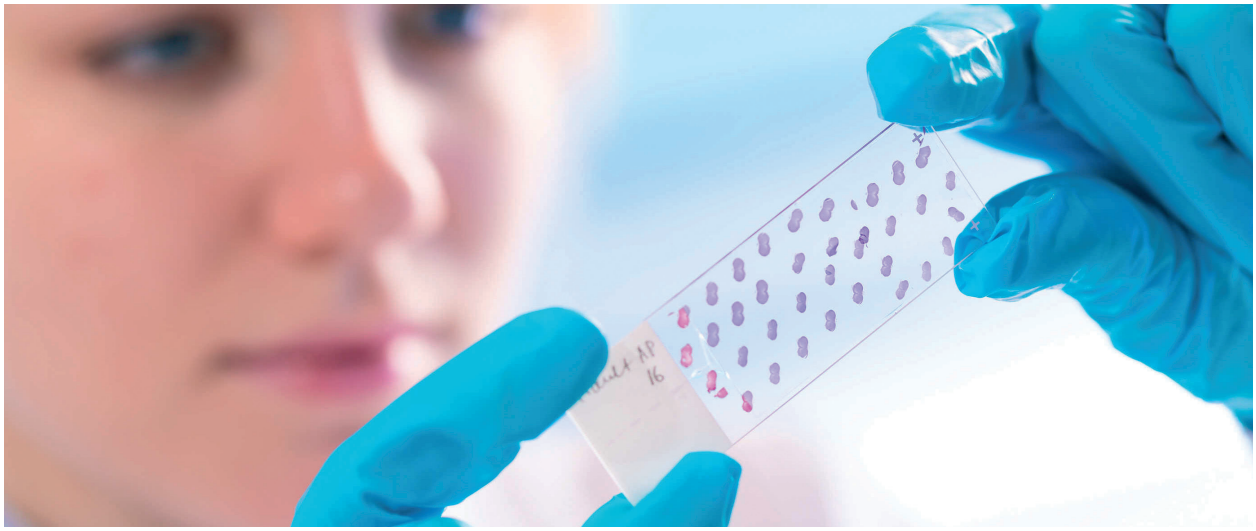
Increase in the number of **CASES EXAMINED** between **2014-2019**

20%

Increase in the number of **BLOCKS PROCESSED** between **2014-2019**

24%

Increase in the number of **SPECIMENS EXAMINED** between **2014-2019**



51.4%

Increase in the volume of cases requiring **IMMUNOHISTOCHEMICAL STAINS** between **2014-2019**

3

INTRODUCTION TO ANALYSIS

CHAPTER 3:
INTRODUCTION TO ANALYSIS

An essential component of the National Histopathology Quality Improvement Programme is an online quality assurance and improvement system that was developed and validated by the HSE Office of the Chief Information Officer (OCIO) to store, analyse and generate reports. This system is the National Quality Assurance and Improvement System (NQAIS).

THE NATIONAL QUALITY ASSURANCE AND IMPROVEMENT SYSTEM (NQAIS)

NQAIS-Histopathology functions as a central repository for quality improvement data from participating hospital's Laboratory Information Systems (LIS). It allows the programme to generate national reports on the accuracy and timeliness of diagnostic reporting in laboratories across Ireland. The data we use, relating to the Key Quality Indicators (KQIs), extracted from NQAIS is used to produce an annual report on these national metrics in histopathology. Ireland is the first country in the world to generate this lab-based report. Laboratories can use the report to identify best practice and any variations, to review, improve and sustain the quality of their work in the context of national norms and targets set by the Faculty of Pathology.

In 2019, 29 laboratories participated in the programme and contributed to the dataset. This number has decreased from 32 in last year's report as three laboratories have consolidated their work with larger laboratories who now capture the workload in their NQAIS accounts (the complete list can be seen on page 11).

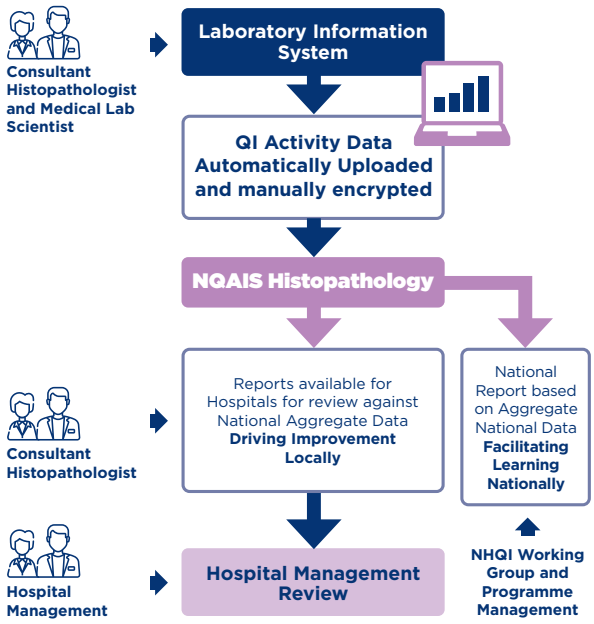
DATA COLLECTION

The data contained in this report was collected between 1st January 2019 and 31st December 2019.

DATA SOURCE

Each laboratory contributes data on histology, cytology, autopsy, and other cases from their local Laboratory Information Systems (LIS). Data are extracted from the LIS on a monthly basis and uploaded to NQAIS-Histopathology.

How is QI Data collected?



As cases are processed within the laboratory, they are assigned specific codes associated with the type of specimen and quality activities performed. These are recorded within the local LIS. Data on all histopathology/cytology cases and the associated quality activities performed are extracted from the LIS and uploaded to NQAIS-Histopathology on a monthly basis by the Local Operational Manager (LOM). Each laboratory's QI Clinical Lead (CL) then reviews the data and signs it off, which triggers its addition to the national dataset.

LOCAL OPERATION MANAGER
Medical Scientists and/or Laboratory Managers work as a part of the team with the Consultant Histopathologists, supporting them in the daily recording, uploading and reporting of QI data, helping to drive local quality improvement.

QI CLINICAL LEAD
Consultant Histopathologists record and sign off data in their local laboratory information system. They review and discuss reports with colleagues, other departments and senior hospital management, including Clinical Directors, who assist them in driving quality improvement locally.

DATA PROTECTION

No patient or staff identifiable information is collected within NQAIS-Histopathology. Hospital identifiable data in the national dataset is pseudonymised. The same hospital identifier is used throughout this document and corresponds to the same Hospital ID structure used in previous reports. This means that it is possible to track an individual laboratory's progress over the preceding years.

Each participating site is the data controller for their own data, this means that they are responsible for the integrity of that data and can authorise or deny access to it. This is performed under the direction and governance of local and hospital group management and in accordance with Data Protection Acts 1988 and 2003 and General Data Protection Regulation (GDPR). The Data Controller determines the purpose and the way data pertaining to the NHQI Programme are to be processed.

DATA ANALYSIS

The national dataset was analysed by the NHQI Programme's Data Analyst and Programme Manager between March and April 2020. Performance against the programme's Round 1, Round 2, Round 3 Targets and Recommendations (Table 3.1 & 3.2 below) were analysed in this report. These are in relation to the following key quality activities:

- Intradepartmental Consultations
- Multidisciplinary Team Review
- Addendum Reports
- Frozen Section
- Turnaround Times

The targets and recommendations for each quality activity are listed at the beginning of each section. The targets were set through a systematic review of the first three years data (2013-2016), to explore the setting of standards that would be achievable and would also facilitate quality improvement, in conjunction with existing national and international standards of best practice. Where targets are absent, due to lack of sufficient evidence with which to base a standard on, a recommendation is made. These targets and recommendations were developed by the Working Group and approved by the Steering Committee of the Specialty Quality Improvement Programmes and Faculty of Pathology.

Information on the national histopathology workload have also been supplied in Chapter 4. Data were analysed to establish trends where possible across the various quality areas for three hospital groupings: (1) National (all sites), (2) Cancer Centres (CCs) and (3) General Centres (GCs). For some quality areas, we also have sufficient data to analyse the performance over multiple years on a quarterly basis, where this is possible this data have been provided.

DATA QUALITY

Here we consider the condition of the data under the following headings accuracy, reliability, relevancy, completeness, consistency and timeliness[1].

ACCURACY: Every effort is made to ensure data captured for the national data report is accurate but minor discrepancies can exist where coding practices are inconsistent. This will result in that case not being included in the laboratories data; however, data mapping can enable the LOM to identify many instances of miscoding and to rectify this prior to upload and sign-off by the Clinical Lead.

RELIABILITY: All efforts are made to remove any subjectivity from the input or collection of the data. Data are extracted and uploaded on a retrospectively rolling 12-month period, the same process is used each month. Training is provided to aid the reliability of this process.

RELEVANCY: The purpose of the data is to aid decision making in the context of the laboratory environment. Detailed data are supplied on each of the KQIs, by hospital to aid visualisation of both areas of improvement and those requiring increased scrutiny.

COMPLETENESS: The programme reports data completeness levels of more than 95%. There are some inconsistent coding practices at present, however the Working Group are working on identifying these practices. This work and the introduction of MedLIS will ensure greater data completeness going forward.

CONSISTENCY: The extraction and uploading of data are performed following agreed pathways depending on the LIS in place. The analysis of the data once extracted from NQAIS is performed consistently by the programme management team.

TIMELINESS: Labs are requested to have completed their data uploads to NQAIS by March each year. In this report three hospitals were unable to upload one month's data. Owing to time constraints it was not possible to include the data. The hospitals concerned have been informed.

Data quality was explored in detail for a random selection of seven hospitals across all five KQIs reported on here.

DATA VISUALISATION

The 2019 data are presented on quarterly graphs, bar charts, tables and on funnel plots. The latter have the ability to present additional layers of easy to interpret information that traditional bar charts cannot, which makes it easier to identify outliers relative to other data points. Ninety-five percent of data should fall within 1.96 standard deviations of the mean, 99.7% of data should fall within 3 standard deviations of the mean. Data that falls outside these control limits represents the presence of clinical outliers, which can be identified by the hospitals themselves.

Figures (graphs, bar charts, funnel plots) and tables providing information for each anonymised centre's performance against the minimum and achievable targets have been supplied. Where the graph element outline is green, it indicates that the laboratory exceeded the achievable target for 2019. Where the graph element is yellow, it indicates that the centre exceeded the minimum target for the quality area but did not exceed the achievable target. Where the graph element is red, laboratories did not meet the minimum target.

1. Health Information and Quality Authority (2018) "Guidance on a data quality framework for health and social care" https://www.hiqa.ie/sites/default/files/2018-10/Guidance-for-a-data-quality-framework.pdf

Data show some variation, primarily reflecting variation in clinical practice. The measurement (and standardisation where appropriate) of this variation is a unique opportunity for the programme

TARGETS AND RECOMMENDATIONS

Below are targets and recommendations set by the Histopathology QI Working Group.

TABLE 3.1: Targets set by Histopathology QI Working Group

Key Quality Area	Targets & Key Quality Indicators	Notes
Turnaround Time (TAT) **ROUND 1 & 2** **Est 2013**	Small Biopsy – 80% by day 5 GI Biopsy – 80% by day 5 Cancer Resection – 80% by day 7 Non-Biopsy Other – 80% by day 7 Cytology FNA – 80% by day 5 Cytology Exfoliative – 80% by day 5	Calculation is for working days*. Turnaround time is calculated based on working days and does not include weekends or bank holidays. For turnaround time calculations the day of receipt of a specimen is considered day 0.
Intradepartmental Consultation (IDC) **ROUND 1 & 2** **Est 2013**	Histology – 3% minimum, 5% achievable Cytology FNA – 7% minimum, 9% achievable Cytology exfoliative – 3% minimum, 5% achievable Autopsy – 1%	
Frozen Section (FS) Diagnosis **ROUND 2** **Est 2014**	FS Concordance rate – 97% or more FS Deferral rate – 5% or less FS Turnaround time – 85% within 20 minutes	Deferral rate should be more than 1%.
Retrospective Real Time Review **ROUND 3** **Est 2016**	% Agreement (Histology) – 95% or more % Agreement (Cytology) – 95% or more	Disagreement is defined as when it is deemed necessary to issue an amended report. Programme guidance recommends locum/new consultants have a minimum 10% rate of review for one month, but this is a local decision.
Multidisciplinary Team (MDT) Meetings **ROUND 3** **Est 2016**	% MDT Agreement – 95% or more	Disagreement is defined as when it is deemed necessary to issue an amended report.

Key Quality Area	Targets & Key Quality Indicators	Notes
Autopsy Retrospective Review **ROUND 3** **Est 2016**	% Satisfactory – more than 90%	No. of cases reviewed to be decided locally.
Autopsy Morbidity & Mortality (M&M) Conference **ROUND 3** **Est 2016**	1% of cases presented per year at hospital M&M conference	M&M conferences are typically presented at hospital Medical & Surgical Grand Rounds.

TABLE 3.2: Recommendations set by Histopathology QI Working Group

Key Quality Area	Recommendations & Key Indicator	Notes
Multidisciplinary Team (MDT) Meetings **ROUND 3** **Est 2016**	% cases discussed at MDT Meeting: • Minimum 10% of all cases (cancer centre labs) • Minimum 5% of all cases (general centre labs) • Minimum 50%, achievable 90% of cancer resection specimens (all labs)	Cases listed for MDT are outside pathologist direct control. For general labs with low MDT meeting activity a combined peer review rate (with IDC) of more than 10% is recommended.
Addendum Reports **ROUND 3** **Est 2016**	% Amended Reports*: • Histology cases – 1% or less • Cytology cases – 1% or less % Corrected Reports* • Histology cases – 2% or less • Cytology cases – 2% or less % Supplementary Reports* • Histology cases – 10% or less • Cytology cases – 10% or less *Terms explained in chapter 7	Classification of amended / corrected reports is to be further reviewed. Case mix can impact supplementary report rate and should be noted on NQAIS reports as applicable.

APPROVAL PROCESS

This report has been developed by the Histopathology QI Working Group of the Programme and the Programme Management Team.

It was submitted to the Specialty Quality Improvement Programme Steering Committee and the Board of the Faculty of Pathology, RCPI, for approval on 3rd June 2020.

This report was approved for publication on 16th June

4

WORKLOAD

CHAPTER 4
WORKLOAD

The following graphs and table show the workload nationally in 2019 and the changes in volume from 2014 to 2019. No targets or recommendations have been set against volumes of cases completed, however, much of the data in this report compare the number of quality activities completed against these figures.

FIGURE 4.1: Volume of Cases by Procedure Code Completed Nationally, 2019

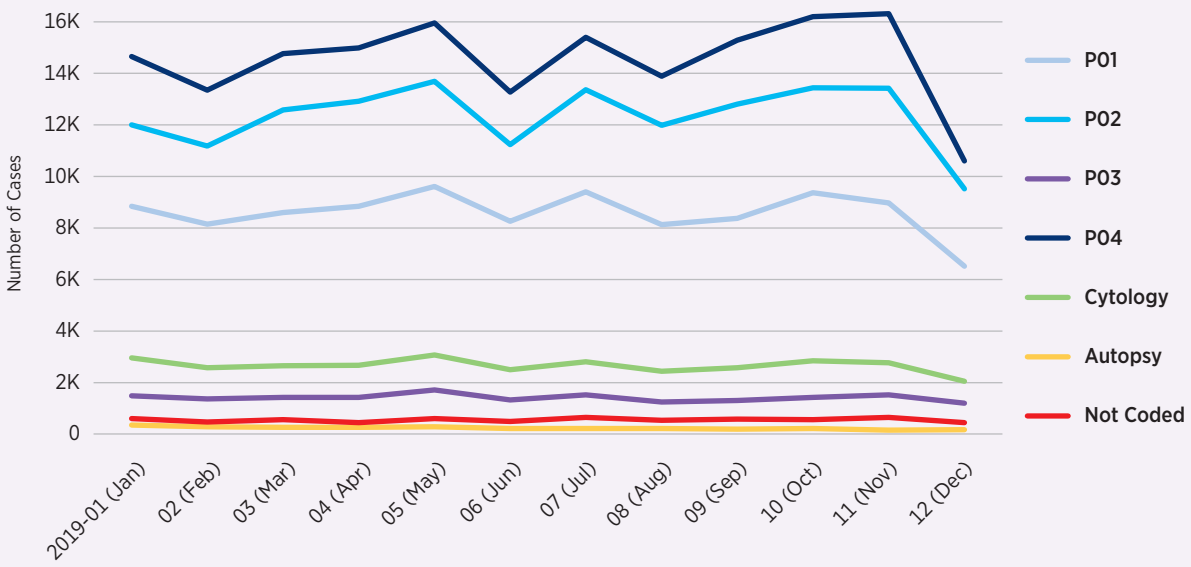


FIGURE 4.2: Volume of Cases by Procedure Code Completed Nationally, 2014-2019

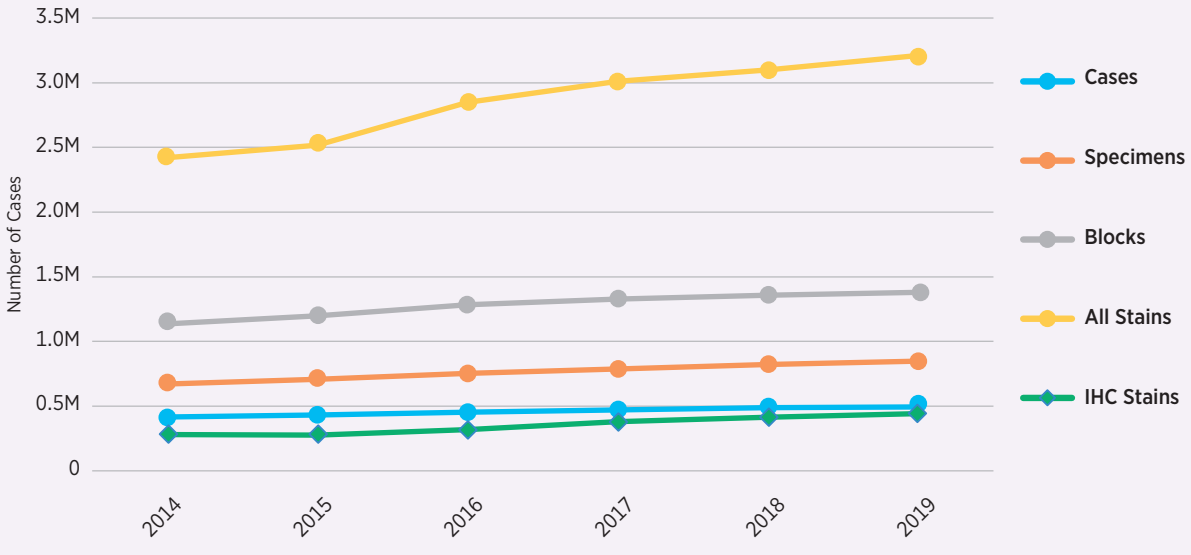


TABLE 4.1: 2014-2019 Workload Data

Type	No. (Cases) 2014	No. (Cases) 2015	No. (Cases) 2016	No. (Cases) 2017	No. (Cases) 2018	No. (Cases) 2019
Cases	422,220	435,276	452,036	466,429	479,856	483,593
Specimens	677,462	709,969	750,718	784,034	815,728	837,855
Blocks	1,142,906	1,200,053	1,281,374	1,323,937	1,351,243	1,371,098
All Stains	2,440,030	2,526,534	2,850,511	3,008,483	3,094,877	3,205,002
IHC stains	285,039 (45,057 cases)	281,551 (49,200 cases)	320,439 (55688 cases)	376,639 (61804 cases)	407,637 (67967 cases)	431,421 (70399 cases)
Routine H&E	1,731,050 (373,116 cases)	1,819,076 (381,144 cases)	2,086,091 (418,164 cases)	2,170,295 (431,903 cases)	2,225,001 (445,446 cases)	2,313,217 (453,797 cases)
Extra H&E	275,874 (58,633 cases)	295,515 (61,701 cases)	304,475 (63,261 cases)	317,584 (63,621 cases)	319,027 (68,003 cases)	308,644 (65,563 cases)
Special stains (& cases)	135,222 (53,822 cases)	127,845 (52,691 cases)	136,411 (58,275 cases)	141,320 (57,555 cases)	137,230 (58,061 cases)	146,584 (60,376 cases)
Frozen Section stains	31,827 (1,573 cases)	28,593 (1,485 cases)	28,834 (1,398 cases)	29,680 (1,358 cases)	25,085 (1,175 cases)	23,877 (1,250 cases)
No. of units	32	32	32	32	32	29

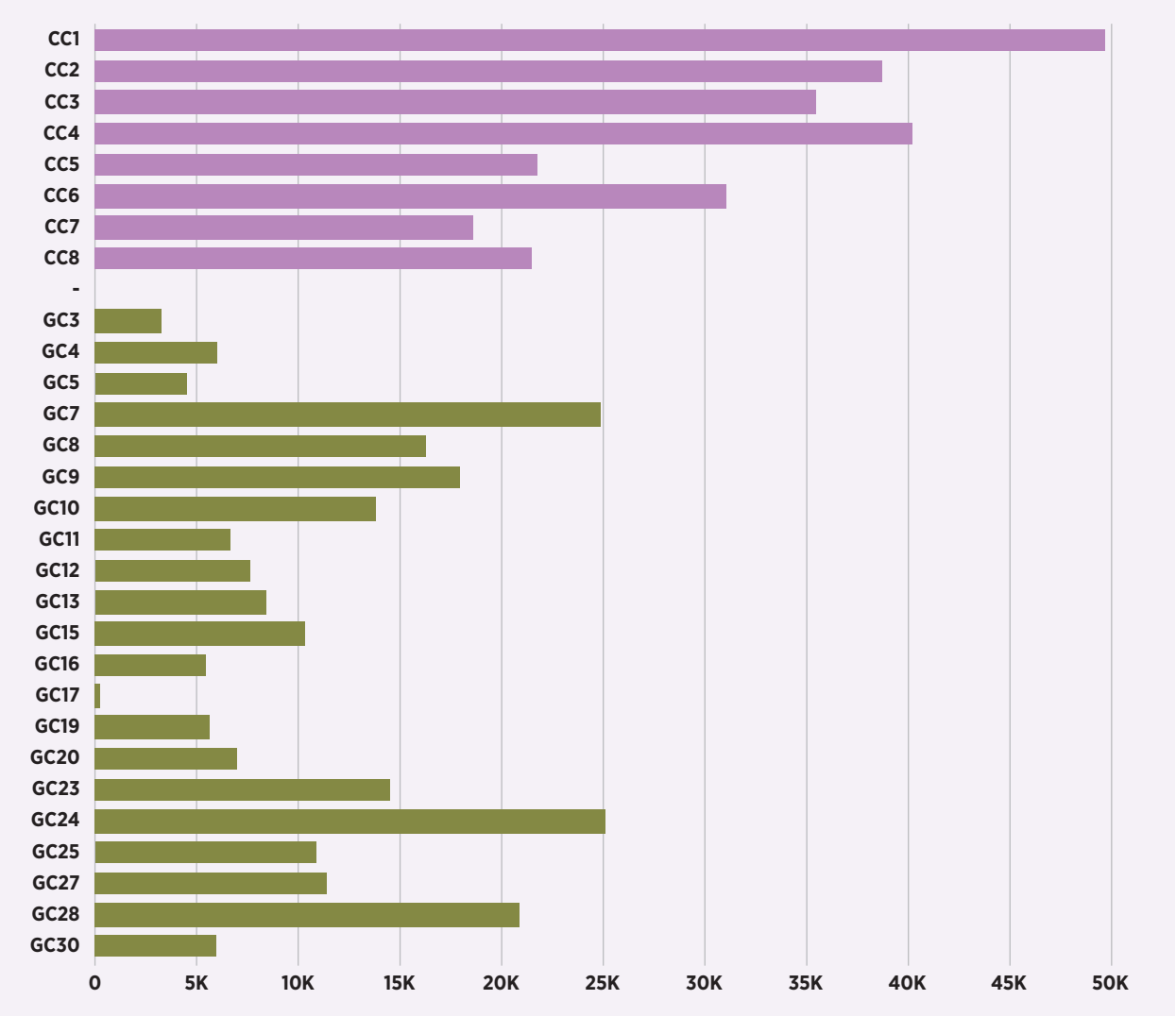
Between 2018 and 2019, the volume of cases nationally increased by 3,737 cases (0.8%), 22,127 specimens (2.7%) and 19,855 blocks (1.5%).The national volume of cases from 2014 to 2019, has increased by 61,373 (14.5%), and blocks have increased by 22%. The volumes of cases, blocks and specimens has been steadily rising for the past six years.

This reflects that more specimens are being submitted to laboratories for individual patients and that these specimens are more complex and time-consuming to analyse, as they require more blocks of tissue to be submitted for examination.

In the same six years from 2014 to 2019, the national volume of cases requiring Immunohistochemical Stains (IHC Stains) increased by 51.4%, the number of All Stains shows a 31.9% increase. This further reflects the increasing complexity of diagnosis and the additional information that pathology can provide from tissue samples to guide patient management. Many of the IHC stains performed are prognostic and predictive markers, which guide patient management.

Number of cases processed by individual hospitals in 2019.

FIGURE 4.3: Number of Cases by Hospital, 2019



CANCER CENTRES (CCs)

The volume of work carried out at CCs ranged from 18,587 to over 49,657 specimens.

GENERAL CENTRES (GCs)

The volume of work carried out at GCs ranged from 105 to over 25,090 cases.

Laboratories varying in size and complexity face different challenges in implementing the Histopathology QI Programme and in meeting targets. This data shows us that workload in histopathology departments continues to increase year-on-year in both volume and complexity, which creates challenges for laboratories in meeting QI targets.

KEY RECOMMENDATION

To ensure that targets can be achieved, laboratory resourcing should keep pace with increasing workload.

5

INTRADEPARTMENTAL CONSULTATION

CHAPTER 5
INTRADEPARTMENTAL CONSULTATION

Definition: An Intradepartmental Consultation (IDC) occurs when a consultant pathologist seeks a second opinion from another consultant pathologist within their department or within their regional hospital network on a particular case prior to authorisation of the final report.

IDC is now included and reported on in the Hospital and Patient Safety Indicator Report on a monthly basis.

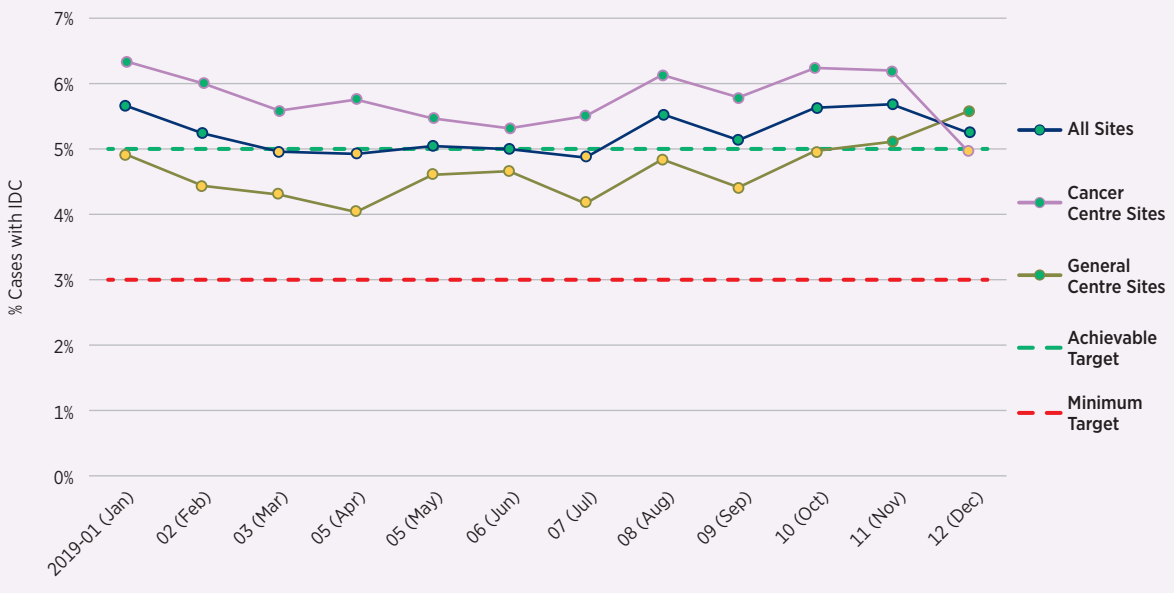
TABLE 5.1: Targets set for Intradepartmental Consultation

Case Type	Minimum Target	Achievable Target
Histology Cases (P01, P02, P03, P04)	3%	5%
Non-Gynaecological Cytology FNA (P06) Cases	7%	9%
Non-Gynaecological Cytology Exfoliative (P07) Cases	3%	5%
Autopsy Cases	1%	1%

IDC Histology (P01-P04)

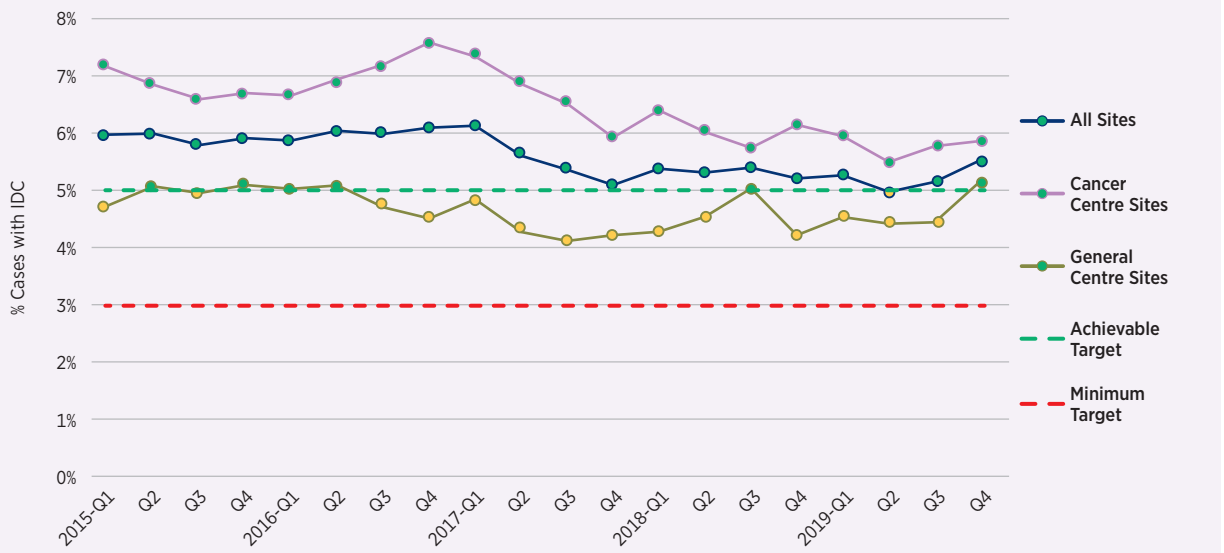
Target: Minimum 3%, Achievable 5%

FIGURE 5.1: Histology (P01, P02, P03, and P04) % IDC by Month, 2019



The National aggregate for IDCs for all sites was 5.2% with the achievable target being met for all 12 months of the year. CCs achieved a yearly average of 6% while GCs averaged 4.6%.

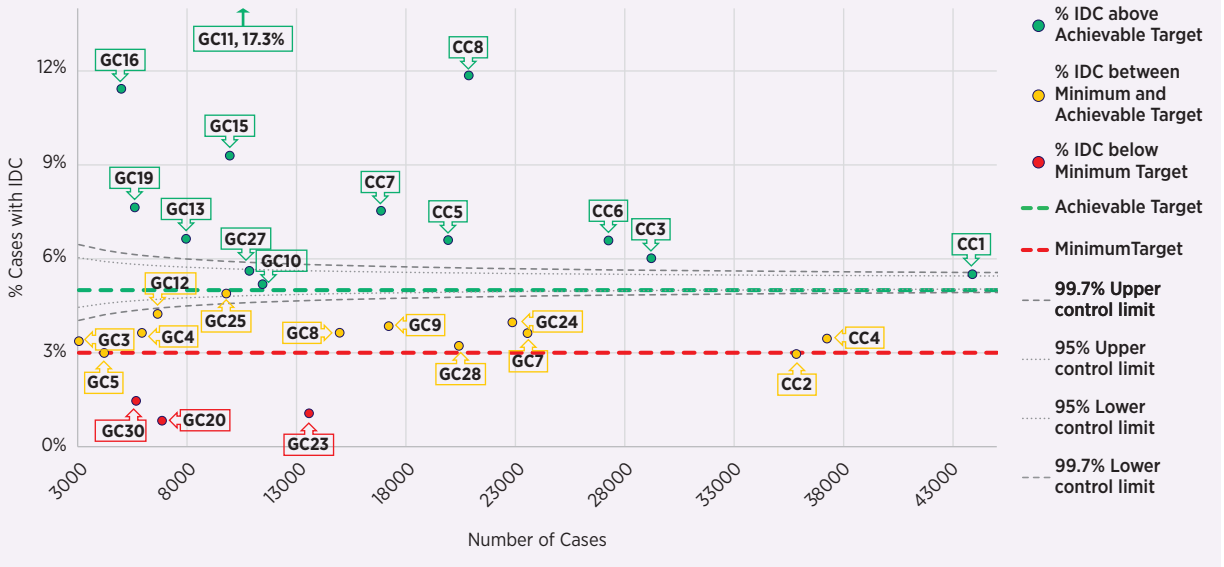
FIGURE 5.2: Histology (P01, P02, P03, and P04) % IDC by Quarter, 2015-2019



For the last five years, on a quarterly basis, the combined rate of IDC for all hospitals has been predominantly above the achievable target fluctuating between 5% and 6%. CCs have consistently stayed above the achievable target during this time where GCs fluctuate around the achievable target.

In 2019, the Histology IDC national aggregate was consistently above both the minimum and achievable targets at 5%

FIGURE 5.3: Histology (P01, P02, P03, and P04) % IDC by Number of Cases per Site, 2019



Please consult Table 5.3 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Three GCs failed to meet the minimum target for IDC in 2019. These sites have been below the minimum target for two consecutive years with one site having an IDC rate of less than or equal to 1%.

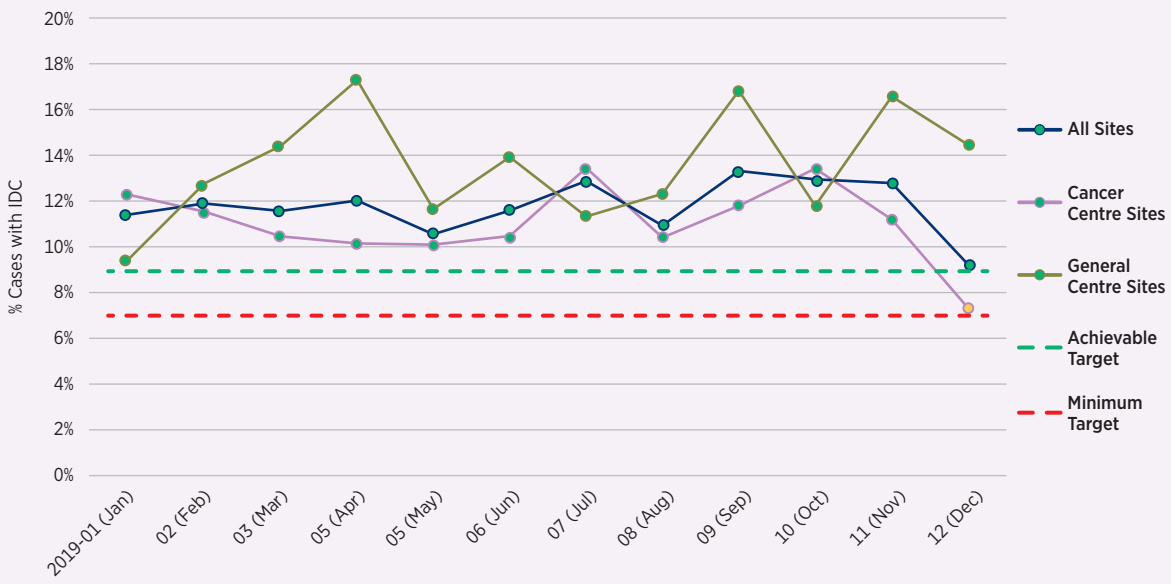
CANCER CENTRES (CCs)

All eight CCs were on or above the minimum target for IDC in 2019.

IDC Non-Gynaecological Cytology FNA (P06)

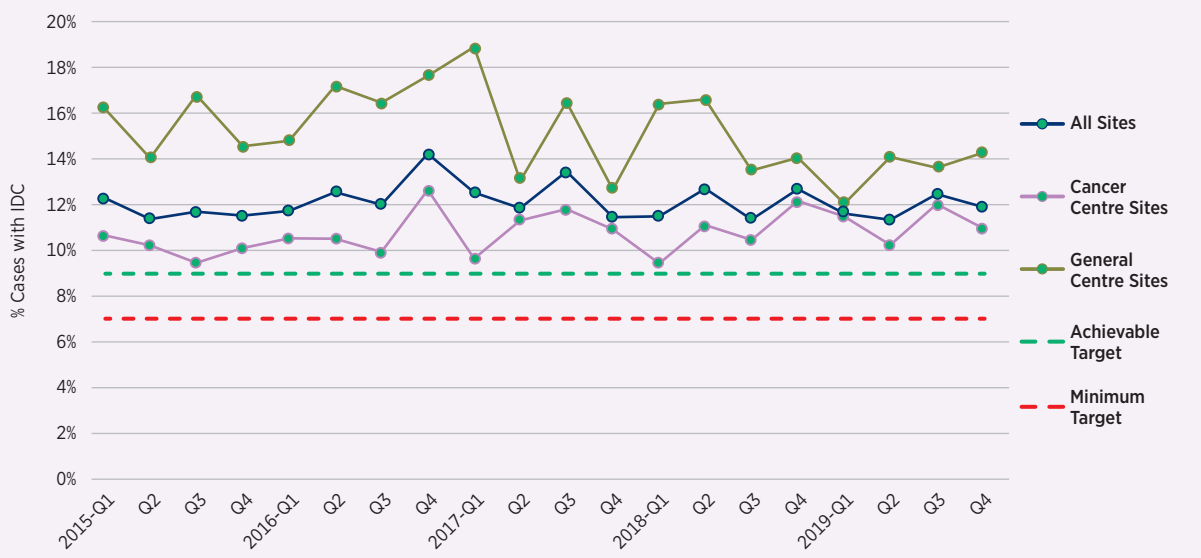
Target: Minimum 7%, Achievable 9%

FIGURE 5.4: Non-Gynaecological Cytology FNA (P06) % IDC by Month, 2019



In 2019, Non-Gynaecological Cytology FNA P06 IDC was consistently above both the minimum and achievable targets, averaging 12% for all 12 months. Cancer Centre (CCs) averaged 11.1% while General Centre (GCs) averaged 13.5%, both above the achievable target.

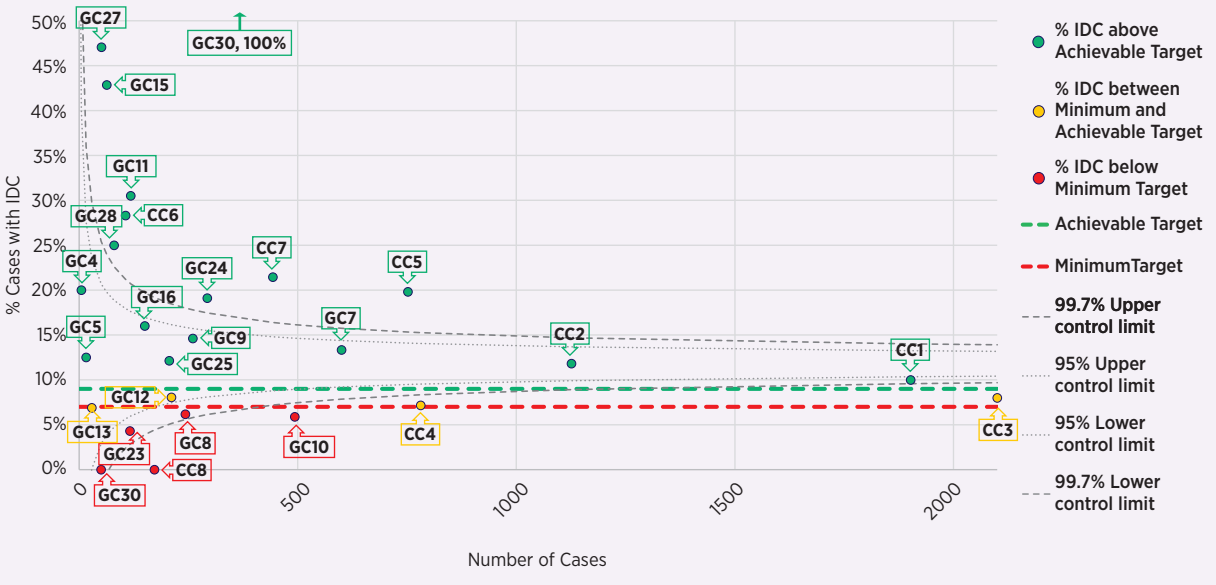
FIGURE 5.5: Non-Gynaecological Cytology FNA (P06) % IDC by quarter, 2015-2019



The 5-year quarterly data reveals the combined averages of both CCs and GCs have been consistently above the achievable target since 2015, stabilising at 12%.

In 2019 the national average for Non-Gynaecological Cytology FNA IDC was consistently above both the minimum and achievable targets

FIGURE 5.6: Non-Gynaecological Cytology FNA (P06) % IDC by Number of Cases per Site, 2019



Please consult Table 5.4 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Twelve of the 21 GCs met or exceeded the achievable target in 2019, an increase of two GCs from 2018. One GC was between the minimum and achievable targets and five GCs were below the minimum target, a decrease of two compared to 2018. Three GCs recorded zero Non-Gynaecological Cytology FNA IDCs.

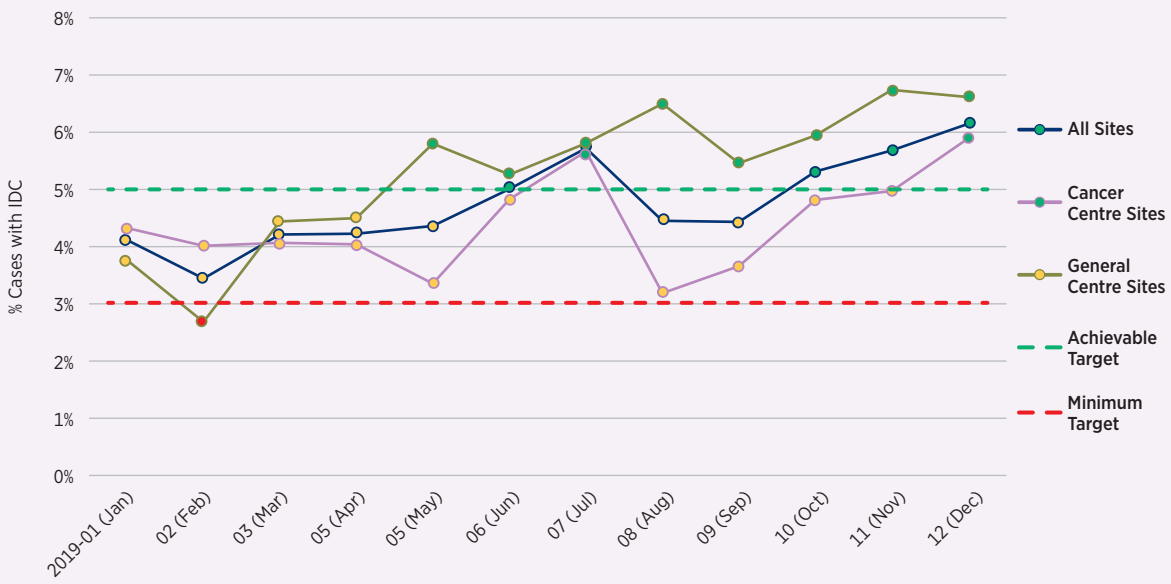
CANCER CENTRES (CCs)

Seven out of eight CCs exceeded the minimum target. Five of seven CCs sites reached the achievable target in 2019, a decrease from six in 2018. One site was below the minimum target, cases were recorded here but no Non-Gynaecological Cytology FNA IDCs took place.

IDC Non-Gynaecological Cytology Exfoliative (P07)

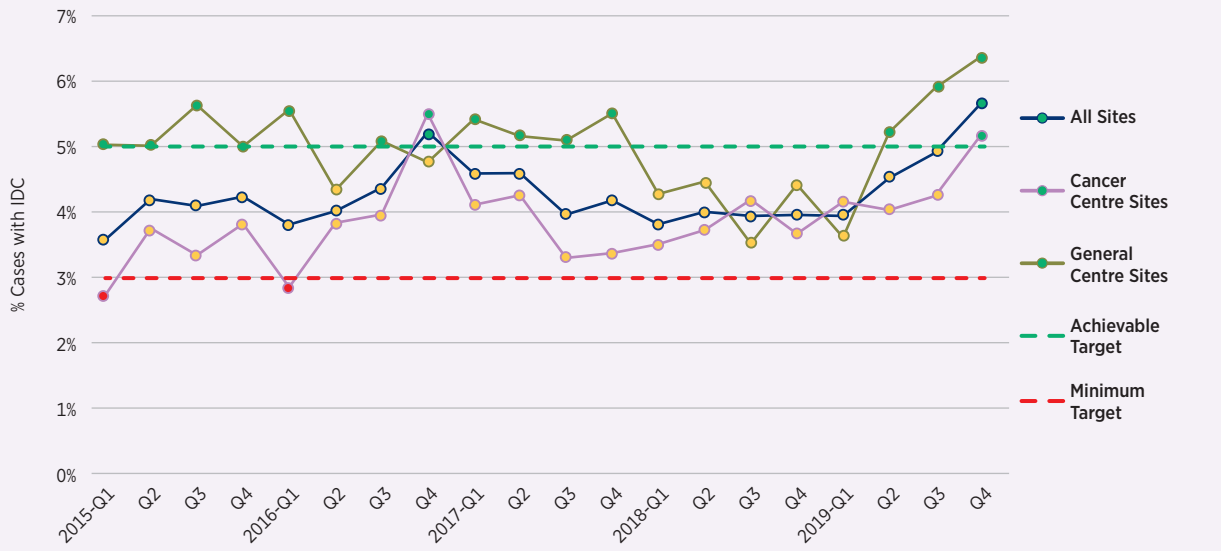
Target: Minimum 3%, Achievable 5%

FIGURE 5.7: Non-Gynaecological Cytology Exfoliative (P07) % IDC by Month, 2019



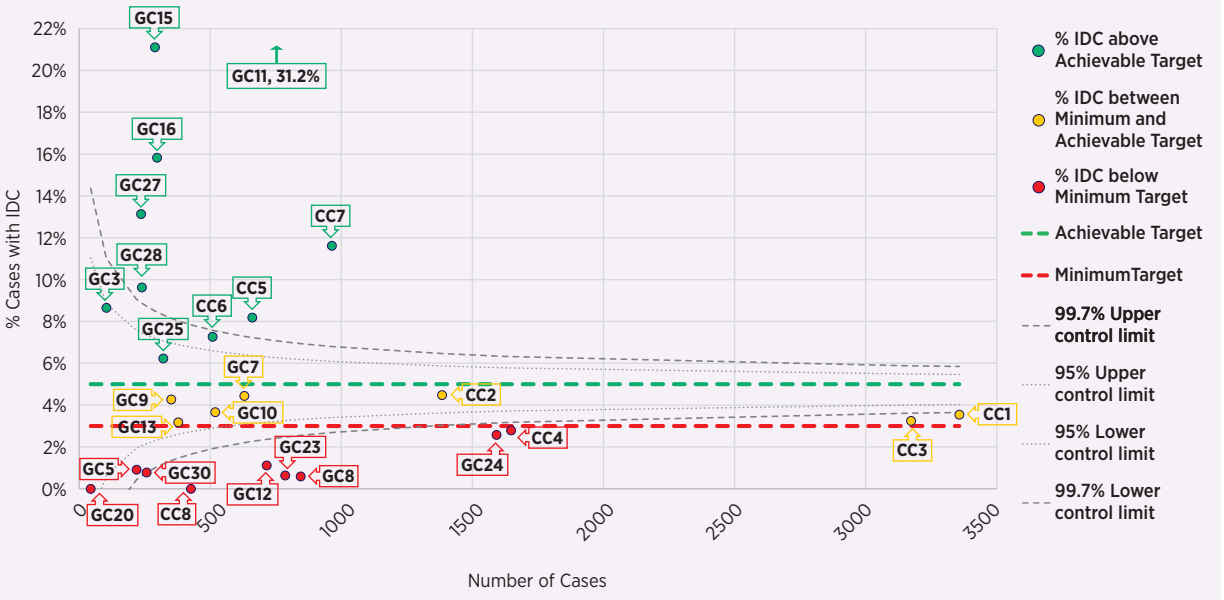
In 2019, the national aggregate for Non-Gynaecological Cytology Exfoliative for all sites was 4.7%. Cancer Centres (CCs) averaged at 4.4%, an increase of 0.6% from 2018. General Centres (GCs) averaged 5.3%, an increase of 0.8% from 2018.

FIGURE 5.8: Non-Gynaecological Cytology Exfoliative % IDC by Quarter, 2015-2019



There was an upward trend for all sites from QI 2015 to Q4 2016, before beginning to gradually decline to between the minimum and achievable targets. It then stabilised in Q2 2018 at 4%, gradually beginning to climb again in Q1 2019 to above the achievable target by Q4.

FIGURE 5.9: Non-Gynaecological Cytology Exfoliative (P07) % IDC by number of Cases per Site, 2019



Please consult Table 5.5 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Eleven of 18 GCs sites met the minimum target in 2019, an increase from nine in 2018. Seven GCs were above the achievable target. Three GCs had no data recorded in 2019 for Non-Gynaecological Cytology Exfoliative (P07). One site had cases but recorded zero IDCs coded.

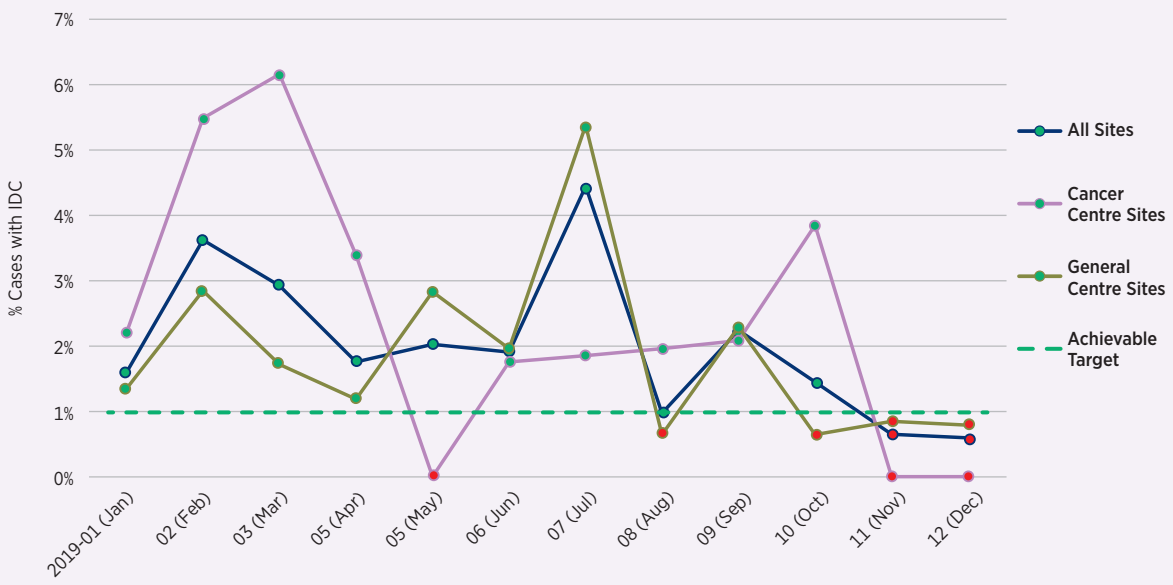
CANCER CENTRES (CCs)

Six of eight CCs met the minimum target in 2019, an increase of one from five sites in 2018. Three CCs were above the achievable target.

IDC Autopsy (P10, P11)

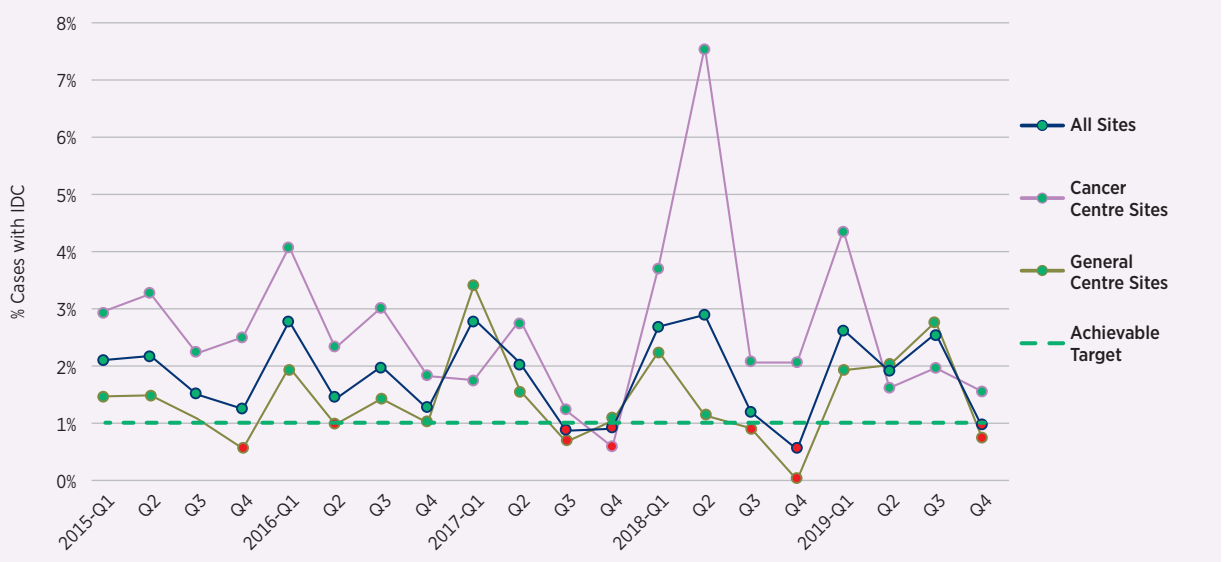
Target: 1%

FIGURE 5.10: Adult Autopsy (P10, P11) % IDC by Month, 2019



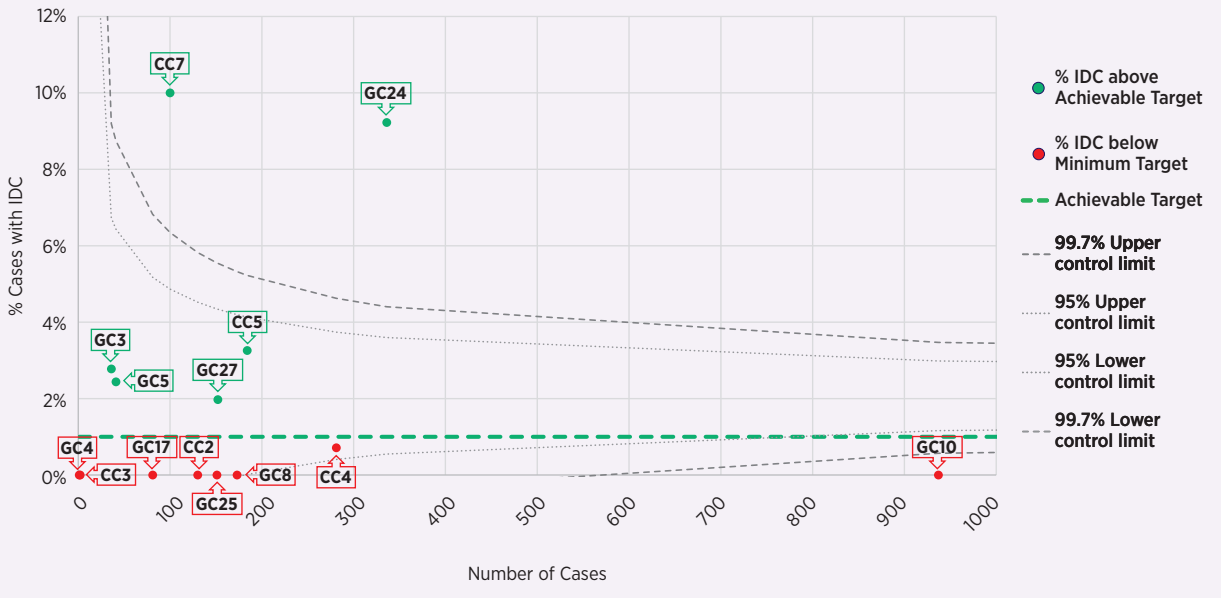
In 2019 the national average for all sites was 2.1% exceeding the minimum and achievable targets. Cancer Centres (CCs) averaged at 2.6%, a decrease of 1.3% from 3.9% in 2018. General Centres (GCs) averaged 1.9%, an increase of 0.7% from 1.2% in 2018.

FIGURE 5.11: Adult Autopsy (P10, P11) % IDC by Quarter, 2015-2019



On a quarterly basis, since 2015, the percentage of IDC for Autopsy (P10, P11) for All Sites has generally remained above the target, dropping below the target in Q3 2017 and fluctuating above and below thereafter until Q4 2019.

FIGURE 5.12: Adult Autopsy (P10, P11) % IDC by Number of Cases per Site, 2019



Please consult Table 5.6 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Four of the nine GCs who provided data had Adult Autopsy's with IDC take place during 2019.

CANCER CENTRES (CCs)

Five out of eight CCs provided data for adult autopsy IDC. Three out of those five CCs had Adult Autopsy's with IDC take place during 2019.

Summary

TABLE 5.2: National Aggregate % Intra-Departmental Consultation (IDC) 2018 vs 2019

National Aggregate % Intra-Departmental Consultation (IDC) 2018 vs 2019						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2018	2019	2018	2019	2018	2019
Target: Minimum 3%, Achievable 5%						
IDC Histology (P01, P02, P03 and P04)	4.4%	4.6%	6.1%	5.8%	5.3%	5.2%
IDC Non-Gynaecological Cytology Exfoliative (P07)	4.2%	5.2%	3.8%	4.4%	3.9%	4.7%
Target: Minimum 7%, Achievable 9%						
IDC Non-Gynaecological Cytology FNA (P06)	15.1%	13.5%	10.7%	13.5%	12.0%	11.8%
Target: 1%						
IDC Autopsy (P10, P11)	1.2%	1.9%	3.9%	2.6%	1.9%	2.1%

Both GCs and CCs have maintained a % IDC above the minimum targets for Histology (P01, P02, P03, P04) and Non-Gynaecological Exfoliative cytology (P07) cases between 2018 and 2019. The national aggregate data reveals that All Sites achieved a % IDC above the achievable target for Histology cases.

The national aggregate for All Sites reveals they have exceeded the achievable target for Non-Gynaecological Cytology FNA (P06) in both 2018 and 2019.

GCs have maintained an average above the target of 1% for IDC Autopsy cases (P10, P11) in 2018 and 2019, as have CCs. The combined national average of both GCs and CCs in 2019 is below the target at 2%.

KEY RECOMMENDATION

Given the varying complexity within histology case types individual laboratories are encouraged to analyse each procedure category to ensure that more complex cases (likely within P01 and P03) exceed the minimal target. A review of targets will be performed in 2020.

6

MULTIDISCIPLINARY TEAM REVIEW

CHAPTER 6
MULTIDISCIPLINARY TEAM REVIEW

Multidisciplinary Team (MDT) meetings form an essential part of the clinical care of patients with cancer, suspected cancer or other clinical conditions. Histopathologists are key participants in these meetings and play an important role in patient management. Organisation of MDT meetings and determining cases for review is the responsibility of the MDT coordinator or clinical teams within the hospital. The reviewing pathologist should prepare the cases assigned for review at MDT, reconcile any discrepancies noted prior to MDT and attend the MDT meetings to present and discuss cases.

Definition: The target set for this form of peer review of greater than or equal to 95% MDT agreement refers to agreement between the primary pathologist authorising the report and the reviewing pathologist presenting the case at the MDT meeting.

Disagreement is defined as when it is deemed necessary to issue an amended report.

CODING MDT REVIEWS

The codes applied are Q017 for MDT Case Review which defaults to MDT Review Agreement unless the code Q019 is entered to represent MDT Review Disagreement.

Some laboratories also use Q018 to indicate MDT agreement, however the Working Group would encourage all to use Q017 to assist in maintaining a standardised coding practice.

TABLE 6.1: MDT Codes

	Code to Apply
MDT Case Review	Q017
MDT Review Agreement	Automatic Default Code Q017
MDT Review Disagreement	Q019

TABLE 6.2: MDT Targets

MDT Case Review	Target
% MDT Review Agreement	Greater than or equal to 95%

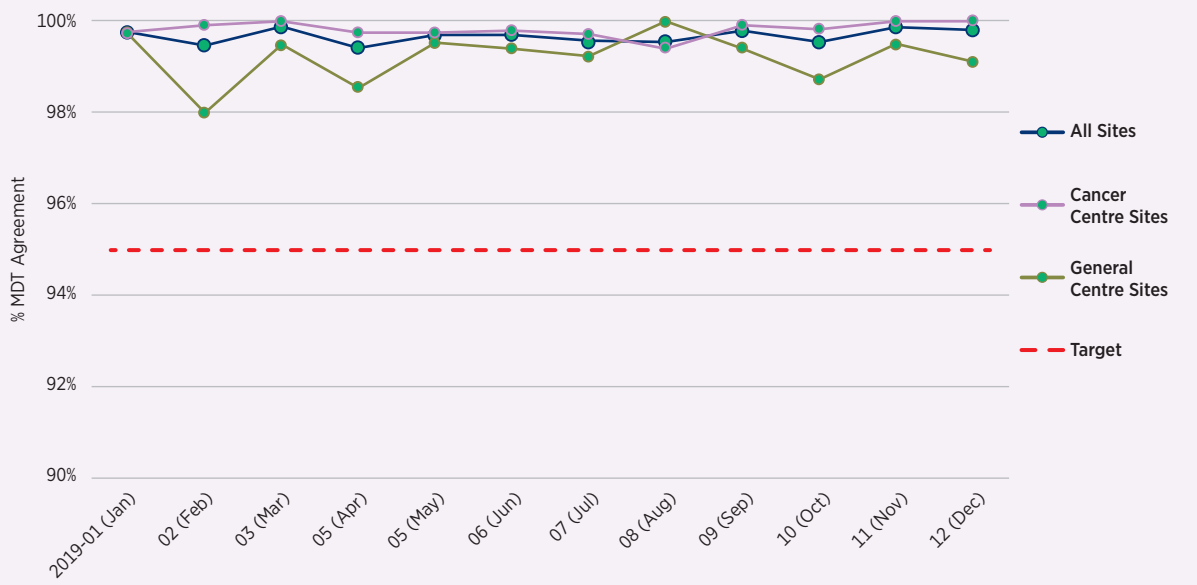
MDT Agreement (Q017) - Small Biopsy (P01)

Target: Greater than or equal to 95%

Of the total number of Small Biopsy (P01) cases recorded in 2019, 18.9% were reviewed at MDTs. Of this number, 14.5% were reviewed in Cancer Centres (CCs) and 4.4% in General Centres (GCs).

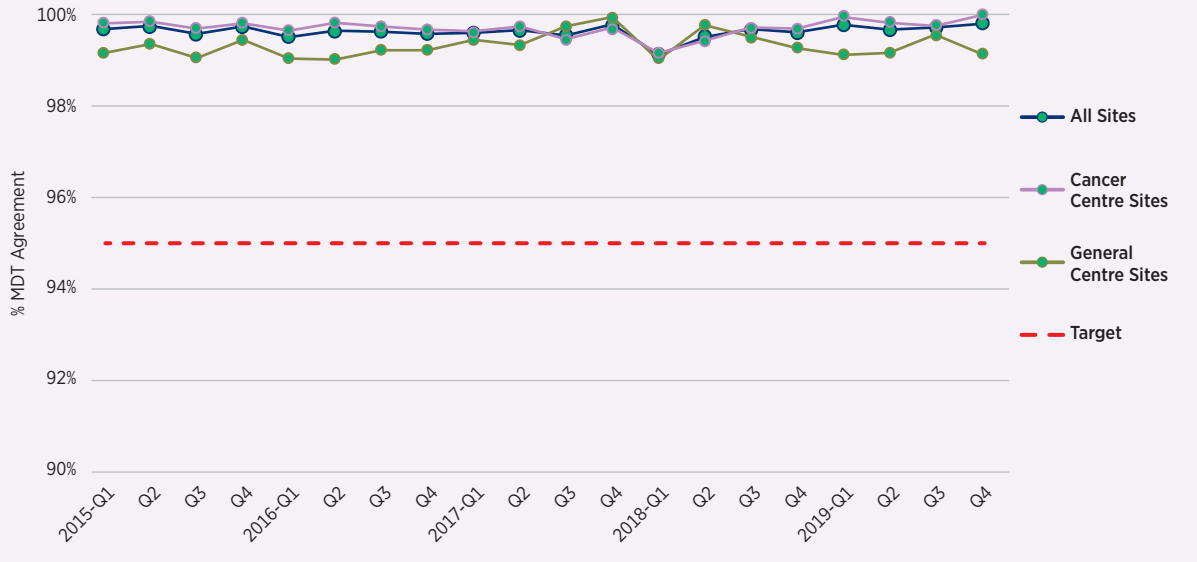
CCs and GCs were above the target of 95% MDT Agreement in 2019. CCs achieved an increase of 0.3% from 2018, while GCs MDT Agreement decreased by 0.2%.

FIGURE 6.1: Small Biopsy (P01) % MDT Agreement by Month, 2019



Both GCs and CCs maintained steady averages above the target between 98% and 100% throughout 2019. The only minor decrease was experienced by GCs in February at 98%.

FIGURE 6.2: Small Biopsy (P01) % MDT Agreement by Quarter, 2015–2019



The data reveals a steady maintenance well above the target for all hospitals from Q1 2015 to Q4 2019.

Please consult Table 6.4 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

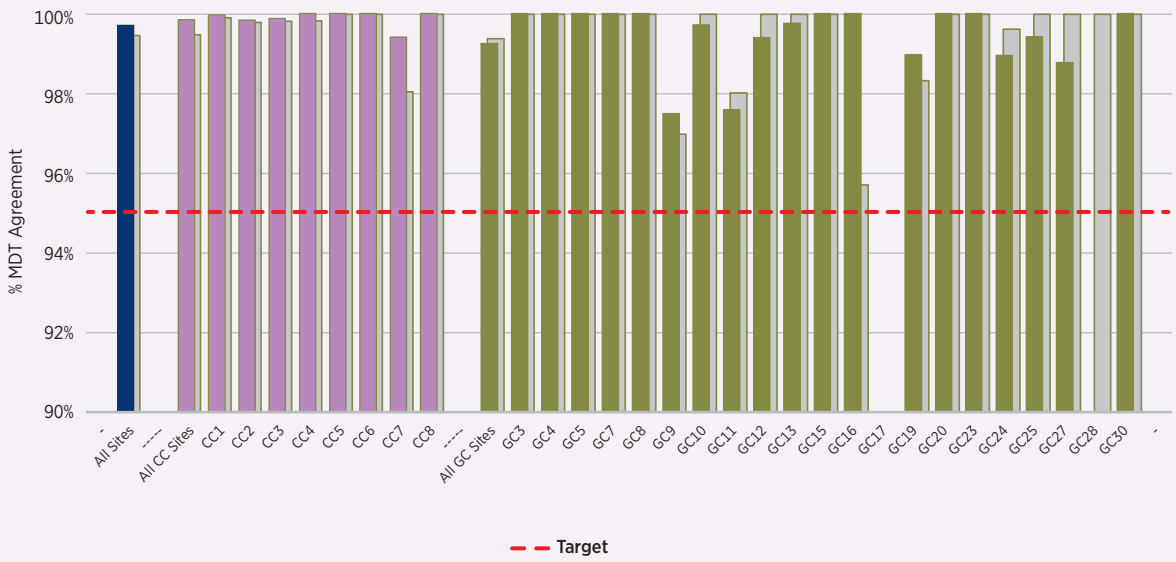
GENERAL CENTRES (GCs)

All GCs exceeded the target of greater than or equal to 95% MDT Agreement in 2019. Nineteen GCs provided data, out of this number 10 reported 100% MDT Agreement, five less than 2018.

CANCER CENTRES (CCs)

All CCs reached the target of greater than or equal to 95% MDT Agreement in 2019.

FIGURE 6.3: Small Biopsy (P01) % MDT Agreement by Site, 2019 v 2018



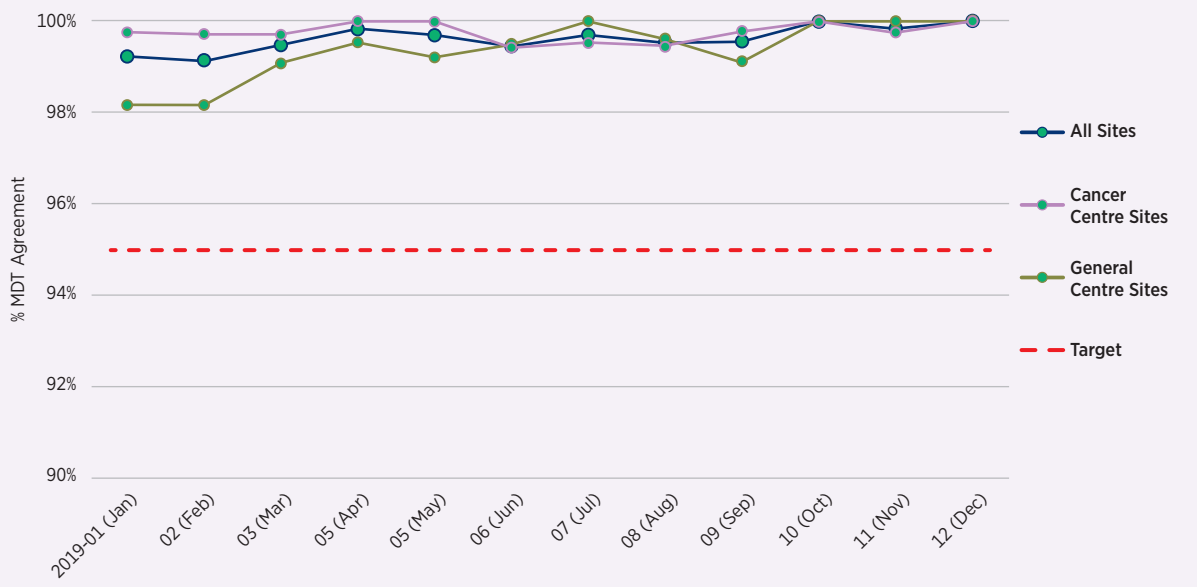
MDT Agreement (Q017) - GI Endoscopic Biopsy (P02)

Target: Greater than or equal to 95%

In 2019, 5.2% of all GI Endoscopic Biopsy (P02) cases were reviewed at MDTs, this is a 0.2% increase from figures recorded in 2018. Of those cases reviewed in 2019, 3.4% were cases in Cancer Centres (CCs) and 1.8% in General Centres (GCs).

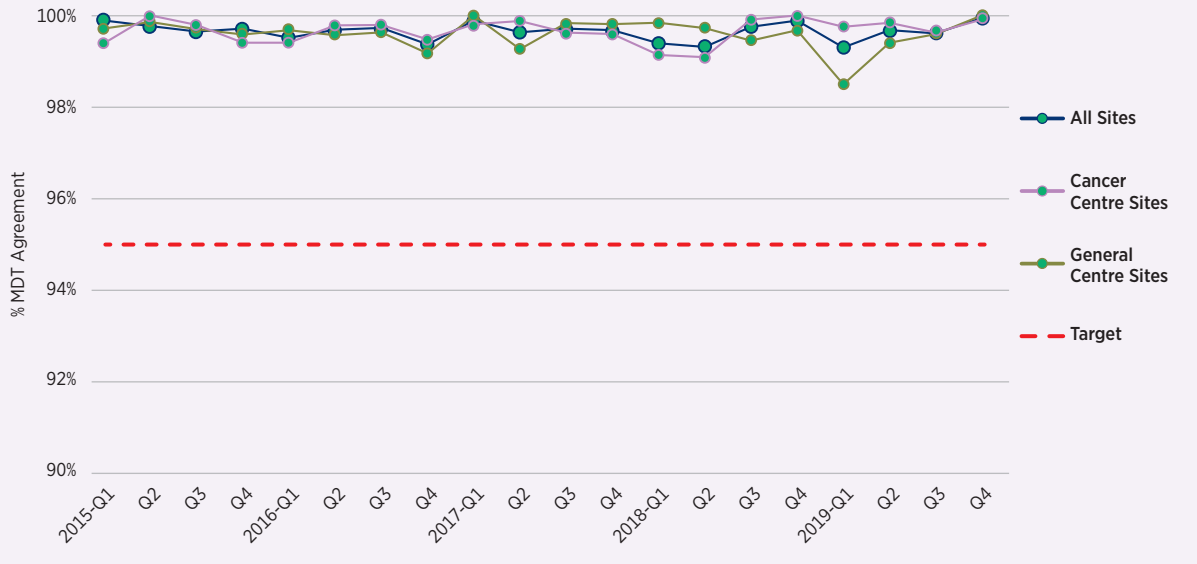
Both CCs and GCs were above the target of greater than or equal to 95% for MDT Agreement of GI Endoscopic Biopsy (P02) cases in 2019. CCs saw an increase of 0.3% going from 99.5% in 2018 to 99.8% in 2019. GCs experienced a minor decrease of 0.3% going from 99.7% in 2018 to 99.4% in 2019 but were still well above the target.

FIGURE 6.4: GI Endoscopic Biopsy (P02) % MDT Agreement by Month, 2019



A review of 2019 by month reveals that all GCs and CCs combined were on average above 99.6% MDT Agreement for these cases. GCs began the year just above 98%, but by October were reporting an average of 100% MDT Agreement for the remainder of the year. CCs maintained monthly averages between 99.5% and 100%.

FIGURE 6.5: GI Endoscopic Biopsy (P02) % MDT Agreement by Quarter, 2015-2019



GCs have maintained quarterly averages above 99.2% between Q1 2015 and Q4 2018. A slight decrease to 98.5% occurred in Q1 2019, followed by a subsequent rise to 100% by Q4 2019. CCs averages fluctuated from 99.1% to 100% between Q1 2015 and Q4 2019.

Please consult Table 6.5 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

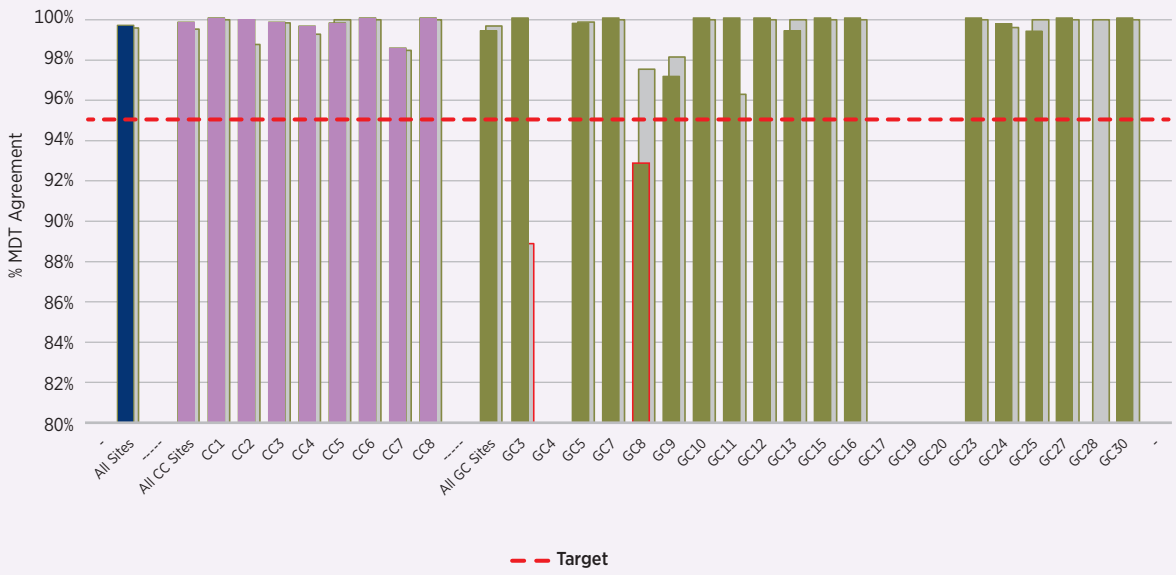
GENERAL CENTRES (GCs)

Out of the 16 GCs that provided data for this target in 2019, 15 were above the target of greater than or equal to 95% MDT Agreement for GI Endoscopic Biopsy (P02) cases.

CANCER CENTRES (CCs)

All eight CCs were well above the target for MDT Agreement with values ranging from 98.5% to 100%.

FIGURE 6.6: GI Endoscopic Biopsy (P02) % MDT Agreement by Site, 2019 v 2018



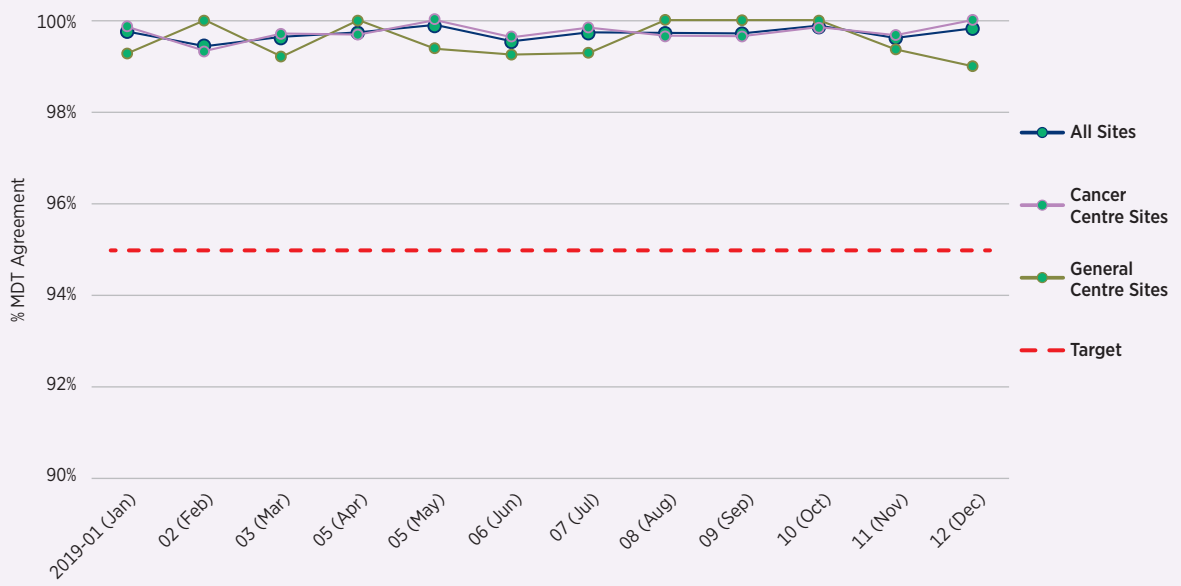
MDT Agreement (Q017) - Non-Biopsy Cancer Resection (P03)

Target: Greater than or equal to 95%

In 2019, of all Non-Biopsy Cancer Resection (P03) cases recorded, 56.5% were reviewed at MDTs. This is an increase of 0.7% from 2018, of this number in 2019, 46.7% were recorded in Cancer Centres (CCs) and 9.8% in General Centres (GCs).

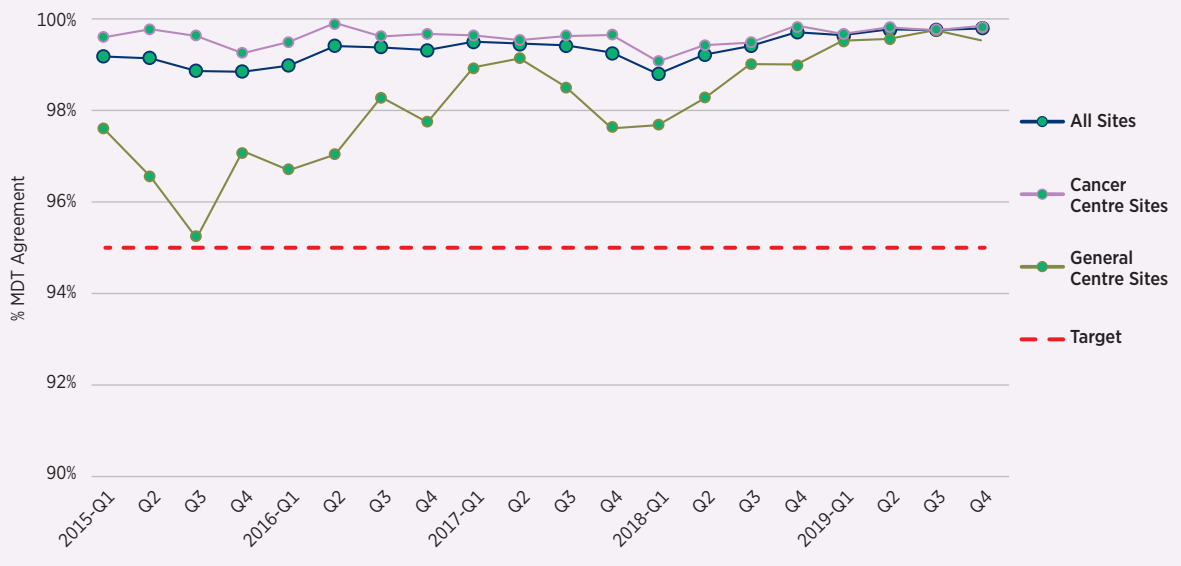
GCs and CCs combined achieved a national aggregate of 99.7% MDT Agreement for Non-Biopsy Cancer Resection (P03) cases in 2019.

FIGURE 6.7: Non-Biopsy Cancer Resection (P03) % MDT Agreement by Month, 2019



A monthly review of average MDT Agreement in 2019 reveals that GCs and CCs combined maintained average MDT Agreement of between 99.4% and 100%.

FIGURE 6.8: Non-Biopsy Cancer Resection (P03) % MDT Agreement by Quarter, 2015-2019



GCs have remained above the target of greater than or equal to 95% since Q1 2015, dropping to 95.2% in Q3 2015, but then steadily increasing to reach 99.5% in Q4 2019. CCs have consistently remained above 99.1% for the previous five years, a minimum of 4.1% and a maximum of 5% above target.

Please consult Table 6.7 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

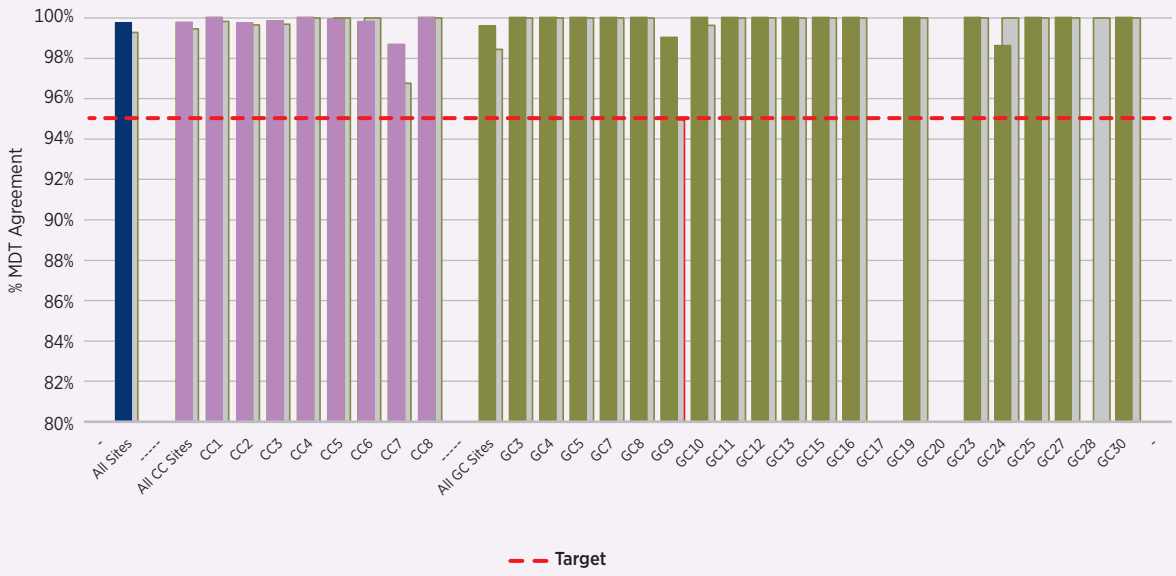
GENERAL CENTRES (GCs)

All 18 GCs were above target for MDT Agreement for Non-Biopsy Cancer Resection (P03) cases, as was the case in 2018.

CANCER CENTRES (CCs)

Similar to 2018, all eight CCs exceeded the target for Non-Biopsy Cancer Resection (P03) MDT Agreement in 2019, with three centres reporting 100% agreement.

FIGURE 6.9: Non-Biopsy Cancer Resection (P03) % MDT Agreement by Site, 2019 v 2018



MDT Agreement (Q017) - Non-Biopsy Other (P04)

Target: Greater than or equal to 95%

A monthly review of 2019 reveals that General Centres (GCs) maintained a national average above the target fluctuating slightly between 98.8% and 100%.

Cancer Centres (CCs) national average ranged from 99.3% to 100% in 2019.

FIGURE 6.10: Non-Biopsy Other (P04) % MDT Agreement by Month, 2019

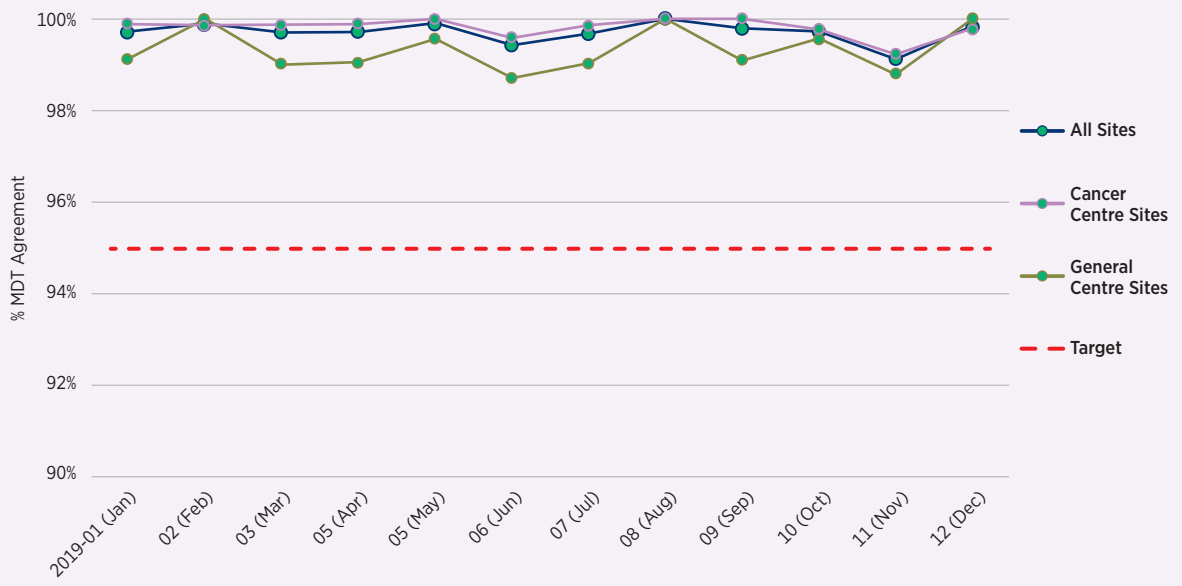
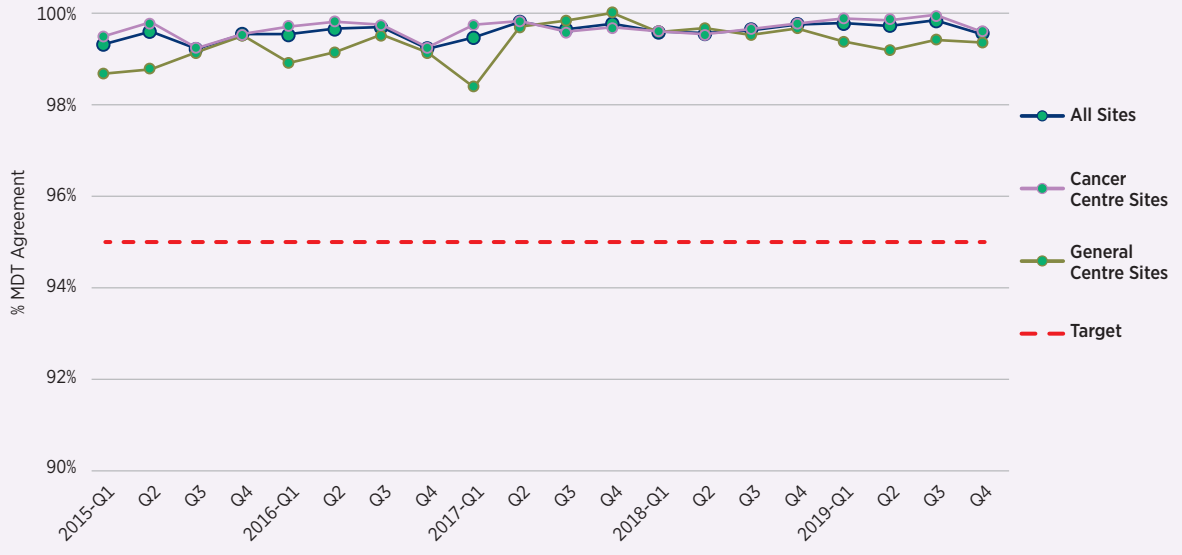


FIGURE 6.11: Non-Biopsy Other (P04) % MDT Agreement by Quarter, 2015-2019



GCs have exceeded the target for the previous five years. Between Q1 2015 and Q2 2017 GCs fluctuated between 98.4% and 98.7%, thereafter they maintained a steadier national average. CCs have also remained above the target for the previous five years, with the lowest average seen in Q3 2015 at 99.3% and the highest at 100% in Q3 2019.

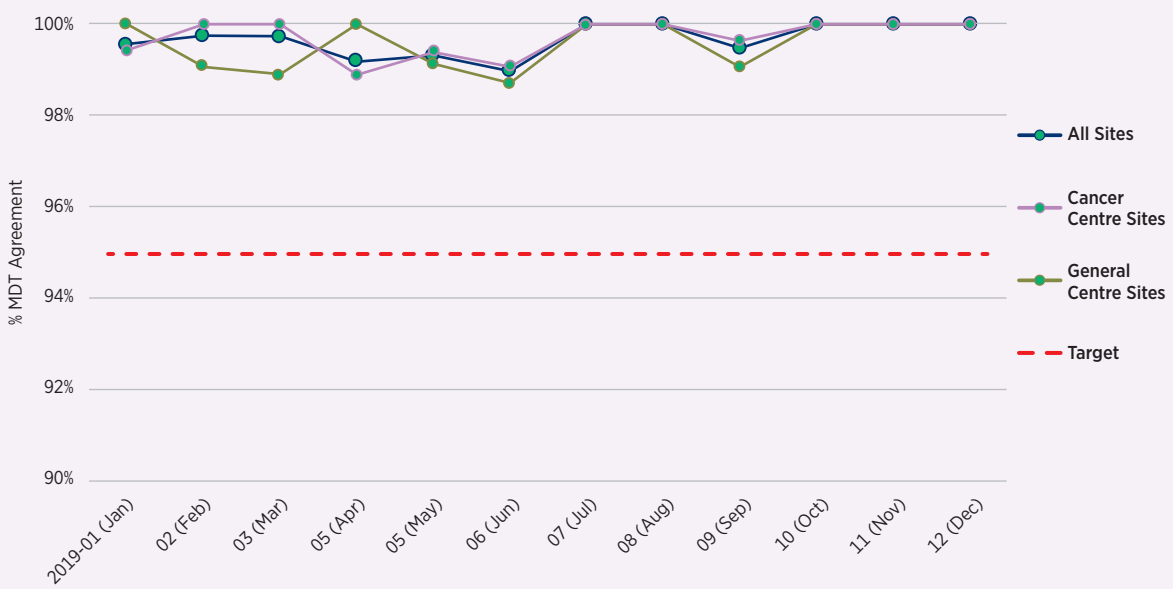
MDT Agreement (Q017) - Cytology (P06, P07)

Target: Greater than or equal to 95%

In 2019, of the total number of Cytology, Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) cases recorded, 15.4% were reviewed at MDTs. This is an increase of 1.4% from 2018, 11.6% of these cases were reviewed in Cancer Centres (CCs) and 3.8% in General Centres (GCs).

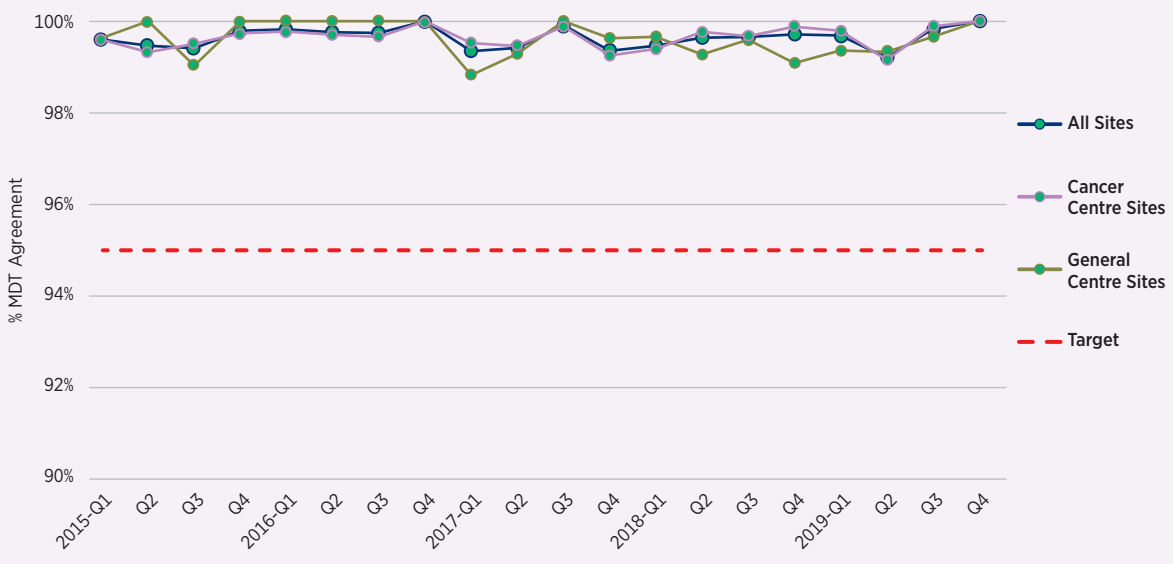
All GCs and CCs were above the target for MDT Agreement for all Cytology cases in 2019.

FIGURE 6.12: Cytology (P06, P07) % MDT Agreement by Month, 2019



Between January and December 2019 both GCs and CCs maintained averages between 98.9% and 100%, a minimum of 3.9% above the target.

FIGURE 6.13: Cytology (P06, P07) % MDT Agreement by Quarter, 2015-2019



A combined average of GCs and CCs from Q1 2015 to Q4 2019 reveals sites were consistently above the target. The lowest point was recorded in Q1 2017 by GCs at 98.9%.

Please consult Table 6.5 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Out of 16 GCs that provided cytology data, all reached the target. Three GCs experienced an increase in MDT agreement from 2018.

CANCER CENTRES (CCs)

Six CCs provided data for this target and all six were above the target.

FIGURE 6.14: Cytology (P06, P07) % MDT Agreement by Site, 2019 v 2018

Summary

TABLE 6.3: National Aggregate % Multi-Disciplinary Team (MDT) Review Agreement (Q017), 2018 v 2019

% National Aggregate Multi-Disciplinary Team (MDT) Review Agreement (Q017), 2018 v 2019						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2018	2019	2018	2019	2018	2019
Target: Greater than or equal to 95%						
Small Biopsy (P01) Cases	99.4%	99.2%	99.5%	99.8%	99.5%	99.7%
GI Endoscopic Biopsy (P02) Cases	99.7%	99.4%	99.5%	99.8%	99.6%	99.6%
Non-Biopsy Cancer Resection (P03) Cases	98.4%	99.6%	99.5%	99.8%	99.3%	99.7%
Cytology Cases (Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) Cases)	99.4%	99.6%	99.7%	99.7%	99.6%	99.7%

All GCs and CCs have been consistently above the target for MDT Agreement in both 2018 and 2019 for all Histology (P01, P02, P03 and P04) and Cytology (P06, P07) cases. The single exception was one GC, which recorded 92.8% MDT Agreement for P02 cases in 2019.

It is important to note that there may be greater levels of disagreement than are represented by the data due to issues with coding accuracy. This hypothesis is supported by the very high levels of MDT agreement including multiple centres recording perfect (100%) agreement for all cases MDT reviewed in both 2018 and 2019.

The Q017 code for MDT Case Review automatically defaults to MDT Review Agreement unless the Q019 code is also entered, which may be a contributory factor. Furthermore, use of the Q019 code necessitates the issuing of an amended report (Q021). There may be variation in practice regarding what is defined as an MDM disagreement. Further refinement and guidance of the use of this code may be indicated.

KEY RECOMMENDATION

Some laboratories use Q018 to indicate MDT Review Agreement, however the Working Group recommend the use of Q017 to assist in maintaining a standardised coding practice.

The use of the Q019 code (MDT Review Disagreement) may necessitate the issuing of an amended report (Q021), the Working Group recommends regular local audits are carried out to verify that these reports are issued.

7

ADDENDUM REPORTS

CHAPTER 7
ADDENDUM REPORTS

Definition: An addendum report refers to any pathology report issued subsequent to the original report and should be classified as amended, corrected or supplementary. There are three recommended quality activity codes relating to addendum reports.

AMENDED REPORTS – Q021

A change to the pathologic interpretation occurs that may give rise to a change in a patient's treatment and / or prognosis.

This is the report issued when the final report diagnosis changes due to a change in interpretation or other important pathologic information becomes available that results in a major change in diagnosis and / or treatment. The reasons for the revision should be explained in the report and the referring clinician notified directly, as an amended report may significantly affect patient care.

CORRECTED REPORTS – Q022

This refers to a report issued when transcription, patient identification, specimen site, or other related reporting errors occur but without a change to the diagnostic information.

Corrected reports do not change the original interpretive diagnosis.

SUPPLEMENTARY REPORTS – Q020

This is a report issued when new information becomes available after the final report has been submitted. Newly obtained clinical information, findings on additional histological sections or review of archival material, the results of special studies such as immunohistochemistry or molecular diagnostics, and the results of consultations may be included in a supplementary report.

When issued following a provisional report, the supplementary report acts as the final report. If the original report does not indicate that further studies or opinions should be sought, and the subsequent supplementary information changes the original diagnosis, the addendum report should be classified as amended.

COMBINED AMENDED/CORRECTED REPORTS

The rationale for combining amended and corrected reports was as a result of a multi-institutional audit of amended and corrected reports at three participating laboratories which revealed significant misclassification of these two categories. We have therefore combined the two for data analysis purposes.[2] The original target agreed for Corrected Reports for both histology and cytology cases was 2%. The target of 1% for combined Amended/Corrected Reports was agreed by the Working Group, this was based on analysis of data gathered in previous years which reveals that the percentages of corrected reports do not exceed 1% for General Centres, Cancer Centres or a combined national average for both.

[2] S.Phelan et al "Monitoring Error in Histopathology-A Multi-Institutional Audit of Addendum Reports", USCAP, Vancouver 2018,

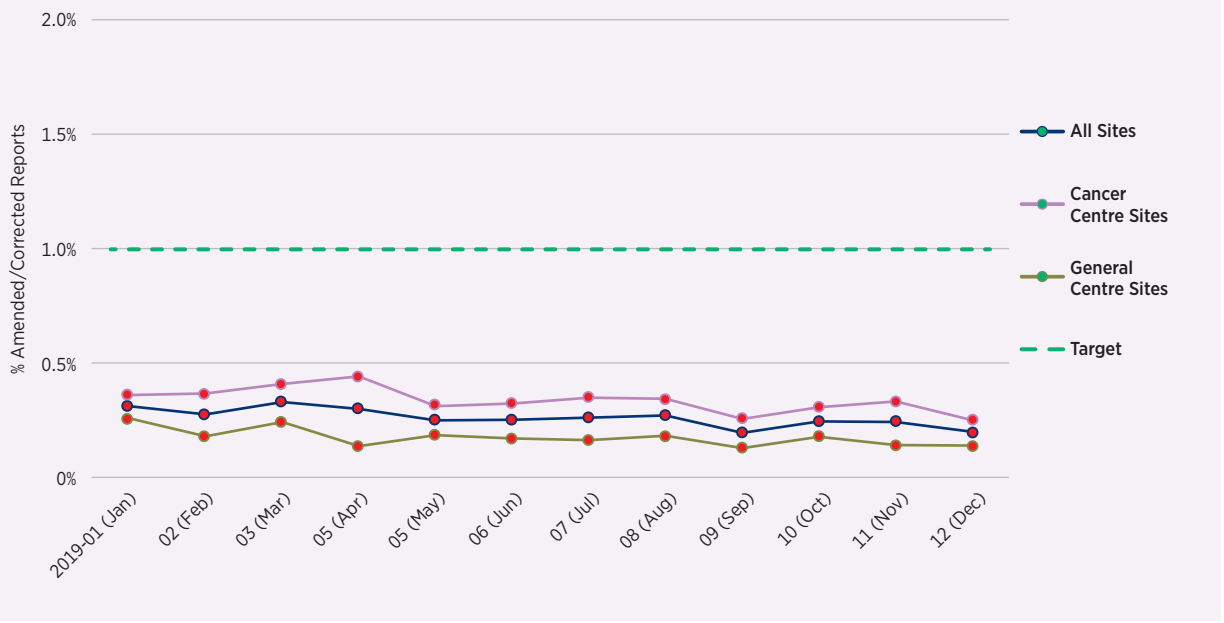
TABLE 7.1: Addendum Reports Recommendations

Key Quality Area	Recommendations
Addendum Reports	**% Combined Amended/ Corrected Reports** 1. Histology cases 1% or less 2. Cytology cases 1% or less **% Supplementary Reports** 3. Histology cases 10% or less 4. Cytology cases 10% or less

Combined Amended/Corrected Reports - Histology Cases (P01-P04)

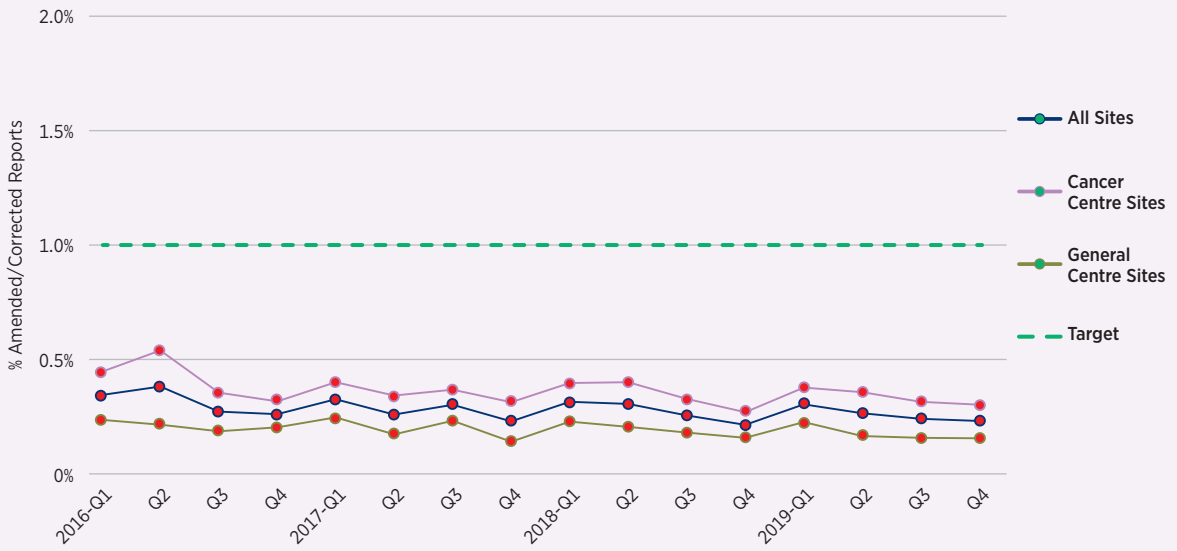
Recommendation: 1% or less

FIGURE 7.1: Histology (P01, P02, P03, and P04) % Amended/Corrected Reports by Month, 2019



Cancer Centres (CCs) and General Centres (GCs) combined remained below the target for all 12 months of 2019 with a national average of 0.3%. CCs had an average of 0.3%, a decrease from 0.4% in 2018. GCs had an average of 0.2%, maintained from 2018.

FIGURE 7.2: Histology (P01, P02, P03, and P04) Amended/Corrected Reports by Quarter, 2016-2019

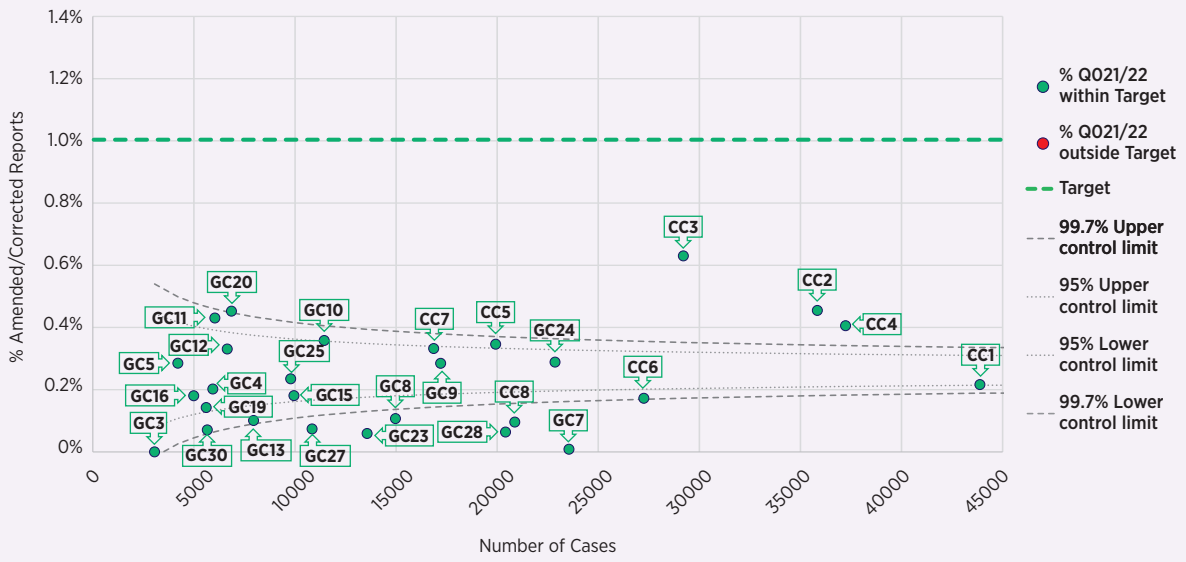


On a quarterly basis from Q1 2016 to Q4 2019, the average percentage of Amended/Corrected Reports for all CCs and GCs combined, has been steadily fluctuating between 0.3% and 0.2% from Q1 2016 to Q4 2019.

A very low level of Amended/Corrected Reports raises a concern over completeness of coding in some centres.

The recommended target of 1% or less for Histology cases Combined Amended/Corrected Reports was achieved by all 29 sites in 2019

FIGURE 7.3: Histology (P01, P02, P03, and P04) % Amended/Corrected Reports per Site, 2019



Please consult Table 7.3 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

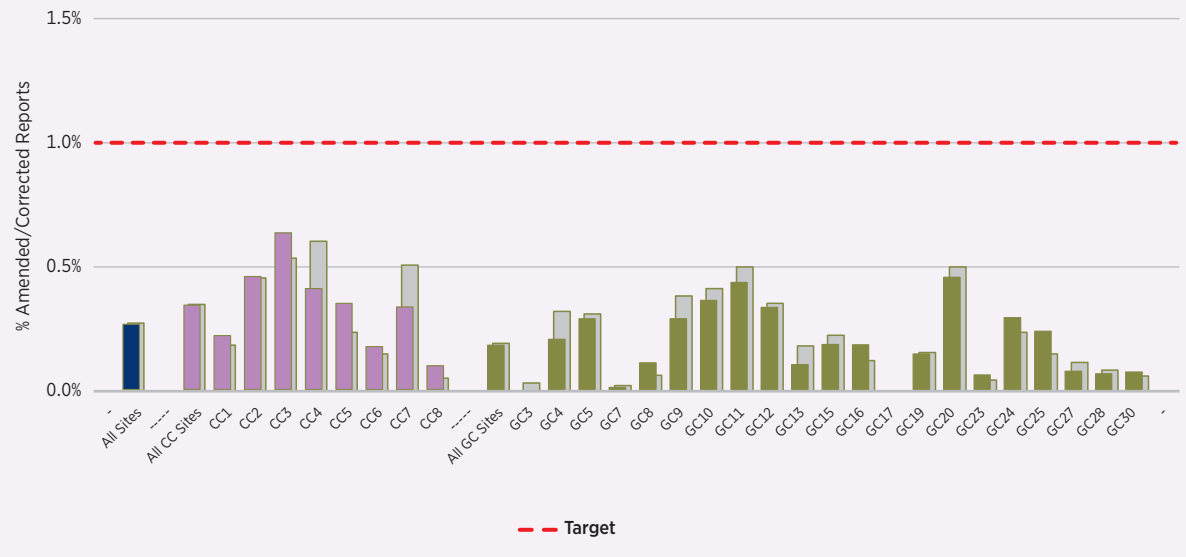
GENERAL CENTRES (GCs)

In 2019, 18 out of 20 GCs remained below the target. Two sites had no histology cases with Amended/Corrected Reports, this indicates an absence of coding in these centres.

CANCER CENTRES (CCs)

All eight CCs remained below the target in 2019.

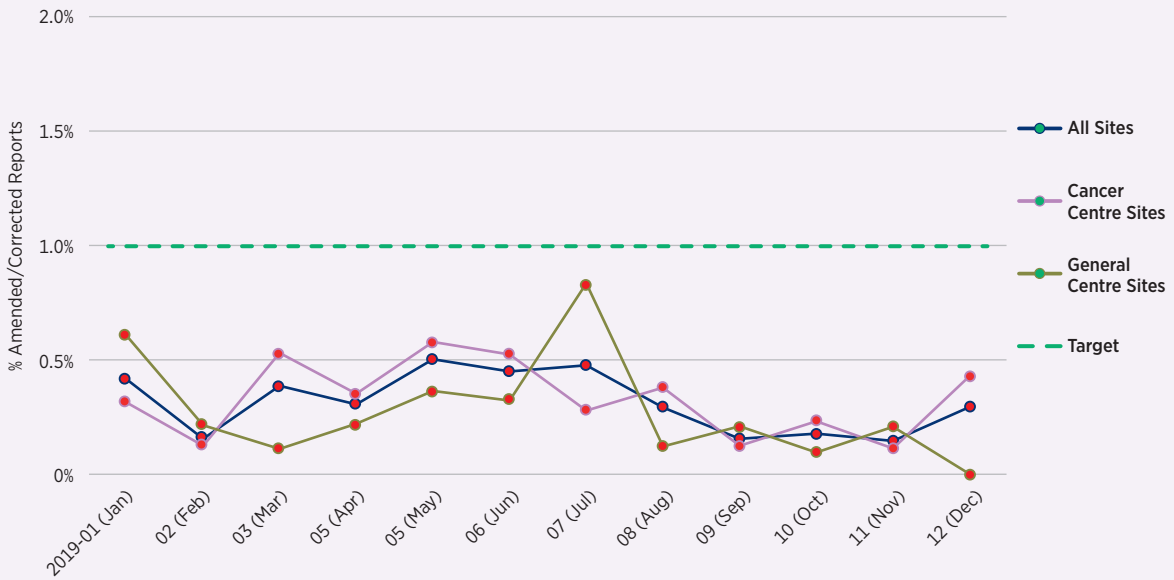
FIGURE 7.4: Histology Cases % Combined Amended/Corrected Reports, 2019 v 2018



Combined Amended/Corrected Reports - All Cytology (P05-P09)

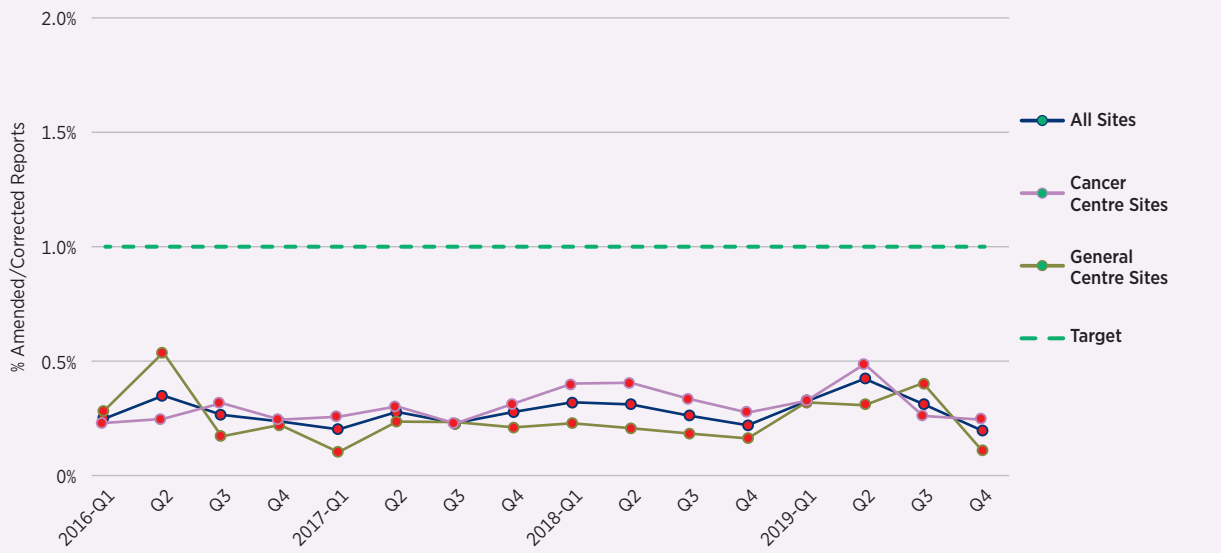
Recommendation: 1% or less

FIGURE 7.5: Cytology (P05, P06, P07, and P09) % Amended/Corrected Reports by Month, 2019



Cancer Centres (CCs) and General Centres (GCs) combined remained below the target of 1% or less for all 12 months of 2019 with an average of 0.3%. CCs had an average of 0.3%, an increase of 0.1% from 2018. GCs had an average of 0.3%, also an increase of 0.1% from 2018.

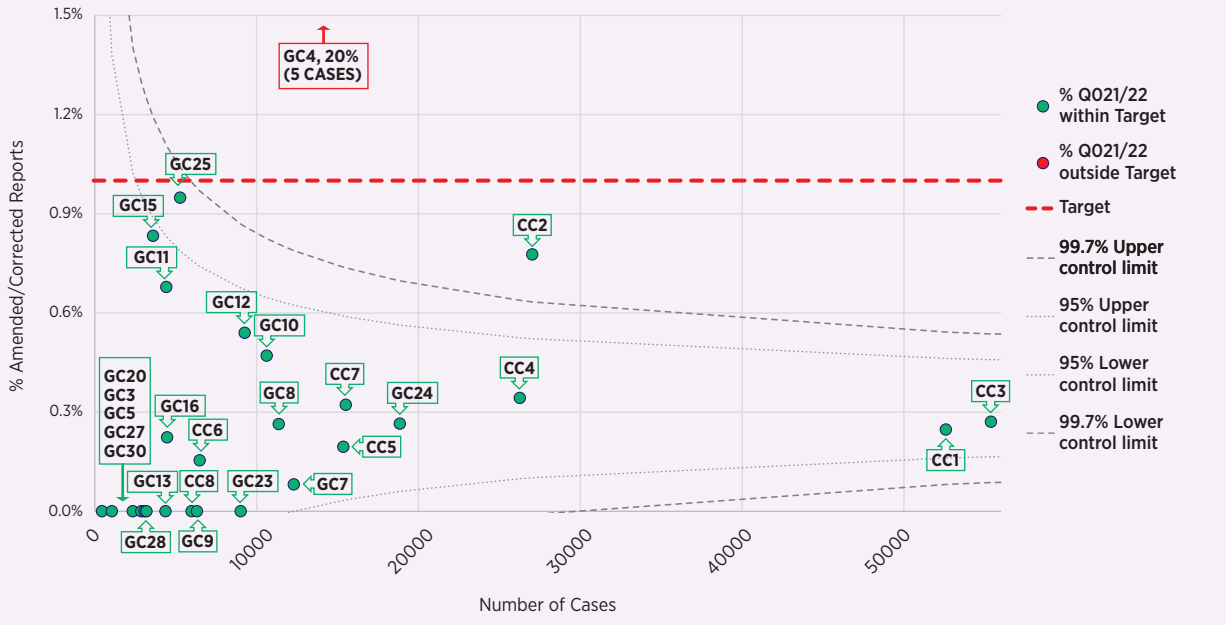
FIGURE 7.6: Cytology (P05, P06, P07 and P09) % Amended/Corrected Reports by Quarter, 2016-2019



The percentage of Amended/Corrected Reports fluctuated on a quarterly basis between 0.2% and 0.3% from Q1 2016 to Q1 2019. During Q2 2019 there was a slight increase to 0.4% before gradually declining to 0.2% by Q4 2019.

CCs and GCs combined remained below the target of 1% or less for Cytology Amended/Corrected Reports for all 12 months of 2019 with an average of 0.3%

FIGURE 7.7: Cytology Only % Combined Amended/Corrected Reports per Site, 2019



Please consult Table 7.4 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Nineteen out of 21 GCs reported cytology cases (two sites reported no cytology cases).

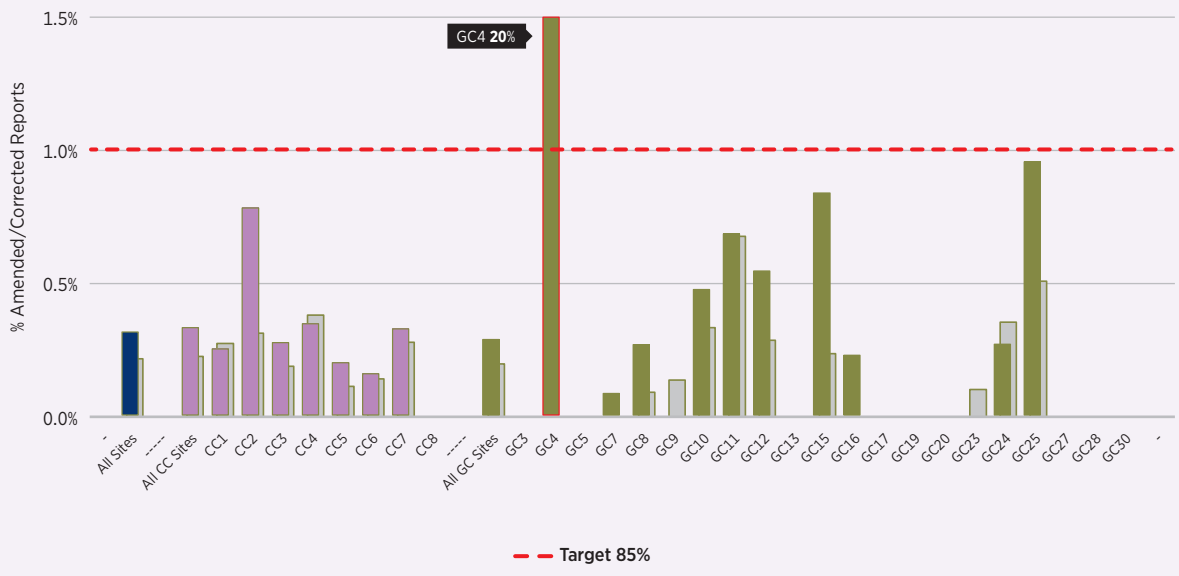
Eighteen out of these 19 centres met the target of 1% or less. However out of these 18 GCs that reported cytology cases, nine sites recorded no Amended/Corrected Reports. This may reflect an absence of coding.

One site recorded the highest level at 20% Amended/Corrected Reports, however this likely represents a low case number as only five cases were reported in 2019.

CANCER CENTRES (CCs)

All eight CCs met the target in 2019. However, one site had no Amended/Corrected Reports recorded, which may indicate an absence of coding.

FIGURE 7.8: Cytology Cases, % Combined Amended/Corrected Reports, 2019 v 2018



Summary

TABLE 7.2: National Aggregate % Addendum Reporting, 2018 v 2019

% National Aggregate, Addendum Reporting, 2018 v 2019						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2018	2019	2018	2019	2018	2019
Less than 1%						
Histology (All Cases)	0.2%	0.2%	0.4%	0.3%	0.3%	0.3%
Cytology (All Cases)	0.2%	0.3%	0.2%	0.3%	0.2%	0.3%

In 2019, the national average for combined Amended/Corrected reporting was 0.3% for Histology cases (P01 – P04) and 0.3% for all Cytology cases (P05 - P09). These are both very much within the recommendations and key indicators set by the Histopathology QI Working Group. In addition, all sites were below the maximum recommended target each month of 2019.

Critical Diagnosis Coding - In 2017 a code for Critical Diagnosis was introduced and a non-exhaustive list of critical diagnoses suggested by the programme but with guidance provided on local ownership of this list. One of the suggested inclusions on this list was an Amended Report, as this reflects a change in the pathological interpretation. The Q063 code for Critical Diagnosis was used infrequently in 2019. The code was recorded a total of 119 times in nine different sites with all specimen types represented. This data reflects poor use of the code in 2019. The programme urges participating laboratories to code Critical Diagnoses using the Q023 code (communication to clinician) or the Q063 code, as most importantly the communication should be recorded. To date a target for this code has not been set. The code for communicating with clinicians (Q023) was used 6,570 times in 2019 (1.4%) which falls within the target of 1-3%.

Concerns exist regarding an absence of coding associated with Amended/Corrected Reports in some centres. The Histopathology QI Working Group, having engaged with colleagues nationwide at the annual conference in 2019 and additional communications throughout the year, recommend a revision of the definitions of Amended/Corrected and Supplementary Reports to ensure accurate application of the codes can be achieved in laboratories.

KEY RECOMMENDATION

The Working Group recommends a revision of all KQI definitions, with focus on Amended/Corrected and Supplementary reports to ensure accurate application of codes are achieved in laboratories.

8

TURNAROUND TIME

CHAPTER 8
TURNAROUND TIME

Definition: Turnaround is measured as the time from when the laboratory receives a specimen to the time the final report is authorised. It is calculated based on working days and does not include weekends or bank holidays.

Turnaround Time (TAT) is a key monitor of the overall function of the laboratory service and is considered an important element of quality due to its impact on the clinical management of patients.

To ensure a meaningful representation of hospital case TAT, separate classification of Biopsy TAT and Non-Biopsy TAT is recommended. Non-Biopsy cases are further classified into Cancer Resections (by organ/site) and into all other cases.

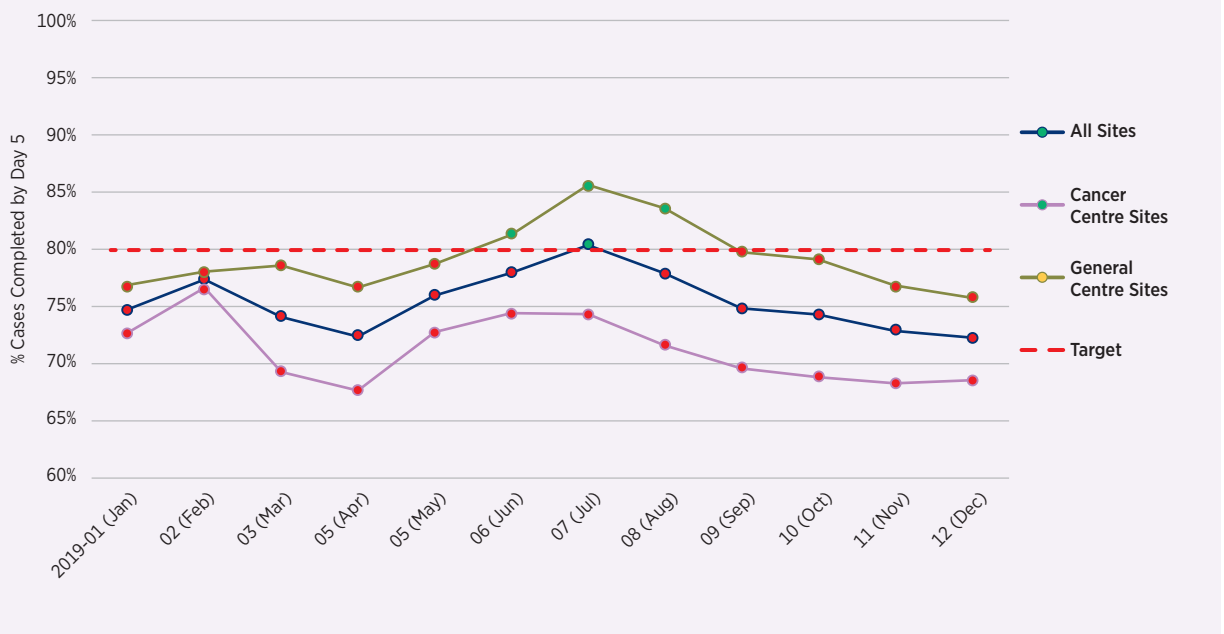
TABLE 8.1: TAT Targets

Case Type	Target
Small Biopsy (P01)	80% of cases Turned Around in 5 days or less
GI Biopsy (P02)	80% of cases Turned Around in 5 days or less
Non-Biopsy Cancer Resection (P03)	80% of cases Turned Around in 7 days or less
Non-Biopsy Other (P04)	80% of cases Turned Around in 7 days or less
Cytology FNA (P06)	80% of cases Turned Around in 5 days or less
Cytology Exfoliative (P07)	80% of cases Turned Around in 5 days or less

Small Biopsy (P01) TAT

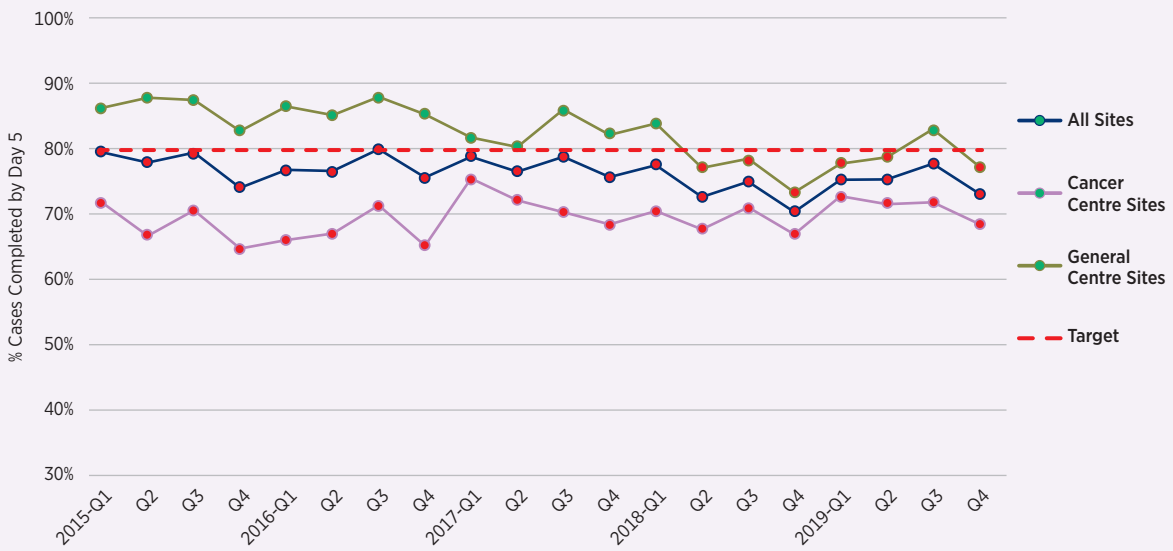
Target: 80% cases completed by day 5

FIGURE 8.1: Small Biopsy (P01) TAT by Month, 2019



Minor fluctuations in TAT can be seen across this 12-month period, with General Centres (GCs) exceeding the target of 80% of reports authorised within the 5 day target in June, July and August. On average, Cancer Centres (CCs) did not reach the 80% target during 2019, with the lowest compliance evident in April with 67% of cases reported on by day 5.

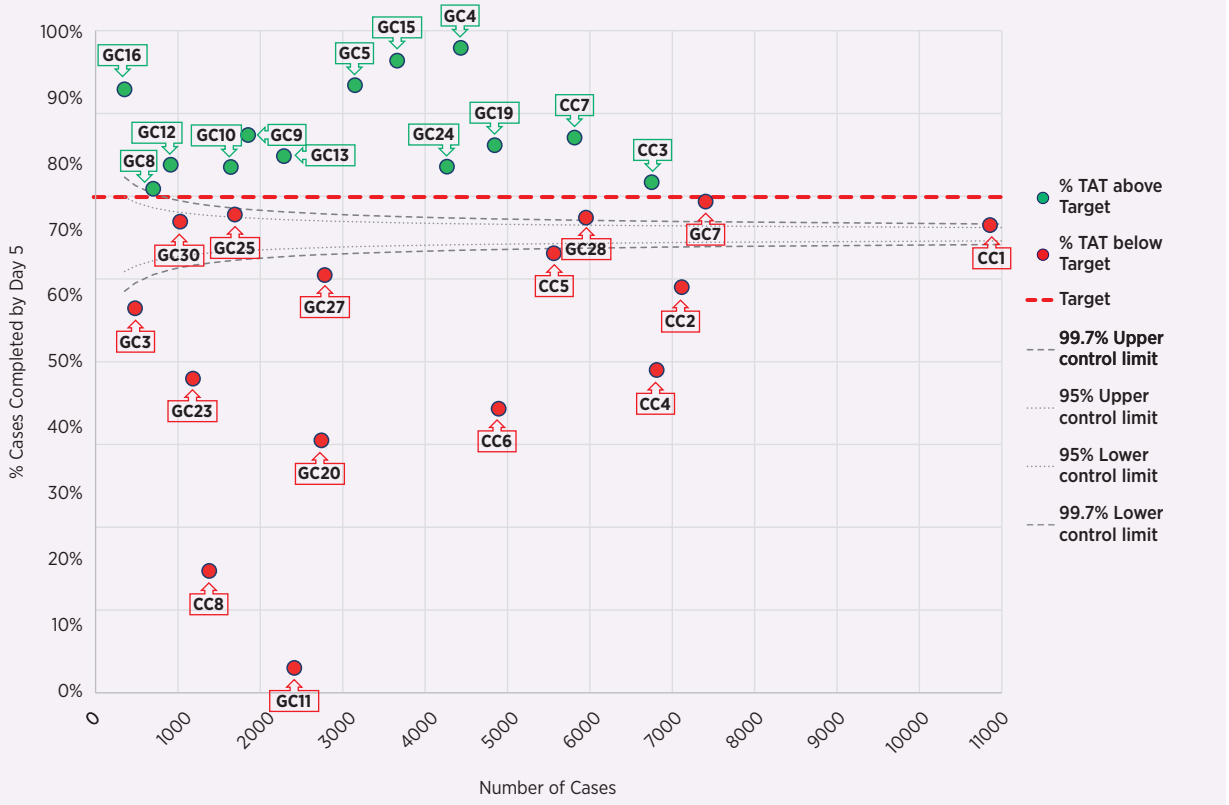
FIGURE 8.2: Small Biopsy (P01) TAT by Quarter, 2015-2019



The national aggregate TAT for Small Biopsy (P01) has been under target for the last 5 years and has fluctuated between 80% and 70% from Q1 2015 and Q4 2019. GCs saw a return to reports being authorised on target in Q3 of 2019, having been below target for 2018. CCs are consistently below the target.

The national average for GCs Small Biopsy (P01) TAT for 2019 was 79.3%, which is 0.7% below the target but also 2.5% above last year's national average of 76.8%. The national average of cases complete by day 5 in CCs was 71.2%, an increase of 2.1% from 2018.

FIGURE 8.3: Small Biopsy (P01) TAT % Completed by Day 5 by Number of Cases, 2019



Please consult Table 8.3 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

A review of the 20 GCs represented in this year's report, reveals that 11 out of 20 sites reached the target. Of those sites that reached the target the average percentage of reports authorised on target was 88.2%.

CANCER CENTRES (CCs)

The two CCs that are above target have maintained this position from 2018.

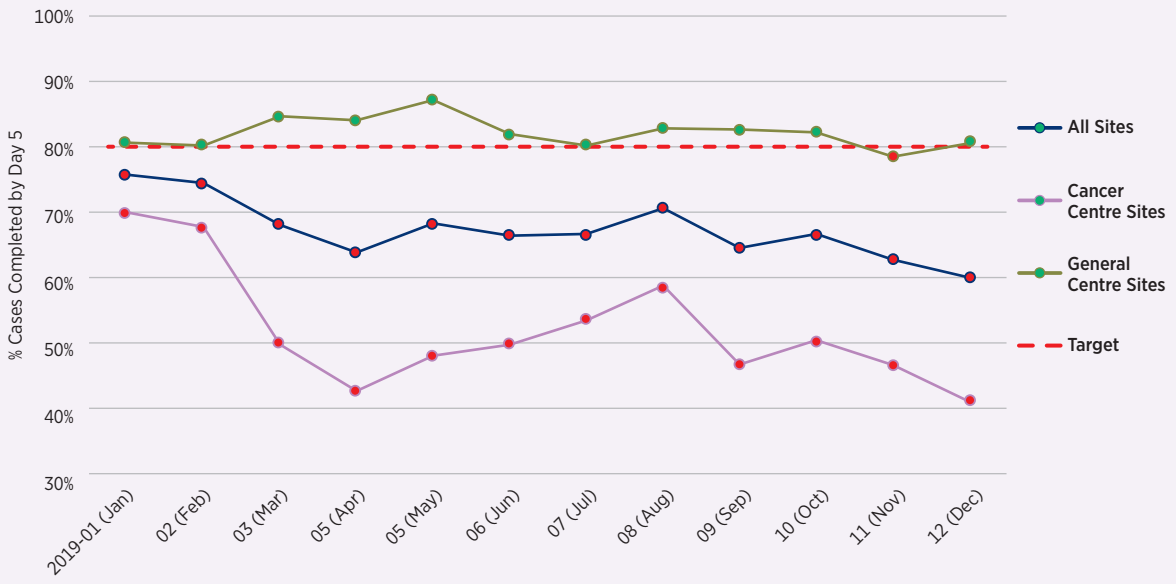
FIGURE 8.4: Small Biopsy (P01) TAT % Completed by Day 5 by Site, 2019 v 2018

GI Endoscopic Biopsy (P02) TAT

Target: 80% cases completed by day 5

The national average for General Centres (GCs) for the year was 82.3%, an increase of 3% from 2018. The national average for Cancer Centres (CCs) this year was 51.8% (overall case increases of 5%), which was a decrease of 4.2% from 2018.

FIGURE 8.5: GI Endoscopic Biopsy (P02) TAT by Month, 2019

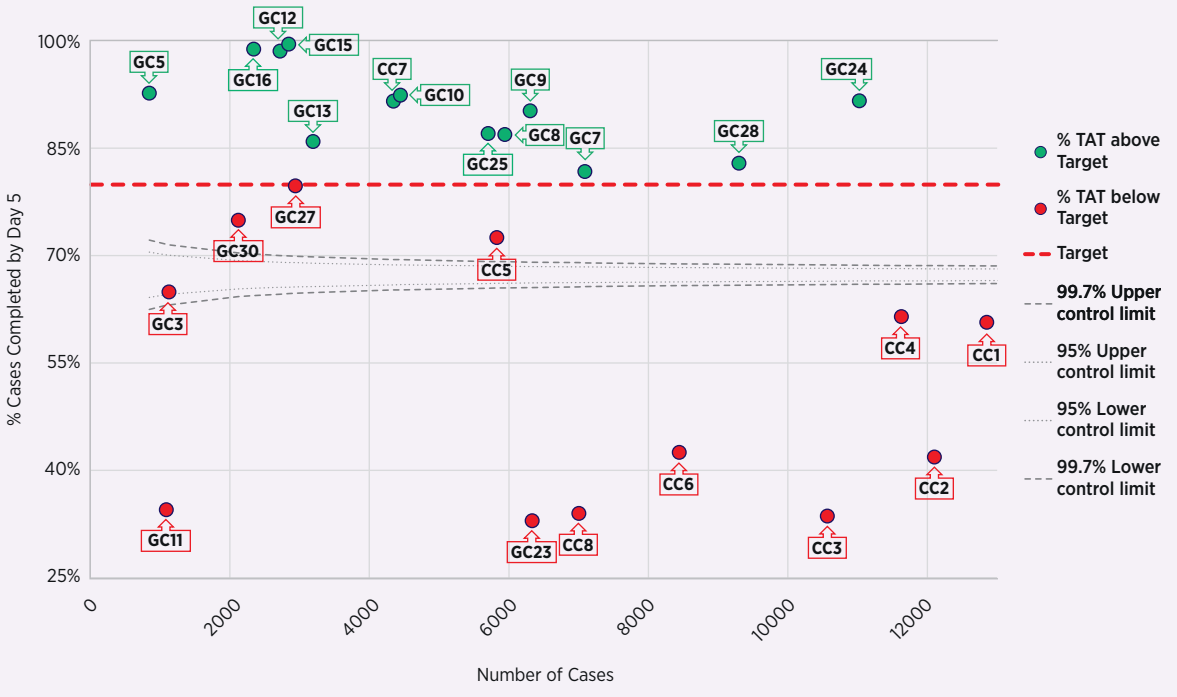


The above graph reveals April and December as the months with the lowest average percentage of GI Endoscopic Biopsy reports completed within 5 days in CCs. GCs maintained a national aggregate TAT above target for the year with the highest average percentage seen in May.

FIGURE 8.6: GI Endoscopic Biopsy (P02) TAT per Quarter, 2015-2019

From 2015 to 2018, the aggregate data reveals a decreasing trend in the number of GCs meeting the target, however improvements can be seen from Q1 of 2019. National aggregate data also reveal that CCs are not meeting the target as it currently stands. This may relate to the significant increase in endoscopy activity nationwide.

FIGURE 8.7: GI Endoscopic Biopsy (P02) TAT % Completed by Day 5 by Number of Cases, 2019



Please consult Table 8.4 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

The target for GI Endoscopic Biopsy (P02) cases was met by 12 out of 17 GCs in 2019 (this represents two more sites than last year). Of those 12 GCs that met the target, the percentage TAT by day 5 was 90.7%, of those unable to meet the target the average TAT was 57.4%.

CANCER CENTRES (CCs)

One out of eight CCs reached the target for GI Endoscopic Biopsy (P02) cases, this site has consistently reached the target in 2018 and 2017.

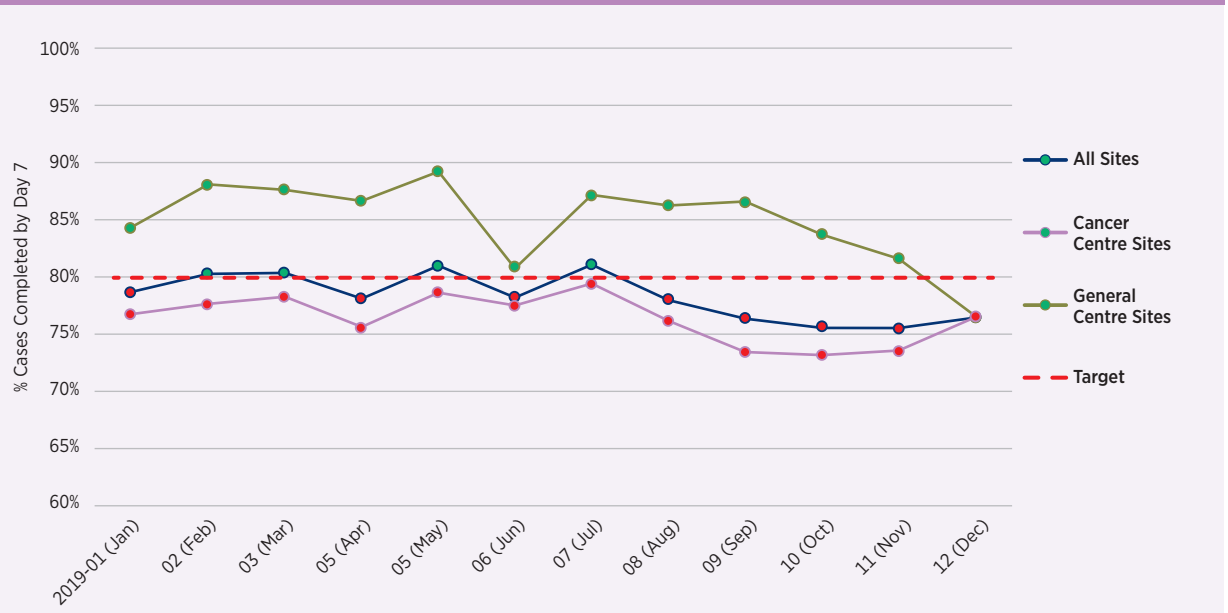
FIGURE 8.8: GI Endoscopic Biopsy (P02) TAT % Completed by Day 5 by Site, 2019 v 2018

Non-Biopsy Cancer Resection (P03) TAT

Target: 80% cases completed by day 7

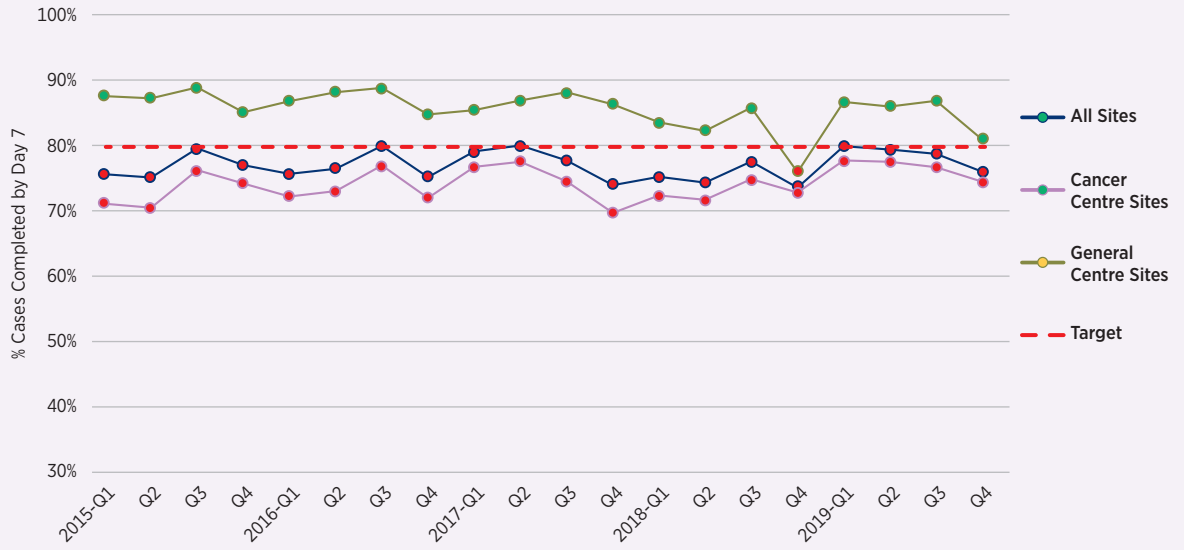
The national average Non-Biopsy Cancer Resection (P03) TAT for General Centres (GCs) in 2019 was 84.9%, Cancer Centres (CCs) reported a national average of 76.5% and the combined average of all sites was 78.4%, 1.6% below the target of 80%. This figure has increased by 2.9%, as the combined average of all sites was 75.5% in 2018.

FIGURE 8.9: Non-Biopsy Cancer Resection (P03) TAT by Month, 2019



The national average data for GCs reveals that the target was reached in all but one month in 2019. It can be seen from the national aggregate data that CCs did not reach the target, with the lowest point being 73%.

FIGURE 8.10: Non-Biopsy Cancer Resection (P03) TAT by Quarter, 2015-2019



Looking back at the aggregate data over the last five years, we can see that GCs have almost consistently remained above the target, dropping below only once in Q4 of 2018. The aggregate data also outlines that CCs have not reached the target in this 5-year period, with the lowest point being 70%.

FIGURE 8.11: Non-Biopsy Cancer Resection (P03) TAT % Completed by Day 7 by Number of Cases, 2019

Please consult Table 8.5 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

The data in the 2019 report reveals that nine out of the 19 General Centres (GCs) that provided data reached the target.

CANCER CENTRES (CCs)

Two out of eight Cancer Centres (CCs) reached the target.

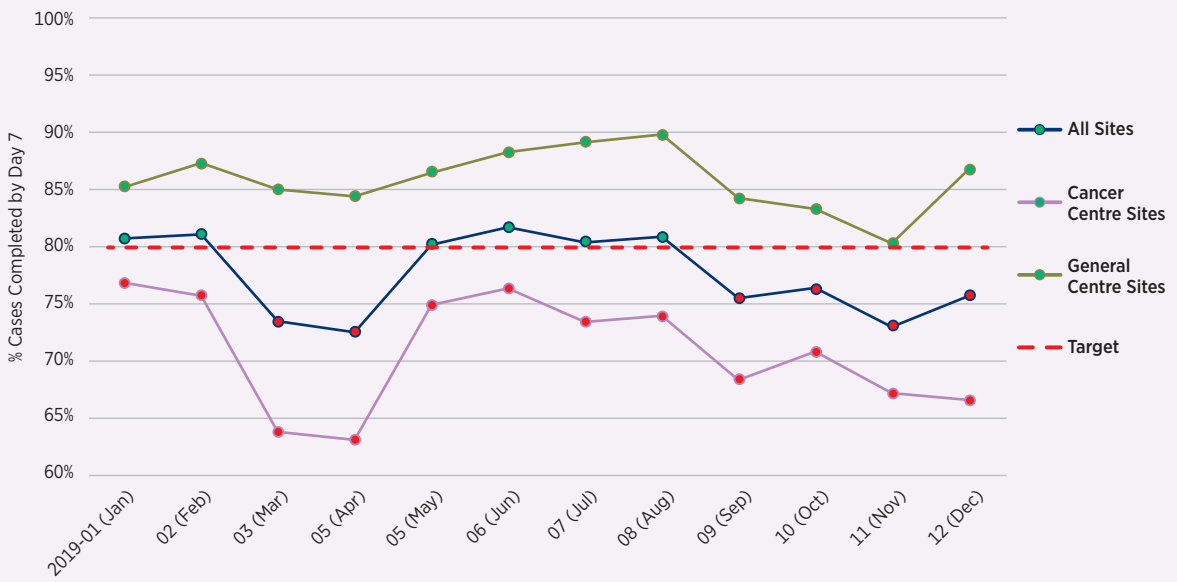
FIGURE 8.12: Non-Biopsy Cancer Resection (P03) TAT% Completed by Day 7 by Site, 2019 v 2018

Non-Biopsy Other (P04) TAT

Target: 80% cases completed by day 7

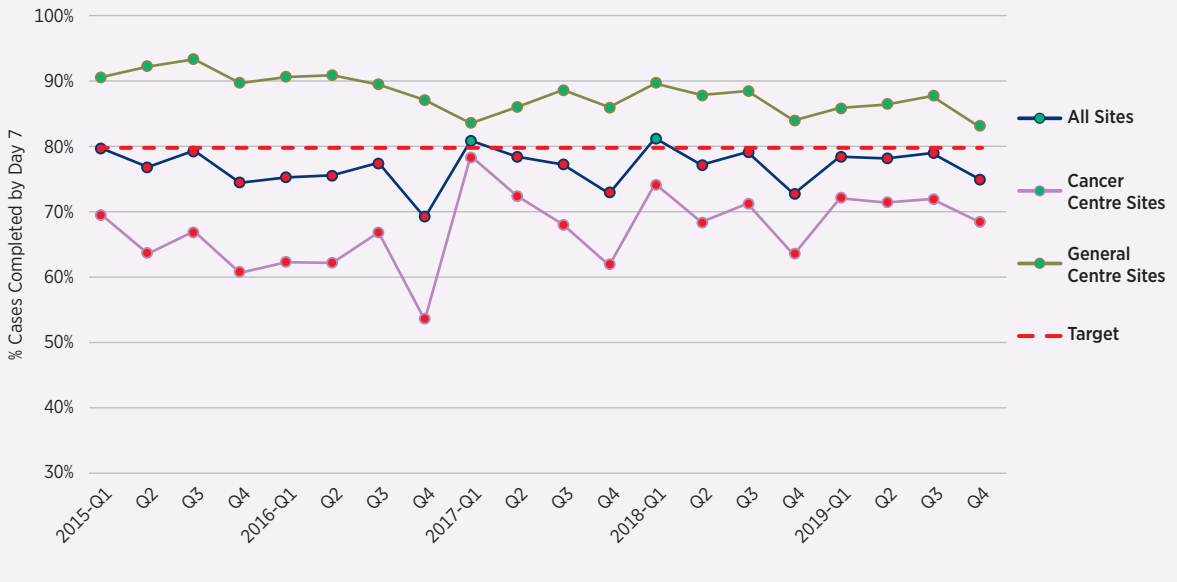
The national average for General Centres (GCs) was 85.7% in 2019, a slight decrease of 1% from 2018. Cancer Centres (CCs) reported a national average of 70.8% in 2019 which was 9.2% below the target of 80%. The national aggregate of all GCs and CCs remains below target at 77.5% in 2019, a 0.4% decrease from 2018.

FIGURE 8.13: Non-Biopsy Other (P04) TAT by Month, 2019



In 2019, the aggregate data reveals that General Centres (GCs) met and exceeded the target of 80% TAT by day 7, month on month. Cancer Centres (CCs) did not reach the target in 2019, with the aggregate data showing the percentage of cases ranging between 63% and 76%, with the lowest points seen in March and April.

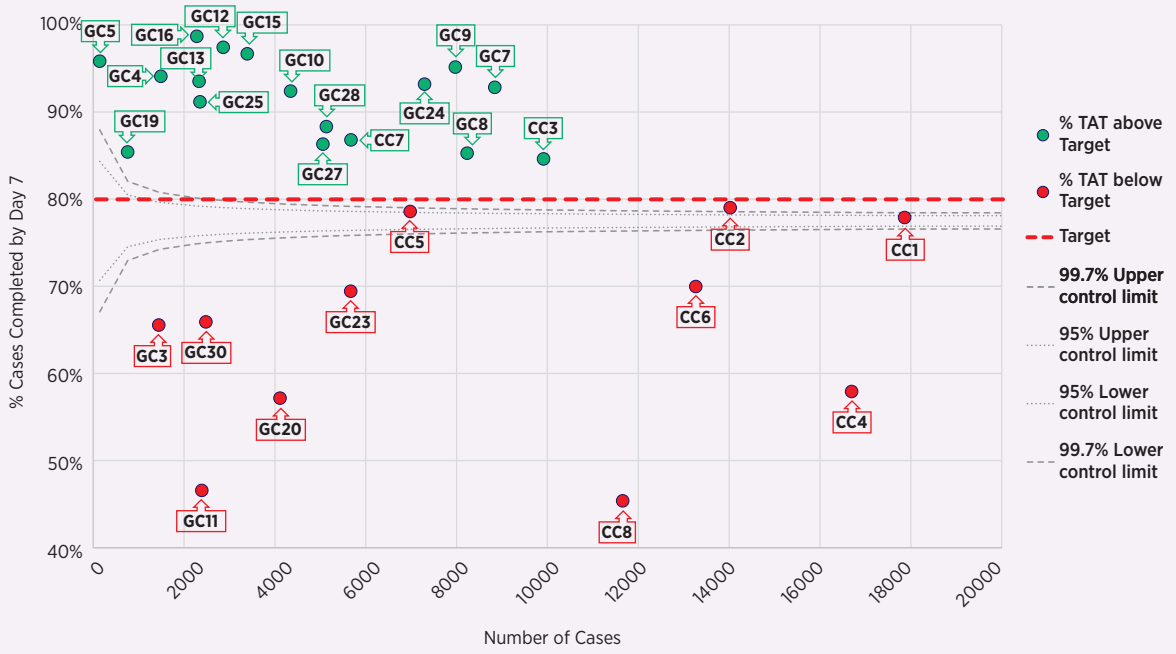
FIGURE 8.14: Non-Biopsy Other (P04) TAT by Quarter, 2015-2019



From 2015 to 2019, GCs have consistently maintained the average TAT above target.

The national aggregate data for CCs reveals they have not met the target between Q1 2015 and Q4 2019.

FIGURE 8.15: Non-Biopsy Other (P04) TAT % Completed by Day 7 by Number of Cases, 2019



Please consult Table 8.6 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Fifteen GCs out of 20 reached the target of 80% Non-Biopsy Other (P04) cases completed by day 7.

CANCER CENTRES (CCs)

In 2019, two CCs reached the target, these sites also achieved this in 2018.

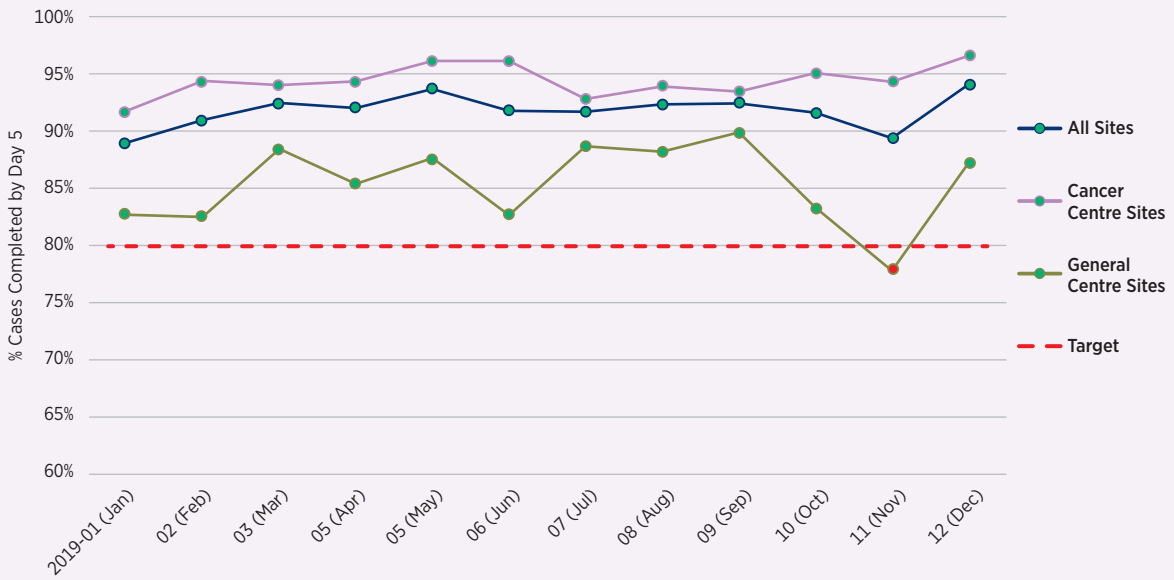
FIGURE 8.16: Non-Biopsy Other (P04) TAT % Completed by Day 7 by Site, 2019 v 2018

Non-Gynaecological Cytology FNA (P06) TAT

Target: 80% cases completed by day 5

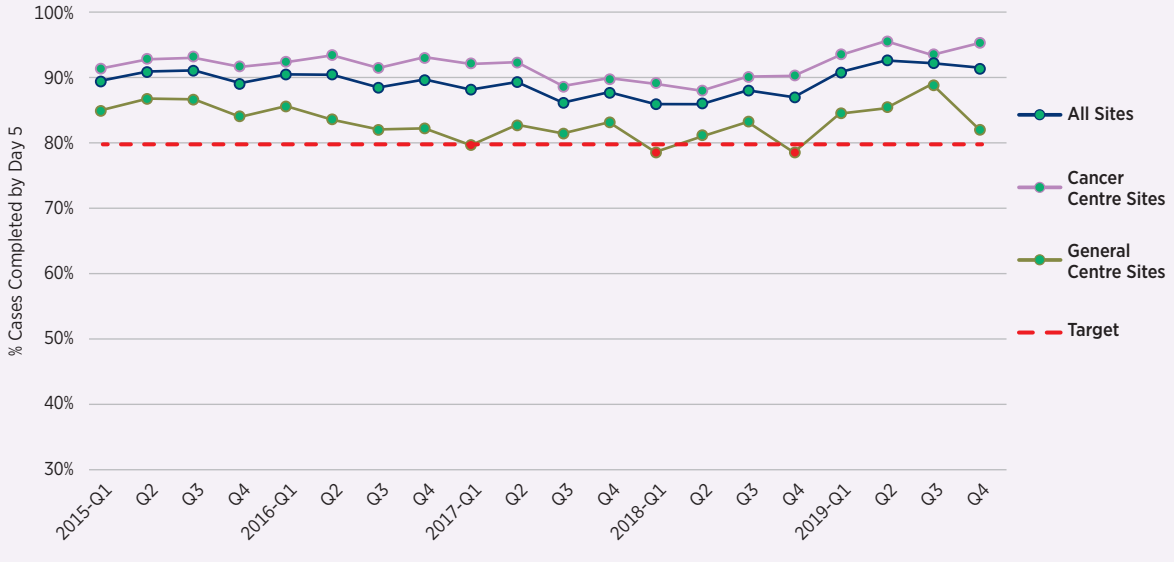
In 2019 the national average for both General Centres (GCs) and Cancer Centres (CCs) exceeded the target at 85.2% and 94.4% respectively.

FIGURE 8.17: Non-Gynaecological Cytology FNA (P06) TAT by Month, 2019



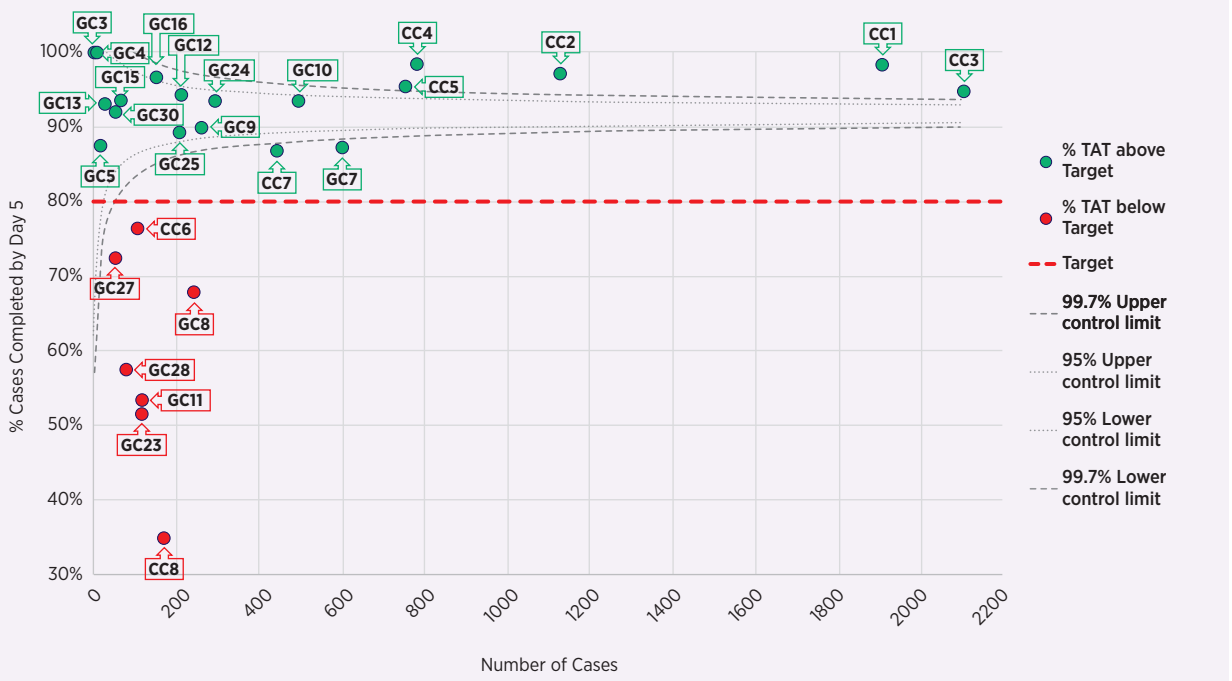
A breakdown of monthly national aggregate data reveals that CCs remained well above the target of 80% Non-Gynaecological Cytology FNA (P06) cases complete by day 5, remaining between 93% and 96%. The national monthly aggregate for GCs dropped below the target once in the month of November to 78%.

FIGURE 8.18: Non-Gynaecological Cytology FNA (P06) TAT by Quarter, 2015-2019



Between 2015 and 2019 CCs have maintained well above the 80% target, with an increase apparent in the average percentage of cases complete from Q1 2019. GCs have experienced a gradual decline from Q1 2015 to Q4 2018, dropping below the target in three months. There has been an increase in the average percentage of cases meeting targets in 2019, the highest value in five years was seen in Q3 2019 for GCs.

FIGURE 8.19: Non-Gynaecological Cytology FNA (P06) TAT % Completed by Day 5 by Number of Cases, 2019



Please consult Table 8.7 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Eighteen GCs provided data for this target in 2019, 13 of these sites achieved the target of 80% Non-Gynaecological Cytology FNA (P06) cases complete by day 5.

CANCER CENTRES (CCs)

Five CCs saw an increase in the percentage of cases complete by day 5 between 2018 and 2019, those six sites who achieved the target in 2018 maintained this position in 2019.

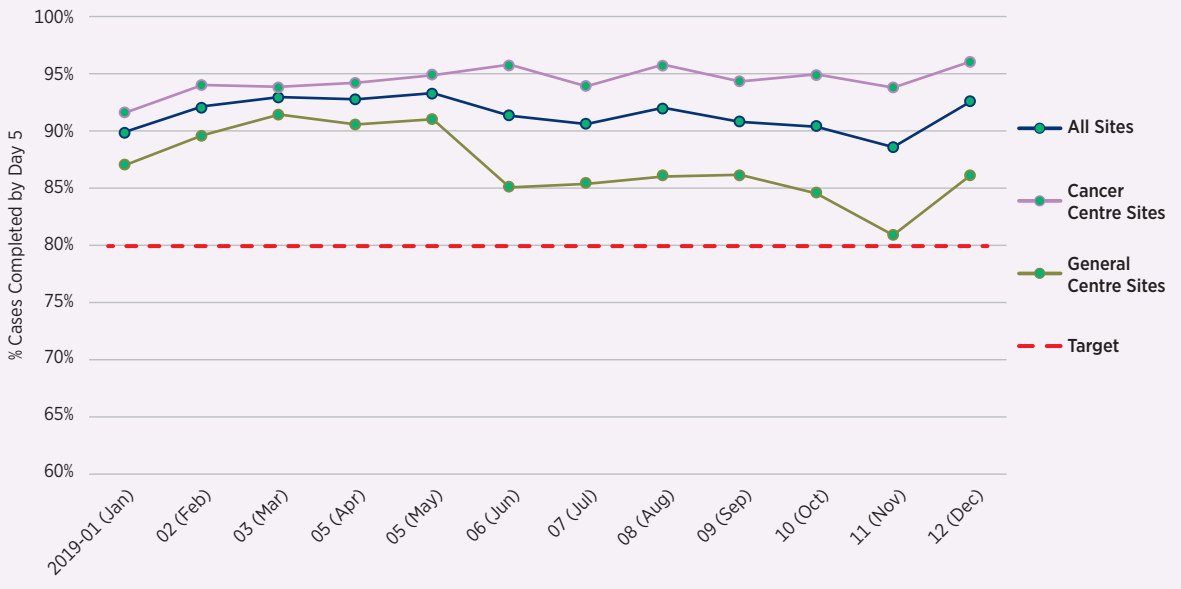
FIGURE 8.20: Non-Gynaecological Cytology FNA (P06) TAT % Completed by Day 5 by Site, 2019 v 2018

Non-Gynaecological Cytology Exfoliative (P07) TAT

Target: 80% cases complete by day 5

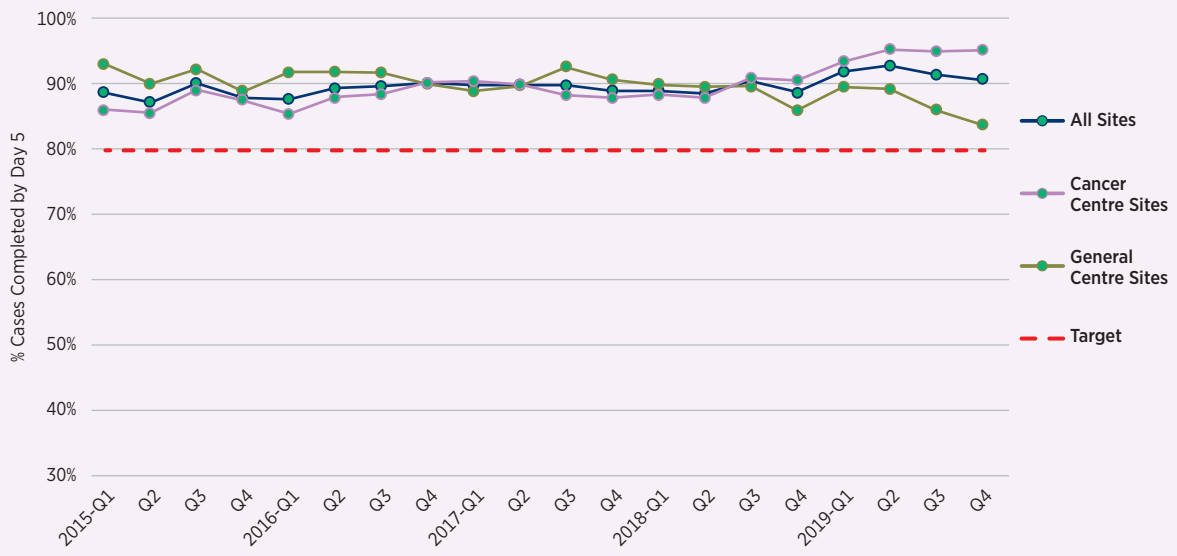
In 2019 both General Centres (GCs) and Cancer Centres (CCs) exceeded the target of 80% Non-Gynaecological Cytology Exfoliative (P07) TAT complete at 87.0% and 94.4% respectively.

FIGURE 8.21: Non-Gynaecological Cytology Exfoliative (P07) TAT by Month, 2019



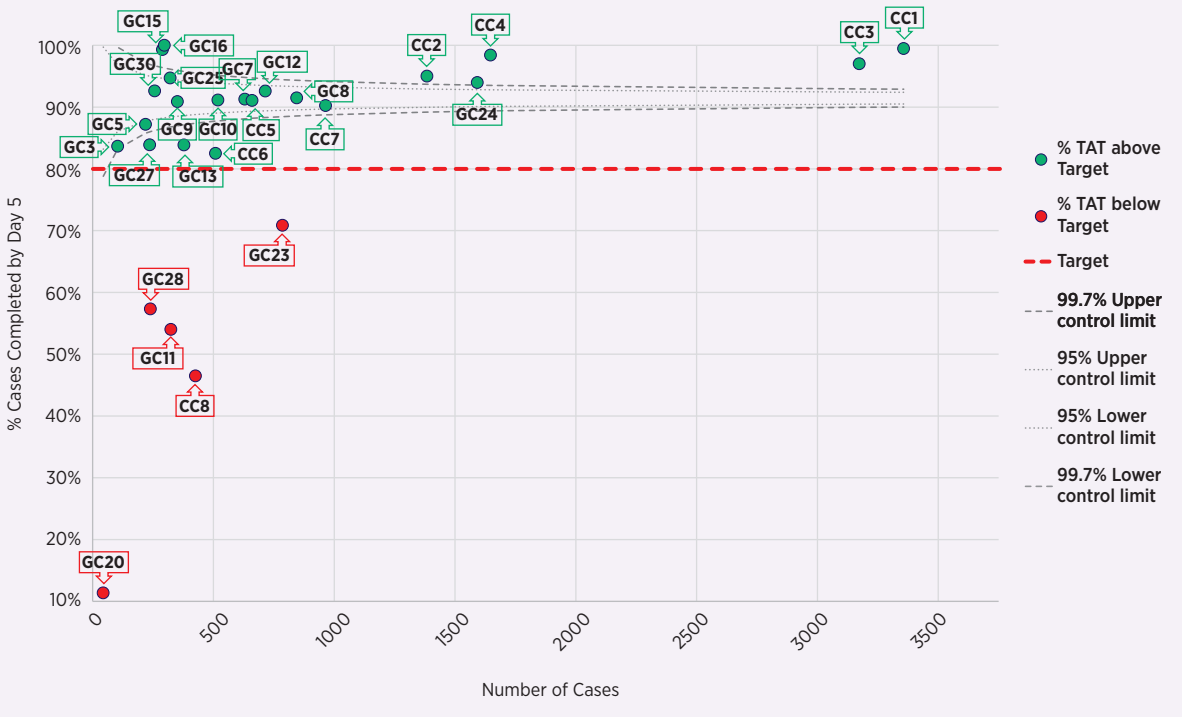
The breakdown by month reveals that GCs and CCs maintained an average percentage of greater than 80% cases complete by day 5. GCs dropped close to but above 80% for the first time in 2019 in November. CCs maintained a steady increase from January to December.

FIGURE 8.22: Non-Gynaecological Cytology Exfoliative (P07) TAT by Quarter, 2015-2019



A lookback by quarter from Q1 2015 to Q4 2019 reveals an impressive standard for both GCs and CCs. GCs range between 84% and 95% cases complete by day 5 and CCs range between 86% and 96% cases complete within target.

FIGURE 8.23: Non-Gynaecological Cytology Exfoliative (P07) TAT % Completed by Day 5 by Number of Cases, 2019



Please consult Table 8.8 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Out of 18 GCs who provided data for this KQI, 14 reached the target of 80% cases complete by day 5.

CANCER CENTRES (CCs)

Seven out of the eight CCs reached and exceeded the target in 2019.

FIGURE 8.24: Non-Gynaecological Cytology Exfoliative (P07) TAT % Completed by Day 5 by Site, 2019 v 2018

Summary

TABLE 8.2: National Aggregate Turnaround Time 2018 v 2019

National Aggregate Turnaround Time 2018 v 2019						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2018	2019	2018	2019	2018	2019
TAT: 80% Cases Complete by Day 5						
Small Biopsy (P01) Cases	76.8%	79.3%	69.1%	71.2%	72.9%	75.4%
GI Endoscopic Biopsy (P02) Cases	79.3%	82.3%	56.0%	51.8%	67.6%	67.3%
Non-Gynaecological Cytology FNA (P06) Cases	82.5%	85.2%	89.4%	94.4%	86.0%	91.8%
Non-Gynaecological Cytology Exfoliative (P07) Cases	88.6%	87.0%	89.2%	94.4%	89.0%	91.4%
TAT: 80% Cases Complete by Day 7						
Non-Biopsy Cancer Resection (P03) Cases	78.1%	84.9%	72.9%	76.5%	75.5%	78.4%
Non-Biopsy Other (P04) Cases	86.7%	85.7%	69.1%	70.8%	77.9%	77.5%

Improvements can be seen in the percentage of small biopsy (P01) cases completed by day 5, however, the target is not currently being met by either GCs or CCs. GCs are making progress in the completion of GI Endoscopic (P02) cases, with an increase of 3% from last year, bringing it to 82.3%, whereas CCs have seen a decrease in cases complete and are still below target.

Both GCs and CCs have seen improvements in completing Non-Biopsy Cancer Resection (P03) cases, with GCs exceeding the target this year. CCs also saw an increase but have not reached the target in these last two years. GCs saw a slight decrease in the percentage of Non-Biopsy Other (P04) cases complete but remain above target, CCs saw a slight improvement but are below target.

Both GCs and CCs achieved well above the target for Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) Cases.

Whilst this data gives us a huge amount of information and details of specimen mix and output of the varying laboratories around Ireland, it lacks context and nuance. In many ways it highlights the ongoing challenges around resourcing of laboratories and staffing issues in recruitment and retention of Consultant Histopathologists, Histopathology Trainees and Medical Laboratory Scientists.

TAT is an important metric to measure that patients are receiving timely histology reports; however, it does not reflect the case difficulty, the need for ancillary testing, second or expert opinions or multi-disciplinary discussions prior to final diagnosis.

The ongoing issues achieving targets for TAT requires further discussions and imaginative collaborative approaches to address them.

KEY RECOMMENDATION

Turnaround times are an essential measure of the quality of histopathology service delivery and can be impacted by unexpected increases in activity and by a mismatch between resourcing and activity. The NHQI data may be a useful tool in highlighting activity and resource mismatches. The Working Group recommends that each department monitors TATs and investigates the root causes of challenges faced in achieving TAT targets. A review of TAT targets will be performed in 2020.

9

FROZEN SECTION

CHAPTER 9
FROZEN SECTION

Definition: Frozen section (FS) is a specimen of tissue that has been quick-frozen, cut by microtome, and stained immediately for rapid diagnosis.

TABLE 9.1: Achievable Targets

Case Type	Achievable Target
FS Concordance rate	Greater than or equal to 97%
FS Deferral rate	Greater than 1%, less than or equal to 5%
FS Turnaround time	Greater than or equal to 85% within 20 minutes

Frozen Section Concordance Rate (Q007)

Target: Greater than or equal to 97%

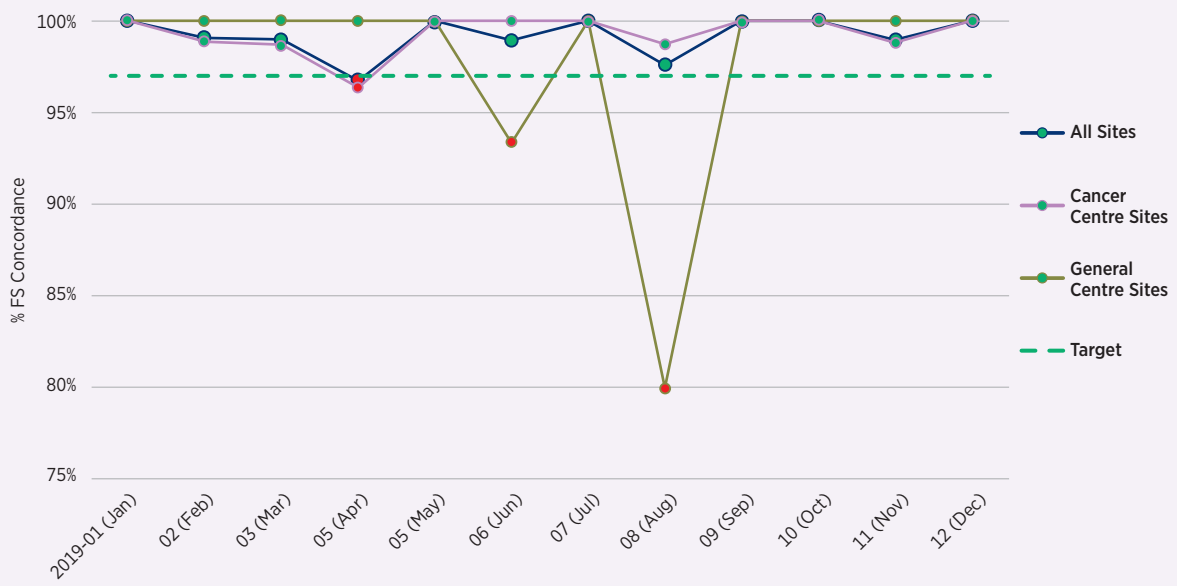
Frozen section Concordance Rate is the rate of correlation of frozen section diagnosis with permanent section diagnosis. Monitoring this correlation is an integral component of the NHQI Programme. It is recommended that permanent section slides should be analysed with the accompanying frozen section slides to establish if any discrepancies exist.

Errors in frozen section interpretation may arise due to sampling or interpretative issues and certain frozen section activities are associated with greater concordance with paraffin section than others. Frozen section evaluation of margin status is typically associated with high accuracy whereas diagnosis of a primary lesion may be more challenging. Some activities e.g. evaluation of follicular thyroid lesions, may be difficult, or indeed impossible, to carry out reliably on frozen section. Any frozen section discordances should be reconciled in the final pathology report and should be reviewed and discussed at the departmental discrepancy conference.

Nationally both General Centres (GCs) and Cancer Centres (CCs) met the FS Concordance Rate target of greater than or equal to 97%. GCs achieved a 98.9% FS Concordance Rate, 1.9% above target and 0.5% above the rate achieved in 2018.

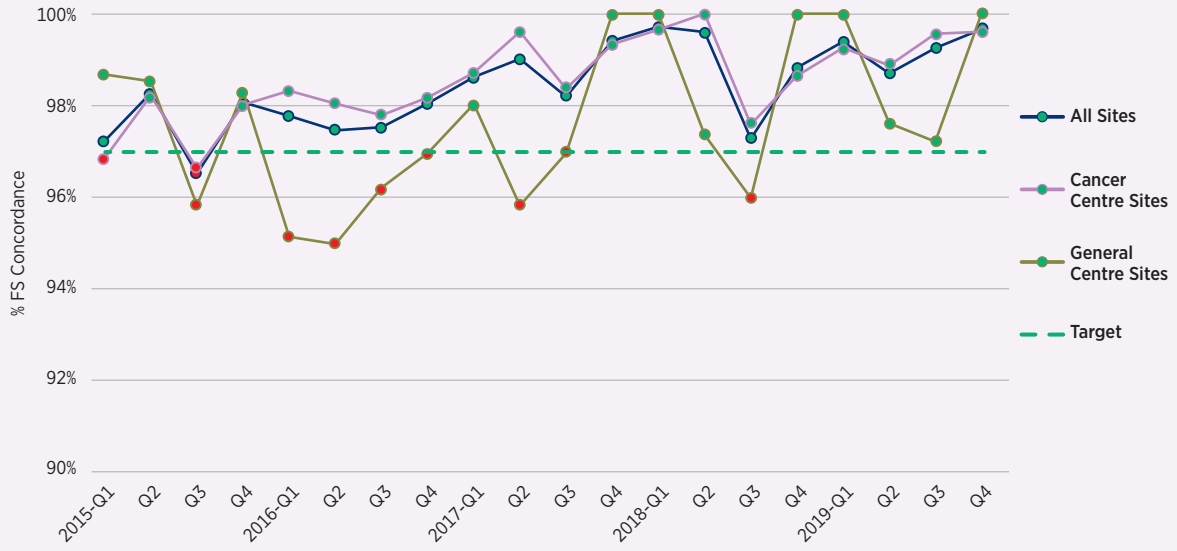
CCs reached a rate of 99.3% FS Concordance, 2.3% above target and 0.3% higher than in 2018.

FIGURE 9.1: % Frozen Section Concordance (Q007) by Month, 2019



A monthly breakdown of the average FS Concordance Rates each month for 2019 reveals fluctuations between April and September where GCs fell well below target in August at 80%. CCs also dropped below target in April but were back on track by the following month.

FIGURE 9.2: % Frozen Section Concordance (Q007) by Quarter, 2015 – 2019



A review of the national aggregate data per quarter from Q1 2015 to Q4 2019 shows FS Concordance Rate has been steadily increasing. CCs have achieved the target rate of greater than or equal to 97% almost consistently. While GCs have experienced fluctuations, with averages dropping below the target on a number of instances, they did not drop lower than 95%.

FIGURE 9.3: % Frozen Section Concordance (Q007) by Site, 2019 v 2018

Please consult Table 9.3 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Eleven GCs provided data on the FS Concordance Rate for 2019, and nine exceeded the target.

CANCER CENTRES (CCs)

One out of eight CCs did not achieve the FS Concordance Rate target of greater than or equal to 97%.

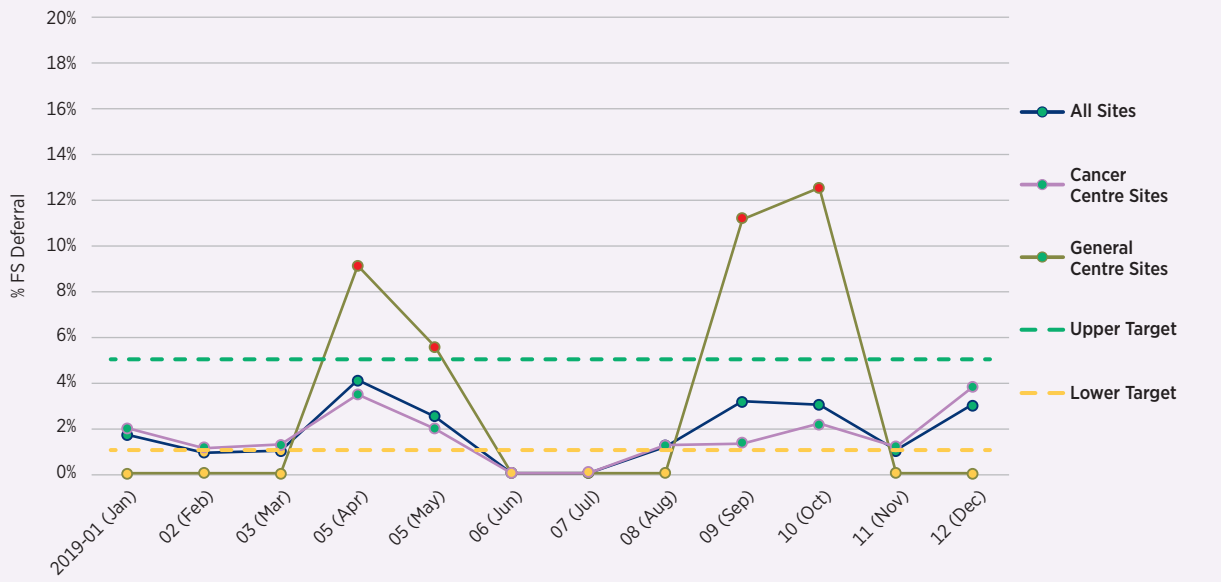
Frozen Section Correlation – Deferral Rate (Q008)

Target: Greater than 1%, less than or equal to 5%

Definition: This refers to the number of cases where a Frozen Section (FS) diagnosis was deferred until final diagnosis was reached on permanent section review.

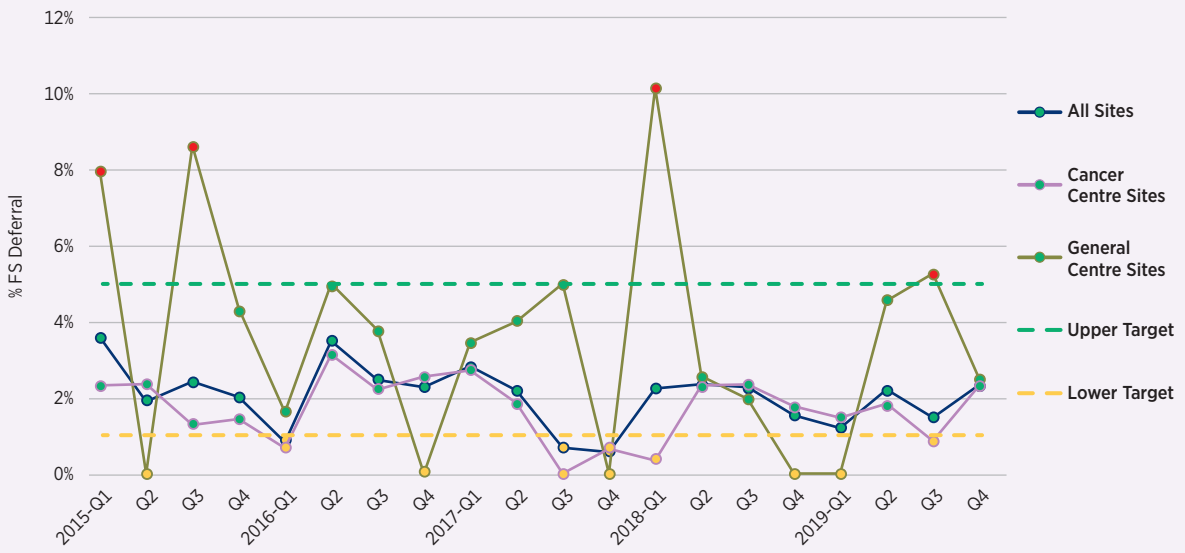
National averages reveal that both General Centres (GCs) and Cancer Centres (CCs) were within the target range for FS Deferral Rates. GCs achieved an average rate of 2.7% in 2019 and CCs were within target at 1.6%.

FIGURE 9.4: % Frozen Section Deferral (Q008) by Month, 2019



Fluctuations are evident throughout 2019, with GCs having the highest FS Deferral Rates in April, September and October. CCs were quite consistent throughout the year, dropping outside the target range in June and July only.

FIGURE 9.5: % Frozen Section Deferral (Q008) by Quarter, 2015 - 2019



A look back to 2015 reveals considerable fluctuations particularly for GCs, with averages outside the target range almost as frequently as within it. A combined national average of both GCs and CCs is relatively stable and within the target range from Q1 2015 to Q4 2019. Similarly, CCs have remained stable and predominantly within range for the last five years.

Please consult Table 9.4 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

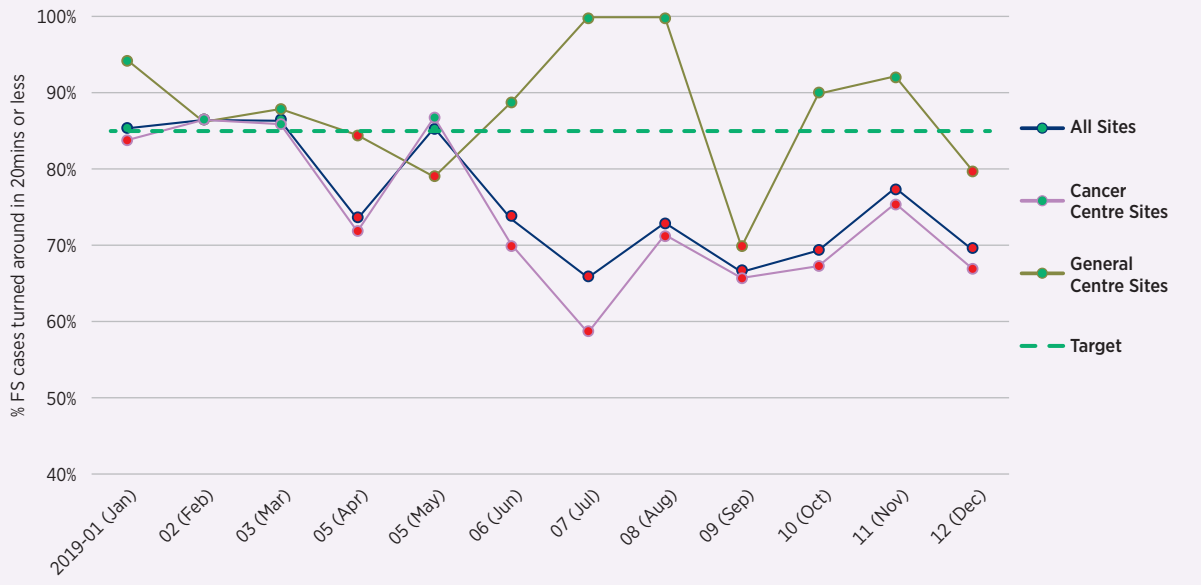
Frozen Section Turnaround Times (FS TAT)

Target: Greater than or equal to 85% complete within in 20 minutes

Definition: The Turnaround Time (TAT) for a Frozen Section (FS) is an important parameter due to the intraoperative nature of the consultation with real-time clinical decisions being made on FS results.

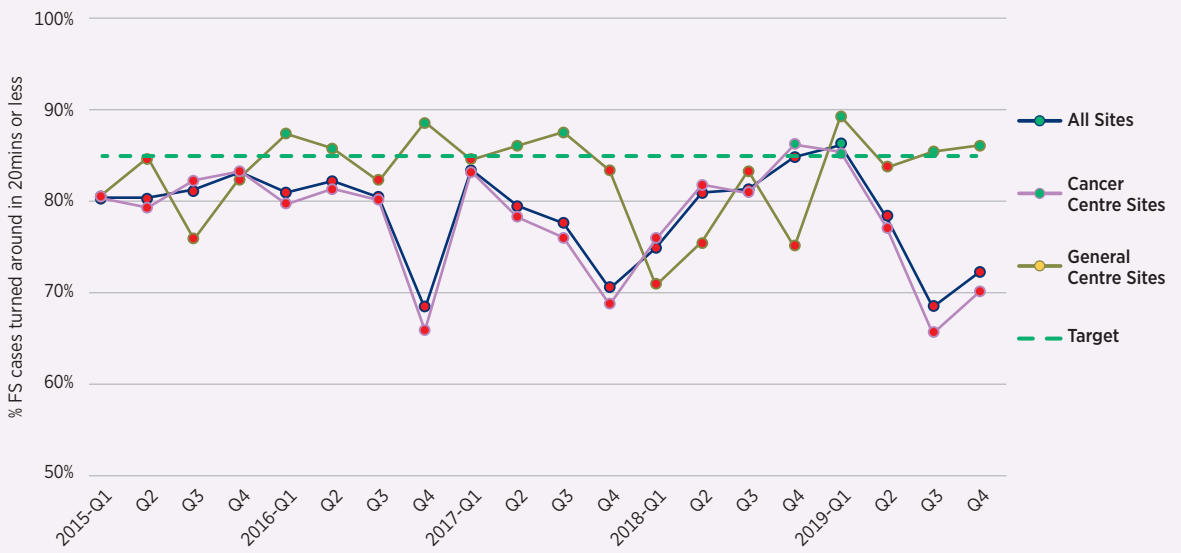
In 2019 the national average for General Centres (GCs) that met the required target of greater than or equal to 85% of cases complete in 20 minutes was 86.3%, this is an increase of 10.4% from 2018 when 75.9% GCs reached the target. Cancer Centres (CCs) achieved a national average of 74.9% reaching the target, a drop of 6% from 2018.

FIGURE 9.6: % Frozen Section TAT by Month, 2019



A look at 2019 by month reveals that GCs reached the target eight out of the 12 months, while CCs remained consistently below the target with the exception of four months.

FIGURE 9.7: % Frozen Section TAT by Quarter, 2015 – 2019



Overall, since 2015, GCs have increased the average percentage of TAT for FS. CCs have remained below target over the last five years with the exception of one quarter, Q1 2019.

FIGURE 9.8: % Frozen Section TAT by Site, 2019 v 2018

Please consult Table 9.5 in Appendix 1 for a detailed table of percentage changes from 2018 to 2019.

GENERAL CENTRES (GCs)

Eleven GCs provided data, and of these, seven met the target of greater than or equal to 85% of cases complete within 20 minutes.

CANCER CENTRES (CCs)

One CC reported FS cases complete within the required target.

Summary

TABLE 9.2: National Aggregate Frozen Section (FS) 2018 v 2019

National Aggregate Frozen Section (FS) 2018 v 2019						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2018	2019	2018	2019	2018	2019
Target: Greater than or equal to 97%						
FS Concordance Rate (Q007)	98.4%	98.9%	99.0%	99.3%	98.9%	99.3%
Target: Greater than 1%, Less than or Equal to 5%						
FS Deferral Rate (Q008)	4.7%	2.7%	1.6%	1.6%	2.1%	1.8%
Target: Greater than or equal to 85%, complete within 20 minutes						
FS Turnaround Time	75.9%	86.3%	80.9%	74.9%	80.1%	76.1%

The national aggregate data reveal that all sites have reached and exceeded the target of 97% for Frozen Section Concordance Rate in 2018 and 2019. Both GCs and CCs experienced an increase in the percentage of FS Concordance Rate in 2019 of 0.5% and 0.3% respectively.

The national averages for GCs, CCs and a national aggregate of both groups for FS Deferral Rate were all within the target ranges of 1% and 5% for 2018 and 2019. GCs experienced a 2% drop from 2018 and CCs maintained at 1.6% in 2019.

The combined national average for GCs and CCs percentage of FS cases complete on target was 76.1% in 2019, 8.9% below target, and a drop of 4.0% compared to 2018. The national average for GCs exceeded the target in 2019 at 86.3%, an increase of 10.4% from 2018. CCs did not meet the target in 2018 or 2019 and experienced a drop of 6% of cases complete on target in 2019.

KEY RECOMMENDATION

The combined national average for percentage Frozen Sections (FS) complete within 20 minutes was below the target of ≥85% in both 2018 and 2019. The Working Group recommends that participating hospitals identify their own FS data in this report to address any improvements required.

APPENDIX 1

APPENDIX 1: SUPPORTING DATA FOR GRAPHS

CHAPTER 5: INTRADEPARTMENTAL CONSULTATION (IDC)

TABLE 5.3: 2019 v 2018 Histology (P01, P02, P03 & P04) % IDC

	2018 IDC Histology		2019 IDC Histology		2019 v 2018 IDC Histology	
	No. of Cases	% IDCs (Q006)	No. of Cases	% IDCs (Q006)	% No. Cases ↑ or ↓	% IDC (Q006) ↑ or ↓
All CCs Sites	**225966**	**6%**	**231079**	**6%**	**2.3%**	**-0.3%**
CC1	39383	5.0%	43880	**5.5%**	**11.4%**	**0.5%**
CC2	32666	4.0%	35837	**3.0%**	**9.7%**	**-1.0%**
CC3	29090	5.5%	29210	**6.0%**	**0.4%**	**0.5%**
CC4	37748	4.3%	37237	**3.5%**	**-1.4%**	**-0.8%**
CC5	19850	7.8%	19927	**6.6%**	**0.4%**	**-1.2%**
CC6	28029	6.8%	27255	**6.6%**	**-2.8%**	**-0.2%**
CC7	16550	8.4%	16863	**7.5%**	**1.9%**	**-0.9%**
CC8	22650	10.7%	20870	**11.9%**	**-7.9%**	**1.1%**
All GCs Sites	**210990**	**4.5%**	**211571**	**4.6%**	**0.3%**	**0.1%**
GC3	2983	0.4%	3055	**3.4%**	**2.4%**	**2.9%**
GC4	5917	3.7%	5937	**3.6%**	**0.3%**	**-0.1%**
GC5	3530	3.1%	4207	**3.0%**	**19.2%**	**-0.1%**
GC7	21875	3.8%	23556	**3.6%**	**7.7%**	**-0.2%**
GC8	15445	4.2%	14972	**3.6%**	**-3.1%**	**-0.5%**
GC9	16438	3.6%	17208	**3.9%**	**4.7%**	**0.2%**
GC10	11395	3.0%	11445	**5.2%**	**0.4%**	**2.2%**
GC11	5998	24.3%	6040	**17.5%**	**0.7%**	**-6.9%**
GC12	6216	5.1%	6651	**4.2%**	**7.0%**	**-0.9%**
GC13	8791	5.3%	7950	**6.6%**	**-9.6%**	**1.3%**
GC15	7548	6.0%	9947	**9.3%**	**31.8%**	**3.3%**
GC16	4892	11.4%	4994	**11.4%**	**2.1%**	**0.0%**
GC17	-	-	-	**-**	**-**	**-**
GC19	5117	6.8%	5611	**7.6%**	**9.7%**	**0.8%**
GC20	6598	1.0%	6856	**0.8%**	**3.9%**	**-0.2%**
GC23	13326	1.5%	13569	**1.1%**	**1.8%**	**-0.5%**
GC24	23159	2.2%	22861	**4.0%**	**-1.3%**	**1.8%**
GC25	9381	5.6%	9787	**4.9%**	**4.3%**	**-0.7%**
GC27	10358	6.6%	10844	**5.6%**	**4.7%**	**-1.0%**
GC28	18753	3.6%	20416	**3.2%**	**8.9%**	**-0.4%**
GC30	4870	2.1%	5665	**1.5%**	**16.3%**	**-0.6%**
All Sites	**436956**	**5.3%**	**442650**	**5.2%**	**1.3%**	**-0.1%**

TABLE 5.4: 2019 v 2018 Non-Gynaecological Cytology FNA (P06) % IDC

	2018 IDC P06		2019 IDC P06		2019 v 2018 IDC P06	
	No. of Cases	% Q006	No. of Cases	% Q006	% No. Cases ↑ or ↓	% IDC (Q006) ↑ or ↓
All CCs Sites	**7469**	**10.8%**	**7382**	**11.1%**	**-1.2%**	**0.4%**
CC1	1824	11.0%	1902	**10.0%**	**4.3%**	**-1.0%**
CC2	1061	12.3%	1126	**11.8%**	**6.1%**	**-0.5%**
CC3	1998	5.9%	2100	**8.0%**	**5.1%**	**2.1%**
CC4	535	11.8%	781	**7.2%**	**46.0%**	**-4.6%**
CC5	813	19.2%	752	**19.8%**	**-7.5%**	**0.6%**
CC6	128	27.3%	106	**28.3%**	**-17.2%**	**1.0%**
CC7	505	19.6%	443	**21.4%**	**-12.3%**	**1.8%**
CC8	605	0.0%	172	**0.0%**	**-71.6%**	**0.0%**
All GCs Sites	**3079**	**15.1%**	**2985**	**13.5%**	**-3.1%**	**-1.6%**
GC3	-	-	1	**100.0%**	**-**	**-**
GC4	10	0.0%	5	**20.0%**	**-50.0%**	**20.0%**
GC5	24	4.2%	16	**12.5%**	**-33.3%**	**8.3%**
GC7	514	17.1%	600	**13.3%**	**16.7%**	**-3.8%**
GC8	295	4.7%	243	**6.2%**	**-17.6%**	**1.4%**
GC9	294	9.2%	260	**14.6%**	**-11.6%**	**5.4%**
GC10	570	6.1%	493	**5.9%**	**-13.5%**	**-0.3%**
GC11	130	36.2%	118	**30.5%**	**-9.2%**	**-5.6%**
GC12	178	6.7%	211	**8.1%**	**18.5%**	**1.3%**
GC13	45	4.4%	29	**6.9%**	**-35.6%**	**2.5%**
GC15	55	34.5%	63	**42.9%**	**14.5%**	**8.3%**
GC16	135	30.4%	150	**16.0%**	**11.1%**	**-14.4%**
GC17	-	-	-	**-**	**-**	**-**
GC19	-	-	-	**-**	**-**	**-**
GC20	-	-	-	**-**	**-**	**-**
GC23	93	16.1%	116	**4.3%**	**24.7%**	**-11.8%**
GC24	347	13.0%	293	**19.1%**	**-15.6%**	**6.1%**
GC25	119	11.8%	206	**12.1%**	**73.1%**	**0.4%**
GC27	86	47.7%	51	**47.1%**	**-40.7%**	**-0.6%**
GC28	75	21.3%	80	**25.0%**	**6.7%**	**3.7%**
GC30	43	2.3%	50	**0.0%**	**16.3%**	**-2.3%**
All Sites	**10548**	**12.0%**	**10367**	**12.0%**	**-1.7%**	**-0.2%**

TABLE 5.5: 2019 v 2018 NON-GYNAECOLOGICAL CYTOLOGY EXFOLIATIVE (P07) % IDC

	2018 IDC P07		2019 IDC P07		2019 v 2018 IDC P07	
	No. of Cases	% Q006	No. of Cases	% Q006	% No. Cases ↑ or ↓	% IDC (Q006) ↑ or ↓
All CCs Sites	**13422**	**3.8%**	**12120**	**4.4%**	**-9.7%**	**0.6%**
CC1	3625	3.0%	3357	3.5%	-7.4%	0.6%
CC2	1359	5.3%	1384	4.5%	1.8%	-0.8%
CC3	3082	2.9%	3173	3.2%	3.0%	0.4%
CC4	1660	4.5%	1647	2.8%	-0.8%	-1.7%
CC5	783	7.3%	660	8.2%	-15.7%	0.9%
CC6	552	5.6%	509	7.3%	-7.8%	1.7%
CC7	921	8.5%	964	11.6%	4.7%	3.1%
CC8	1440	0.0%	426	0.0%	-70.4%	0.0%
All GCs Sites	**8371**	**4.2%**	**8146**	**5.3%**	**-2.7%**	**1.1%**
GC3	-	-	104	8.7%	-	-
GC4	-	-	-	-	-	-
GC5	188	0.0%	219	0.9%	16.5%	0.9%
GC7	551	3.3%	630	4.4%	14.3%	1.2%
GC8	753	1.3%	845	0.6%	12.2%	-0.7%
GC9	419	3.6%	351	4.3%	-16.2%	0.7%
GC10	583	4.5%	519	3.7%	-11.0%	-0.8%
GC11	313	16.3%	324	31.2%	3.5%	14.9%
GC12	865	1.5%	715	1.1%	-17.3%	-0.4%
GC13	476	2.3%	378	3.2%	-20.6%	0.9%
GC15	360	10.6%	289	21.1%	-19.7%	10.6%
GC16	260	6.9%	297	15.8%	14.2%	8.9%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	44	0.0%	-	-
GC23	884	2.1%	786	0.6%	-11.1%	-1.5%
GC24	1339	1.4%	1592	2.6%	18.9%	1.2%
GC25	470	7.9%	321	6.2%	-31.7%	-1.6%
GC27	208	16.3%	236	13.1%	13.5%	-3.2%
GC28	228	13.6%	239	9.6%	4.8%	-4.0%
GC30	242	2.1%	257	0.8%	6.2%	-1.3%
All Sites	**21793**	**3.9%**	**20266**	**4.7%**	**-7.0%**	**0.8%**

TABLE 5.6: 2019 v 2018 AUTOPSY (P10 & P11) % IDC

	2018 IDC Autopsy		2019 IDC Autopsy		2019 v 2018 IDC Autopsy	
	No. of Cases	% Q006	No. of Cases	% Q006	% No. Cases ↑ or ↓	% IDC (Q006) ↑ or ↓
All CCs Sites	**791**	**3.9%**	**697**	**2.6%**	**-11.9%**	**-1.3%**
CC1	68	0.0%	-	-	-	-
CC2	83	2.4%	130	0.0%	56.6%	-2.4%
CC3	107	20.6%	2	0.0%	-98.1%	-20.6%
CC4	258	0.4%	281	0.7%	8.9%	0.3%
CC5	161	2.5%	184	3.3%	14.3%	0.8%
CC6	54	0.0%	-	-	-	-
CC7	60	3.3%	100	10.0%	66.7%	6.7%
CC8	-	-	-	-	-	-
All GCs Sites	**2160**	**1.2%**	**1908**	**1.9%**	**-11.7%**	**0.7%**
GC3	31	0.0%	36	2.8%	16.1%	2.8%
GC4	54	0.0%	1	0.0%	-98.1%	0.0%
GC5	20	0.0%	41	2.4%	105.0%	2.4%
GC7	-	-	-	-	-	-
GC8	164	0.0%	173	0.0%	5.5%	0.0%
GC9	-	-	-	-	-	-
GC10	949	0.0%	937	0.0%	-1.3%	0.0%
GC11	-	-	-	-	-	-
GC12	-	-	-	-	-	-
GC13	-	-	-	-	-	-
GC15	-	-	-	-	-	-
GC16	-	-	-	-	-	-
GC17	200	5.5%	81	0.0%	-59.5%	-5.5%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	-	-	-	-	-	-
GC24	373	3.5%	336	9.2%	-9.9%	5.7%
GC25	219	0.0%	151	0.0%	-31.1%	0.0%
GC27	140	0.7%	152	2.0%	8.6%	1.3%
GC28	-	-	-	-	-	-
GC30	-	-	-	-	-	-
All Sites	**2953**	**1.9%**	**2605**	**2.1%**	**-11.8%**	**0.2%**

CHAPTER 6: MULTIDISCIPLINARY TEAM REVIEW

TABLE 6.4: 2019 v 2018 MDT AGREEMENT SMALL BIOPSY (P01)

	2018 MDT P01		2019 MDT P01		2019 v 2018 MDT P01	
	No. of MDTs	% Q017	No. of MDTs	% Q017	% No. MDT ↑ or ↓	% Q017 ↑ or ↓
All CCs Sites	**15021**	**99.5%**	**14935**	**99.8%**	**-0.6%**	**0.4%**
CC1	2402	99.9%	2605	100.0%	8.5%	0.0%
CC2	2870	99.8%	3035	99.8%	5.7%	0.0%
CC3	1696	99.8%	1619	99.9%	-4.5%	0.1%
CC4	1235	99.8%	1289	100.0%	4.4%	0.2%
CC5	2138	100.0%	2267	100.0%	6.0%	0.0%
CC6	1090	100.0%	1155	100.0%	6.0%	0.0%
CC7	3282	98.0%	2698	99.4%	-17.8%	1.4%
CC8	308	100.0%	267	100.0%	-13.3%	0.0%
All GCs Sites	**4207**	**99.4%**	**4491**	**99.2%**	**6.8%**	**-0.1%**
GC3	6	100.0%	7	100.0%	16.7%	0.0%
GC4	50	100.0%	47	100.0%	-6.0%	0.0%
GC5	193	100.0%	153	100.0%	-20.7%	0.0%
GC7	163	100.0%	414	100.0%	154.0%	0.0%
GC8	28	100.0%	25	100.0%	-10.7%	0.0%
GC9	598	97.0%	636	97.5%	6.4%	0.5%
GC10	752	100.0%	706	99.7%	-6.1%	-0.3%
GC11	101	98.0%	124	97.6%	22.8%	-0.4%
GC12	265	100.0%	332	99.4%	25.3%	-0.6%
GC13	499	100.0%	412	99.8%	-17.4%	-0.2%
GC15	99	100.0%	76	100.0%	-23.2%	0.0%
GC16	70	95.7%	80	100.0%	14.3%	4.3%
GC17	-	-	-	-	-	-
GC19	60	98.3%	97	99.0%	61.7%	0.6%
GC20	65	100.0%	44	100.0%	-32.3%	0.0%
GC23	405	100.0%	402	100.0%	-0.7%	0.0%
GC24	539	99.6%	664	98.9%	23.2%	-0.7%
GC25	123	100.0%	170	99.4%	38.2%	-0.6%
GC27	112	100.0%	81	98.8%	-27.7%	-1.2%
GC28	18	100.0%	-	-	-	-
GC30	19	100.0%	21	100.0%	10.5%	0.0%
All Sites	**19228**	**99.5%**	**19426**	**99.7%**	**1.0%**	**0.2%**

TABLE 6.5: 2019 v 2018 MDT AGREEMENT GI ENDOSCOPIC BIOPSY (P02)

	2018 MDT P02		2019 MDT P02		2019 v 2018 MDT P02	
	No. of MDTs	% Q017	No. of MDTs	% Q017	% No. MDT ↑ or ↓	% Q017 ↑ or ↓
All CCs Sites	**4560**	**99.5%**	**5049**	**99.8%**	**10.7%**	**0.2%**
CC1	420	100.0%	364	100.0%	-13.3%	0.0%
CC2	817	98.8%	1107	99.9%	35.5%	1.1%
CC3	630	99.8%	498	99.8%	-21.0%	0.0%
CC4	1129	99.3%	1246	99.6%	10.4%	0.3%
CC5	527	100.0%	784	99.7%	48.8%	-0.3%
CC6	524	100.0%	459	100.0%	-12.4%	0.0%
CC7	132	98.5%	133	98.5%	0.8%	0.0%
CC8	381	100.0%	458	100.0%	20.2%	0.0%
All GCs Sites	**2608**	**99.7%**	**2688**	**99.4%**	**3.1%**	**-0.3%**
GC3	9	88.9%	6	100.0%	-33.3%	11.1%
GC4	-	-	-	-	-	-
GC5	833	99.9%	735	99.7%	-11.8%	-0.2%
GC7	41	100.0%	98	100.0%	139.0%	0.0%
GC8	122	97.5%	111	92.8%	-9.0%	-4.7%
GC9	54	98.1%	69	97.1%	27.8%	-1.0%
GC10	179	100.0%	204	100.0%	14.0%	0.0%
GC11	27	96.3%	31	100.0%	14.8%	3.7%
GC12	52	100.0%	33	100.0%	-36.5%	0.0%
GC13	157	100.0%	155	99.4%	-1.3%	-0.6%
GC15	51	100.0%	33	100.0%	-35.3%	0.0%
GC16	13	100.0%	4	100.0%	-69.2%	0.0%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	217	100.0%	227	100.0%	4.6%	0.0%
GC24	263	99.6%	350	99.7%	33.1%	0.1%
GC25	307	100.0%	450	99.3%	46.6%	-0.7%
GC27	95	100.0%	102	100.0%	7.4%	0.0%
GC28	57	100.0%	-	-	-	-
GC30	85	100.0%	80	100.0%	-5.9%	0.0%
All Sites	**7168**	**99.6%**	**7737**	**99.6%**	**7.9%**	**0.0%**

TABLE 6.6: 2019 v 2018 MDT AGREEMENT NON-BIOPSY CANCER RESECTION (P03)

	2018 MDT P03		2019 MDT P03		2019 v 2018 MDT P03	
	No. of MDTs	% Q017	No. of MDTs	% Q017	% No. MDT ↑ or ↓	% Q017 ↑ or ↓
All CCs Sites	**7936**	**99.5%**	**7892**	**99.8%**	**-0.6%**	**0.3%**
CC1	1125	99.8%	1231	100.0%	9.4%	0.2%
CC2	1967	99.6%	1851	99.7%	-5.9%	0.1%
CC3	1260	99.7%	1163	99.8%	-7.7%	0.1%
CC4	1093	100.0%	1097	100.0%	0.4%	0.0%
CC5	780	100.0%	1148	99.9%	47.2%	-0.1%
CC6	577	100.0%	470	99.8%	-18.5%	-0.2%
CC7	930	96.8%	743	98.7%	-20.1%	1.9%
CC8	204	100.0%	189	100.0%	-7.4%	0.0%
All GCs Sites	**1739**	**98.4%**	**1651**	**99.6%**	**-5.1%**	**1.1%**
GC3	1	100.0%	1	100.0%	0.0%	0.0%
GC4	14	100.0%	2	100.0%	-85.7%	0.0%
GC5	49	100.0%	37	100.0%	-24.5%	0.0%
GC7	12	100.0%	30	100.0%	150.0%	0.0%
GC8	19	100.0%	16	100.0%	-15.8%	0.0%
GC9	516	95.0%	407	99.0%	-21.1%	4.1%
GC10	271	99.6%	306	100.0%	12.9%	0.4%
GC11	8	100.0%	10	100.0%	25.0%	0.0%
GC12	134	100.0%	120	100.0%	-10.4%	0.0%
GC13	128	100.0%	124	100.0%	-3.1%	0.0%
GC15	40	100.0%	25	100.0%	-37.5%	0.0%
GC16	3	100.0%	5	100.0%	66.7%	0.0%
GC17	-	-	-	-	-	-
GC19	1	100.0%	1	100.0%	0.0%	0.0%
GC20	-	-	-	-	-	-
GC23	212	100.0%	256	100.0%	20.8%	0.0%
GC24	141	100.0%	216	98.6%	53.2%	-1.4%
GC25	30	100.0%	24	100.0%	-20.0%	0.0%
GC27	45	100.0%	42	100.0%	-6.7%	0.0%
GC28	1	100.0%	-	-	-	-
GC30	43	100.0%	29	100.0%	-32.6%	0.0%
All Sites	**9675**	**99.3%**	**9543**	**99.7%**	**-1.4%**	**0.5%**

TABLE 6.7: 2019 v 2018 MDT AGREEMENT CYTOLOGY (P06 & P07)

	2018 MDT Cytology		2019 MDT Cytology		2019 v 2018 MDT Cytology	
	No. of MDTs	% Q017	No. of MDTs	% Q017	% No. MDT ↑ or ↓	% Q017 ↑ or ↓
All CCs Sites	**3554**	**99.7%**	**3557**	**99.7%**	**0.1%**	**0.0%**
CC1	844	100.0%	847	100.0%	0.4%	0.0%
CC2	859	100.0%	954	100.0%	11.1%	0.0%
CC3	705	100.0%	614	100.0%	-12.9%	0.0%
CC4	334	99.4%	340	100.0%	1.8%	0.6%
CC5	352	100.0%	358	100.0%	1.7%	0.0%
CC6	-	-	-	-	-	-
CC7	460	98.0%	444	97.7%	-3.5%	-0.3%
CC8	-	-	-	-	-	-
All GCs Sites	**1070**	**99.4%**	**1163**	**99.6%**	**8.7%**	**0.1%**
GC3	7	100.0%	1	100.0%	-85.7%	0.0%
GC4	-	-	-	-	-	-
GC5	7	100.0%	1	100.0%	-85.7%	0.0%
GC7	47	100.0%	120	100.0%	155.3%	0.0%
GC8	7	100.0%	1	100.0%	-85.7%	0.0%
GC9	107	99.1%	113	100.0%	5.6%	0.9%
GC10	403	100.0%	370	99.7%	-8.2%	-0.3%
GC11	37	97.3%	58	100.0%	56.8%	2.7%
GC12	15	100.0%	14	100.0%	-6.7%	0.0%
GC13	4	100.0%	10	100.0%	150.0%	0.0%
GC15	55	100.0%	24	100.0%	-56.4%	0.0%
GC16	104	96.2%	117	97.4%	12.5%	1.3%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	96	100.0%	129	100.0%	34.4%	0.0%
GC24	124	100.0%	151	100.0%	21.8%	0.0%
GC25	24	100.0%	30	96.7%	25.0%	-3.3%
GC27	24	100.0%	22	100.0%	-8.3%	0.0%
GC28	2	100.0%	-	-	-	-
GC30	1	100.0%	2	100.0%	100.0%	0.0%
All Sites	**4624**	**99.6%**	**4720**	**99.7%**	**2.1%**	**0.0%**

CHAPTER 7: ADDENDUM REPORTS

TABLE 7.3: 2019 v 2018 HISTOLOGY AMENDED/CORRECTED REPORTS (P01, P02, P03 & P04)

	2018 Histology Amended/Corrected Reports		2019 Histology Amended/Corrected Reports		2019 v 2018 Histology Amended/Corrected Reports	
	No. of Cases	% Q021/22	No. of Cases	% Q021/22	% No. of Cases ↑ or ↓	% Q021/22 ↑ or ↓
All CCs Sites	**225966**	**0.4%**	**231079**	**0.3%**	**2.3%**	**0.0%**
CC1	39383	0.2%	43880	0.2%	11.4%	0.0%
CC2	32666	0.5%	35837	0.5%	9.7%	0.0%
CC3	29090	0.5%	29210	0.6%	0.4%	0.1%
CC4	37748	0.6%	37237	0.4%	-1.4%	-0.2%
CC5	19850	0.2%	19927	0.3%	0.4%	0.1%
CC6	28029	0.1%	27255	0.2%	-2.8%	0.0%
CC7	16550	0.5%	16863	0.3%	1.9%	-0.2%
CC8	22650	0.1%	20870	0.1%	-7.9%	0.0%
All GCs Sites	**210990**	**0.2%**	**211571**	**0.2%**	**0.3%**	**0.0%**
GC3	2983	0.0%	3055	0.0%	2.4%	0.0%
GC4	5917	0.3%	5937	0.2%	0.3%	-0.1%
GC5	3530	0.3%	4207	0.3%	19.2%	0.0%
GC7	21875	0.0%	23556	0.0%	7.7%	0.0%
GC8	15445	0.1%	14972	0.1%	-3.1%	0.0%
GC9	16438	0.4%	17208	0.3%	4.7%	-0.1%
GC10	11395	0.4%	11445	0.4%	0.4%	-0.1%
GC11	5998	0.5%	6040	0.4%	0.7%	-0.1%
GC12	6216	0.4%	6651	0.3%	7.0%	0.0%
GC13	8791	0.2%	7950	0.1%	-9.6%	-0.1%
GC15	7548	0.2%	9947	0.2%	31.8%	0.0%
GC16	4892	0.1%	4994	0.2%	2.1%	0.1%
GC17	-	-	-	-	-	-
GC19	5117	0.2%	5611	0.1%	9.7%	0.0%
GC20	6598	0.5%	6856	0.5%	3.9%	0.0%
GC23	13326	0.0%	13569	0.1%	1.8%	0.0%
GC24	23159	0.2%	22861	0.3%	-1.3%	0.1%
GC25	9381	0.1%	9787	0.2%	4.3%	0.1%
GC27	10358	0.1%	10844	0.1%	4.7%	0.0%
GC28	18753	0.1%	20416	0.1%	8.9%	0.0%
GC30	4870	0.1%	5665	0.1%	16.3%	0.0%
All Sites	**436956**	**0.3%**	**442650**	**0.3%**	**1.3%**	**0.0%**

TABLE 7.4: 2019 v 2018 CYTOLOGY AMENDED/CORRECTED REPORTS (P05, P06, P07 & P09)

	2018 Cytology Amended/Corrected Reports		2019 Cytology Amended/Corrected Reports		2019 v 2018 Cytology Amended/Corrected Reports	
	No. of Cases	% Q021/22	No. of Cases	% Q021/22	% No. of Cases ↑ or ↓	% Q021/22 ↑ or ↓
All CCs Sites	**21565**	**0.2%**	**20459**	**0.3%**	**-5.1%**	**0.1%**
CC1	5449	0.3%	5259	0.2%	-3.5%	0.0%
CC2	2551	0.3%	2703	0.8%	6.0%	0.5%
CC3	5285	0.2%	5538	0.3%	4.8%	0.1%
CC4	2355	0.4%	2626	0.3%	11.5%	0.0%
CC5	1752	0.1%	1536	0.2%	-12.3%	0.1%
CC6	702	0.1%	648	0.2%	-7.7%	0.0%
CC7	1426	0.3%	1551	0.3%	8.8%	0.0%
CC8	2045	0.0%	598	0.0%	-70.8%	0.0%
All GCs Sites	**11603**	**0.2%**	**11288**	**0.3%**	**-2.7%**	**0.1%**
GC3	167	0.0%	105	0.0%	-37.1%	0.0%
GC4	10	0.0%	5	20.0%	-50.0%	20.0%
GC5	212	0.0%	235	0.0%	10.8%	0.0%
GC7	1065	0.0%	1230	0.1%	15.5%	0.1%
GC8	1078	0.1%	1137	0.3%	5.5%	0.2%
GC9	723	0.1%	631	0.0%	-12.7%	-0.1%
GC10	1197	0.3%	1062	0.5%	-11.3%	0.1%
GC11	443	0.7%	442	0.7%	-0.2%	0.0%
GC12	1045	0.3%	926	0.5%	-11.4%	0.3%
GC13	576	0.0%	437	0.0%	-24.1%	0.0%
GC15	423	0.2%	360	0.8%	-14.9%	0.6%
GC16	395	0.0%	447	0.2%	13.2%	0.2%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	65	0.0%	44	0.0%	-32.3%	0.0%
GC23	980	0.1%	902	0.0%	-8.0%	-0.1%
GC24	1686	0.4%	1885	0.3%	11.8%	-0.1%
GC25	590	0.5%	527	0.9%	-10.7%	0.4%
GC27	294	0.0%	287	0.0%	-2.4%	0.0%
GC28	303	0.0%	319	0.0%	5.3%	0.0%
GC30	285	0.0%	307	0.0%	7.7%	0.0%
All Sites	**33168**	**0.2%**	**31747**	**0.3%**	**-4.3%**	**0.1%**

CHAPTER 8: TURNAROUND TIME

TABLE 8.3: 2019 v 2018 TAT SMALL BIOPSY (P01) 80% COMPLETED BY DAY 5

	2018 TAT P01		2019 TAT P01		2019 v 2018 TAT P01	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% No. of Cases ↑ or ↓	% ↑ or ↓
All CCs Sites	**48373**	**69.1%**	**49190**	**71.2%**	**1.7%**	**2.1%**
CC1	10408	68.2%	10859	76.5%	4.3%	8.3%
CC2	6773	69.5%	7117	69.0%	5.1%	-0.5%
CC3	6589	83.2%	6752	81.7%	2.5%	-1.5%
CC4	6366	65.7%	6811	59.0%	7.0%	-6.7%
CC5	5407	65.0%	5564	73.1%	2.9%	8.1%
CC6	4802	53.0%	4893	54.3%	1.9%	1.3%
CC7	6117	88.6%	5814	87.1%	-5.0%	-1.5%
CC8	1911	24.1%	1380	34.7%	-27.8%	10.6%
All GCs Sites	**50978**	**76.8%**	**53785**	**79.3%**	**5.5%**	**2.5%**
GC3	453	69.1%	480	66.5%	6.0%	-2.6%
GC4	4622	96.1%	4434	97.9%	-4.1%	1.8%
GC5	2441	92.2%	3149	93.4%	29.0%	1.2%
GC7	7056	80.2%	7406	79.3%	5.0%	-0.9%
GC8	719	78.9%	701	80.9%	-2.5%	2.0%
GC9	1993	84.1%	1853	87.4%	-7.0%	3.3%
GC10	1790	76.7%	1643	83.5%	-8.2%	6.8%
GC11	2112	37.9%	2413	23.0%	14.3%	-14.9%
GC12	877	69.9%	913	83.8%	4.1%	13.9%
GC13	2328	68.0%	2287	84.8%	-1.8%	16.9%
GC15	3063	95.9%	3661	96.4%	19.5%	0.5%
GC16	338	94.4%	352	92.9%	4.1%	-1.5%
GC17	-	-	-	-	-	-
GC19	4245	88.3%	4846	86.2%	14.2%	-2.1%
GC20	2548	59.7%	2743	50.5%	7.7%	-9.2%
GC23	1231	81.2%	1184	57.9%	-3.8%	-23.3%
GC24	4678	46.3%	4267	83.5%	-8.8%	37.2%
GC25	1787	75.8%	1691	77.8%	-5.4%	1.9%
GC27	2548	68.1%	2782	70.5%	9.2%	2.4%
GC28	5323	86.5%	5953	77.4%	11.8%	-9.1%
GC30	826	86.2%	1027	76.9%	24.3%	-9.3%
All Sites	**99351**	**72.9%**	**102975**	**75.4%**	**3.6%**	**2.5%**

TABLE 8.4: 2019 v 2018 GI ENDOSCOPIC BIOPSY (P02) TAT 80% COMPLETED BY DAY 5

	2018 TAT P02		2019 TAT P02		2019 v 2018 TAT P02	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% No. of Cases ↑ or ↓	% ↑ or ↓
All CCs Sites	**69316**	**56.0%**	**72757**	**51.8%**	**5.0%**	**-4.1%**
CC1	11255	55.0%	12853	60.6%	14.2%	5.7%
CC2	11184	48.3%	12099	41.8%	8.2%	-6.5%
CC3	10305	65.7%	10564	33.6%	2.5%	-32.0%
CC4	10938	74.6%	11628	61.4%	6.3%	-13.2%
CC5	5946	74.5%	5825	72.5%	-2.0%	-2.0%
CC6	8703	34.1%	8442	42.5%	-3.0%	8.4%
CC7	3676	94.7%	4345	91.5%	18.2%	-3.2%
CC8	7309	19.2%	7001	34.0%	-4.2%	14.8%
All GCs Sites	**71314**	**79.3%**	**75351**	**82.3%**	**5.7%**	**3.0%**
GC3	1055	78.6%	1128	64.9%	6.9%	-13.7%
GC4	-	-	-	-	-	-
GC5	916	93.2%	845	92.7%	-7.8%	-0.6%
GC7	6224	83.9%	7090	81.7%	13.9%	-2.2%
GC8	5891	89.9%	5944	86.9%	0.9%	-3.1%
GC9	5889	78.5%	6306	90.2%	7.1%	11.7%
GC10	4245	83.2%	4444	92.3%	4.7%	9.2%
GC11	1194	43.9%	1087	34.5%	-9.0%	-9.4%
GC12	2803	96.4%	2717	98.5%	-3.1%	2.1%
GC13	3675	71.8%	3193	85.9%	-13.1%	14.2%
GC15	2364	98.0%	2842	99.5%	20.2%	1.5%
GC16	2241	98.8%	2341	98.8%	4.5%	0.0%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	5944	48.9%	6333	33.0%	6.5%	-15.9%
GC24	10700	31.8%	11023	91.6%	3.0%	59.8%
GC25	5218	88.4%	5702	87.0%	9.3%	-1.4%
GC27	2627	82.4%	2938	79.7%	11.8%	-2.7%
GC28	8590	91.9%	9297	82.9%	8.2%	-9.1%
GC30	1738	89.3%	2121	74.9%	22.0%	-14.4%
All Sites	**140630**	**67.6%**	**148108**	**67.3%**	**5.3%**	**-0.3%**

TABLE 8.5: 2019 v 2018 NON-BIOPSY CANCER RESECTION (P03) TAT 80% COMPLETED BY DAY 7

	2018 TAT P03		2019 TAT P03		2019 v 2018 TAT P03	
	No. of Cases	% by Day 7	No. of Cases	% by Day 7	% No. of Cases ↑ or ↓	% ↑ or ↓
All CCs Sites	**12878**	**72.9%**	**13050**	**76.5%**	**1.3%**	**3.6%**
CC1	2232	69.4%	2305	74.7%	3.3%	5.4%
CC2	2487	85.4%	2596	85.6%	4.4%	0.2%
CC3	1841	75.6%	1977	77.9%	7.4%	2.4%
CC4	2022	76.0%	2102	75.6%	4.0%	-0.4%
CC5	1322	68.4%	1558	74.9%	17.9%	6.5%
CC6	763	61.9%	654	59.9%	-14.3%	-1.9%
CC7	1208	88.1%	1026	93.8%	-15.1%	5.7%
CC8	1003	34.0%	832	46.0%	-17.0%	12.0%
All GCs Sites	**4189**	**78.1%**	**3831**	**84.9%**	**-8.5%**	**6.8%**
GC3	4	75.0%	4	100.0%	0.0%	25.0%
GC4	28	92.9%	11	81.8%	-60.7%	-11.0%
GC5	75	72.0%	69	69.6%	-8.0%	-2.4%
GC7	208	77.4%	218	81.7%	4.8%	4.2%
GC8	137	67.9%	95	55.8%	-30.7%	-12.1%
GC9	1197	95.1%	1075	96.2%	-10.2%	1.1%
GC10	1116	81.1%	1010	89.1%	-9.5%	8.0%
GC11	176	48.9%	148	49.3%	-15.9%	0.5%
GC12	163	50.3%	158	65.8%	-3.1%	15.5%
GC13	149	85.2%	138	84.1%	-7.4%	-1.2%
GC15	51	92.2%	51	92.2%	0.0%	-
GC16	35	94.3%	18	61.1%	-48.6%	-33.2%
GC17	-	-	-	-	-	-
GC19	8	62.5%	4	75.0%	-50.0%	12.5%
GC20	-	-	-	-	-	-
GC23	312	92.0%	381	77.7%	22.1%	-14.3%
GC24	244	55.7%	276	87.7%	13.1%	31.9%
GC25	135	83.7%	41	75.6%	-69.6%	-8.1%
GC27	70	80.0%	66	77.3%	-5.7%	-2.7%
GC28	29	93.1%	33	72.7%	13.8%	-20.4%
GC30	52	84.6%	35	82.9%	-32.7%	-1.8%
All Sites	**17067**	**75.5%**	**16881**	**78.4%**	**-1.1%**	**2.9%**

TABLE 8.6: 2019 v 2018 NON-BIOPSY OTHER (P04) TAT 80% COMPLETED BY DAY 7

	2018 TAT P04		2019 TAT P04		2019 v 2018 TAT P04	
	No. of Cases	% by Day 7	No. of Cases	% by Day 7	% No. of Cases ↑ or ↓	% ↑ or ↓
All CCs Sites	**95399**	**69.1%**	**96082**	**70.8%**	**0.7%**	**1.7%**
CC1	15488	73.9%	17863	77.9%	15.3%	4.0%
CC2	12222	77.7%	14025	79.0%	14.8%	1.3%
CC3	10355	85.4%	9917	84.6%	-4.2%	-0.8%
CC4	18422	79.5%	16696	57.9%	-9.4%	-21.6%
CC5	7175	74.8%	6980	78.6%	-2.7%	3.8%
CC6	13761	53.3%	13266	70.0%	-3.6%	16.6%
CC7	5549	85.4%	5678	86.8%	2.3%	1.4%
CC8	12427	32.9%	11657	45.4%	-6.2%	12.5%
All GCs Sites	**76108**	**86.7%**	**78604**	**85.7%**	**3.3%**	**-1.0%**
GC3	1471	69.3%	1443	65.6%	-1.9%	-3.8%
GC4	1267	91.0%	1492	94.1%	17.8%	3.1%
GC5	98	89.8%	144	95.8%	46.9%	6.0%
GC7	8387	92.9%	8842	92.8%	5.4%	-0.1%
GC8	8698	85.6%	8232	85.3%	-5.4%	-0.4%
GC9	7359	89.9%	7974	95.2%	8.4%	5.3%
GC10	4244	84.1%	4348	92.4%	2.5%	8.3%
GC11	2516	63.8%	2392	46.6%	-4.9%	-17.3%
GC12	2373	95.4%	2863	97.4%	20.6%	2.0%
GC13	2639	87.0%	2332	93.5%	-11.6%	6.5%
GC15	2070	94.9%	3393	96.7%	63.9%	1.7%
GC16	2278	99.7%	2283	98.7%	0.2%	-1.0%
GC17	-	-	-	-	-	-
GC19	864	87.6%	761	85.4%	-11.9%	-2.2%
GC20	4049	71.3%	4113	57.2%	1.6%	-14.1%
GC23	5839	95.6%	5671	69.4%	-2.9%	-26.2%
GC24	7537	79.2%	7295	93.2%	-3.2%	14.0%
GC25	2241	90.2%	2353	91.2%	5.0%	1.0%
GC27	5113	89.5%	5058	86.3%	-1.1%	-3.2%
GC28	4811	94.7%	5133	88.3%	6.7%	-6.4%
GC30	2254	82.4%	2482	65.9%	10.1%	-16.5%
All Sites	**171507**	**77.9%**	**174686**	**77.5%**	**1.9%**	**-0.4%**

TABLE 8.7: 2019 v 2018 NON-GYNAECOLOGICAL CYTOLOGY FNA (P06) TAT 80% COMPLETED BY DAY 5

	2018 TAT P06		2019 TAT P06		2019 v 2018 TAT P06	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% No. of Cases ↑ or ↓	% ↑ or ↓
All CCs Sites	**7469**	**89.4%**	**7382**	**94.4%**	**-1.2%**	**5.0%**
CC1	1824	98.9%	1902	98.4%	4.3%	-0.5%
CC2	1061	95.9%	1126	97.1%	6.1%	1.1%
CC3	1998	94.7%	2100	94.8%	5.1%	0.1%
CC4	535	98.9%	781	98.5%	46.0%	-0.4%
CC5	813	94.0%	752	95.5%	-7.5%	1.5%
CC6	128	62.5%	106	76.4%	-17.2%	13.9%
CC7	505	92.5%	443	86.9%	-12.3%	-5.6%
CC8	605	20.8%	172	34.9%	-71.6%	14.1%
All GCs Sites	**3013**	**82.5%**	**2985**	**85.2%**	**-0.9%**	**2.7%**
GC3	-	-	1	100.0%	-	-
GC4	10	100.0%	5	100.0%	-50.0%	0.0%
GC5	24	79.2%	16	87.5%	-33.3%	8.3%
GC7	514	70.0%	600	87.3%	16.7%	17.3%
GC8	295	74.9%	243	67.9%	-17.6%	-7.0%
GC9	294	95.6%	260	90.0%	-11.6%	-5.6%
GC10	570	80.7%	493	93.5%	-13.5%	12.8%
GC11	130	70.0%	118	53.4%	-9.2%	-16.6%
GC12	178	93.8%	211	94.3%	18.5%	0.5%
GC13	45	80.0%	29	93.1%	-35.6%	13.1%
GC15	55	100.0%	63	93.7%	14.5%	-6.3%
GC16	135	94.8%	150	96.7%	11.1%	1.9%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	93	71.0%	116	51.7%	24.7%	-19.2%
GC24	347	91.1%	293	93.5%	-15.6%	2.4%
GC25	119	73.1%	206	89.3%	73.1%	16.2%
GC27	86	69.8%	51	72.5%	-40.7%	2.8%
GC28	75	73.3%	80	57.5%	6.7%	-15.8%
GC30	43	86.0%	50	92.0%	16.3%	6.0%
All Sites	**10482**	**86.0%**	**10367**	**91.8%**	**-1.1%**	**5.8%**

TABLE 8.8: 2019 v 2018 NON-GYNAECOLOGICAL CYTOLOGY FNA (P07) 80% COMPLETED BY DAY 5

	2018 TAT P07		2019 TAT P07		2019 v 2018 P07 TAT P07	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% No. of Cases ↑ or ↓	% ↑ or ↓
All CC Sites	**13422**	**89.2%**	**12120**	**94.4%**	**-9.7%**	**5.2%**
CC1	3625	99.6%	3357	99.5%	-7.4%	-0.1%
CC2	1359	96.0%	1384	95.0%	1.8%	-1.0%
CC3	3082	96.9%	3173	97.0%	3.0%	0.2%
CC4	1660	98.8%	1647	98.4%	-0.8%	-0.4%
CC5	783	92.5%	660	91.1%	-15.7%	-1.4%
CC6	552	74.5%	509	82.5%	-7.8%	8.1%
CC7	921	90.0%	964	90.2%	4.7%	0.2%
CC8	1440	33.0%	426	46.5%	-70.4%	13.5%
All GCs Sites	**8371**	**88.6%**	**8146**	**87.0%**	**-2.7%**	**-1.5%**
GC3	167	79.0%	104	83.7%	-37.7%	4.6%
GC4	-	-	-	-	-	-
GC5	188	77.7%	219	87.2%	16.5%	9.6%
GC7	551	88.4%	630	91.3%	14.3%	2.9%
GC8	753	91.8%	845	91.5%	12.2%	-0.3%
GC9	419	96.9%	351	90.9%	-16.2%	-6.0%
GC10	583	82.7%	519	91.1%	-11.0%	8.5%
GC11	313	70.9%	324	54.0%	3.5%	-16.9%
GC12	865	92.8%	715	92.6%	-17.3%	-0.2%
GC13	476	77.7%	378	83.9%	-20.6%	6.1%
GC15	360	98.3%	289	99.3%	-19.7%	1.0%
GC16	260	98.1%	297	100.0%	14.2%	1.9%
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	65	16.9%	44	11.4%	-32.3%	-5.6%
GC23	884	89.8%	786	70.9%	-11.1%	-19.0%
GC24	1339	97.2%	1592	94.0%	18.9%	-3.2%
GC25	470	86.6%	321	94.7%	-31.7%	8.1%
GC27	208	77.9%	236	83.9%	13.5%	6.0%
GC28	228	80.7%	239	57.3%	4.8%	-23.4%
GC30	242	85.5%	257	92.6%	6.2%	7.1%
All Sites	**21793**	**89.0%**	**20266**	**91.4%**	**-7.0%**	**2.5%**

CHAPTER 9: FROZEN SECTION

TABLE 9.3: 2019 v 2018 FS CONCORDANCE

	2018 FS Correlation		2019 FS Correlation		2019 v 2018 FS Correlation	
	No. of Correlation FS Cases	% Q007	No. of Correlation FS Cases	% Q007	% No. of Cases ↑ or ↓	% Q007 ↑ or ↓
All CCs Sites	**933**	**99.0%**	**1025**	**99.3%**	**9.9%**	**0.3%**
CC1	57	96.5%	88	96.6%	54.4%	0.1%
CC2	81	96.3%	102	100.0%	25.9%	3.7%
CC3	121	99.2%	87	98.9%	-28.1%	-0.3%
CC4	59	100.0%	41	100.0%	-30.5%	0.0%
CC5	511	100.0%	577	100.0%	12.9%	0.0%
CC6	10	100.0%	13	100.0%	30.0%	0.0%
CC7	94	96.8%	116	97.4%	23.4%	0.6%
CC8	-	-	1	100.0%	-	-
All GCs Sites	**184**	**98.4%**	**178**	**98.9%**	**-3.3%**	**0.5%**
GC3	-	-	-	-	-	-
GC4	1	100.0%	-	-	-	-
GC5	34	94.1%	60	100.0%	76.5%	5.9%
GC7	13	100.0%	12	100.0%	-7.7%	0.0%
GC8	12	100.0%	17	100.0%	41.7%	0.0%
GC9	51	98.0%	28	96.4%	-45.1%	-1.6%
GC10	2	100.0%	9	88.9%	350.0%	-11.1%
GC11	-	-	-	-	-	-
GC12	7	100.0%	5	100.0%	-28.6%	0.0%
GC13	3	100.0%	5	100.0%	66.7%	0.0%
GC15	7	100.0%	12	100.0%	71.4%	0.0%
GC16	-	-	-	-	-	-
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	2	100.0%	-	-	-	-
GC24	31	100.0%	20	100.0%	-35.5%	0.0%
GC25	3	100.0%	2	100.0%	-33.3%	0.0%
GC27	2	100.0%	-	-	-	-
GC28	15	100.0%	8	100.0%	-46.7%	0.0%
GC30	-	-	-	-	-	-
All Sites	**1117**	**98.9%**	**1203**	**99.3%**	**7.7%**	**0.3%**

TABLE 9.4: 2019 v 2018 FS DEFERRAL RATE

	2018 FS Deferral		2019 FS Deferral		2019 v 2018 FS Deferral	
	No. of Correlation FS Cases	% Q008	No. of Correlation FS Cases	% Q008	% No. of Cases ↑ or ↓	% Q008 ↑ or ↓
All CCs Sites	**948**	**1.6%**	**1042**	**1.6%**	**9.9%**	**0.0%**
CC1	59	3.4%	89	1.1%	50.8%	-2.3%
CC2	82	1.2%	103	1.0%	25.6%	-0.2%
CC3	125	3.2%	89	2.2%	-28.8%	-1.0%
CC4	59	0.0%	45	8.9%	-23.7%	8.9%
CC5	515	0.8%	579	0.3%	12.4%	-0.4%
CC6	10	0.0%	13	0.0%	30.0%	0.0%
CC7	98	4.1%	123	5.7%	25.5%	1.6%
CC8	-	-	1	0.0%	0.0%	0.0%
All GCs Sites	**193**	**4.7%**	**183**	**2.7%**	**-5.2%**	**-1.9%**
GC3	-	-	-	-	-	-
GC4	1	0.0%	-	-	-	-
GC5	35	2.9%	62	3.2%	77.1%	0.4%
GC7	13	0.0%	12	0.0%	-7.7%	0.0%
GC8	12	0.0%	17	0.0%	41.7%	0.0%
GC9	51	0.0%	29	3.4%	-43.1%	3.4%
GC10	2	0.0%	9	0.0%	350.0%	0.0%
GC11	-	-	-	-	-	-
GC12	8	12.5%	5	0.0%	-37.5%	-12.5%
GC13	3	0.0%	5	0.0%	66.7%	0.0%
GC15	7	0.0%	12	0.0%	71.4%	0.0%
GC16	-	-	-	-	-	-
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	2	0.0%	-	-	-	-
GC24	32	3.1%	22	9.1%	-31.3%	6.0%
GC25	9	66.7%	2	0.0%	-77.8%	-66.7%
GC27	2	0.0%	-	-	-100.0%	0.0%
GC28	15	0.0%	8	0.0%	-46.7%	0.0%
GC30	-	-	-	-	-	-
All Sites	**1141**	**2.1%**	**1225**	**1.8%**	**7.4%**	**-0.3%**

TABLE 9.5: 2019 v 2018 FS TURNAROUND TIME

	2018 FS TAT		2019 FS TAT		2019 v 2018 FS TAT	
	No. of TAT FS Cases	% Q061	No. of TAT FS Cases	% Q061	% No. of Cases ↑ or ↓	% Q061 ↑ or ↓
All CCs Sites	**1066**	**80.9%**	**1077**	**74.9%**	**1.0%**	**-5.9%**
CC1	59	66.1%	91	71.4%	54.2%	5.3%
CC2	84	64.3%	104	59.6%	23.8%	-4.7%
CC3	129	81.4%	92	83.7%	-28.7%	2.3%
CC4	60	78.3%	45	80.0%	-25.0%	1.7%
CC5	620	85.0%	600	76.7%	-3.2%	-8.3%
CC6	10	30.0%	13	69.2%	30.0%	39.2%
CC7	99	83.8%	129	73.6%	30.3%	-10.2%
CC8	5	80.0%	3	100.0%	-40.0%	20.0%
All GCs Sites	**203**	**75.9%**	**204**	**86.3%**	**0.5%**	**10.4%**
GC3	-	-	-	-	-	-
GC4	1	0.0%	-	-	-	-
GC5	35	82.9%	63	85.7%	80.0%	2.9%
GC7	13	100%	12	100.0%	-7.7%	0.0%
GC8	15	100%	18	77.8%	20.0%	-22.2%
GC9	53	81.1%	29	86.2%	-45.3%	5.1%
GC10	4	75.0%	19	89.5%	375.0%	14.5%
GC11	-	-	-	-	-	-
GC12	10	90.0%	5	100.0%	-50.0%	10.0%
GC13	3	100%	5	80.0%	66.7%	-20.0%
GC15	7	85.7%	12	100.0%	71.4%	14.3%
GC16	-	-	-	-	-	-
GC17	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	3	33.3%	-	-	-	-
GC24	32	56.3%	23	73.9%	-28.1%	17.7%
GC25	9	0%	3	33.3%	-66.7%	33.3%
GC27	2	0%	-	-	-	-
GC28	15	86.7%	15	100.0%	0.0%	13.3%
GC30	-	-	-	-	-	-
All Sites	**1269**	**80.1%**	**1281**	**76.7%**	**0.9%**	**-3.3%**

APPENDIX 2

APPENDIX 2:
GLOSSARY

Addendum Report	Refers to any pathology report issued subsequent to original report and should be classified as amended, corrected or supplementary.
Amended Report	A change to the pathologic interpretation occurs that may give rise to a change in treatment/prognosis. This is the report issued when the final report diagnosis changes due to a change in interpretation or other important pathologic information becomes available that results in a significant change in diagnosis and/or treatment.
Block	Samples obtained from a patient (for example when a biopsy is taken) are preserved within a piece of paraffin wax, from which slides are then made. This is known as a block.
Case	Refers to a patient's pathological material. This may comprise a single sample or multiple samples (specimens) from the same patient.
Case ID	Refers to a unique identifier associated with each case. The case ID is a combination of multiple identifiers containing information such as the specimen type, year, unique case number, specimen identifier, block identifier and/or character.
CC	Cancer Centre
CL	The Clinical Lead is the individual with designated overall responsibility for the programme within their local site. They are also responsible for identifying a designated person or two people locally with responsibility for the operational support of NQAIS- Histopathology and other administrative tasks on an ongoing basis (Local Operational Manager).
Corrected Report	A transcription or identification error, without a change to the diagnostic information. A corrected report is issued when transcription, patient identification, specimen site, or other related reporting errors occur. Corrected reports do not change the original interpretive diagnosis.
Cytopathology	The examination of cells to determine the cause or the nature of disease.
Frozen section (FS)	A specimen of tissue that has been quick-frozen, cut by microtome, and stained immediately for rapid diagnosis. A specimen processed in this manner is not optimal for detailed study of the cells but can be used to guide intra-operative decision making.
Funnel Plots	They have the ability to present additional layers of information that traditional bar charts cannot. They make it easier to identify outliers relative to other data points.
GC	General Centre
GI Endoscopic Biopsy (P02)	A sample of tissue taken from the gastrointestinal tract during an endoscopic procedure for diagnosis.
Histopathology	The examination of tissue to determine the cause of the nature of disease.
HPSIR	Hospital Patient Safety Indicator Report. This was created to assure the public that the indicators selected and published for this report are monitored by senior management of both the hospital and hospital group as a key component of clinical governance.
IHC	Immunohistochemistry (IHC) is a special test, widely used in pathology. It involves the process of identifying antigens (proteins) in cells of a tissue section by exploiting the principle of antibodies binding specifically to antigens in biological tissues. It can provide the pathologist with useful information about tumours, including the subtype of the tumour and what types of treatment it might respond to.
Intradepartmental Consultation (IDC)	Occurs when a consultant pathologist seeks a second opinion from another consultant pathologist within their department or within their regional hospital network on a particular case prior to authorisation of the final report.
LIS	Laboratory Information System
LOM	The Local Operations Manager is responsible for reviewing and verifying the accuracy and completeness of local QI data utilising local report and analysis tools, coordination of the ongoing setup and removal of authorised local users for NQAIS-Histopathology in conjunction with the Clinical Lead.

Multidisciplinary Team Meetings (MDT)	Multidisciplinary Team Meetings form an essential part of the clinical care of patients with cancer, suspected cancer or other clinical conditions and involve specialists in many areas including medical oncology, radiation oncology, radiology, pathology, surgery etc. coming together to agree on the best treatment options for individual patients. Histopathologists have a key role in such meetings and thereby contribute to patient management.
National Aggregate	This refers to the combined average of General Centres and Cancer Cancers with regards to the data collected for the individual KQIs, it is often expressed as the national average within the text.
NQAIS	The National Quality Assurance and Improvement System is a platform for the generation of national reports to allow for the review of the accuracy of diagnostic testing from hospital laboratories. The NQAIS system is being used in the Histopathology Quality Improvement Programme to centrally monitor the practices involved in analysing and interpreting patient tissue samples.
Non Biopsy – Cancer Resection (P03)	Partial or total resections of organs involved by cancer. Examples include Mastectomy for the treatment of breast cancer, Colectomy for the treatment of colon cancer.
Non Biopsy – Other (P04)	All other surgical specimens which are neither small biopsies nor cancer resections.
Non Gynaecological Cytology – FNA (P06)	Fine Needle Aspiration (FNA) involves using a needle attached to a syringe to collect cells from lesions or masses in various body organs. These small samples are examined by Cytopathologists eg. Fine needle aspiration of the thyroid gland or of a lymph node.
Non Gynaecological Cytology – Exfoliative (P07)	These are samples of cells that are collected after they have been either spontaneously shed by the body or manually scraped/brushed off of a surface in the body. They are examined by Cytopathologists eg. Pleural fluid or peritoneal fluid.
P Code	Procedure codes are a sub-type of classification used to identify specific cases within Histology and Cytology, for example P02 always refers to Small biopsy.
Q Code	Quality codes are comprised of the elements associated with appropriate categorisation and actions for quality activities, for example Q017 is a case that is subject to MDT/M&M review.
Recommendation	Refers to recommendations that should be implemented in each histopathology laboratory to fully support quality improvement activities. Where quality targets are absent due to lack of sufficient evidence on which to base a standard, a recommendation is usually made.
Slide	When a tissue sample is obtained from a patient it is processed within a laboratory and ultimately sliced extremely thinly. The thin slice of tissue is placed on a glass slide. The glass slide is then stained to colour the cells and assessed using a microscope by the pathologist.
Small Biopsy (P01)	A sample of tissue taken from anywhere other than the gastrointestinal tract during a procedure for diagnosis.
Specimen	A piece of tissue received into the pathology laboratory for analysis and diagnosis. A patient may have one or more samples submitted at any one time.
Stain	Refers to a pigment applied to slides to highlight particular features of interest. The most widely used stain is known as H&E (Haematoxylin & Eosin).
Supplementary Report	A report issued when new information becomes available after the final report has been submitted. Newly obtained clinical information, findings on additional histological sections or review of archival material, the results of special studies such as immunohistochemistry or molecular diagnostics, and the results of consultations may be included in a supplementary report.
Target	Refers to the target associated with Quality Indicators.
QI	Quality Improvement in healthcare is a science that uses sophisticated tools and techniques to systematically introduce and embed changes to healthcare delivery. An important aspect of quality improvement is the use of accurate and powerful measurement tools to make sure patient outcomes are improving as a result of the change.

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