

# National Histopathology Quality Improvement Programme

*8th National Data Report*  
1 JAN - 31 DEC 2020



**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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## PROGRAMME MANAGEMENT TEAM, ROYAL COLLEGE OF PHYSICIANS OF IRELAND

<b>Áine Mitchell</b>	Programme Manager, National Histopathology QI, Programme, RCPI
<b>Caitriona McGrath</b>	Manager, Specialty Quality Improvement Programmes

# FOREWORD

This is the eighth annual national data report composed of anonymised national data collected from the National Quality Assurance and Improvement System (NQAIS), from 1 January to 31 December 2020. In 2020, 28 laboratories participated in the programme and contributed to the national dataset.

This report includes analysis on selected targets and recommendations released by National Histopathology Quality Improvement (NHQI) Programme, which have been set over the lifetime of the programme and guided by the data collected. 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 this programme, we can report on national metrics in histopathology, making Ireland the first country in the world to do so.

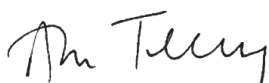
Quality improvement takes place in many laboratories as detailed in this report; however, gaps and outliers are present within the data suggesting areas for local analysis and opportunities for change and growth. We urge participating hospitals to integrate the output of this programme into their day-to-day quality assurance/improvement functions. We hope that this data may also be useful in highlighting gaps in resourcing in individual laboratories. Year on year, workload continues to increase in histopathology laboratories across the country, reflecting a rise in specimen volumes, and complexity of cases. Laboratories require adequate resourcing and staffing to provide a high-quality service.

The Working Group of the NHQI 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 and Patient Safety Team who provides funding for this programme, our approving bodies the Specialty QI Programme Steering Committee and the Programme Management Team, RCPI for their continuous support.

During 2020, we experienced much disruption to our clinical services with the COVID-19 pandemic and closure of many diagnostic services with government-imposed lockdown in March 2020. During this period the numbers of all specimens fell, most marked was the drop in diagnostic biopsies (P01) and gastrointestinal biopsies (P02). The data gathered by the NHQI programme formed an integral part of the COVID collaboration led by the Faculty of Pathology (RCPI), with the National Gastrointestinal Endoscopy QI programme, the National Radiology QI Programme, the National Cancer Control Programme (NCCP) and Prof Mark Lawler, Associate Pro-Vice Chancellor and Professor of Digital Health, Queens University Belfast; Scientific Director DATA-CAN (Health Data Research, UK) which is detailed in chapter 10 of this report.

I would like to thank members of the NHQI Working Group for their time dedicated to our monthly meetings and their contributions to projects, the annual reports, guidelines and our 2020 webinar. Finally, I wish to acknowledge Ms Áine Mitchell, NHQI Programme Manager and Ms Caitriona McGrath, Manager, Specialty Quality Improvement Programmes for their guidance, analysis and input to the NHQI Programme.



**Dr Ann Treacy,**  
**Chair of the National Histopathology Quality Improvement Programme Working Group**

# GLOSSARY

<b>Achievable Target</b>	Refers to an additional aspirational value that should be aimed for, if the minimum target is being met.
<b>Addendum Report</b>	Refers to any pathology report issued subsequent to original report and should be classified as amended, corrected or supplementary.
<b>Amended Report</b>	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.
<b>Block</b>	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.
<b>Case</b>	Refers to a patient's pathological material. This may comprise a single sample or multiple samples (specimens) from the same patient.
<b>Case ID</b>	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.
<b>CC</b>	Cancer Centre
<b>CL</b>	The Clinical Lead is the individual with designated overall responsibility for the programme within their local site. She/he is 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).
<b>Corrected Report</b>	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.
<b>Cytopathology</b>	The examination of cells to determine the cause or the nature of disease.
<b>Frozen Section (FS)</b>	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.
<b>GC</b>	General Centre
<b>GI Endoscopic Biopsy (P02)</b>	A sample of tissue taken from the gastrointestinal tract during an endoscopic procedure for diagnosis.
<b>Histopathology</b>	The examination of tissue to determine the cause or the nature of disease.
<b>HPSIR</b>	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.
<b>IHC</b>	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.
<b>Intradepartmental Consultation (IDC)</b>	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.
<b>LIS</b>	Laboratory Information System
<b>Key Quality Indicator (KQI)</b>	Refers to a minimum or achievable value associated with Quality Indicators.
<b>LOM</b>	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.

<b>Minimum Target</b>	This refers to the minimum acceptable value for a KQI.
<b>Multidisciplinary Team Meetings (MDT)</b>	Multidisciplinary Team Meetings form an essential part of the clinical care of patients with cancer, suspected cancer or other clinical conditions. They involve specialists in many areas such as 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.
<b>National Aggregate</b>	Refers to the combined total of General Centres and Cancer Centres with regards to the data collected for the individual KQIs, it is often expressed as the national average within the text.
<b>NQAIS-Histopathology</b>	NQAIS-Histopathology functions as a central repository for quality improvement data from participating hospital's Laboratory Information Systems (LIS).
<b>Non Biopsy – Cancer Resection (P03)</b>	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.
<b>Non Biopsy – Other (P04)</b>	All other surgical specimens which are neither small biopsies nor cancer resections.
<b>Non Gynaecological Cytology – FNA (P06)</b>	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. FNA of the thyroid gland or of a lymph node.
<b>Non Gynaecological Cytology – Exfoliative (P07)</b>	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 e.g. pleural fluid or peritoneal fluid.
<b>P Code</b>	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.
<b>Q Code</b>	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.
<b>Recommendation</b>	Refers to recommendations that should be implemented in each histopathology laboratory to the implementation of improvement activities. Where quality targets are absent due to lack of sufficient evidence on which to base a standard, a recommendation is usually made.
<b>Scatter plots</b>	A graph in which the values of two variables are plotted along two axes, the pattern of the resulting points revealing any correlation present.
<b>Slide</b>	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.
<b>Small Biopsy (P01)</b>	A sample of tissue taken from anywhere other than the gastrointestinal tract during a procedure for diagnosis.
<b>Specimen</b>	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.
<b>Stain</b>	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).
<b>Supplementary Report</b>	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.
<b>Target</b>	Refers to the target associated with Quality Indicators.
<b>QI</b>	Quality Improvement



# HISTOPATHOLOGY QI PROGRAMME ENDORSEMENT

Continual quality improvement within the Irish Histopathology Laboratory service is central to the delivery of high quality services for the benefits of all our patients. The Faculty of Pathology welcomes this 8th report and are committed to working with and supporting all who engage in this programme.

**Professor Louise Burke**  
Dean of the Faculty of Pathology



## SPECIAL RECOGNITION

The National Histopathology QI Programme Working Group would like to acknowledge and thank both Professor Kieran Sheahan and Professor Conor O'Keane who have recently stepped down from the Working Group after 10 years. Both were instrumental in the development, launch and implementation of the programme since 2009. They have made an outstanding contribution to Quality Improvement in the Irish laboratory service.

Professor O'Keane is now the Chair of the Specialty QI Programme Steering Committee, while Professor Sheahan sits on the Board of Directors of the International Collaboration on Cancer Reporting.

We are very grateful to them for their input and innovation throughout the years.





# KEY RECOMMENDATIONS

1

To ensure that Turnaround Times and other targets can be achieved, the Working Group recommends that laboratory resources should aim to keep pace with the increasing workload. Inclusion of staffing and resourcing issues on hospital risk register to highlight impact of patient care should be considered at a local level.

*See Chapter 4*

2

The Working Group recommend that centres below target and with 'zero' Intradepartmental Consultation rates in particular should carry out local audits and root cause analysis to establish the reasons for this.

*See Chapter 5*

3

The high volume of both General and Cancer Centres recording 100% Multidisciplinary Team (MDT) Agreement may indicate the need to look at re-evaluating the status of MDT Review as an actively managed key quality indicator. The Working Group recommend that current standards continue to be met and monitored and that an additional area requiring a QI focus is introduced.

*See Chapter 6*

4

The Working Group recommends local audits are carried out to ensure that Amended/Corrected and Supplementary report codes are being applied correctly. Additionally, zero rates of Amended/Corrected reports should trigger an audit of Supplementary reports as all departments should have some corrections or amendments.

*See Chapter 7*

5

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. As the national histopathology data may be a useful tool, the Working Group recommend that each department monitors TATs and investigates the root cause of challenges faced in achieving TAT targets.

*See Chapter 8*

6

The Working Group recommend that participating hospitals identify their own data in an effort to identify causative factors where targets are not met. Achievement of Frozen Section (FS) TAT targets continues to remain a challenge.

*See Chapter 9*

7

Data analysis revealed considerable variation in the use of FS coding practices locally. The Working Group recommend reviewing FS coding practices within participating hospitals' Quality Groups

*See Chapter 9*

# 8th NATIONAL DATA REPORT

## KEY FINDINGS

### CHAPTER 4: WORKLOAD

1. Between 2019 and 2020, the volume of cases nationally decreased by 16.2% (78, 110 cases), specimens decreased by 16.6% (138,805 specimens) and blocks decreased by 13.9% (191,157 blocks).
2. In the six years from 2015 to 2020, the national volume of cases requiring Immunohistochemical Stains (IHC Stains) increased by 59.3%, and the number of All Stains shows a 11.9% increase.

### CHAPTER 5: INTRADEPARTMENTAL CONSULTATION (IDC)

1. The national aggregate data for all sites combined for % IDC for all histology, cytology and autopsy cases reached or exceeded targets in 2020.
2. In 2020 the combined national average for Non-Gynaecological Cytology FNA (P06) % IDC for all sites was 16.5%, well above the achievable target of 9%.

### CHAPTER 6: MULTIDISCIPLINARY TEAM REVIEW

1. All General Centres and Cancer Centres have been consistently above the target of greater than or equal to 95% for Multidisciplinary Team (MDT) Agreement in both 2019 and 2020 for all histology (P01, P02, P03 and P04) and cytology (P06, P07) cases.

### CHAPTER 7: ADDENDUM REPORTS

1. The target of a Combined Amended/Corrected report rate of < 1% in histology was achieved by all sites in 2020.

### CHAPTER 8: TURNAROUND TIME

1. The national averages for General and Cancer Centres are not currently meeting the target of 80% of cases completed in 5 days or less for Small Biopsy (P01) Turnaround Time (TAT).
2. The national average for Cancer Centres for GI Endoscopic Biopsy (P02) has been below the target of 80% of cases completed in 5 days or less in both 2019 and 2020, while General Centres were above target for the same time period.
3. The national averages for Non-Biopsy Cancer Resection (P03) TAT for all General and Cancer Centres and all sites combined have been below the target of 80% of cases completed in 7 days or less in both 2019 and 2020.
4. Cancer Centres national average was consistently below the target of 80% of cases completed in 7 days or less for Non-Biopsy Other (P04) cases in 2019 and 2020, while General Centres were above target.
5. The national averages for Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) TAT have remained above the target of 80% of cases completed in 5 days or less as in 2019.

## CHAPTER 9: FROZEN SECTION

1. All General Centres and Cancer Centres have consistently reached and exceeded the target greater than or equal to 97% for Frozen Section (FS) concordance rate in 2019 and 2020.
2. The national averages for all sites combined and Cancer Centres specifically were significantly outside the target range of less than or equal to 5% and greater than 1% for FS deferral rates. However, there were fewer cases recorded but with higher deferral rates attached.

## CHAPTER 10: IMPACT OF COVID-19 ON CANCER CARE AND HISTOPATHOLOGY SERVICES

1. NQAIS-Histopathology data from the NHQI programme played a vital role in assessing the impact of the COVID-19 pandemic on cancer services in Ireland in 2020 and is a reminder to programme participants to continually audit their data to ensure accuracy of coding.
2. The importance of collecting both public and private data by NHQI programme was highlighted, as a significant proportion of cancer surgeries performed in private hospitals during the first wave of the pandemic was captured, in contrast to other datasets used to assess cancer from National Cancer Control Programme/HSE.

# CHAPTER 1

## INTRODUCTION TO THE PROGRAMME

# 1

The National Histopathology Quality Improvement (NHQI) Programme has been guiding quality improvement in Irish laboratories for the last 11 years. It was launched by the Faculty of Pathology in the Royal College of Physicians of Ireland (RCPI) in January 2009 in collaboration with the National Cancer Control Programme (NCCP). Funding was initially provided by the NCCP and was taken over by the HSE National Quality Improvement Team in 2014. RCPI continue to provide the management of this programme.

### **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 participating laboratories to identify opportunities for improved efficiency of services and has the potential to reduce unnecessary testing and errors. Laboratories and hospital management can use the data uploaded into the National Quality Assurance and Improvement System (NQAIS) to 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.

**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 Working Group in conjunction with the Faculty of Pathology has set three rounds of evidence-based targets since 2013 to enable laboratories to monitor and track their performance in several key quality areas, such as how quickly test results are processed and reported on.

In 2020, the programme contributed workload data to the Faculty of Pathology led report on the impact of COVID-19 pandemic on cancer services in Ireland as part of a collaborative report with the National Cancer Control Programme (NCCP), Prof Mark Lawler, Associate Pro-Vice Chancellor and Professor of Digital Health, Queens University Belfast; Scientific Director DATA-CAN (Health Data Research, UK) and the National QI Programmes in GI Endoscopy and Radiology. This report is outlined in further detail in Chapter 10.

## PURPOSE OF THIS REPORT

This report enables informed decision making on the steps necessary to support current and future quality improvements within Irish histopathology services. The NHQI Working Group encourages participating hospitals to identify their laboratory within the report and to 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-Histopathology.

## 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
- Patients and 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.

## LOCAL REPORTING

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 the laboratory and 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 with the Quality and Patient Safety Teams 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 P01 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.

## TARGETS AND RECOMMENDATIONS

Table 1.1 sets out targets and recommendations set by the Histopathology QI Working Group.

**TABLE 1.1: 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 Endoscopic Biopsy – 80% by day 7 <b>Updated</b> GI Endoscopic Biopsy – 100% by day 10 <b>Updated</b> Cancer Resection – 80% by day 7 Non-Biopsy Other – 80% by day 7 Neuropathology Cytology – 80% By day 5 <b>New</b> Cytology FNA – 80% by day 5 Cytology Exfoliative – 80% by day 5	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.
Intrdepartmental 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.
Autopsy Retrospective Review ROUND 3 Est 2016	% Satisfactory – more than 90%	Number 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 a hospital Medical & Surgical Grand Rounds.



**TABLE 1.2: Recommendations set by the Working Group**

Key Quality Area	Recommendations & Key Indicator	Notes
Multidisciplinary Team (MDT) Meetings  ROUND 3 Est 2016	% cases discussed at MDT Meeting: <ul style="list-style-type: none"> <li>• Minimum 10% of all cases (cancer centre labs)</li> <li>• Minimum 5% of all cases (general centre labs)</li> <li>• Minimum 50%, achievable 90% of cancer resection specimens (all labs)</li> </ul>	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	Combined Amended/Corrected Reports 1. Histology Cases -1% or less 2. Cytology Cases - 1% or less	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.

## NATIONAL DATA REPORT APPROVAL PROCESS

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

It was submitted to the Specialty Quality Improvement Steering Committee for approval on 25 11 2021. This report was approved for publication on the 02 12 2021

## CHAPTER 2 REPORT HIGHLIGHTS

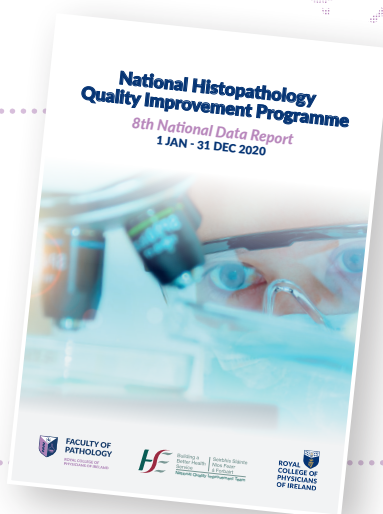
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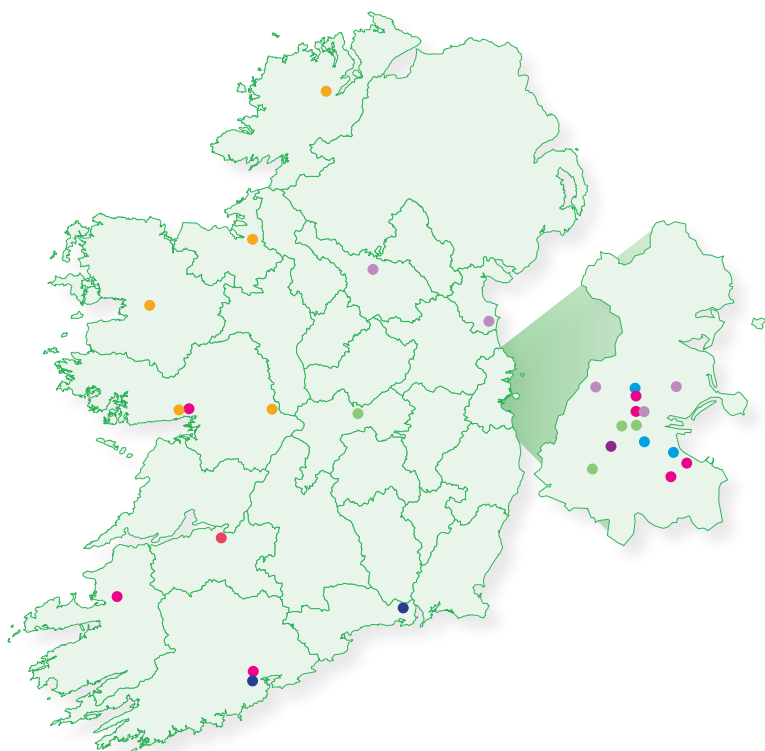
## FIRST COUNTRY IN THE WORLD

to report on national  
metrics in histopathology

## 8th National Data Report



## 28 Participating Laboratories



**405,483  
CASES**



**699,050  
SPECIMENS**



**1,179,941  
BLOCKS**

**PROCESSED  
IN 2020**

# CHAPTER 3

## DATA QUALITY

# 3

### DATA ANALYSIS

National QI data relating to the following Key Quality Indicators (KQIs) were analysed in the preparation of this report:

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

The associated targets have been 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 (See Table 1.1). Where targets are absent due to lack of sufficient evidence with which to base a standard upon, 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.

Data relating to the national histopathology workload have also been supplied in Chapter 4.

Data are analysed to establish trends where possible across the various quality areas for three hospital groupings: (1) national (All Sites), (2) Cancer Centres (CC) and (3) General Centres (GC). For some key quality areas, we also have sufficient data to analyse performance over multiple years on a quarterly basis. Where this is possible this data have been provided.

### DATA SOURCE

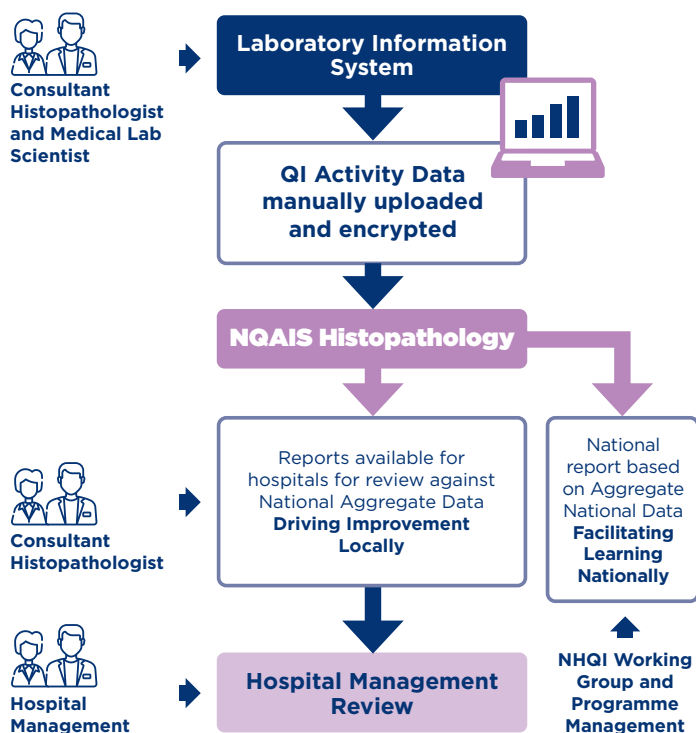
The data source for this report is Health Atlas Ireland – NQAIS-Histopathology.

Laboratories contribute data on histology, cytology and autopsy, from their Local Laboratory Information Systems (LIS). Compliance with the upload schedule is reported to the programme's Working Group at monthly meetings and quarterly, to the Steering Committee.

### The National Quality Assurance and Improvement System (NQAIS-Histopathology)

NQAIS-Histopathology is a central repository for quality improvement data submitted by participating hospitals. It allows sites to generate local reports and the programme to generate national reports on the accuracy and timeliness of diagnostic reporting in laboratories across Ireland.

## How is QI Data collected?



## DATA AND INFORMATION LIFECYCLE

As cases are processed within the laboratory, they are assigned specific codes associated with the type of specimen and quality activities performed. 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 them off, which triggers its addition to the national dataset. Each upload incorporates the previous 12 months, capturing any cases that were not available in the previous month's uploads.

The SQI programme management team extract the 12-month dataset for analysis from NQAIS-Histopathology.

## DATE / TIMELINE

The data contained in this report were collected between 1st January 2020 and 31st December 2020.

## SCOPE OF THE NATIONAL DATA REPORT

### In Scope:

- Inpatient and outpatient cases are captured in the dataset. We are unable to differentiate between these cases at this time owing to limitations in the current systems.
- Adult and paediatric cases are captured in the dataset; however, no distinction is made between them in the report at this time.
- Data is collected from both public and private sites; however, no distinction is made in the dataset based on this information.

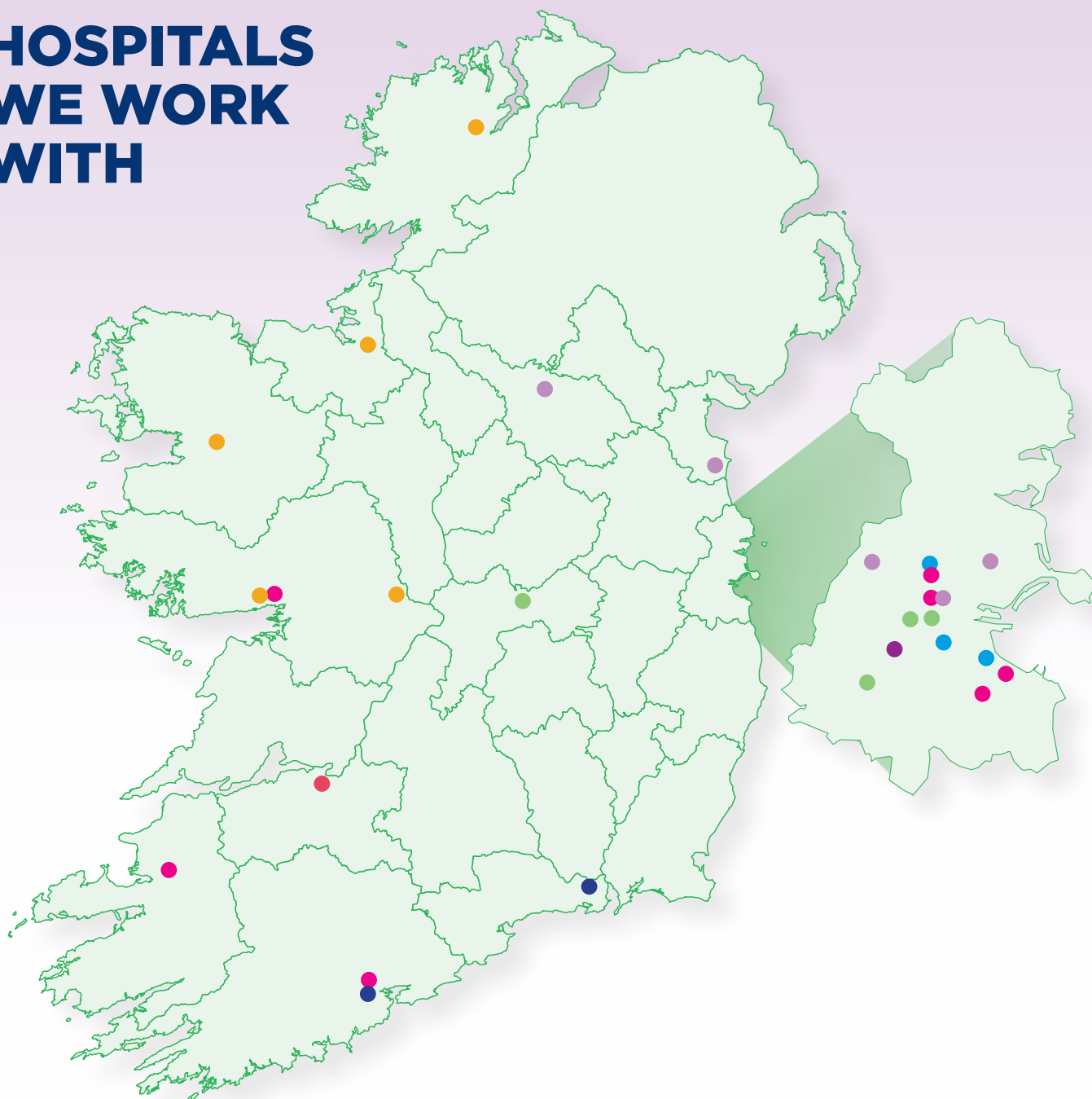
### Out of Scope:

- It is not possible to gather information on patient outcomes at this time.
- Individual histopathologist data is not captured in this dataset.

## DATA COVERAGE

In 2020, 28 laboratories participated in the NHQI programme, 21 public and 7 private laboratories (See map on page 16)

# 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. Vincent's University Hospital\***

196 Merrion Rd, Dublin 4, D04 Y8V0

#### CHILDREN'S HEALTH IRELAND

**Children's Health Ireland at Crumlin**

Cooley Rd, Crumlin, Dublin, D12 N512

**Children's Health Ireland at Temple Street**

Temple St, Rotunda, Dublin 1, D01 XD99

#### UNIVERSITY OF LIMERICK HOSPITAL GROUP

**University Hospital Limerick**

St Nesson'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 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 Vincent's Private Laboratory participates in the programme and its data is included in SVUH uploads.

## DATA QUALITY

It is important that those collecting and using the QI data can have confidence in the quality of the data. The data collected must be reliable, accurate, relevant and timely, to facilitate decision making and associated quality improvements to provide safe and high quality care for patients.

HIQA recommends the use of a data quality framework, which will enable the programme to assess the current data quality and necessary improvements using the following four tools: 1) data quality strategy 2) data quality assessment 3) reporting on data quality and 4) a data quality improvement cycle.<sup>1</sup>

### Data Quality Statement

The programme acknowledges the challenges that exist in relation to the quality of the data submitted and collected. This refers to coding issues, whereby samples are miscoded and as a result are not captured accurately for inclusion in the analysis. Alternative analysis using Microsoft Power BI now enables the programme management team to identify missing Procedure (P) Codes and to quantify with greater ease the issue on an annual basis, and on a site-by-site basis.

The Working Group encourages sites to engage with this report and the updated [Guidelines](#) to identify the correct coding for samples.

### Data Quality Assessment

Here we consider data under the following five dimensions of quality: accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity, and relevance <sup>1</sup>.

#### Accuracy and Reliability:

The QI data collected for the Histopathology QI Programme consist of a range of KQIs, designed to measure quality at both a local and national level in laboratories. Trends are analysed on a quarterly basis for each KQI in the national data report dating back to 2015 when the first dataset was created. Additional data visualisation provides comparisons between sites over the course of the year.

The data coverage is outlined on page 17, with all 21 public laboratories and 7/9 private labs represented, this represents significant coverage.

Duplicate cases are removed from the dataset as part of the data validation process by the programme management.

**Completeness:** The programme reports data completeness levels of 98%. There are some inconsistent coding practices at present which will result in minor discrepancies. Some cases are uploaded without a P code which results in that case not being included in the laboratories data. Data mapping locally enables the Local Operational Manager to validate the data identifying instances of miscoding and to rectify this prior to upload and sign-off by the Clinical Lead. The completeness of the data is regarded as sufficiently high so as not to impact the fitness for use of the dataset.

The recent review and update of the programmes Guideline document (page 20) provides detailed information on the correct coding to be used in table format.

This report provides data tables in the appendices for each of the key quality indicators.

#### Timeliness and Punctuality

Data, relating to the same suite of key quality indicators should be uploaded monthly to NQAIS-Histopathology on a retrospectively rolling 12-month period. Laboratories are requested to have completed their final data uploads to NQAIS-Histopathology by the end of March each year for inclusion in the annual national data report. The programme upload schedule can

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<sup>1</sup> 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>

[be viewed here](#). In addition, the Lapsed Participation Process [can be located here](#) outlining the necessary steps where a site is no longer compliant with the upload schedule.

The annual national data report is launched within the 12 months after the reporting period.

The Working Group are updated monthly by the programme manager regarding compliance nationally and the steering committee are updated quarterly.

Considering that the uploads are on a 12-month retrospective, the data presented in this report are accurate at the time the dataset is extracted from NQAIS-Histopathology. Some cases relating to the report timeline may be uploaded in the period between data extraction and publication of this report.

The programme acknowledges that uploads are performed manually and can be time consuming, contributing to some expected delays in the uploading of data.

Considering the impact of the COVID-19 pandemic, compliance was higher for the 2020 data than in the previous year, with all sites uploading 12 months of data into the national dataset.

## **Coherence and Comparability**

Laboratories are contacted on a quarterly basis by the programme manager and encouraged to access their own data on NQAIS-Histopathology provided they have the appropriate permissions, here they can compare their own performance over time to the national aggregate and provide a report for colleagues and hospital management.

The current convention in the national data report is to identify hospitals with a pseudo-identifier, known only to the hospitals themselves. The Working Group advise against using the report to produce league tables or to compare hospitals to one another 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.

Recent contributions to the Faculty of Pathology led report on the impact of COVID-19 on cancer services highlighted the increasing need for implementation of the e-Health Strategy to facilitate cross-referencing of cases between specialties to build a more complete picture of the patients journey through cancer services. The current dataset reported on by the NHQI Programme facilitates quality improvements within histopathology but cannot be linked with datasets provided by the other National QI Programmes in GI endoscopy and radiology or with the HIPE database.

A data dictionary is maintained by the programme manager, cataloguing and describing the structure and content of the data to maintain consistency in data collection.

## **Accessibility and Clarity**

Laboratories may access their own data in NQAIS-Histopathology. Training is provided to aid the reliability of this process.

The extraction and uploading of data are performed following agreed pathways depending on the Laboratory Information System in place. Further training or any refreshing of specific elements can be requested from the programme manager.

The analysis of the data once extracted from NQAIS-Histopathology is performed by the programme management team and presented graphically in the national data report.

Previous reports are hosted by the RCPI website and [can be viewed here](#).

## **Relevancy**

The purpose of the data are to aid decision making in the context of the laboratory environment. Detailed data is supplied on each of the KQIs in the guidelines document and broken down by cancer centre and general centre in the national data report to aid visualisation of both areas of improvement and those requiring increased scrutiny. The recent report on the impact of COVID-19 on cancer care in Ireland found the NHQI programme data to be one of the more real-time sources

of diagnostic data in the country and assisted significantly in representing the challenges faced by hospitals in meeting the needs of patients (See Chapter 10).

Based on current information, the NHQI programme is aware of 12 different local Laboratory Information Systems that are used across the country resulting in challenges in the uniform collection of data. It is widely agreed that the introduction of MedLIS, a nationally integrated laboratory system, is essential to ensure the current and future data needs of users are met, to facilitate the collection of additional relevant data to provide the highest standards of patient care possible.

The Working Group review and assess the KQIs and the targets set on an ongoing basis in terms of relevance and based on feedback from colleagues.

The Working Group and the programme management carry out a review of coding on an annual basis, using previous data extracts to investigate the levels of use certain codes have received in the previous year. This results in the removal of any codes no longer in use. In 2021, an additional code/target was added to facilitate the collection of data on neuropathology cases (PO5) on foot of discussion with clinicians. This went live in September 2021.

NQAIS-Histopathology permits the programme management to report on the number of times reports are generated in a laboratory, however, this functionality is not used as sites have responsibility for the monitoring of reports locally and to ensure appropriate actions are taken when necessary.

## REPORTING ON DATA QUALITY

Data quality is monitored by the programme management currently, with reports currently made to the Working Group when issues arise.

## CONTINUOUS IMPROVEMENT OF DATA QUALITY

The use of superior data analysis tools will permit a more in-depth consideration of data quality into the future, however, limitations encountered in the data captured by local systems must be factored in. It is hoped that the MedLIS project will not only result in a nationally coordinated diagnostic reporting system benefiting patient care greatly, but the parallel use of synoptic reporting will ensure that data collection is more accurate and complete.

### KEY RECOMMENDATION

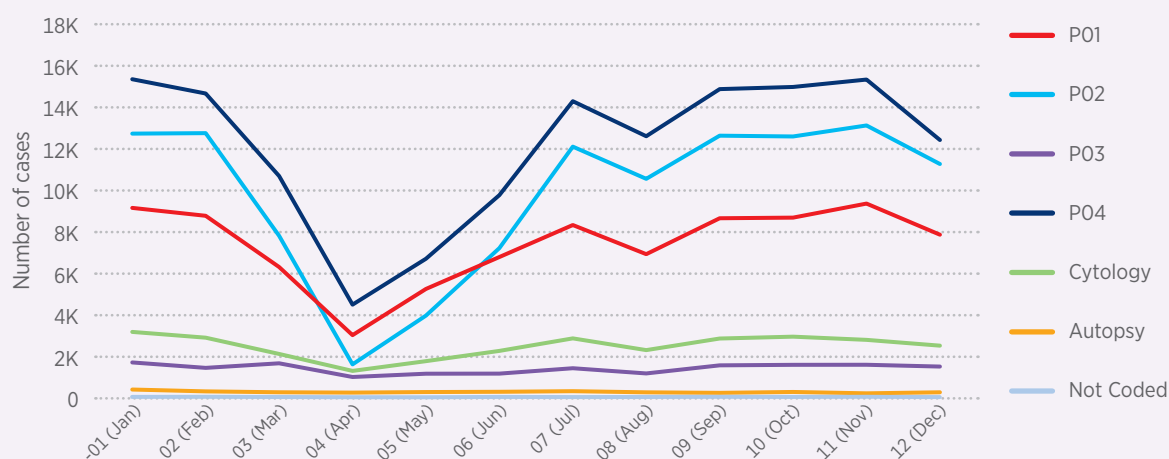
**Greater discussion between all parties will indicate if the data currently available meets the needs of the laboratories locally and on the use of reports locally which will enable the programme to generate a more detailed picture on the use of the data such as service planning.**

## CHAPTER 4 WORKLOAD

# 4

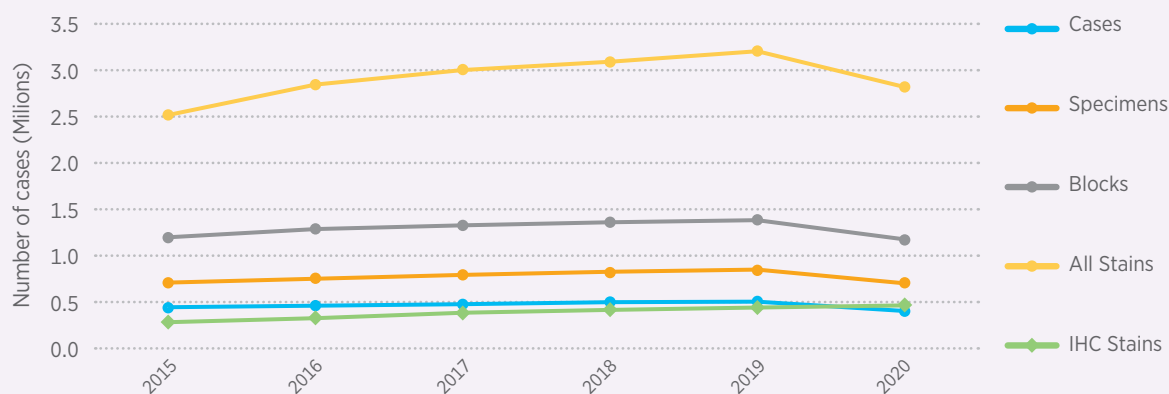
Due to the impact of the COVID-19 pandemic, laboratory workload numbers are considerably different to other years, with a reduction of 10.3% in overall specimen numbers when compared to the average of the previous five years. Figures 4.1, 4.2 and Table 4.1 display the workload nationally in 2020 where differences in volume are clear from 2015 to 2020. No targets or recommendations have been set against volumes of cases completed. Much of the data in this report compare the number of quality activities completed against these figures overall.

**FIGURE 4.1: Volume of Cases by Procedure Code Completed Nationally in 2020**



The impact of the global pandemic is clear in Figure 4.1 where numbers of cases experienced a dramatic decrease from March, the lowest point in the year can be seen in April but with significant recovery taking place for the remainder of the year. This is discussed in more detail in Chapter 10.

**FIGURE 4.2: Volume of Cases by Procedure Code Completed Nationally, 2015-2020**



**TABLE 4.1: 2015-2020 Workload Data**

Type	2015	2016	2017	2018	2019	2020
<b>Cases</b>	435,276	452,036	466,429	479,856	483,593	405,483
<b>Specimens</b>	709,969	750,718	784,034	815,728	837,855	699,050
<b>Blocks</b>	1,200,053	1,281,374	1,323,937	1,351,243	1,371,098	1,179,941
<b>All Stains</b>	2,526,534	2,850,511	3,008,483	3,094,877	3,205,002	2,827,999
<b>IHC stains</b>	281,551 (49,200 cases)	320,439 (55,688 cases)	376,639 (61,804 cases)	407,637 (67,967 cases)	431,421 (70,399 cases)	448,541 (68,269 cases)
<b>Routine H&amp;E</b>	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)	1,952,051 (371,998 cases)
<b>Extra H&amp;E</b>	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)	291,847 (59,871 cases)
<b>Special stains (&amp; cases)</b>	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)	134,585 (53,034 cases)
<b>Frozen Section stains</b>	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)	22,634 (1,079 cases)
<b>No. of labs</b>	33	32	32	32	29	28

Between 2019 and 2020, the volume of cases nationally decreased by 16.2% (78,110 cases), specimens decreased by 16.6% (138,805 specimens) and blocks decreased by 13.9% (191,157 blocks).

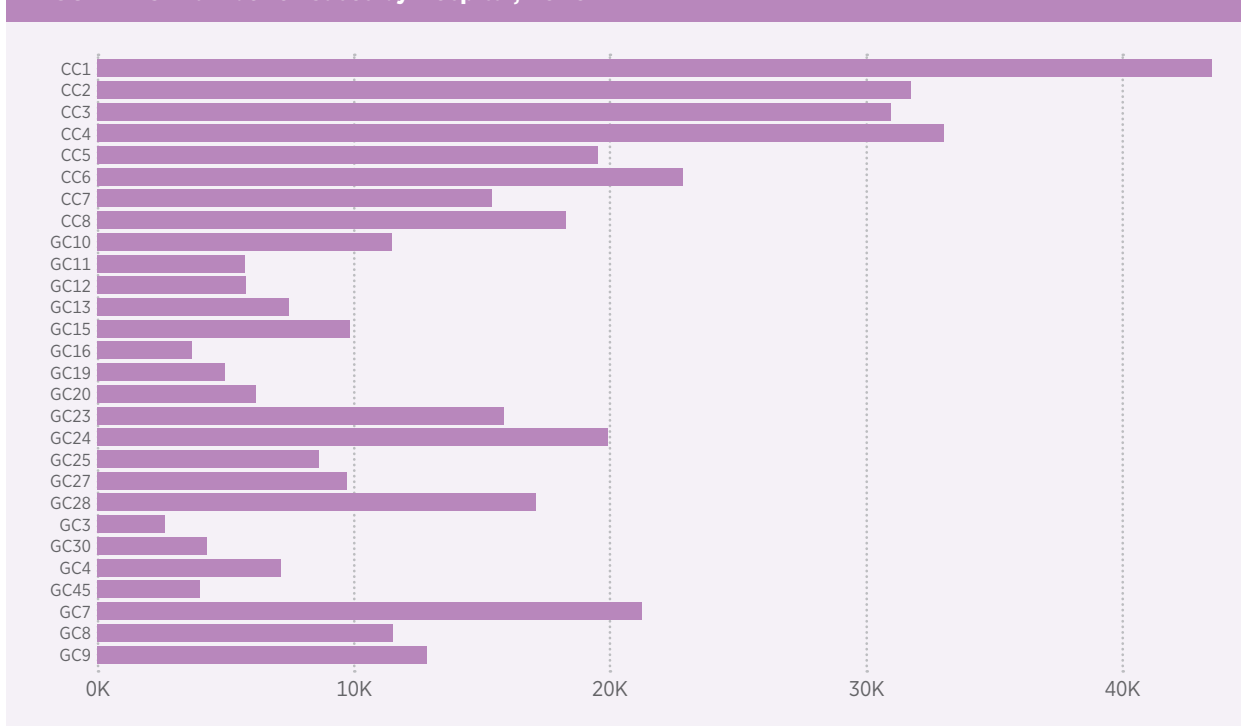
The volumes of cases, blocks and specimens had been steadily rising for the past number of years, however, the impact of the COVID-19 pandemic is evident and responsible for the significant decreases seen in 2020. Interestingly, the number of immunohistochemistry stains increased in 2020 compared to all other previous years, perhaps reflecting the prioritisation during the pandemic lockdowns of cancer resection surgeries and diagnostic services for suspected cancer patients. It also may reflect increased ordering of stains for therapeutic targets by clinicians.

In previous years, the programme noted that more specimens were being submitted to laboratories for individual patients and that as these specimens are now more complex and time-consuming to analyse than previously, they require more blocks of tissue to be submitted for examination. The number of specimens has dropped significantly in 2020, as has the number of blocks submitted, with a 14% decrease from 2019.

In the six years from 2015 to 2020 (Table 4.1), the national volume of cases requiring Immunohistochemical (IHC) stains increased by 59.3%, and the number of All Stains shows a 11.9% increase. Figure 4.3 displays the number of cases processed by individual hospitals in 2020.



**FIGURE 4.3: Number of Cases by Hospital, 2020**



### **CANCER CENTRES (CCs)**

Figure 4.3 shows that the volume of work carried out at Cancer Centres ranged from 15,381 to over 43,508 cases.

### **GENERAL CENTRES (GCs)**

Figure 4.3 shows that the volume of work carried out at General Centres ranged from 2,635 to over 21,244 cases. Many patients from cancer centres had their diagnostic investigations, surgery, and treatment in General Centres under the HSE initiative which saw the HSE take over beds in private hospitals to cope with the surge in demand for beds in cancer centres and other public hospitals.

Laboratories are facing a significant challenge as they attempt to re-establish workload to pre-pandemic levels. Prior to the COVID-19 pandemic, we noted in these yearly reports, the rise in case, specimen and block numbers and issues achieving turnaround time targets. The additional burden of achieving this recovery and catching up with backlogs and waiting lists will add to both specimen volume and complexity.

Adequate resourcing and staffing levels (scientific and medical) are an ongoing concern within the NHQI programme.

### **KEY RECOMMENDATION**

**To ensure that turnaround times and other targets can be achieved, the working group recommends that laboratory resources should aim to keep pace with the increasing workload. Inclusion of staffing and resourcing issues on hospital risk register to highlight impact of patient care should be considered at a local level.**

# CHAPTER 5

## INTRADEPARTMENTAL CONSULTATION (IDC)

5

**Definition:** 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. Research studies support the effectiveness of IDC in improving diagnostic accuracy in diagnostic histopathology.

Since the introduction of the Hospital Patient Safety Indicator Reports (HPSIR) in 2019, IDC is now included and reported on in the HPSIR on a monthly basis.

**TABLE 5.1: Targets Set for Intradepartmental Consultation**

Case Type	Minimum Target	Achievable Target
Histology (P01, P02, P03 and P04) Cases	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%**

The average rate of IDC for histology for all sites in 2020 was 6.8%, an increase of 1% from 2019. The national average for General Centres (GCs) in 2020 was 6.5%, above the achievable target and a 1.3% increase from 2019. The national average for all Cancer Centres (CCs) was 7.2%, a 0.9% increase from 2019.

**FIGURE 5.1: Histology (P01, P02, P03 and P04) % IDC by Quarter, 2016-2020**

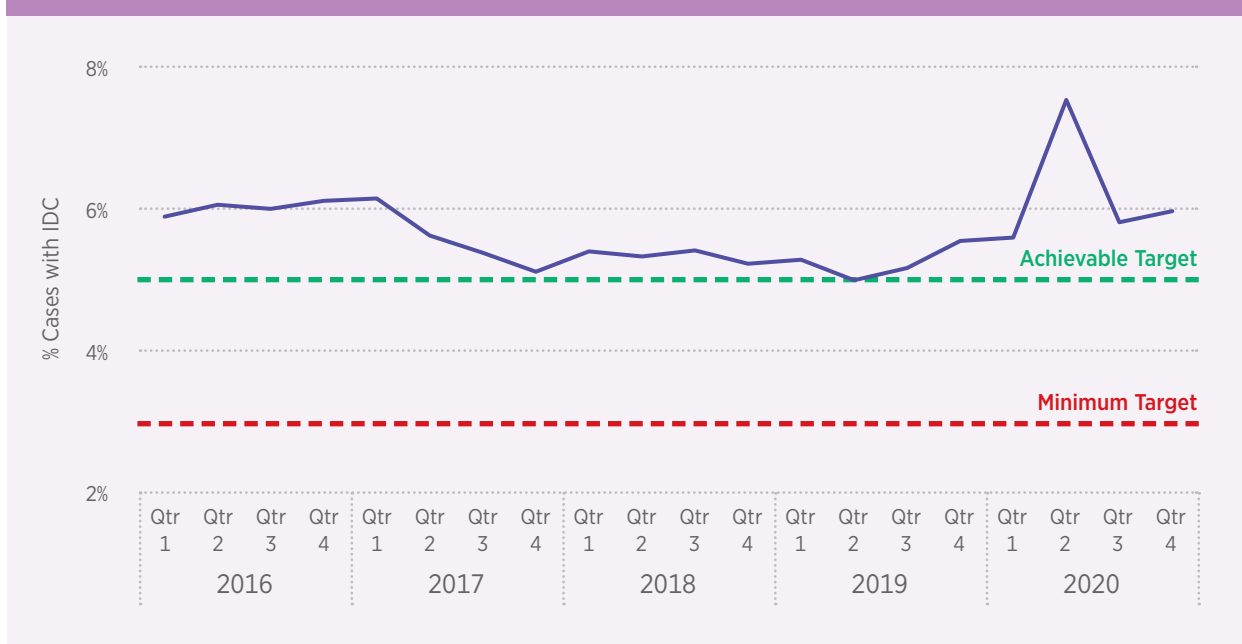
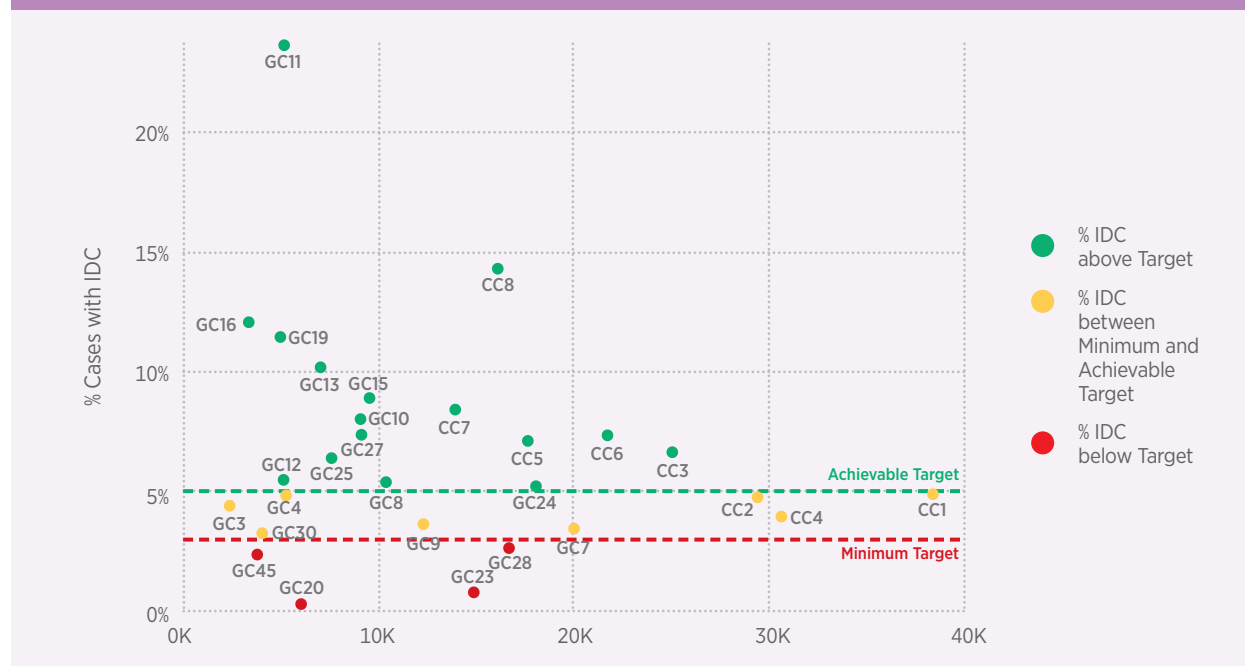


Figure 5.1 displays aggregate data from GCs and CCs combined over five years from Q1 2016 to Q4 2020. The average aggregate data for Histology % IDC for all sites has remained at or above the achievable target of 5% from Q1 2016 to Q4 2020. The highest average percentage of IDC at 7.5% was seen between Q2 and Q3 2020.

**In 2020, the average for all sites Histology % IDC was above both the minimum and achievable targets at 6.8% (Figure 5.2).**

**FIGURE 5.2: Histology (P01, P02, P03 and P04) % IDC by Number of Cases per Site, 2020**



Please consult Table A.5.1 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

### GENERAL CENTRES (GCs)

Eleven GCs out of 20 that provided data were above the achievable target of 5% for % IDC for histology cases. Five GCs were above the minimum target of 3% and below the achievable 5% target. Of the four GCs that failed to meet the minimum target of 3% IDC in 2020, two have been below the minimum target for two consecutive years (Figure 5.2).

### CANCER CENTRES (CCs)

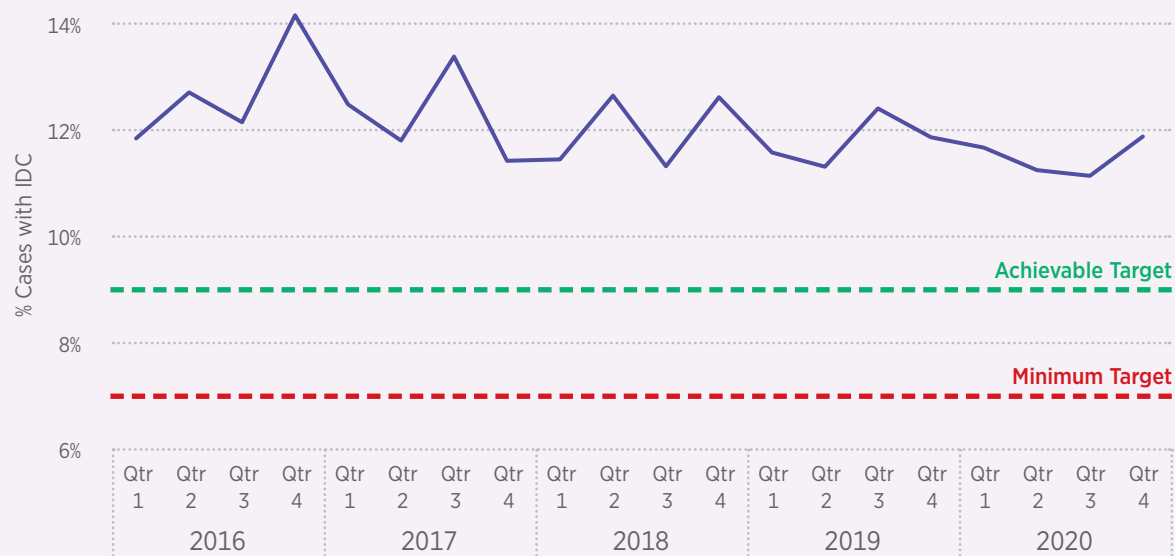
All eight CCs were above the minimum target of 3% for IDC in 2020, with only three below the achievable target of 5%, which was one more than in 2019 (Figure 5.2).

## IDC Non-Gynaecological Cytology FNA (P06)

**Target: Minimum 7%, Achievable 9%**

The combined average of CCs & GCs was 16.5% for all 12 months of 2020, a 0.9% decrease from 2019 but well above the achievable target of 9%. GCs averaged 20.6% for Non-Gynaecological Cytology FNA (P06) % IDC in 2020, a 0.8% decrease from 2019 but well above the achievable target. The national average for CCs in 2020 was 12.3%, a 1% decrease from 2019.

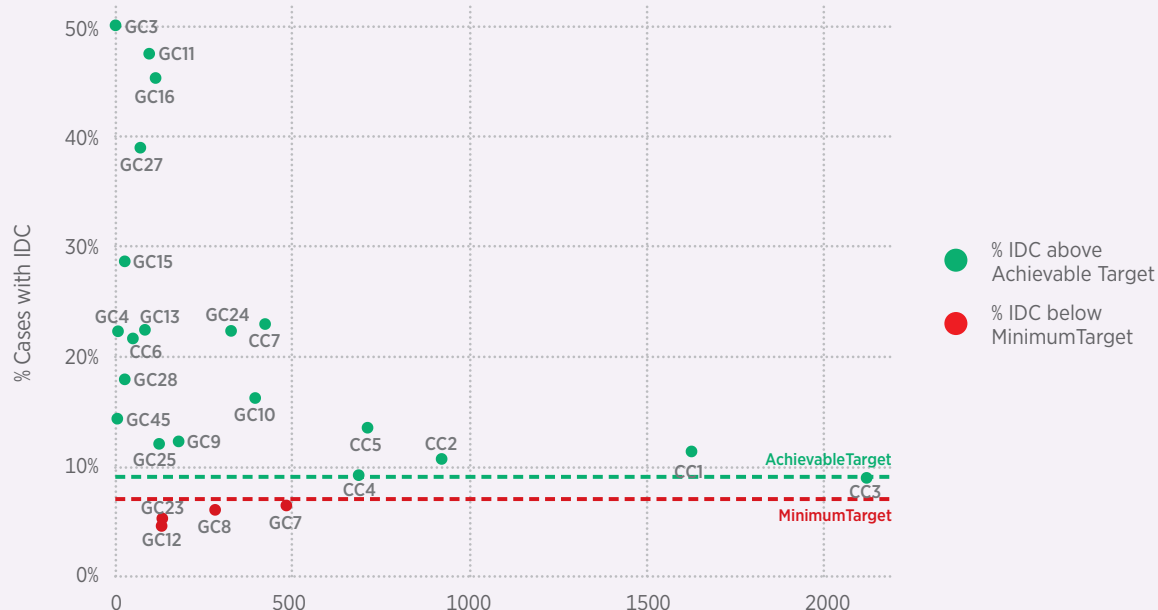
**FIGURE 5.3: Non-Gynaecological Cytology FNA (P06) % IDC by Quarter, 2016-2020**



The 5-year quarterly data from Q1 2016 to Q4 2020 (Figure 5.3) show the average of all CCs and GCs well above the achievable target of 9%.

**In 2020, the combined national average for Non-Gynaecological Cytology FNA (P06) % IDC for all sites was 16.5%, well above the achievable target of 9% (Figure 5.4).**

**FIGURE 5.4: Non-Gynaecological Cytology FNA (P06) % IDC by Number of Cases per Site, 2020**



Please consult Table A.5.2 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

## GENERAL CENTRES (GCs)

Thirteen of the 17 GCs that provided data for IDC Non-Gynaecological Cytology FNA (P06) met or exceeded the achievable target of 9% in 2020, one more GC than in 2019. Four GCs were below the minimum target of 7%, an increase of one compared to 2019. One GC recorded zero P06 IDCs (Figure 5.4).

## CANCER CENTRES (CCs)

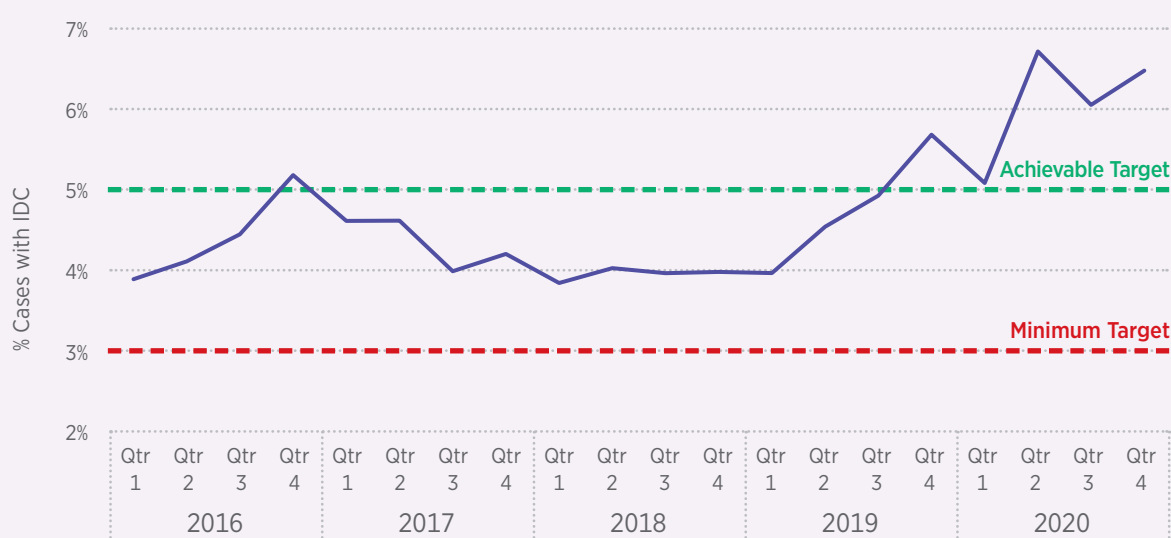
Six CCs exceeded the achievable target of 9%, this was one more than in 2019. One site had 761 cases but recorded no P06 IDCs in 2020 (Figure 5.4).

# IDC Non-Gynaecological Cytology Exfoliative (P07)

**Target: Minimum 3%, Achievable 5%**

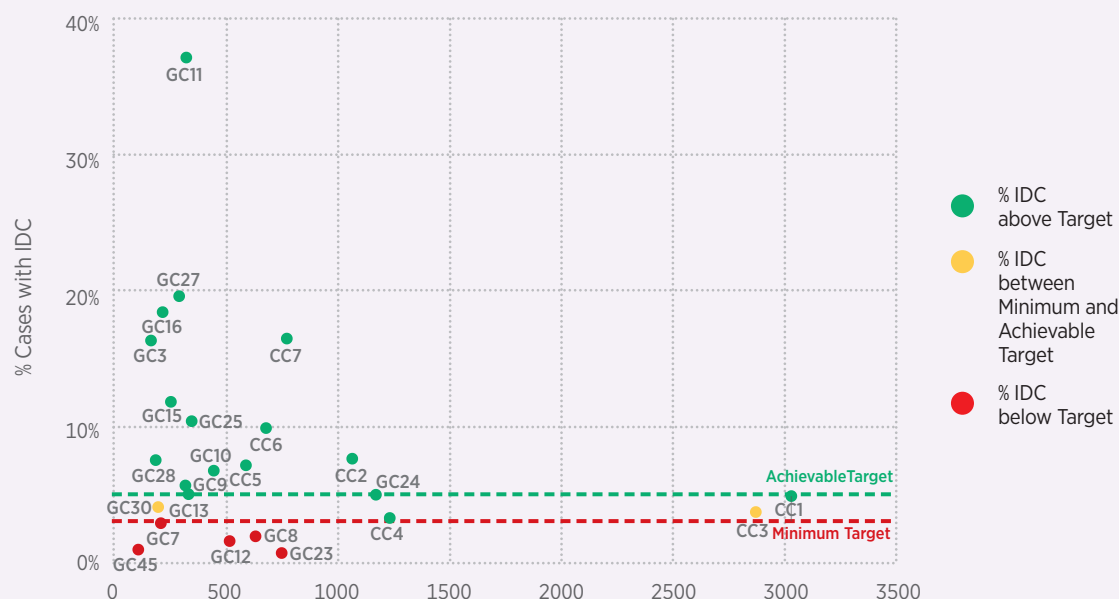
In 2020, the national aggregate for % IDC Non-Gynaecological Cytology Exfoliative for all sites was 7.6%, a 1.5% increase from 2019. Cancer Centres (CCs) averaged at 6.6%, an increase of 1.4% from 2019. General Centres (GCs) averaged 8.6%, an increase of 1.5% from 2019 and were also well above the achievable target of 5%.

FIGURE 5.5: Non-Gynaecological Cytology Exfoliative % IDC by Quarter, 2016-2020



Overall, an upward trend for all sites can be seen in Figure 5.5 from Q1 2016 to Q4 2020. The highest % IDC for Non-Gynaecological Cytology is seen in Q2 2020 at 6.7%.

**FIGURE 5.6: Non-Gynaecological Cytology Exfoliative (P07) % IDC by number of Cases per Site, 2020**



Please consult Table A.5.3 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

### GENERAL CENTRES (GCs)

Twelve of 18 GCs, reporting on % IDC Non-Gynaecological Cytology Exfoliative exceeded the minimum target of 3% in 2020, one more than in 2019. Nine GCs were above the achievable target of 5%, two more than in 2019. One site had 44 cases but recorded zero IDCs (Figure 5.6).

### CANCER CENTRES (CCs)

Five of the seven CCs that uploaded data for % IDC for Non-Gynaecological Cytology Exfoliative met the minimum target in 2020, a decrease of one from six sites in 2019. One CC site had 1,398 cases but recorded zero IDCs in 2020 (Figure 5.6).

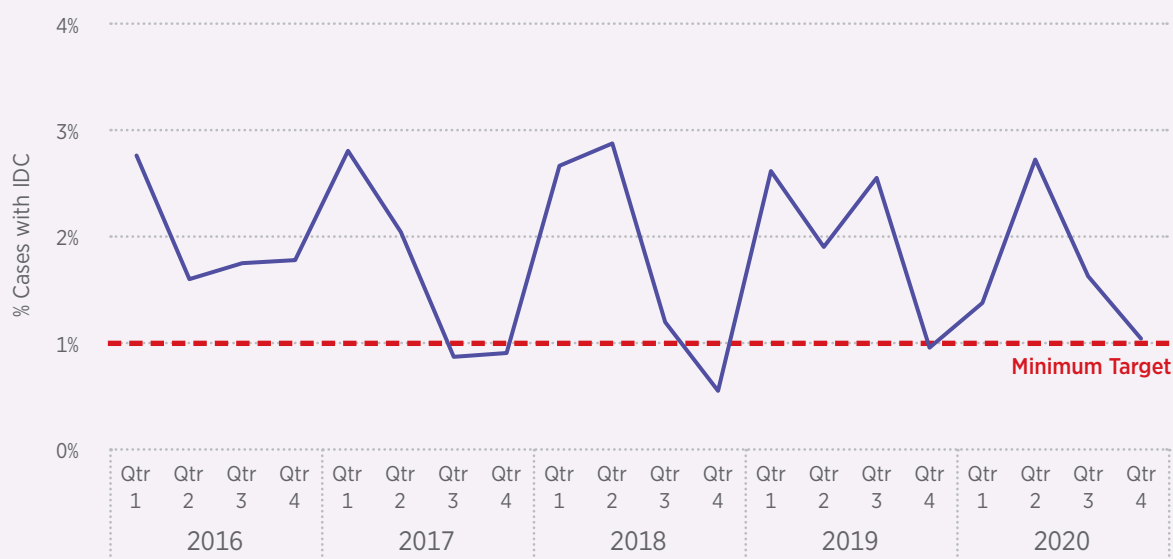
## IDC Autopsy (P10, P11)

### Target: 1%

In 2020, the national average % IDC for Autopsy for all sites was 1.1%, just above the target of 1%. The national average for GCs was 1.1%, a 0.7% decrease from 2019. CCs recorded a national average of 1% for % IDC Autopsy, a 1.8% decrease from 2019 but above the target.

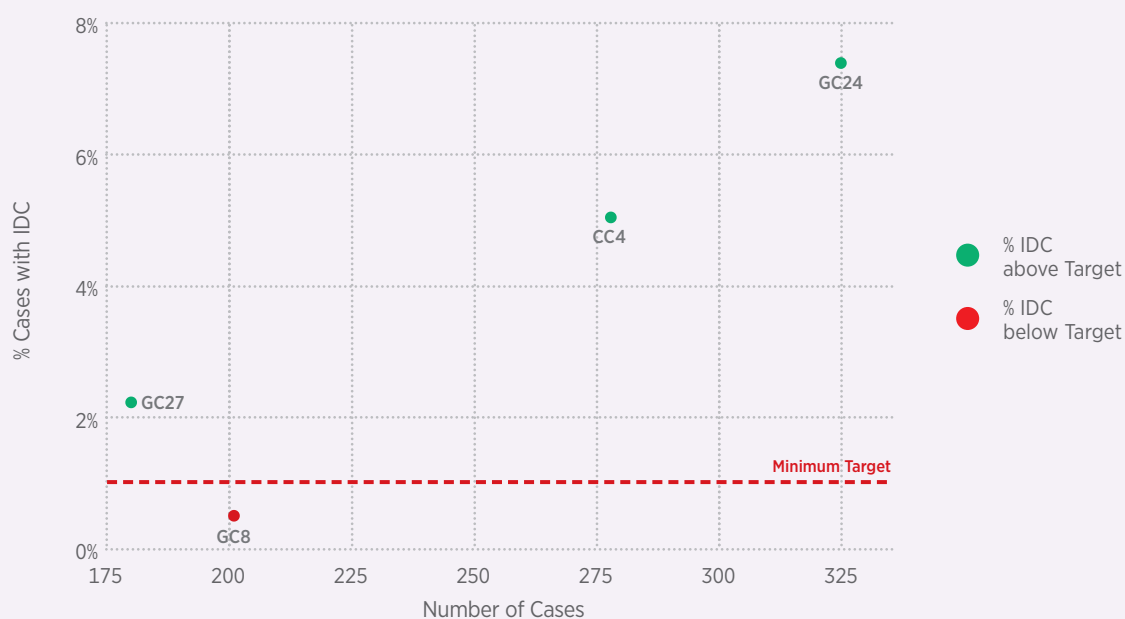


**FIGURE 5.7: Adult Autopsy (P10, P11) % IDC by Quarter, 2016-2020**



Since 2016, the percentage of IDC for Autopsy (P10, P11) for all sites has overall remained above the 1% target with drops below the target seen in Q3 and Q4 2017 and Q4 2018 (Figure 5.7).

**FIGURE 5.8: Adult Autopsy (P10, P11) % IDC by Number of Cases per Site, 2020**



Please consult Table A.5.4 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

### GENERAL CENTRES (GCs)

Three GCs uploaded data on % IDC Adult Autopsy in 2020, with only one below the target of 1%. This is one site less than 2019 when four sites uploaded data and two were below target (Figure 5.8).

### CANCER CENTRES (CCs)

One CC provided data for Adult Autopsy IDC and was well above the target at 5% compared to three sites in 2019 and an aggregate average of 2.8% (Figure 5.8).

## Summary

All sites have consistently maintained a % IDC above the minimum and achievable targets for Histology (P01, P02, P03 and P04) and Non-Gynaecological Cytology Exfoliative (P07) cases between 2019 and 2020 (Table 5.2).

A combined average for All Sites reveals they have exceeded the achievable target of 9% for Non-Gynaecological Cytology FNA (P06) in both 2019 and 2020 (Table 5.2).

GCs have maintained an average above the target of 1% for IDC Autopsy cases (P10, P11) in 2019 and 2020. CCs were on or above the 1% target in both 2019 and 2020. The combined national average of both GCs and CCs in 2020 is above the target at 1.1% (Table 5.2).

**TABLE 5.2: National Aggregate % Intradepartmental Consultation (IDC) 2019 vs 2020**

National Aggregate % Intradepartmental Consultation (IDC) 2019 vs 2020						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2019	2020	2019	2020	2019	2020
Target: Minimum 3%, Achievable 5%						
IDC Histology (P01, P02, P03 and P04)	5.2%	6.5%	6.3%	7.2%	5.8%	6.8%
IDC Non-Gynaecological Cytology Exfoliative (P07)	7.1%	8.6%	5.1%	6.6%	6.1%	7.6%
Target: Minimum 7%, Achievable 9%						
IDC Non-Gynaecological Cytology FNA (P06)	21.4%	20.6%	13.3%	12.3%	17.3%	16.5%
Target: 1%						
IDC Autopsy (P10, P11)	1.8%	1.1%	2.8%	1.0%	2.3%	1.1%

### KEY RECOMMENDATION

The Working Group strongly support the ongoing monitoring of IDC to assist in the achievement of targets.

The Working Group recommend that centres below target and with 'zero' IDC rate in particular should carry out local audit and root cause analysis to establish the reasons for this.

## CHAPTER 6

# MULTIDISCIPLINARY TEAM REVIEW

# 6

**Definition:** Multidisciplinary Team (MDT) meetings form an essential part of the clinical care of patients with cancer, suspected cancer or other clinical conditions. The meetings are attended by healthcare workers from different disciplines whose aim is to devise the best care plan for a patient.

Histopathologists are key participants in these meetings and play an important role in patient management. The reviewing pathologist should prepare the cases assigned for review at MDT, reconcile any discrepancies noted prior to MDT and attend the meetings to present and discuss cases.

### 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 (Table 6.1).

Some laboratories also use Q018 to indicate MDT Agreement, however, the programme would encourage all participants 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%

The target set for this form of peer review is greater than or equal to 95% MDT agreement (Table 6.2). The programme has issued further refinement and guidance on the use of this code in the most recent NHQI Programme Guidelines 2021 to include the following:

(1) If a case is discussed at MDT the Q017 code can be added irrespective of whether slide review has taken place given that peer review in the form of clinical and/or radiological correlation will have occurred. However, it is anticipated that slide review will have been undertaken in a significant proportion of cases, which are discussed at MDT. This process involves the review of selected slides at the discretion of the reviewing pathologist. If slide review of a case listed for MDT takes place, but the case ultimately is not discussed at MDT, the Q017 code should not be used.

(2) Only disagreement at MDT due to pathological interpretation should be classified as 'disagreement at MDT'. Disagreement which arises due to the provision of additional clinical information does not come under this category. Disagreement is defined as when it is deemed necessary to issue an Amended Report (See Chapter 7).

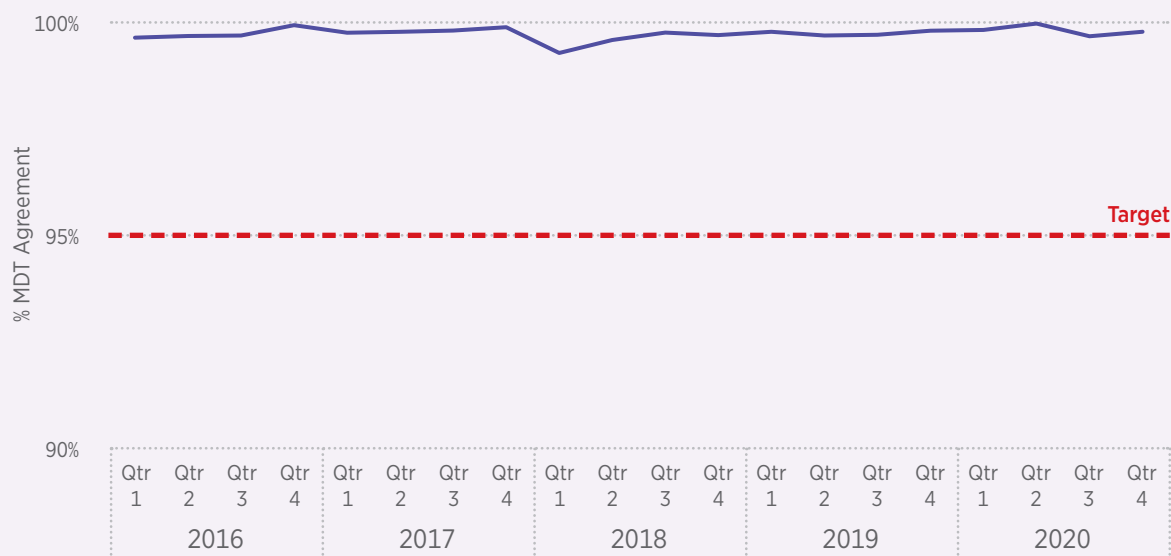
## MDT Agreement (Q017) - Small Biopsy (P01)

**Target: Greater than or equal to 95%**

Of the total number of Small Biopsy (P01) cases recorded in 2020, 19.3% were reviewed at MDTs. Of this number, 14.6% were reviewed in Cancer Centres (CCs) and 4.7% in General Centres (GCs).

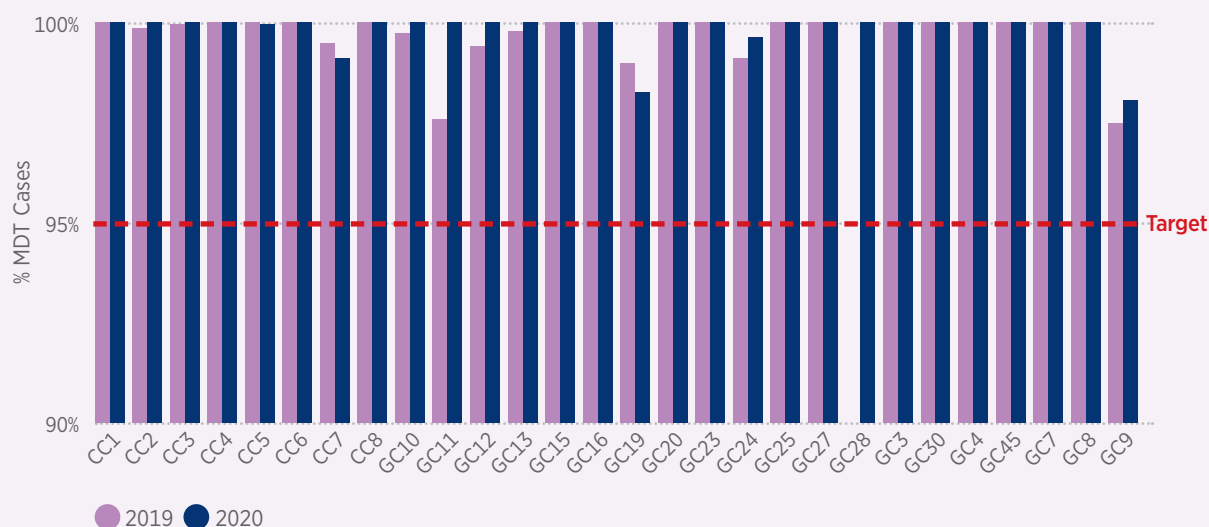
All sites were above the target with an average agreement of 99.8% in 2020, 0.1% higher than in 2019. GCs were well above the target of greater than or equal to 95% at 99.8%, 0.2% above the national average in 2019. CCs maintained a national average of 99.9% from 2019 to 2020.

**FIGURE 6.1: Small Biopsy (P01) % MDT Agreement by Quarter, 2016–2020**



The data reveal all sites have maintained MDT Agreement well above the greater than or equal to 95% target from Q1 2016 to Q4 2020 (Figure 6.1).

**FIGURE 6.2: Small Biopsy (P01) % MDT Agreement by Site, 2019 v 2020**



\*Please note sites that did not upload data will not be visible on the above graph (Figure 6.2).

## GENERAL CENTRES (GCs)

All 20 GCs exceeded the target of greater than or equal to 95% MDT Agreement in 2020 for Small Biopsy (P01) cases. Seventeen of these sites reported 100% MDT Agreement, this was five more than in 2019 (Figure 6.2).

## CANCER CENTRES (CCs)

All eight CCs exceeded the target of greater than or equal to 95% MDT Agreement in 2020, with seven labs reporting 100% agreement (Figure 6.2).

Please consult Table A.6.1 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

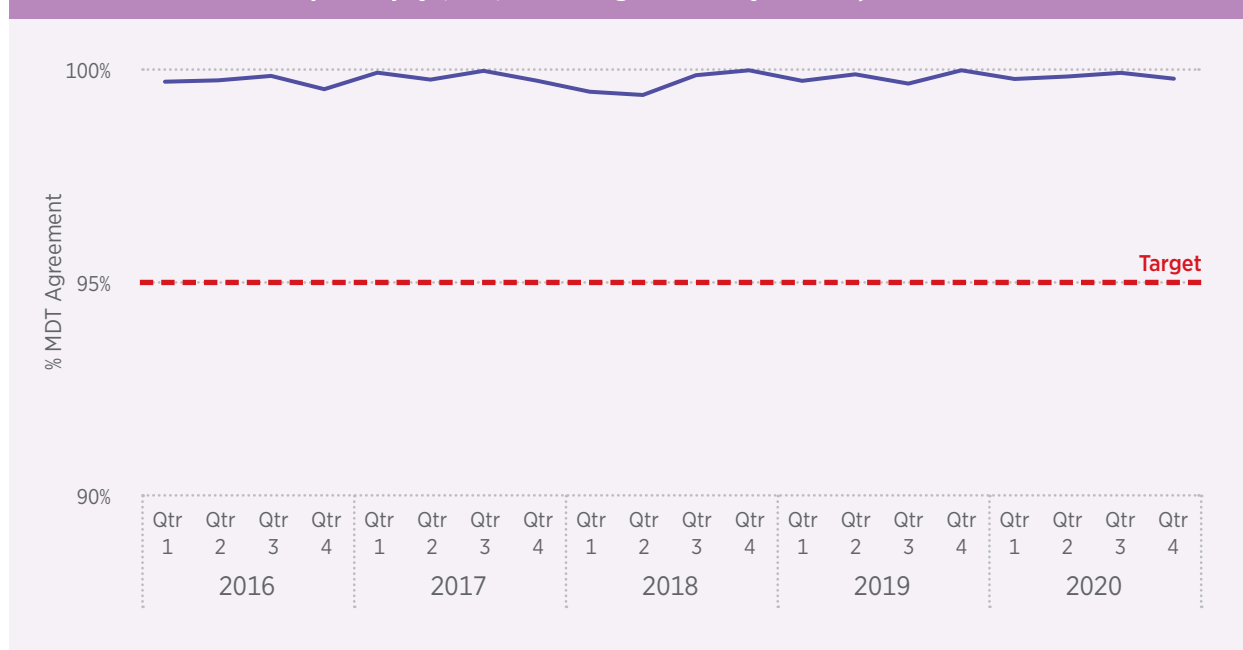
## MDT Agreement (Q017) - GI Endoscopic Biopsy (P02)

### Target: Greater than or equal to 95%

In 2019, 5.5% of all GI Endoscopic Biopsy (P02) cases were reviewed at MDTs, this is a 0.3% increase from figures recorded in 2018. Of those cases reviewed in 2019, 3.6% were cases in CCs and 1.8% in GCs.

A review of 2020 by month reveals that GCs and CCs combined achieved an average of 99.3% MDT Agreement for Endoscopic Biopsy (P02) cases brought to MDT Meetings, a slight decrease of 0.4% from 2019. The national average for GCs was 98.7%, CCs achieved a national average of 99.8%, both well above the target of greater than or equal to 95%.

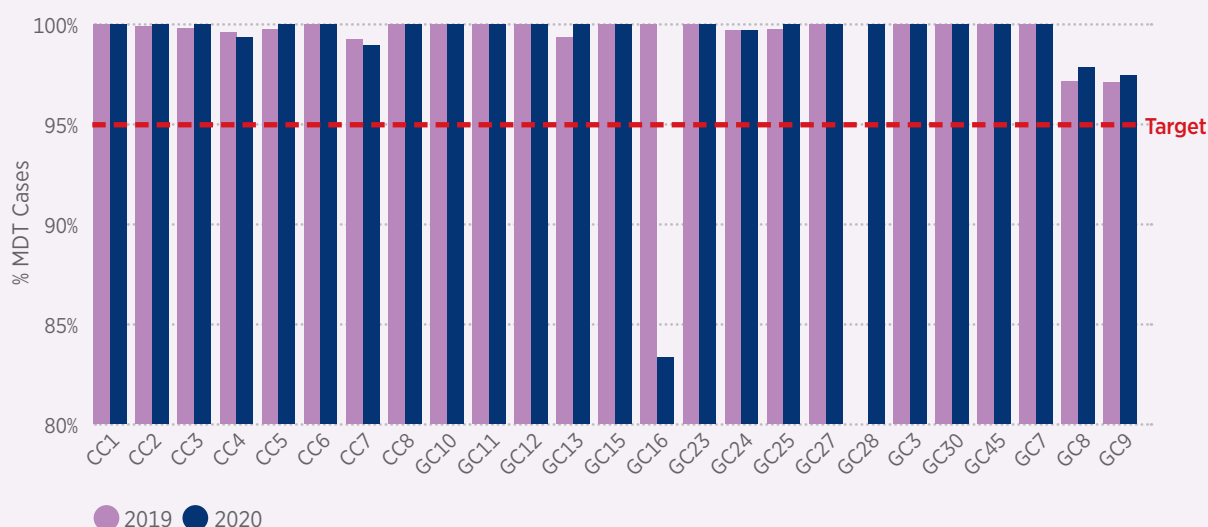
FIGURE 6.3: GI Endoscopic Biopsy (P02) % MDT Agreement by Quarter, 2016-2020



All sites have maintained quarterly averages well above the greater than or equal to 95% target, and as high as 99.9% between Q1 2016 and Q4 2020 (Figure 6.3).

Please consult Table A.6.2 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

**FIGURE 6.4: GI Endoscopic Biopsy (P02) % MDT Agreement by Site, 2019 v 2020**



\*Please note sites that did not upload data will not be visible on the above graph (Figure 6.4).

#### GENERAL CENTRES (GCs)

Out of the 17 GCs that provided data for this target in 2020, 16 were above the target of greater than or equal to 95% MDT Agreement for GI Endoscopic Biopsy (P02) cases. This was similar to 2019 where all 16 sites that provided data were above the target (Figure 6.4).

#### CANCER CENTRES (CCs)

All eight CCs were well above the target for MDT Agreement with average values ranging from 98.9% to 100% (Figure 6.4).

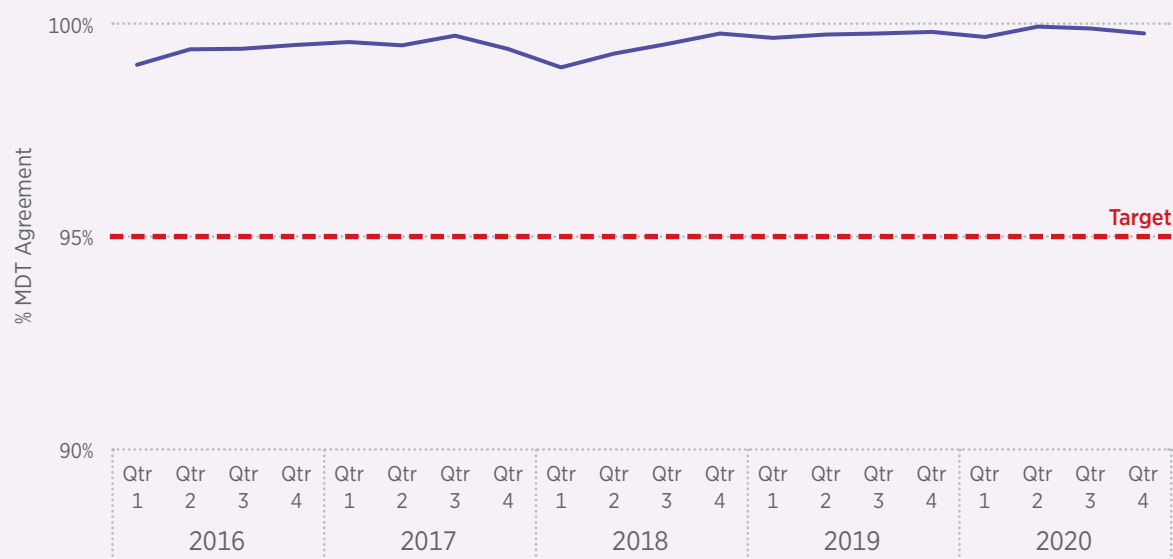
## MDT Agreement (Q017) - Non-Biopsy Cancer Resection (P03)

### Target: Greater than or equal to 95%

In 2020, of all Non-Biopsy Cancer Resection (P03) cases recorded, 55.9% were reviewed at MDTs. This is a decrease of 0.6% from 2019. Of this number in 2020, 46.9% were recorded in CCs and 8.9% in GCs.

A monthly review of average MDT Agreement in 2020 reveals that the combined national average of all sites was 99.8%, remaining the same as in 2019. GCs achieved a national average of 99.9%, well above the target of greater than or equal to 95%. CCs achieved a national average of 99.8% maintained the national average from 2019.

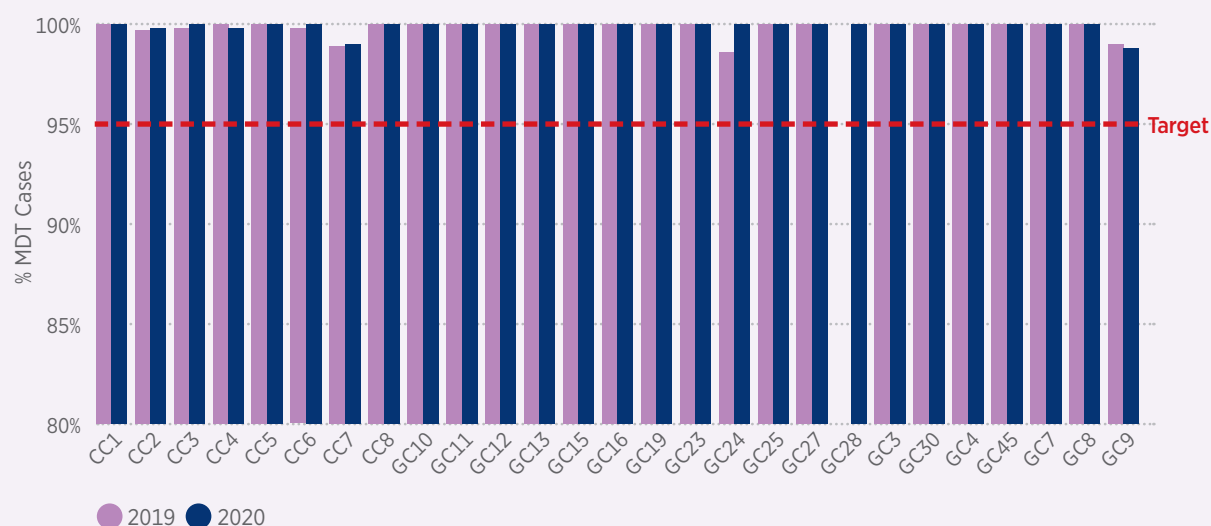
**FIGURE 6.5: Non-Biopsy Cancer Resection (P03) % MDT Agreement by Quarter, 2016-2020**



All sites have remained well above the target of greater than or equal to 95% since Q1 2016 (Figure 6.5).

Please consult Table A.6.3 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

**FIGURE 6.6: Non-Biopsy Cancer Resection (P03) % MDT Agreement by Site, 2019 v 2020**



\*Please note sites that did not upload data will not be visible on the above graph (Figure 6.6).

### GENERAL CENTRES (GCs)

All 19 GCs that provided data for Non-Biopsy Cancer Resection (P03) MDT were above target in 2020, with 18 reporting 100% MDT Agreement (Figure 6.6).

### CANCER CENTRES (CCs)

All eight CCs exceeded the target for Non-Biopsy Cancer Resection (P03) MDT Agreement in 2020, with five centres reporting 100% agreement, as was the case in 2019 (Figure 6.6).



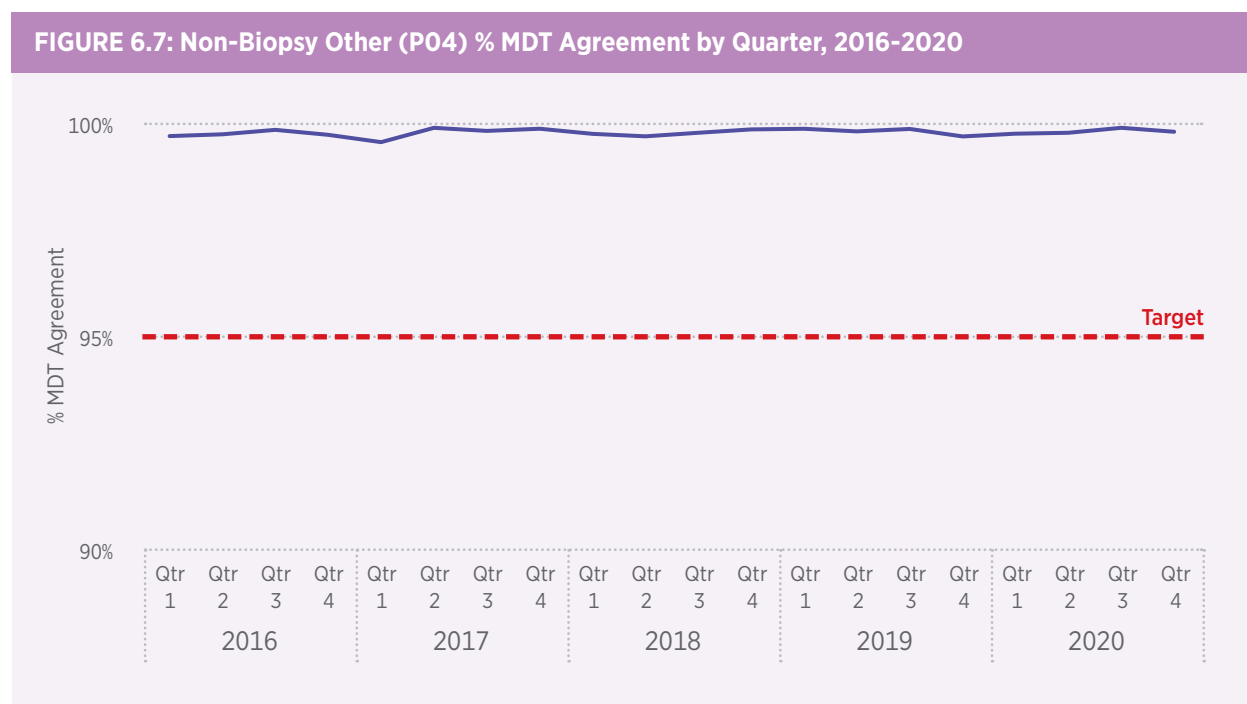
## MDT Agreement (Q017) - Non-Biopsy Other (P04)

**Target: Greater than or equal to 95%**

The monthly review of 2020 data reveal that GCs and CCs combined, maintained a national average above the target of greater than or equal to 95% at 99.6%.

In 2020, of the total number of Non- Biopsy Other (P04) cases recorded, 8% were reviewed at MDTs. This is a decrease of 0.5% from 2019, 6.3% of these cases were reviewed in CCs and 1.7% in GCs.

In 2020, 20 GCs provided data on MDT Agreement for Non-Biopsy Other (P04) cases, only one site was below target at 91.7%, the national average was 99.3%. All eight CCs were above the target, similar to 2019 data and achieved a national average of 99.8%.



All sites have exceeded the target for the previous five years between Q1 2016 and Q4 2020 (Figure 6.7).

Please consult Table A.6.4 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

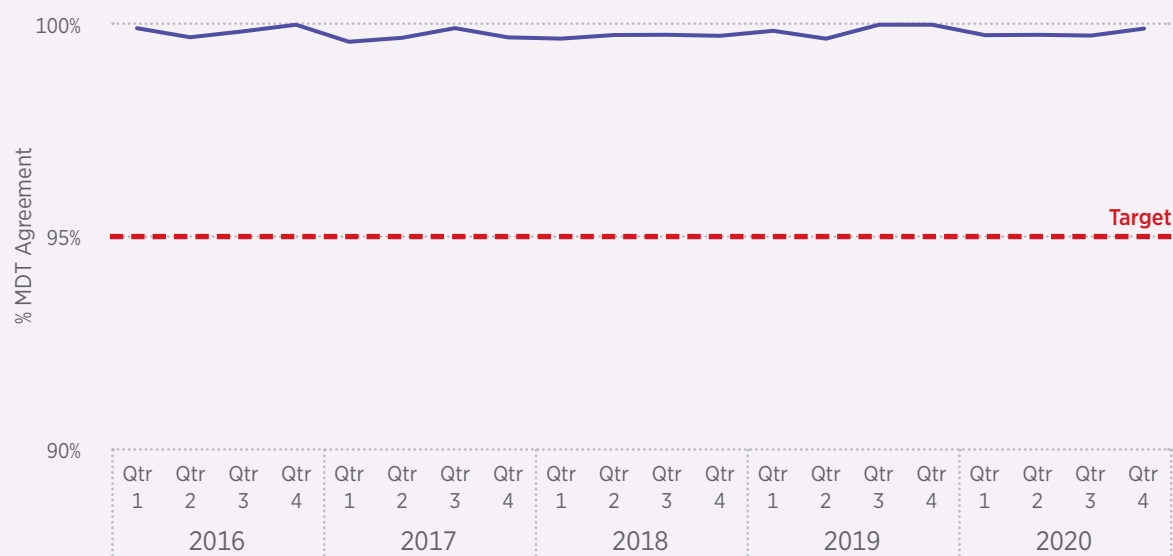
## MDT Agreement (Q017) - Cytology (P06, P07)

**Target: Greater than or equal to 95%**

In 2020, of the total number of Cytology, Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) cases recorded, 14.7% were reviewed at MDTs. This is a decrease of 0.7% from 2019, 11.4% of these cases were reviewed in CCs and 3.3% in GCs.

All sites combined achieved a national average of 99.7% MDT Agreement for Cytology cases (P06 and P07), 0.1% below 2019. GCs reached a national average of 99.7% in 2020, which was 0.1% higher than 2019. Similarly, CCs achieved a national average of 99.6% which was a slight decrease of 0.3% from 2019.

**FIGURE 6.8: Cytology (P06, P07) % MDT Agreement by Quarter, 2016-2020**



All sites have been consistently above the target of greater than or equal to 95% from Q1 2016 to Q4 2020 (Figure 6.8).

Please consult Table A.6.5 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

**FIGURE 6.8: Cytology (P06, P07) % MDT Agreement by Site, 2019 v 2020**



\*Please note sites that did not upload data will not be visible on the above graph (Figure 6.8).

#### GENERAL CENTRES (GCs)

Out of the 17 GCs that provided cytology data, all reached the target of greater than or equal to 95% in 2020 (Figure 6.8).

#### CANCER CENTRES (CCs)

Six out of eight CCs provided data for this target and all six were well above the target of greater than or equal to 95% (Figure 6.8).

## Summary

The national average of all GCs and CCs, grouped and combined, have been consistently above the target of greater than or equal to 95% MDT Agreement in both 2019 and 2020 for histology (P01, P02, P03 and P04) and cytology (P06, P07) cases (Table 6.3).

The workload aspect of MDT review is significant with 11.9% (48,301) of all cases presented at MDT meetings in 2020. Despite this, the % of P03 cases recorded as discussed at MDT in 2020 (55.9%), although above the minimum target of 50% is well below the achievable target of 90%. We acknowledge that pathologists do not list the cases for MDT and also we are aware that MDT review and discussion may not be at the operative site so coding for some cases will be captured under external cases for review. However, this low percentage for Non-biopsy cancer resection cases may be due in part to variations in how this code is applied and we recommend that centres familiarise themselves with the further refinement and guidance on the use of this code in the updated guidelines.

As outlined earlier in this report there are some concerns regarding the accuracy of coding in certain instances. Consequently, there may be greater levels of disagreement than are represented by the data. This hypothesis is supported by the very high levels of MDT agreement including multiple centres recording perfect (100%) agreement for all histology and cytology cases MDT reviewed in both 2019 and 2020.

The use of the Q017 code for MDT Case Review may also be a contributing factor as it automatically defaults to MDT Review Agreement unless the Q019 code is also entered. As stated at the beginning of this chapter, the use of the Q019 code necessitates the issuing of an amended report (Q021).

The programme has issued further refinement and guidance on the use of this code in the most recent NHQI Programme Guidelines 2021.

**TABLE 6.3: % National Aggregate Multidisciplinary Team (MDT) Review Agreement (Q017), 2019 v 2020**

% National Aggregate Multidisciplinary Team (MDT) Review Agreement (Q017), 2019 v 2020						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2019	2020	2019	2020	2019	2020
Target: Greater than or equal to 95%						
<b>Small Biopsy (P01) Cases</b>	99.6%	99.8%	99.9%	99.9%	99.7%	99.8%
<b>GI Endoscopic Biopsy (P02) Cases</b>	99.6%	98.7%	99.8%	99.8%	99.7%	99.3%
<b>Non-Biopsy Cancer Resection (P03) Cases</b>	99.9%	99.9%	99.8%	99.8%	99.8%	99.9%
<b>Non-Biopsy Other (P04) Cases</b>	99.6%	99.3%	99.9%	99.8%	99.8%	99.6%
<b>Cytology Cases (Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) Cases</b>	99.6%	99.7%	99.9%	99.6%	99.8%	99.7%

### KEY RECOMMENDATION

The high volume of both General and Cancer Centres recording 100% Multidisciplinary Team (MDT) Agreement may indicate the need to look at re-evaluating the status of MDT Review as an actively managed key quality indicator. The working group recommend that current standards continue to be met and monitored and that an additional area requiring a QI focus is introduced.

# CHAPTER 7

## ADDENDUM REPORTS

# 7

**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, see below.

### 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, because 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 pathological diagnosis. However, a transcription error (e.g. the wrong laterality of the biopsy) could have potential catastrophic effects on subsequent patient care.

### 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

Following the results of a multi-institutional audit of amended and corrected reports at three participating laboratories, the decision was made to combine Amended and Corrected Reports<sup>2</sup>. The rationale for combining these reports was to prevent future misclassification of these two categories as was observed in the audit. The programme has therefore combined them for data reporting purposes. 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 National Histopathology QI (NHQI) Working Group in 2018 based on analysis of data gathered in previous years which revealed that the percentages of corrected reports had not exceeded 1% for General Centres (GCs), Cancer Centres (CCs) or a combined national average for both (Table 7.1).

<sup>2</sup> 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
<b>Addendum Reports</b>	<p><b>% Combined Amended/Corrected Reports</b></p> <ol style="list-style-type: none"> <li>1. Histology Cases (P01-P04) 1% or less</li> <li>2. Cytology Cases (P05-P09) 1% or less</li> </ol> <p><b>% Supplementary Reports</b></p> <ol style="list-style-type: none"> <li>3. Histology Cases (P01-P04) 10% or less</li> <li>4. Cytology Cases (P05-P09) 10% or less</li> </ol>

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

**Recommended Target: 1% or less**

All sites achieved the target of 1% or less in 2020 with a national average of 0.3%.

GCs had an average of 0.2%, maintained from 2019 and CCs had an average of 0.4%, a 0.1% increase from 2019.

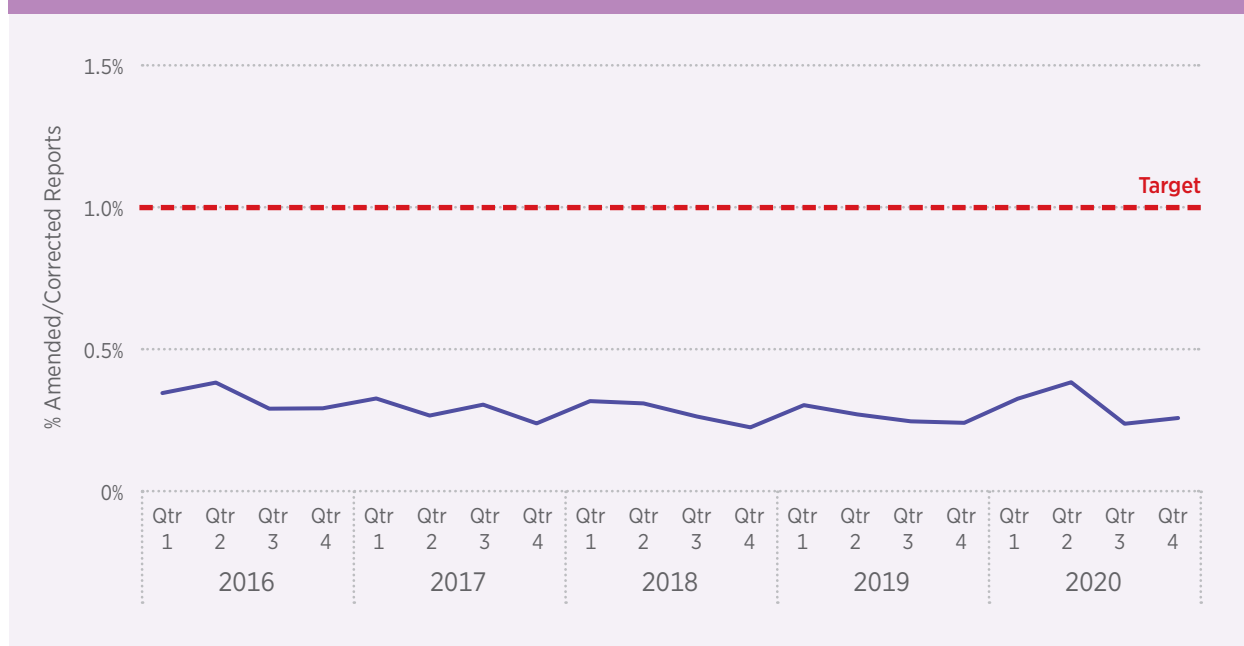
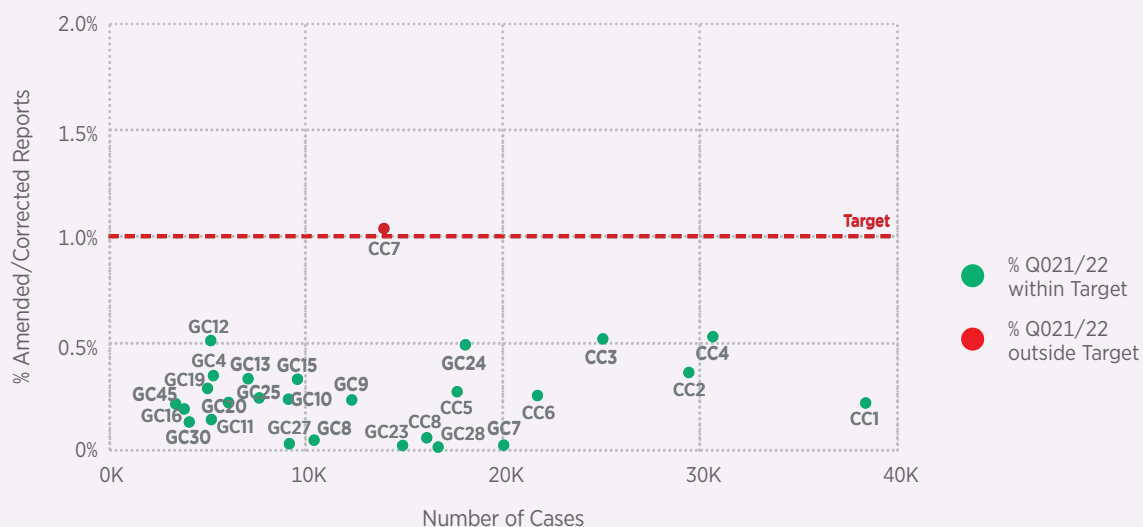
**FIGURE 7.1: Histology (P01, P02, P03, and P04) Amended/Corrected Reports by Quarter, 2016-2020**

Figure 7.1 shows that the national average has remained below the target of 1% or less since Q1 2016.

In some centres, a very low level of amended/corrected reports raises a concern over completeness of coding.

**The target of a combined Amended/Corrected report rate of < 1% in histology was achieved by all sites in 2020 (Figure 7.1).**

**FIGURE 7.2: Histology (P01, P02, P03, and P04) % Amended/Corrected Reports per Site, 2020**



Please consult Table A.7.1 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

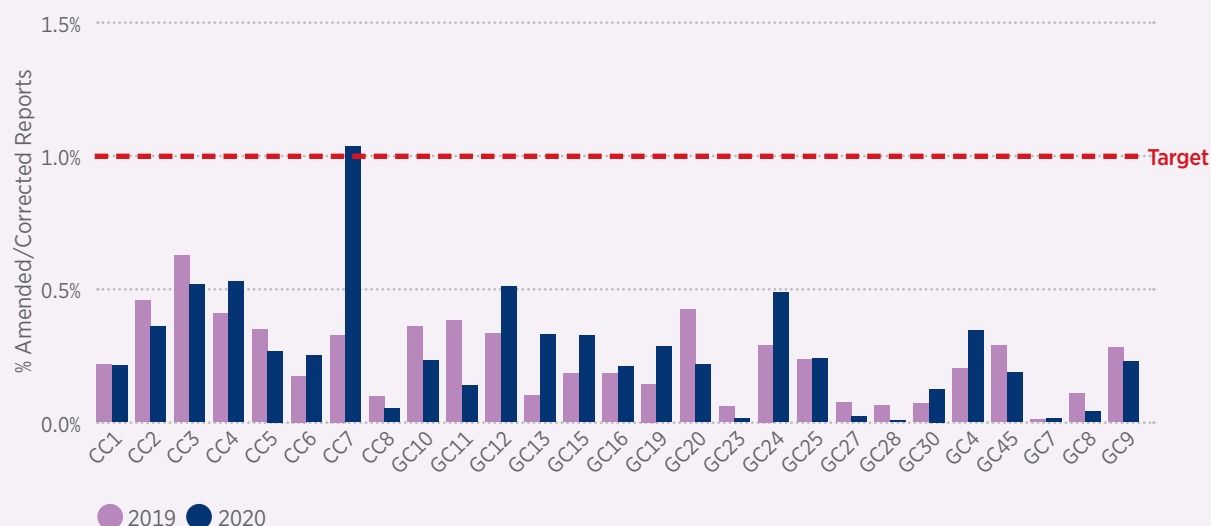
### GENERAL CENTRES (GCs)

In 2020, 14 out of 20 GCs achieved the target of 1% or less. Six sites had histology cases with no Amended/Corrected reports, this may indicate an issue with coding in these centres (Figures 7.2 & 7.3).

### CANCER CENTRES (CCs)

Seven of the eight CCs met the target of 1% or less in 2020 (Figures 7.2 & 7.3).

**FIGURE 7.3: Histology Cases % Combined Amended/Corrected Reports, 2019 v 2020**



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

**Recommended Target: 1% or less**

All sites met the target of 1% or less in 2020 with an average of 0.2%.

GCs had an average of 0.1%, a decrease of 0.2% from 2019 and CCs had an average of 0.3%, maintained from 2019.

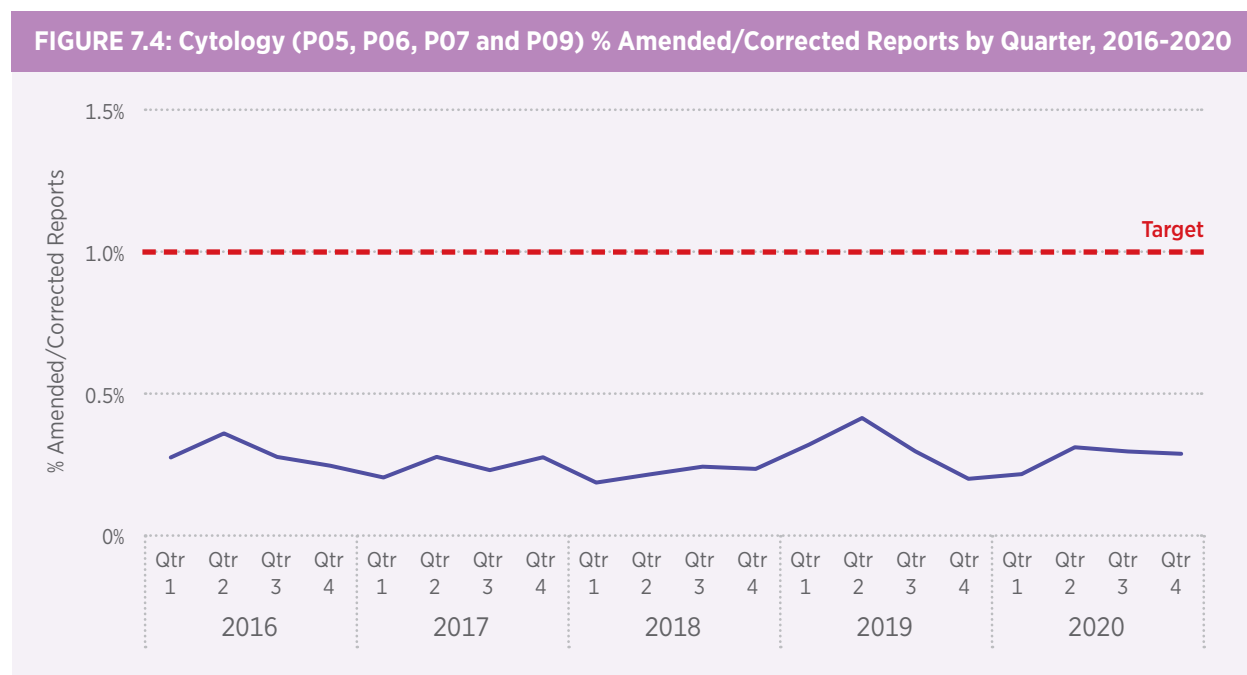
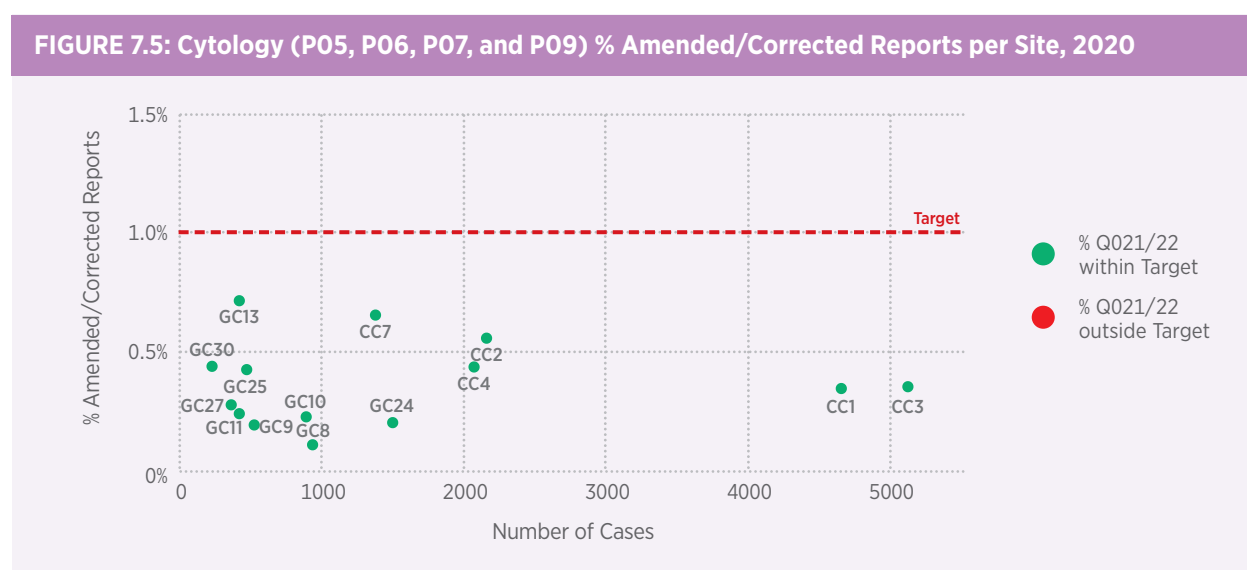


Figure 7.4 shows that all sites have remained below the target of 1% or less since Q1 2016.

**The target of a combined Amended/Corrected report rate of < 1% in cytology was achieved by all sites in 2020.**



Please consult Table A.7.2 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.



## GENERAL CENTRES (GCs)

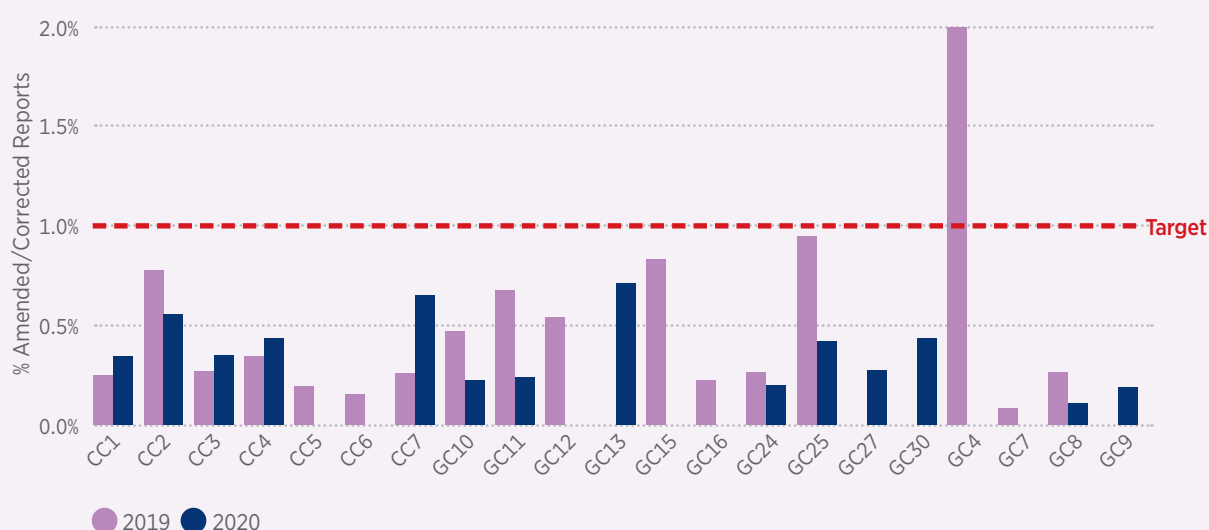
Nine out of 19 GCs reported cytology cases with Amended/Corrected Reports and all achieved the target of 1% or less. Ten sites reported having cytology cases with no Amended/Corrected Reports in 2020, compared to nine last year (Figures 7.5 & 7.6). This may reflect an issue with coding practices.

Please note one site recorded 20% Amended/Corrected reports in 2020, however this likely represents a low case number as only five cases were reported that year in that site.

## CANCER CENTRES (CCs)

Five out of the eight CCs achieved the target of 1% or less Amended/Corrected Reports for cytology cases in 2020 (Figures 7.5 & 7.6). Three sites had cytology cases recorded but no Amended/Corrected reports, which as stated above may indicate a coding issue.

**FIGURE 7.6: Cytology Cases % Combined Amended/Corrected Reports, 2019 v 2020**



## Summary

In 2020, the national average for combined Amended/Corrected reporting for all sites was 0.3% for histology cases (P01 – P04) and 0.2% for all cytology cases (P05 – P09). An improvement was seen in GCs cytology cases with Amended/Corrected Reports in 2020 where a decrease of 0.2% from 2019 figures was seen (Table 7.2).

The NHQI Programme Working Group have expressed concerns regarding an absence of coding associated with Amended/Corrected Reports in some centres in 2019 and again this year. The recommendation made based on the last report was to revise the definitions of Amended, Corrected and Supplementary reports to assist laboratories in ensuring coding practices could be refined. The QI guidelines have been reviewed and are now available as a useful resource for participating labs. However, the programme is aware of the challenges faced by all laboratories throughout 2020 during the COVID-19 pandemic which were further exacerbated by the cyber attack in May 2021. It is hoped that the revised QI guidelines will be a useful tool for labs as they assess their coding practices.

**TABLE 7.2: % National Aggregate Addendum Reporting, 2019 v 2020**

% National Aggregate Addendum Reporting, 2019 v 2020						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2019	2020	2019	2020	2019	2020
Target: 1% or less						
Histology (All Cases)	0.2%	0.2%	0.3%	0.4%	0.3%	0.3%
Cytology (All Cases)	0.3%	0.1%	0.3%	0.3%	0.3%	0.2%

### KEY RECOMMENDATION

The Working Group recommends local audits are carried out to ensure that Amended/Corrected and Supplementary report codes are being applied correctly. Additionally, zero rates of Amended/Corrected reports should trigger an audit of Supplementary reports as all departments should have some corrections or amendments.

## CHAPTER 8

# TURNAROUND TIME

# 8

**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. Table 8.1 below sets out the TAT targets.

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

**TABLE 8.1: TAT Targets**

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

## Small Biopsy (P01) TAT

**Target: 80% cases completed in 5 days or less**

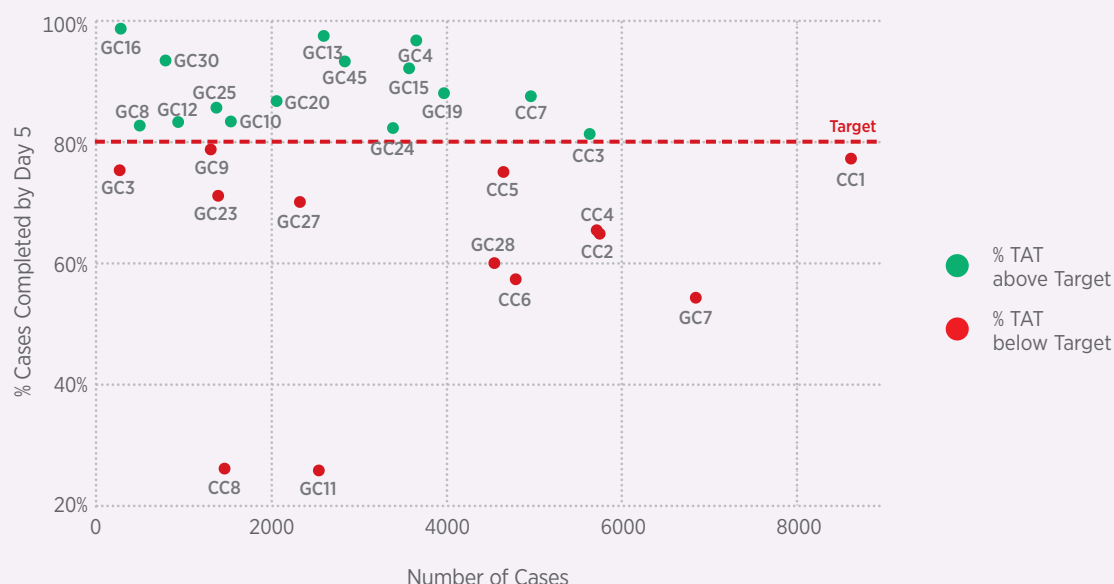
The national average for all sites combined for Small Biopsy (P01) TAT was 73.3% in 2020. This was below the target but was an increase of 1.1% from 2019. The national average for General Centres (GCs) for 2020 was 79.8%, which is 0.2% below the target but a 2.3% improvement on last year's national average of 77.5%. The national average of cases complete by day 5 in Cancer Centres (CCs) was 66.7%, an increase of 0.2% from 2019.

**FIGURE 8.1: Small Biopsy (P01) TAT by Quarter, 2016-2020**



Between Q1 2016 and Q4 2020 the national aggregate TAT for Small Biopsy (P01) cases has been under the target of 80% cases complete by day 5. A significant increase in the number of P01 cases completed on time was seen between Q2 and Q3 of 2020 (Figure 8.1) before dropping once more below target in Q4 2020. This peak corresponds with a drop in cases owing to the impact of the COVID-19 pandemic, this is discussed in more detail in Chapter 10. In general, laboratories have difficulties maintaining TATs when case numbers increase, without an increase in staff.

**FIGURE 8.2: Small Biopsy (P01) TAT % Completed by Day 5 by Number of Cases, 2020**



Please consult Table A.8.1 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020

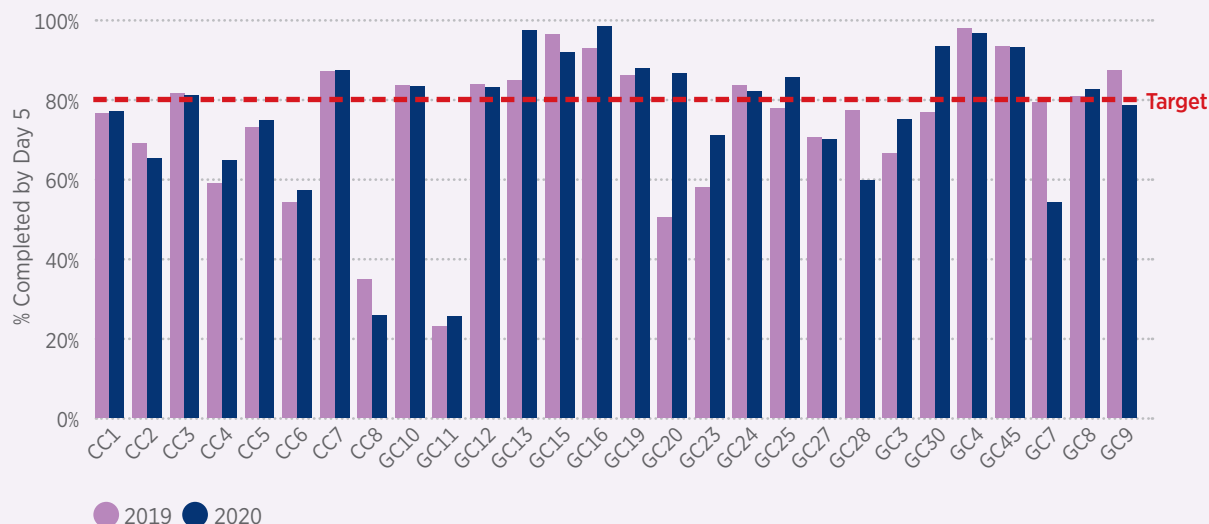
### GENERAL CENTRES (GCs)

Twenty GCs are represented in this year's report for this KQI, 13 out of these 20 sites reached the target of 80% Small Biopsy (P01) cases reported on by day 5 (Figures 8.2 & 8.3).

### CANCER CENTRES (CCs)

Two out of eight CCs exceeded the target for Small Biopsy TAT in 2020. Both of these CCs have maintained this position from 2019 (Figures 8.2 & 8.3).

**FIGURE 8.3: Small Biopsy (P01) TAT % Completed by Day 5 by Site, 2019 v 2020**



## GI Endoscopic Biopsy (P02) TAT

**Target: 80% cases completed in 5 days or less**

The national average for all sites combined for GI Endoscopic Biopsy (P02) TAT was 70.2% in 2020, an increase of 2.4% from 2019, however, this value remains 9.8% below the target. The national average for GCs in 2020 was 81.2%, just above the target and 0.3% above 2019. The national average for CCs in 2020 was 59.3%, a 4.4% increase from 2019, but 20.7% below the target of 80% cases completed in 5 days or less.

**This target has recently been amended following comprehensive discussions at national conferences, at Working Group and Steering Committee level, with input from clinical colleagues and our patient representative and based on evidence of the previous year's findings.**

**The revised target from January 2021 is now 80% cases completed by day 7, and 100% cases completed by day 10. This is the first time a 100% completion target has been used by the programme and this will be carefully monitored.**

**FIGURE 8.4: GI Endoscopic Biopsy (P02) TAT per Quarter, 2016-2020**

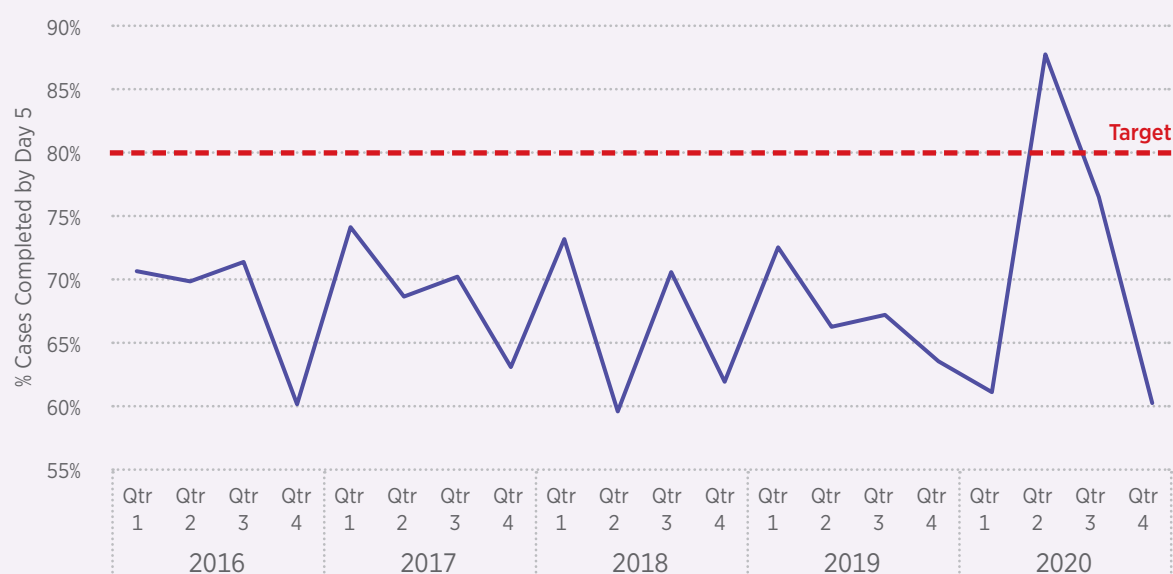
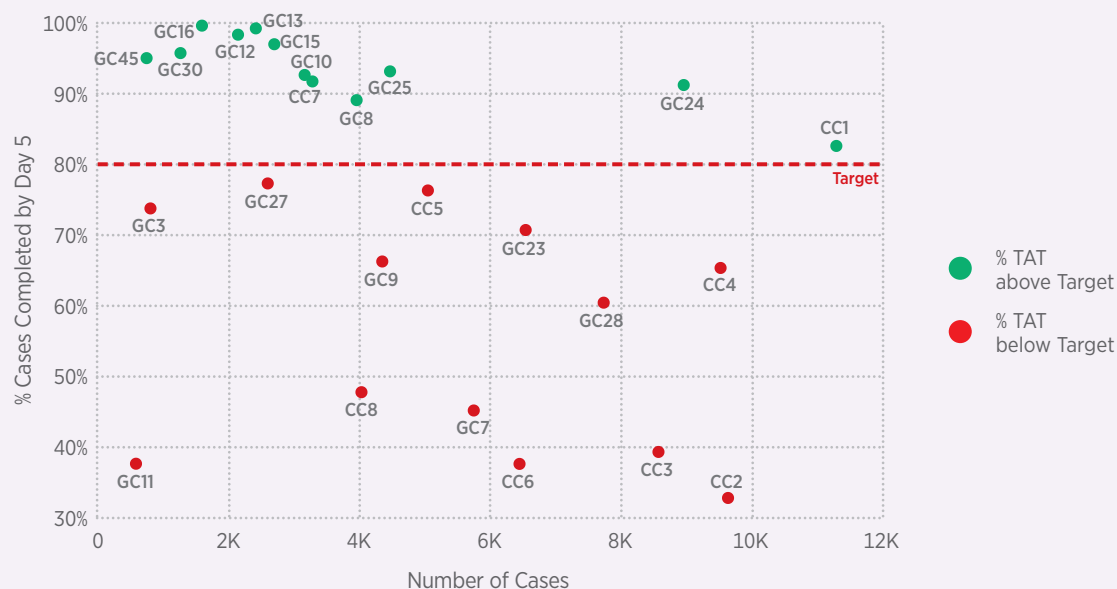


Figure 8.4 shows a similar pattern to that seen between Q1 2016 and Q4 2020 for Small Biopsy TAT. The national average for all sites for GI Endoscopic Biopsy TAT is below target until a significant improvement is seen in Q2 of 2020, after which the cases completed by day 5 or less drops again below the target of 80%. This peak corresponds with a drop in cases owing to the impact of the COVID-19 pandemic, this is discussed in more detail in Chapter 10.

**FIGURE 8.5: GI Endoscopic Biopsy (P02) TAT % Completed by Day 5 by Number of Cases, 2020**



Please consult Table A.8.2 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

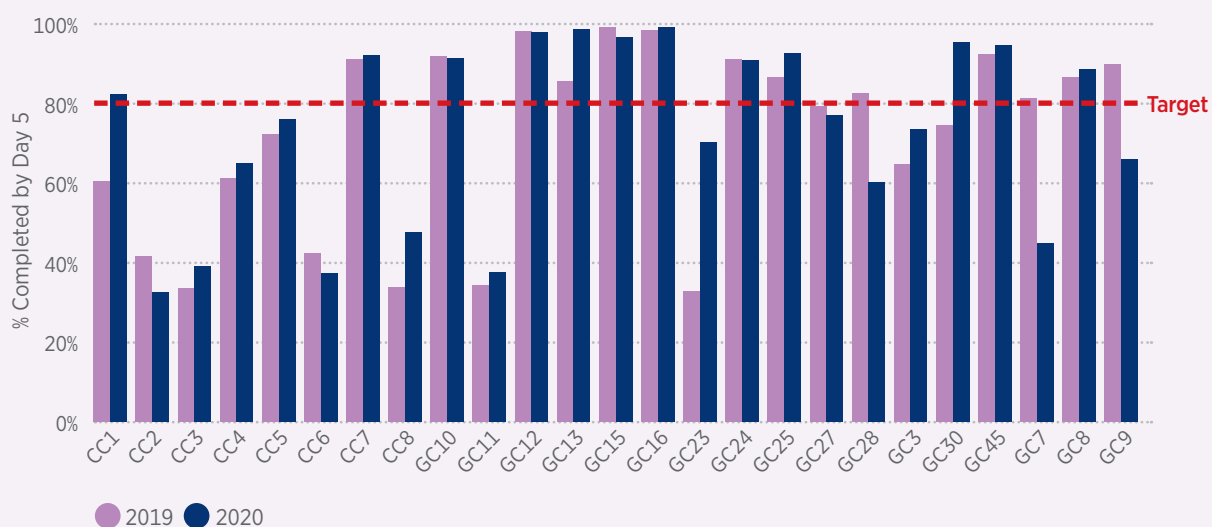
#### GENERAL CENTRES (GCs)

The target for GI Endoscopic biopsy (P02) cases, 80% completed by day 5, was met by 10 out of the 17 GCs who provided data for this KQI in 2020 (Figures 8.5 & 8.6).

#### CANCER CENTRES (CCs)

Two out of the eight CCs reached the target for for this KQI in 2020. One of these sites has consistently reached the target for the last three years and was the only site to achieve the target in 2019 (Figures 8.5 & 8.6).

**FIGURE 8.6: GI Endoscopic Biopsy (P02) TAT % Completed by Day 5 by Site, 2019**

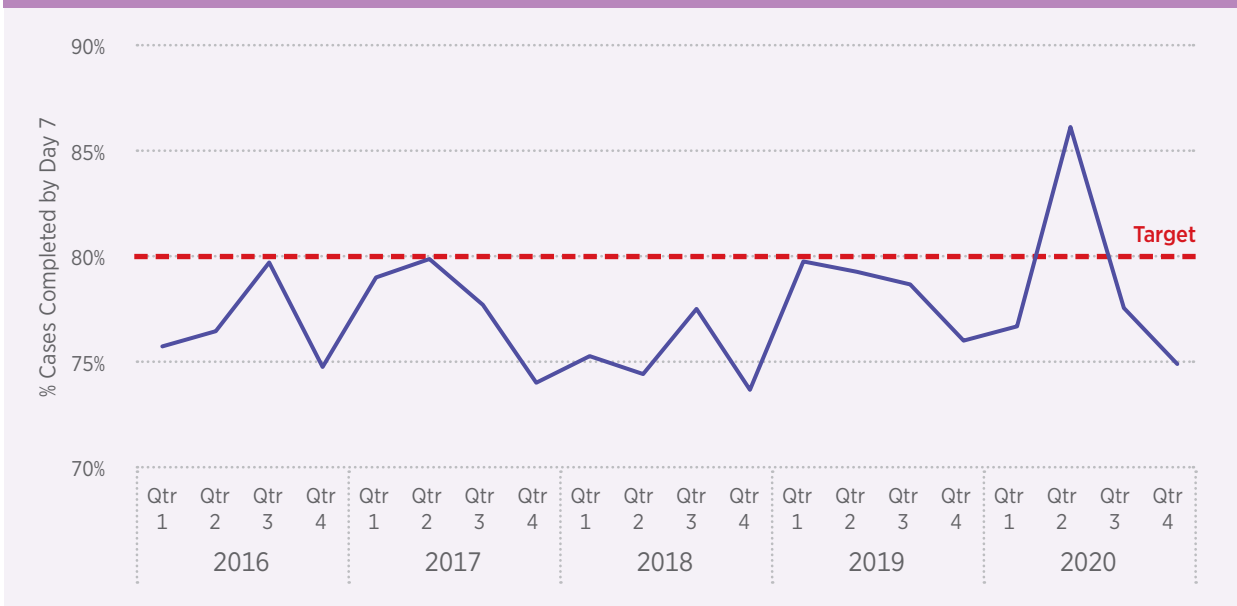


## Non-Biopsy Cancer Resection (P03) TAT

**Target: 80% cases completed by day 7 or less**

The combined average for all sites for Non-Biopsy Cancer Resection (P03) TAT in 2020 was 75.5%, 4.5% below the target of 80% cases complete by day 7 or less. The combined average of all sites was 75.5% in 2019, showing a 0.1% decrease from 2019. The national average for GCs in 2020 was 77.2%, 0.4% lower than in 2019 and remaining below target. The national average for CCs was 73.7%, a slight increase of 0.1% from 2019 but 6.3% below the target.

**FIGURE 8.7: Non-Biopsy Cancer Resection (P03) TAT by Quarter, 2016-2020**



Between Q1 2016 and Q4 2020 the national aggregate data for all sites have consistently remained below the target. As with the Small Biopsy and GI Endoscopic Biopsy cases, the TAT for Non-Biopsy Cancer Resection cases increased in Q2 2020 corresponding with the impact of the COVID-19 pandemic on cancer services (Figure 8.7).

**FIGURE 8.8: Non-Biopsy Cancer Resection (P03) TAT % Completed by Day 7 by Number of Cases, 2020**



Please consult Table A.8.3 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.



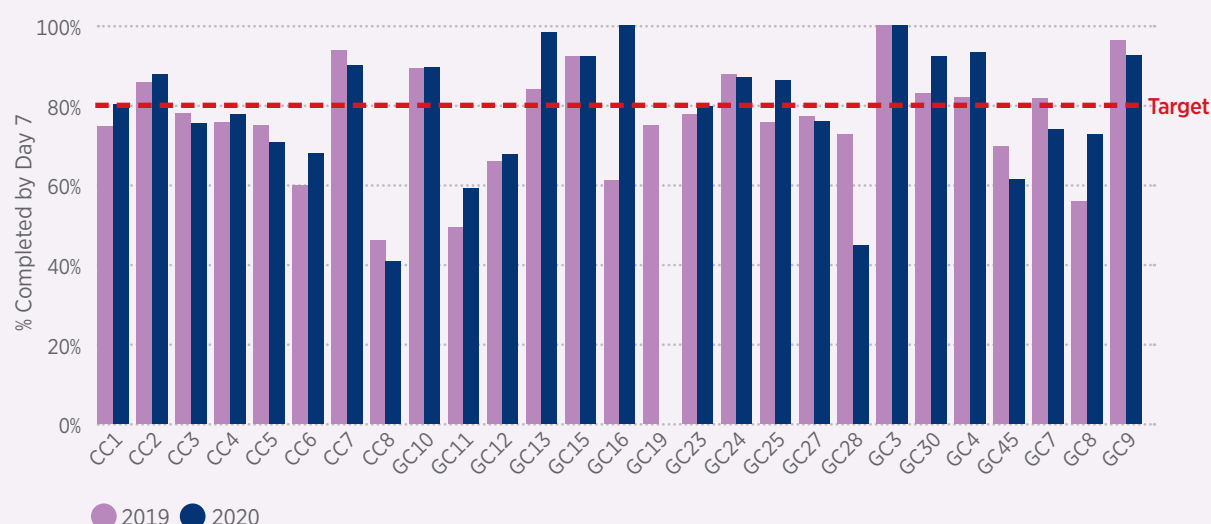
## GENERAL CENTRES (GCs)

Eighteen GCs provided data for the 2020 report for Non-Biopsy Cancer Resection cases, one site recorded only one case and no TAT data. Ten out of the 18 General Centres (GCs) reached the target of 80% cases complete by day 7 or less (Figures 8.8 & 8.9).

## CANCER CENTRES (CCs)

Three out of the eight Cancer Centres (CCs) reached the target, one more than in 2019 (Figures 8.8 & 8.9).

**FIGURE 8.9: Non-Biopsy Cancer Resection (P03) TAT % Completed by Day 7 by Site, 2019 v 2020**



## Non-Biopsy Other (P04) TAT

**Target: 80% cases completed by day 7**

The national average for all sites combined for “Non-Biopsy Other cases” TAT was 79.3%, an increase of 0.8% from 2019 but remaining below the target. The national average for GC sites was 84.6%, above target and a slight increase of 0.1% from 2019. The national average for CCs in 2020 for Non-Biopsy Other cases completed by day 7 or less was 74%, 6% below the target but an improvement of 1.5% from 2019.

**FIGURE 8.10: Non-Biopsy Other (P04) TAT by Quarter, 2016-2020**

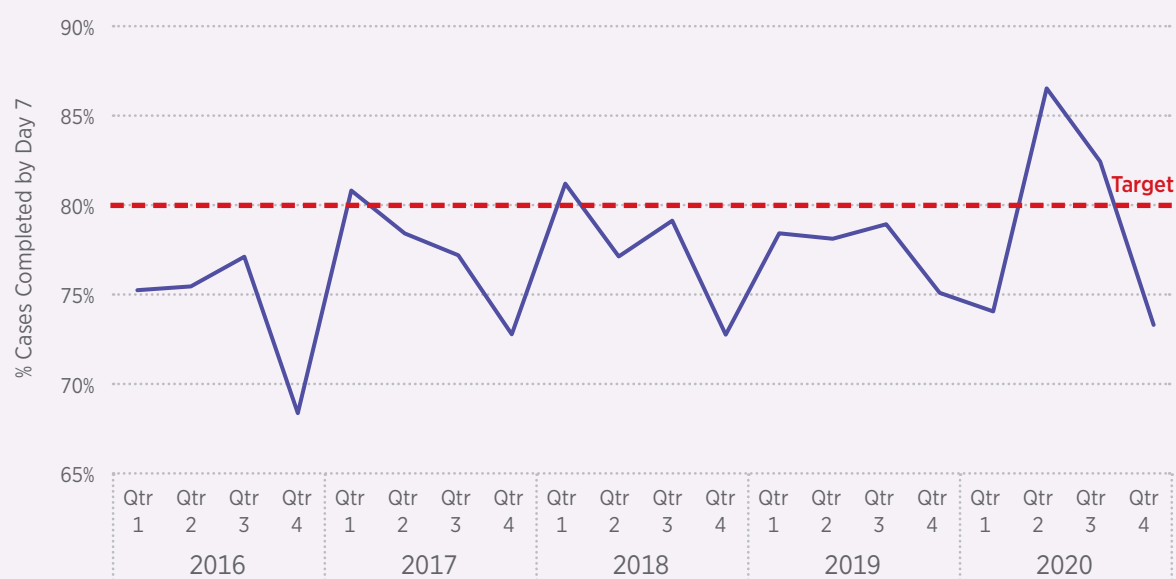


Figure 8.10 details Non-Biopsy Other cases TAT between Q1 2016 and Q4 2020. The combined aggregate data show that all sites combined are generally below target, achieving the target in Q1 2017 and Q1 2018 before a significant increase in Q2 2020 associated with the impact of COVID-19 on services and the decreased number of cases at that time.

**FIGURE 8.11: Non-Biopsy Other (P04) TAT % Completed by Day 7 by Number of Cases, 2020**



Please consult Table A.8.4 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

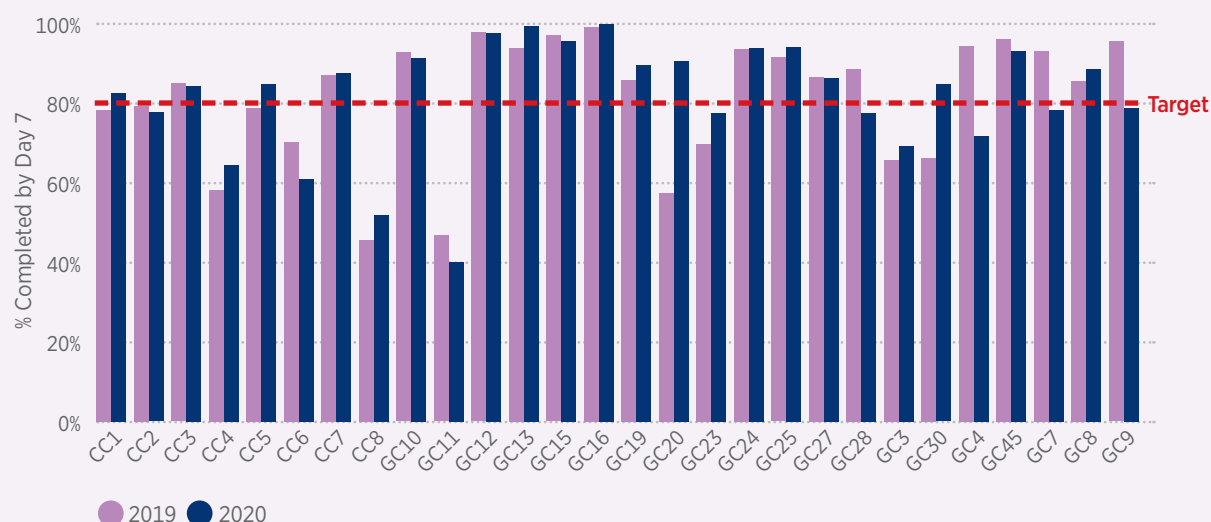
### GENERAL CENTRES (GCs)

Thirteen out of 20 GCs reached the target of 80% Non-Biopsy Other cases completed by day 7 or less in 2020 (Figures 8.11 & 8.12).

### CANCER CENTRES (CCs)

In 2020, four out of the eight CCs achieved the target of 80% cases complete by day 7 (Figures 8.11 & 8.12).

**FIGURE 8.12: Non-Biopsy Other (P04) TAT % Completed by Day 7 by Site, 2019 v 2020**

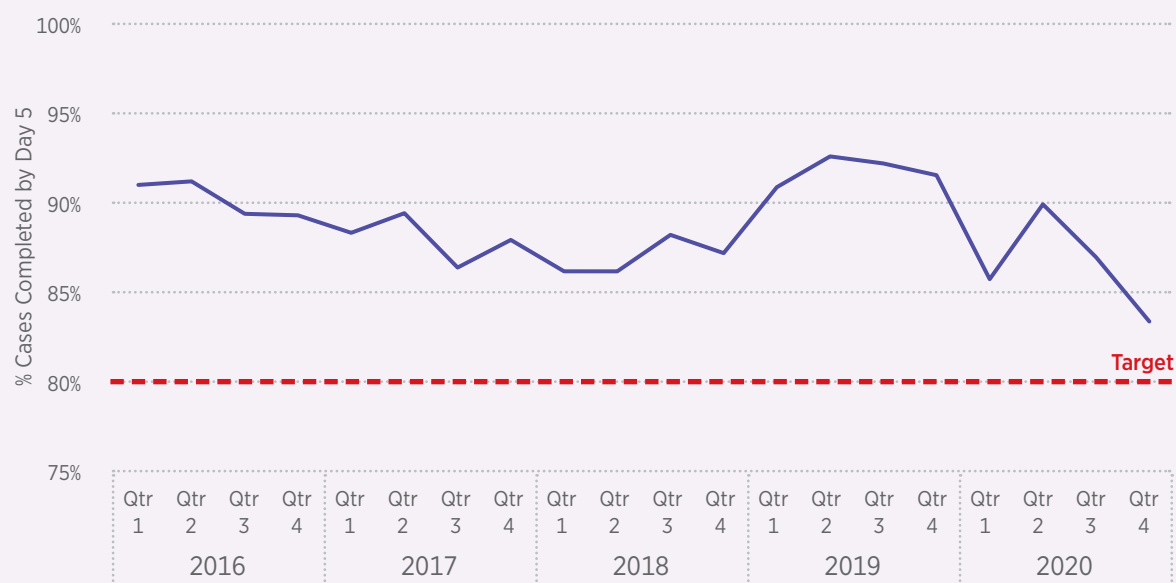


## Non-Gynaecological Cytology FNA (P06) TAT

**Target: 80% cases completed by day 5**

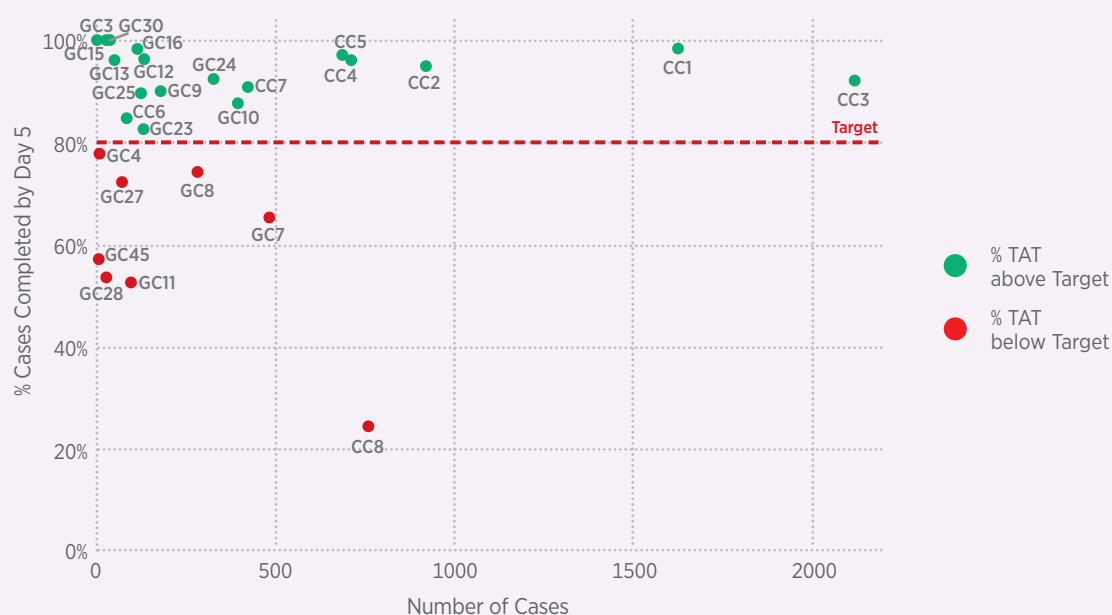
In 2020, the national average for Non-Gynaecological Cytology FNA (P06) TAT for all sites combined was 83.7% which exceeds the target by 3.7%, but was a 1.0% decrease from 2019 figures. The national average for GCs was 82.5% which was above the target, but a decrease of 1.6% from 2019. The national average for CCs for Non-Gynaecological Cytology FNA cases TAT was 84.8%, 0.5% less than in 2019 but well above the target.

**FIGURE 8.13: Non-Gynaecological Cytology FNA (P06) TAT by Quarter, 2016-2020**



Between Q1 2016 and Q4 2020 all sites combined have maintained TAT of Non-Gynaecological Cytology FNA cases well above the 80% target (Figure 8.13).

**FIGURE 8.14: Non-Gynaecological Cytology FNA (P06) TAT % Completed by Day 5 by Number of Cases, 2020**



Please consult Table A.8.5 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

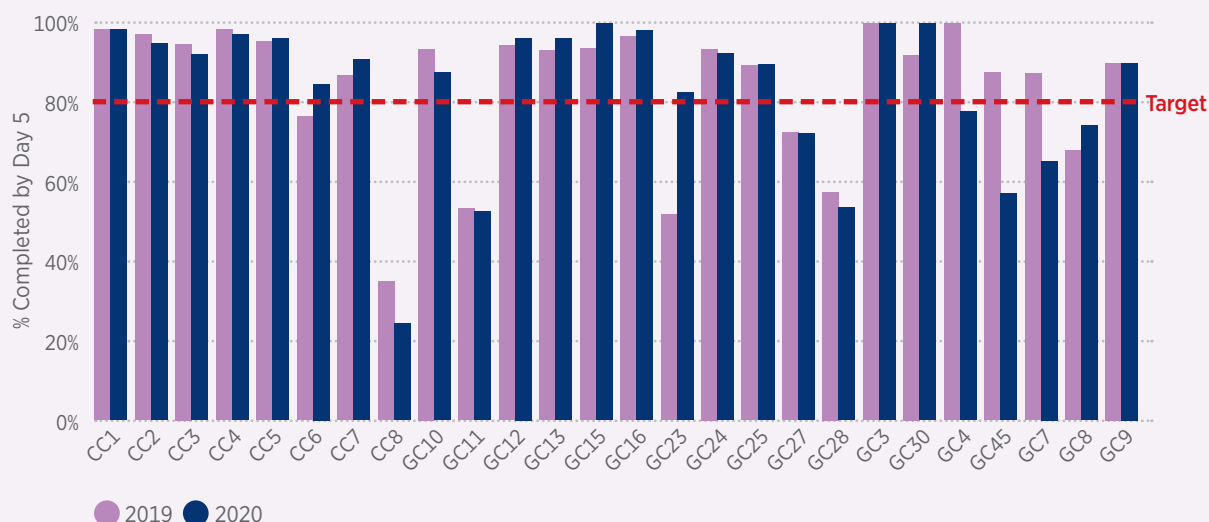
## GENERAL CENTRES (GCs)

Eleven of the eighteen GCs that provided data for this target in 2020 achieved the target of 80% Non-Gynaecological Cytology FNA cases complete by day 5 (Figures 8.14 & 8.15).

## CANCER CENTRES (CCs)

Seven out of the eight CCs reached the target in 2020 (Figures 8.14 & 8.15).

**FIGURE 8.15: Non-Gynaecological Cytology FNA (P06) TAT % Completed by Day 5 by Site, 2019 v 2020**

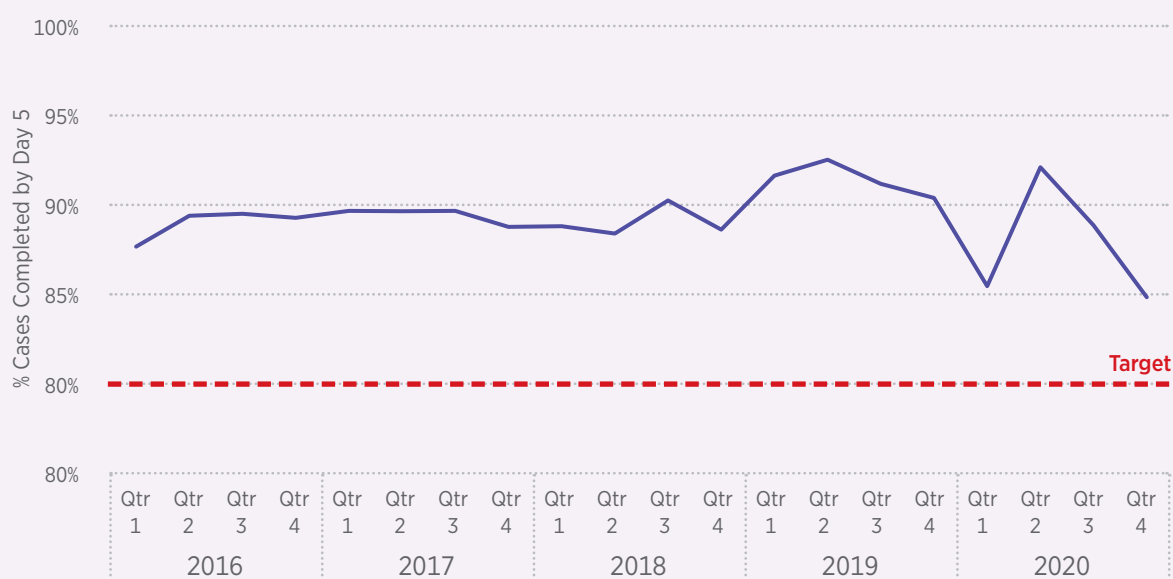


## Non-Gynaecological Cytology Exfoliative (P07) TAT

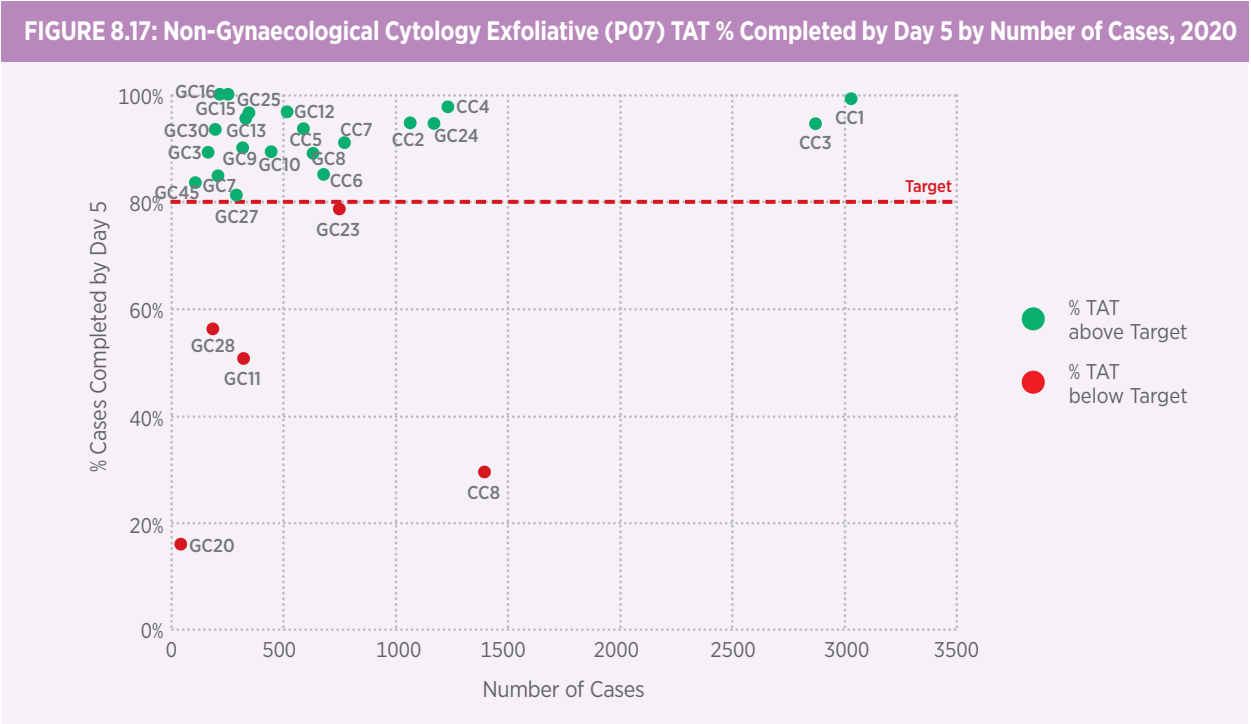
**Target: 80% cases complete by day 5 or less**

In 2020, all sites combined exceeded the target of 80% Non-Gynaecological Cytology Exfoliative (P07) complete by day 5 or less at 84.1%, similar to 2019 where the combined national average was 84.6%. The national average for GCs for Non-Gynaecological Cytology Exfoliative (P07) TAT was 82.5%, above the target and an improvement of 0.8% from 2019. CCs achieved a national average of 85.6%, a slight decrease of 1.9% from 2019 but well above the target.

**FIGURE 8.16: Non-Gynaecological Cytology Exfoliative (P07) TAT by Quarter, 2016-2020**



A review of Non-Gynaecological Cytology Exfoliative (P07) TAT from Q1 2016 to Q4 2020 reveals an impressive standard for both GCs and CCs. GCs remained consistently well above the target of 80% cases complete by day 5 or less (Figure 8.16).



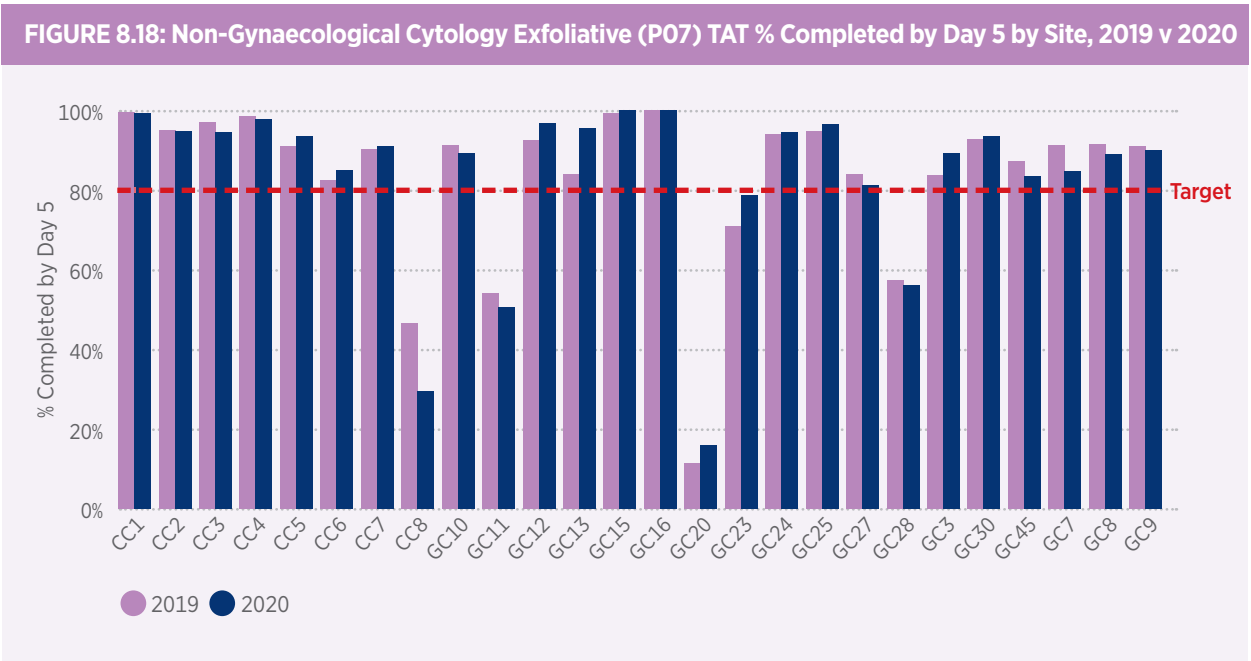
Please consult Table A.8.6 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

**GENERAL CENTRES (GCs)**

Out of 18 GCs who provided data for this KQI, 14 reached the target of 80% cases complete by day 5 (Figures 8.17 & 8.18).

**CANCER CENTRES (CCs)**

Seven out of the eight CCs exceeded the target of 80% Non-Gynaecological Cytology Exfoliative cases completed by day 5 (Figures 8.17 & 8.18).



## Summary

The national averages for GCs and CCs are not currently meeting the target for Small Biopsy (P01) TAT cases completed by day 5 or less. The national average for CCs for GI Endoscopic Biopsy (P02) has been below target in both 2019 and 2020, while GCs have maintained above target for the same time period (Table 8.2).

The national averages for Non-Biopsy Cancer Resection (P03) TAT for all CCs and GCs and all sites combined have been below target in both 2019 and 2020. CCs national average was consistently below target for Non-Biopsy Other (P04) cases in 2019 and 2020, while GCs were above target. The combined average for all sites for Non-Biopsy Other (P04) TAT was just below target in 2019 and 2020 (Table 8.2).

The national averages for Non-Gynaecological Cytology FNA (P06) and Non-Gynaecological Cytology Exfoliative (P07) TAT have remained above the target as in 2019 (Table 8.2).

These data provide an important information on specimen mix, processes, and output of participating laboratories around Ireland, however, it lacks context and nuance. In 2020, the programme recommended that laboratories use the NHQI data to highlight any mismatches between resourcing and activity and to investigate the root cause of challenges faced in meeting TAT targets.

The impact of the COVID-19 pandemic on laboratory services is documented in this report in Chapter 10, with particular focus on Small Biopsy, GI Endoscopic Biopsy, Cancer Resection and Non-Gynaecological Cytology FNA. The graphs presented here show that laboratories saw a drop in case numbers most notably from Q2 2020, coinciding with the first restrictions imposed and the concomitant pause in elective care. Laboratories then faced a sudden upswing in incoming work as these services recommenced and society reopened.

The programme acknowledges the significant backlog of patient care which is likely to lead to high numbers of incoming cases for all laboratories over the coming years. This backlog in patient care was further compounded by the HSE cyber attack of May 2021. All histopathology services are likely to face significant challenges in maintaining TATs into the future, as a consequence of both the COVID-19 pandemic and the cyber attack on HSE IT infrastructure in 2021. The NHQI data will be more useful than ever before in resource planning as laboratories attempt to meet those challenges.

The TAT for GI Endoscopic Biopsy (P02) cases has recently been revised (see page 47), following feedback from participants and consultation with the steering committee. The new TAT target went live in January 2021. We are mindful of the increasing challenges facing histopathology services in maintaining TATs.

**TABLE 8.2: National Aggregate Turnaround Times (TAT) 2019 v 2020**

National Aggregate Turnaround Times 2019 v 2020						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2019	2020	2019	2020	2019	2020
TAT: 80% Cases Complete by Day 5 or Less						
Small Biopsy (P01) Cases	77.5%	79.8%	66.9%	66.7%	72.2%	73.3%
GI Endoscopic Biopsy (P02) Cases	80.9%	81.2%	54.7%	59.3%	67.8%	70.2%
Non-Gynaecological Cytology FNA (P06) Cases	84.1%	82.5%	85.3%	84.8%	84.7%	83.7%
Non-Gynaecological Cytology Exfoliative (P07) Cases	81.7%	82.5%	87.5%	85.6%	84.6%	84.1%
TAT: 80% Cases Complete by Day 7 or Less						
Non-Biopsy Cancer Resection (P03) Cases	77.7%	77.2%	73.6%	73.7%	75.6%	75.5%
Non-Biopsy Other (P04) Cases	84.5%	84.6%	72.5%	74.0%	78.5%	79.3%

### 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. As the national histopathology data may be a useful tool, the working group recommend that each department monitors TATs and investigates the root cause of challenges faced in achieving TAT targets.

## CHAPTER 9 FROZEN SECTION

# 9

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

**TABLE 9.1: Achievable Targets**

Case Type	Achievable Target
<b>FS Concordance rate</b>	Greater than or equal to 97%
<b>FS Deferral rate</b>	Less than or equal to 5% and greater than 1%
<b>FS Turnaround time</b>	Greater than or equal to 85% within 20 minutes

### Frozen Section Concordance Rate (Q007)

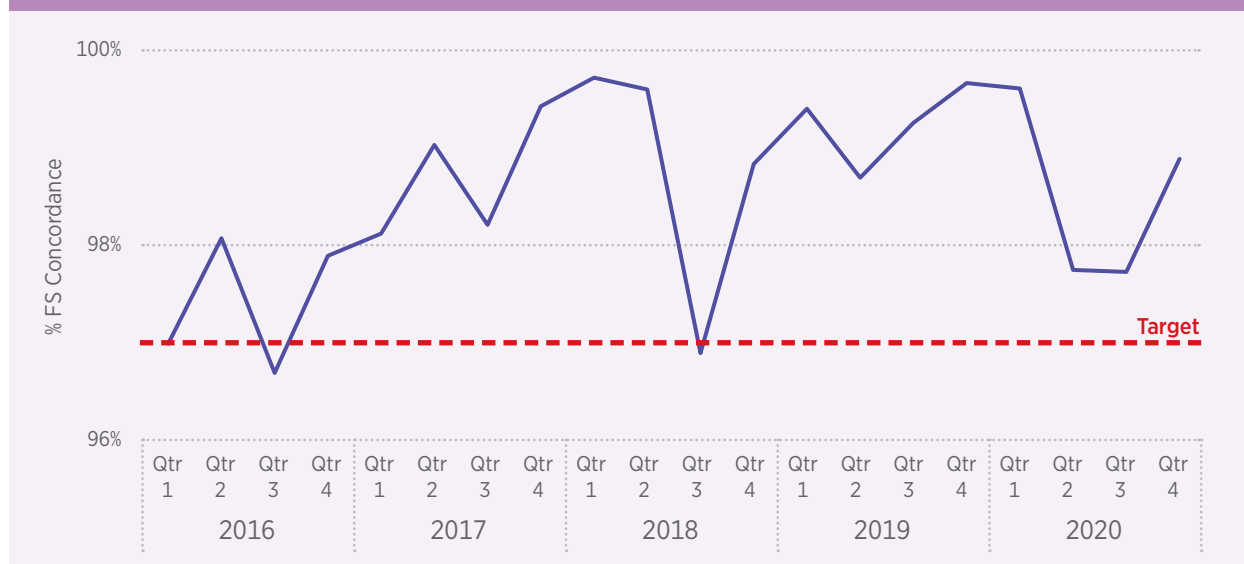
**Target: Greater than or equal to 97%**

FS 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 FS interpretation may arise due to sampling or interpretative issues and certain frozen section activities are associated with greater concordance with paraffin section than others. FS 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 FS discordances should be reconciled in the final pathology report and should be reviewed and discussed at the departmental discrepancy conference.

Nationally, General Centres (GCs) and Cancer Centres (CCs) combined met the FS Concordance Rate target of greater than or equal to 97% at 98%; this was just 0.8% below the rate achieved in 2019. GCs achieved a 97.8% FS Concordance Rate, a 0.9% decrease from 2019 but 0.8% above target. CCs achieved a national average of 98.3%, a slight decrease from 2019 but above target.

**FIGURE 9.1: % Frozen Section Concordance (Q007) by Quarter, 2016 – 2020**





Review of the national aggregate data per quarter from Q1 2016 to Q4 2020 shows FS Concordance Rate has overall been well above the greater than or equal to 97% target, with a decrease below target seen only in Q3 2016 (Figure 9.1).



Please consult Table A.9.1 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

### GENERAL CENTRES (GCs)

Eleven GCs provided data on the FS Concordance Rate for 2019, nine of which exceeded the target of greater than or equal to 97%. These figures were the same in 2020, with one site below target in both years (Figure 9.2).

### CANCER CENTRES (CCs)

Two out of eight CCs did not achieve the FS Concordance rate target of greater than or equal to 97%. This was one additional site below target from 2019 (Figure 9.2).

## Frozen Section Deferral Rate (Q008)

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

**Definition:** This refers to the number of cases where a FS diagnosis was deferred until final diagnosis was reached on permanent section review. Deferral of FS diagnosis may lead to a delay in optimum patient management. However, FSs are not equivalent to evaluation of permanent sections for diagnoses and in certain instances, e.g. an artefact specimen or a difficult to classify lesion, deferral to permanent section may be prudent.

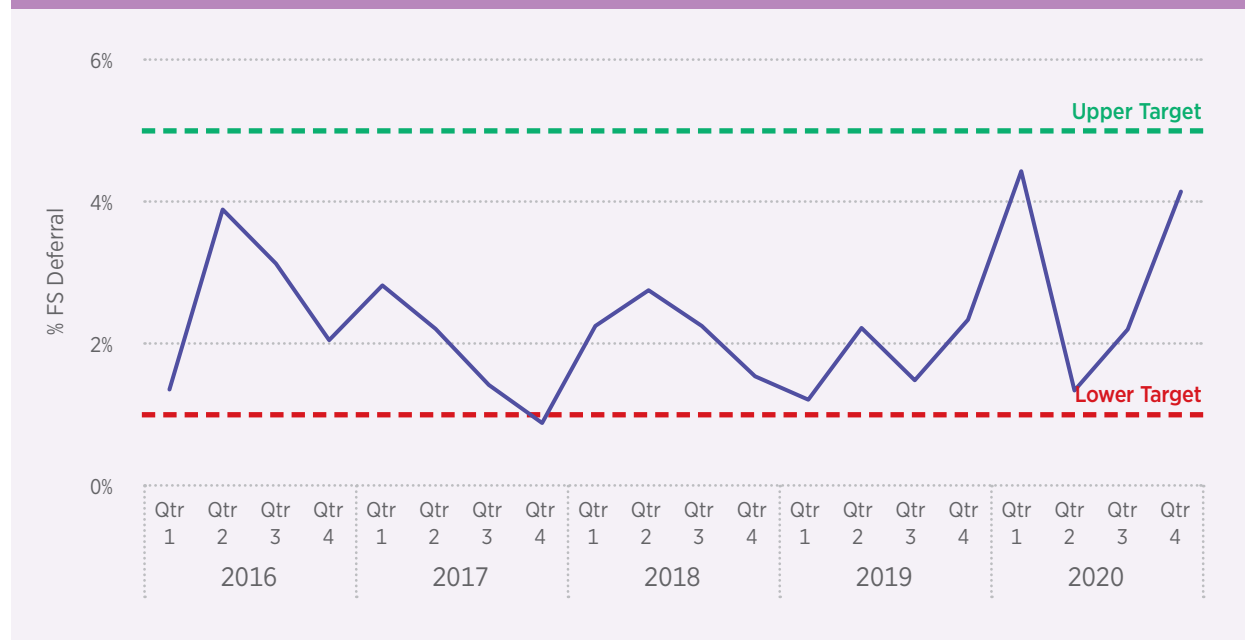
The national average of all sites combined reveal a high level of FS Deferral at 11.8%, this is a significant increase on 1.9% reported on in 2019. In 2020 all sites combined reported 164 fewer cases of FS Correlation Cases than in 2019.

GCs achieved an average Deferral Rate of 5.6% in 2020, outside the target range by 0.6% and 4.2% above the 2019 rate of 1.4% which was within the target range.

CCs were outside the target range at 18%, a 15.6% increase on 2019 findings which were inside

the target range at 2.4%. It is worth noting that in 2020 sites reported lower FS cases numbers (decrease of 13.3% compared to 2019), possibly due to changes in surgical practice during the COVID-19 pandemic. A relatively high percentage of cases were deferred to a permanent section diagnosis.

**FIGURE 9.3: % Frozen Section Deferral (Q008) by Quarter, 2016 - 2020**



A review of quarterly data between Q1 2015 and Q4 2020 show that overall, the FS Deferral Rate for all sites has been between the target range of 1% and 5%, falling out of this range only once in Q4 2017 (Figure 9.3).

Figure 9.3 displays average aggregate data over a five year period. However, when viewed on the 2020 yearly table (Appendix 1, Table A.9.2), the average aggregate data for all sites was outside the acceptable range at 11.8%.

Please consult Table A.9.2 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

## Frozen Section Turnaround Times (FS TAT)

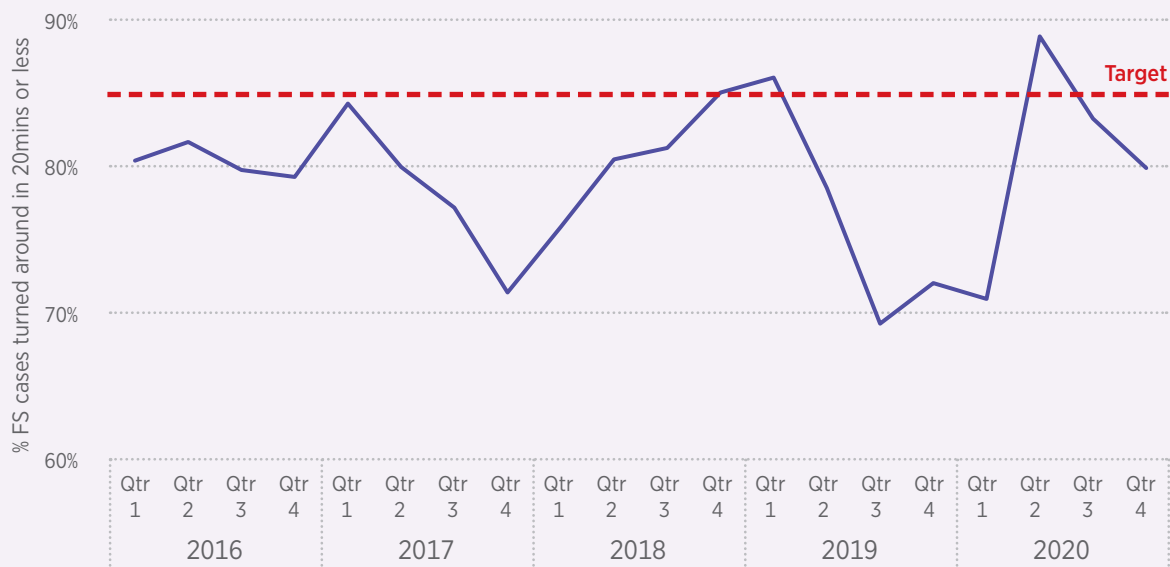
**Target: Greater than or equal to 85% complete within 20 minutes**

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

The national average for FSTAT for all sites combined in 2020 was 14.8% below the target at 70.2%. This was a lower average than in 2019, when all sites reached 80.9% which was 4.1% below target.

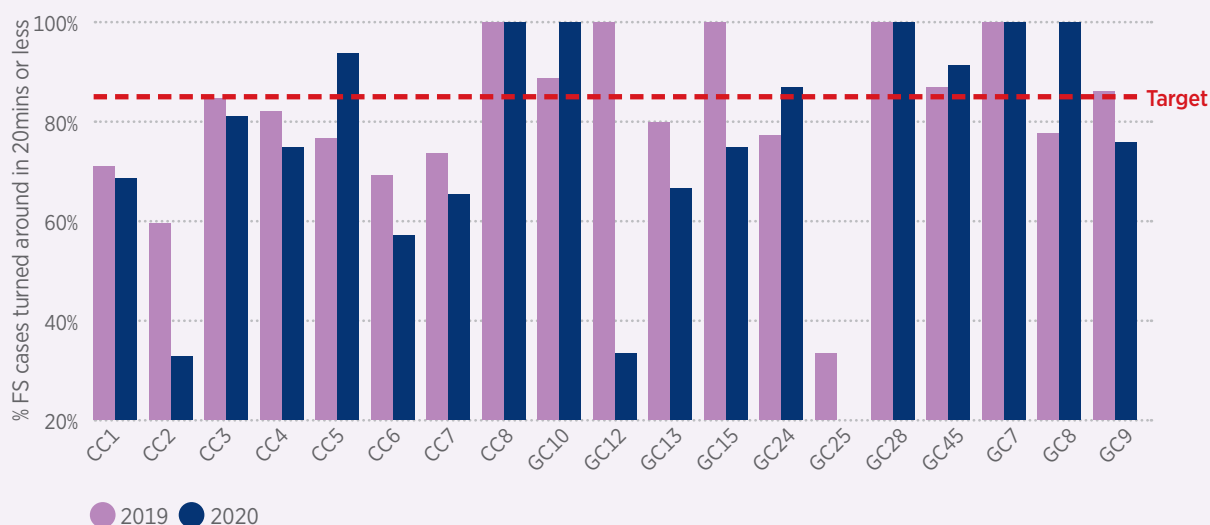
GCs reached an average TAT of 68.4%, this was 16.1% below the 2019 average which was close to the target at 84.5%. The national average for CCs was similarly below target at 71.9%, and a 5.4% decrease from 2019.

**FIGURE 9.4: % Frozen Section TAT by Quarter, 2016 – 2020**



A review of FS TAT between Q1 2016 and Q4 2020 show that overall all sites remained below target. All sites exceeded the greater than or equal to 85% FS cases complete between Q3 2018 and Q1 2019 and again in Q2 of 2020 (Figure 9.4).

**FIGURE 9.5: % Frozen Section TAT by Site, 2019 v 2020**



Please consult Table A.9.3 in Appendix 1 for a detailed table of percentage changes from 2019 to 2020.

### GENERAL CENTRES (GCs)

Ten GCs provided data for FS TAT in 2020, and of these, five met the target of greater than or equal to 85% of cases complete within 20 minutes, compared to four sites out of 11 reaching the target in 2019 (Figure 9.5).

### CANCER CENTRES (CCs)

Two CCs reported FS cases complete within the required target in 2020, which was one more than in 2019 (Figure 9.5).

## Summary

All GCs and CCs have consistently reached and exceeded the target of 97% for Frozen Section Concordance Rate in 2019 and 2020. Both GCs and CCs experienced a decrease in the number of FS cases in 2020 compared to 2019, most likely attributable to the decrease in patient attendances seen throughout the COVID-19 pandemic but predominantly in Q2 2020 (Table 9.2).

The national averages for all sites combined, and CCs specifically, were significantly outside the target range for FS Deferral Rates. As stated above, there were fewer cases recorded but with higher deferral rates attached.

**TABLE 9.2: National Aggregate Frozen Section (FS)**

National Aggregate Frozen Section (FS)						
	General Centres (GCs)		Cancer Centres (CCs)		All Sites (Combined)	
	2019	2020	2019	2020	2019	2020
Target: Greater than or equal to 97%						
FS Concordance Rate	98.7%	97.8%	99.1%	98.3%	98.9%	98.0%
Target: Greater than 1%, Less than or Equal to 5%						
FS Deferral Rate	1.4%	5.6%	2.4%	18.0%	1.9%	11.8%
Target: Greater than or equal to 85%, complete within 20 minutes						
FS Turnaround Time	84.5%	68.4%	77.3%	71.9%	80.9%	70.2%

### KEY RECOMMENDATION

The Working Group recommend that participating hospitals identify their own data in an effort to identify causative factors where targets are not met. Achievement of FS TAT targets continues to remain a challenge.

### KEY RECOMMENDATION

Data analysis revealed considerable variation in the use of FS coding practices locally. The Working Group recommend reviewing FS coding practices within participating hospitals' Quality Groups.

# CHAPTER 10

## IMPACT OF COVID-19 ON IRISH HISTOPATHOLOGY SERVICES

# 10

The value of the NHQI Programmes data was seen in assessing the significant impact on diagnoses in Irish cancer services with the launch of the first report on the impact of COVID-19 on cancer services in Ireland, **“Deploying Data-Driven Intelligence to measure the impact of COVID-19 on cancer care and cancer patients”**.

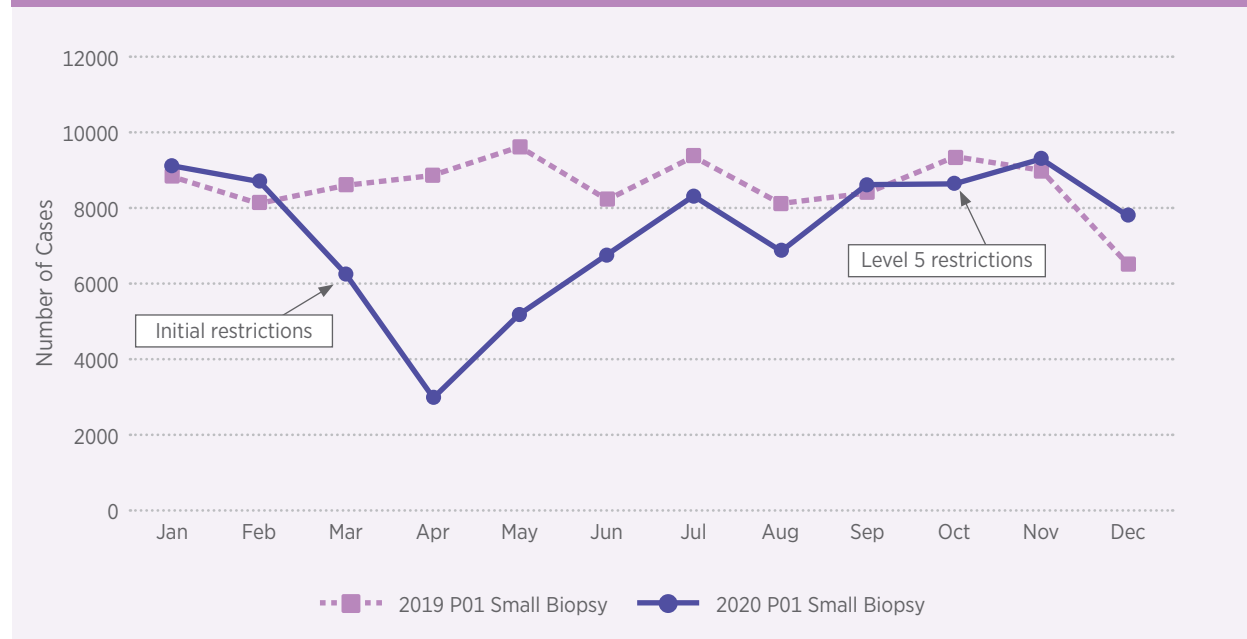
The Faculty of Pathology led report was the result of a collaboration between the National Cancer Control Programme (NCCP), Prof Mark Lawler, Associate Pro-Vice Chancellor and Professor of Digital Health, Queens University Belfast; Scientific Director DATA-CAN (Health Data Research, UK) and the National QI Programmes in GI Endoscopy and Radiology.

The data outline the significant challenges faced by laboratories across the country as restrictions of varying severity meant patients struggled to access healthcare, but the recovery is also highlighted as colleagues managed to reach 2019 workload levels by September 2020.

Figure 10.1 is a summary of the data and commentary submitted to the collaboration on behalf of the NHQI programme:

### P01 Small Biopsy

**FIGURE 10.1: P01 Small Biopsy, comparison for All Sites, 2019-2020**



**TABLE 10.1: P01 Small Biopsy, comparison for All Sites, 2019-2020**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2019	8831	8149	8583	8840	9592	8264	9380	8120	8376	9343	8964	6533	102975
2020	9088	8709	6251	2982	5199	6731	8266	6868	8591	8621	9295	7802	88403

Table 10.1 shows that numbers of monthly cases began to decrease below expected (2019) levels from early March 2020. Monthly cases reached their lowest point in April 2020 with 2,982 cases reported, representing a 66% decrease compared to the 8,840 cases reported for the same month in 2019.

It is not possible to determine the number of these biopsies that represent a cancer diagnosis, however, the data signify a very worrying trend during this period when there was reduced access to non-COVID related diagnostic services.

From May 2020, Small Biopsy case numbers began to rise again, with cases falling slightly in August but with a recovery comparable to 2019 case numbers in the month of September 2020. The Small Biopsy caseload remained at a similar level to 2019 until November 2020 when there was an increase of 10% in the caseload which was maintained until the end of 2020.

Overall, the number of Small Biopsies reported in 2020 was **86% of 2019 figures**. This represents 14,572 fewer Small Biopsies reported in 2020 compared to 2019 (Figure 10.1).

## PO2 GI Endoscopic Biopsy

FIGURE 10.2: PO2 GI Endoscopic Biopsy, comparison for All Sites, 2019-2020

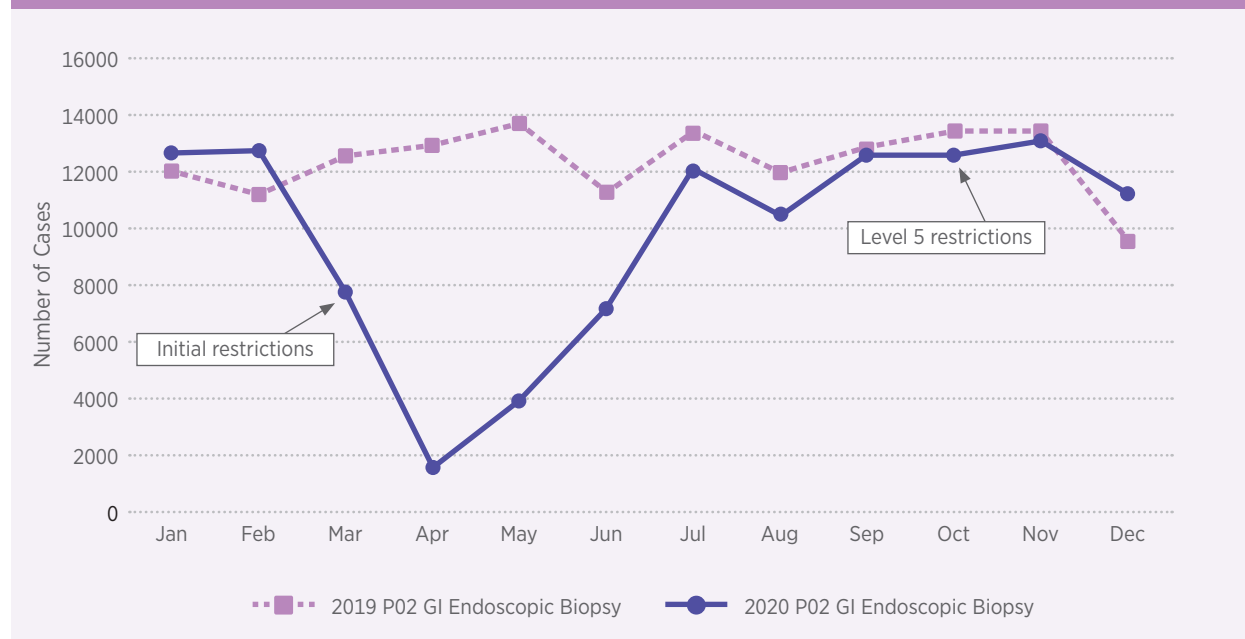


TABLE 10.2: PO2 GI Endoscopic Biopsy, comparison for All Sites, 2019-2020

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2019	12006	11192	12569	12916	13678	11244	13346	11983	12801	13430	13406	9537	148108
2020	12679	12702	7759	1569	3918	7167	12052	10502	12580	12542	13072	11216	117758

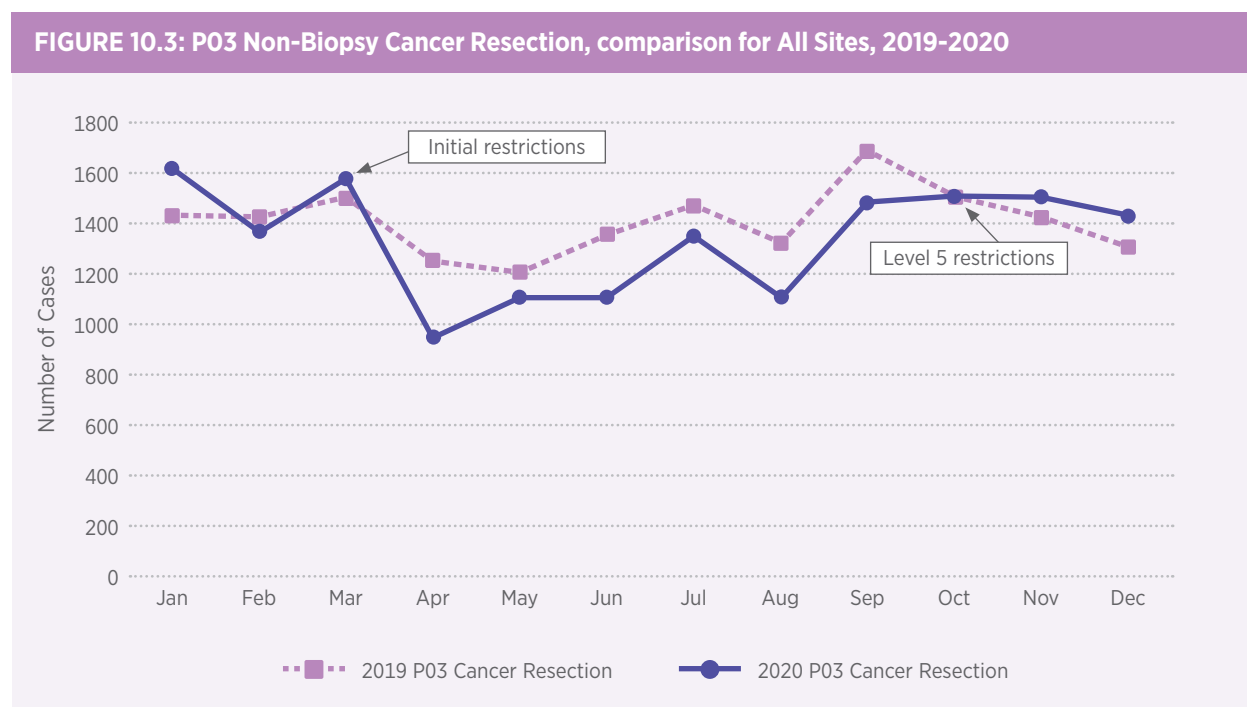
GI Endoscopic Biopsy (PO2) cases demonstrate a similar trend to that observed for Small Biopsy cases. A significant decrease was observed from early March 2020, to the lowest point recorded in April 2020 (Figure 10.2).

There was a decrease of 88% in GI Endoscopic Biopsy cases reported on in April 2020, when compared to the caseload for the same month in 2019. Between March and June 2020 inclusive, there were 60% (29,994) fewer GI Endoscopic Biopsies undertaken compared to 2019 figures (Table 10.2).

Figure 10.2 shows a recovery to 2019 caseload numbers in September 2020 with an 18% increase in caseload recorded in December 2020 in comparison to December 2019.

Overall, the number of GI Endoscopic Biopsies reported on in 2020 was 80% of 2019 figures. This represents 30,350 fewer GI Endoscopic Biopsies reported on in 2020 compared to 2019.

## P03 Non- Biopsy Cancer Resection



**TABLE 10.3: P03 Non-Biopsy Cancer Resection, comparison for All Sites, 2019-2020**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2019	1425	1426	1504	1250	1207	1358	1469	1319	1685	1504	1426	1308	16881
2020	1615	1370	1576	959	1107	1111	1354	1119	1484	1507	1510	1429	16141

Figure 10.3 shows that Cancer Resection (P03) cases began to significantly decrease in April 2020. There was a decrease of 24% in Non-Biopsy Cancer Resection cases in April 2020 in comparison to April 2019. From April to June 2020 inclusive, there was a decrease of 17% in cancer resections recorded.

The reduction in cancer resection specimens is much less marked than that observed in Small Biopsies and FNA cytology presented above (Table 10.3). This may reflect patients who had diagnostic biopsies and cytology earlier in the year and were awaiting surgery when the pandemic began in March 2020. It may also highlight the arrangement between public and private hospitals, whereby public patients continued to have their care delivered in private hospitals over this period.

There was a recovery to 2019 levels in October 2020 with a 6% and 9% increase in caseload in November and December 2020 respectively in comparison to the same months in 2019.

Overall, the number of cancer resections in 2020 was 96% of 2019 figures. This represents 740 fewer cancer resections undertaken in 2020 compared to 2019.

## P06 Non-Gynaecological Cytology Fine Needle Aspirations

FIGURE 10.4: P06 Non-Gynaecological Cytology FNA, comparison for All Sites, 2019-2020

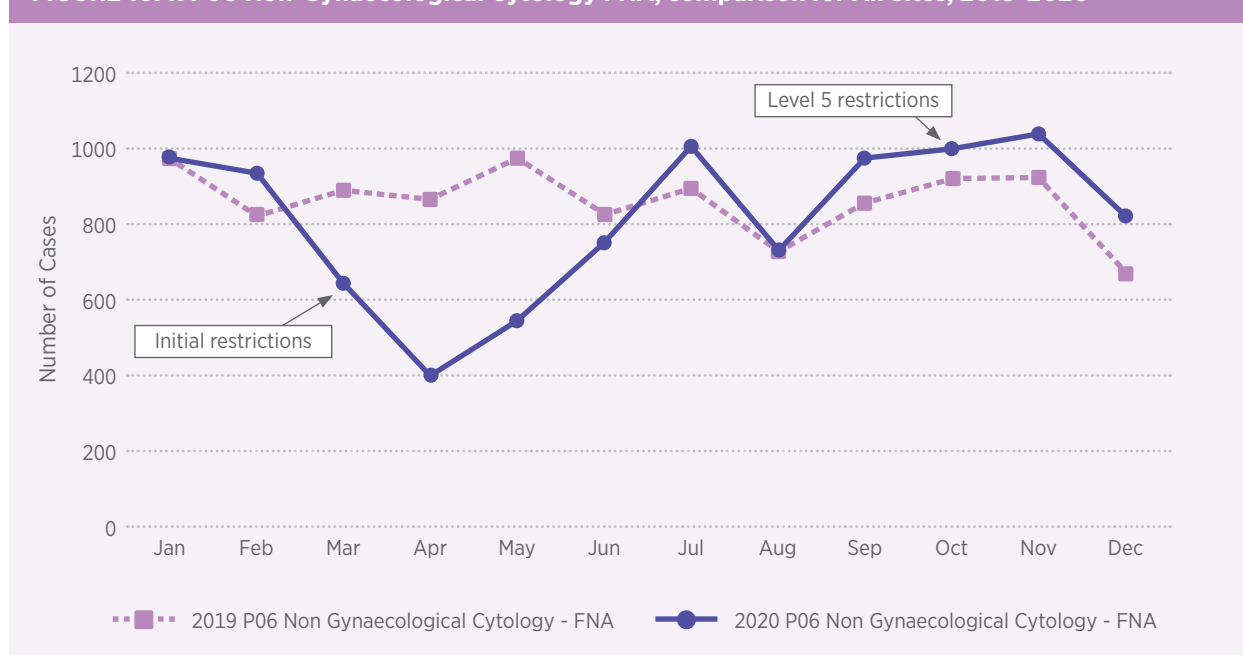


TABLE 10.4: P06 Non-Gynaecological Cytology FNA, comparison for All Sites, 2019-2020

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2019	974	825	891	867	977	830	896	732	859	921	925	670	10367
2020	979	934	645	404	548	752	1005	736	974	1003	1039	824	9843

Figure 10.4 shows that Non-Gynaecological Cytology FNA (P06) cases followed a similar trend to that observed for Small Biopsy cases, with a significant decrease from March 2020, to the lowest point recorded in April 2020. There was a decrease of 53% in Non-Gynaecological Cytology FNA cases in April 2020, compared to the caseload for the same month in 2019.

Between March and June 2020 inclusive, there was a decrease of 34% in the number of Non-Gynaecological FNAs performed (1,216 cases) compared to 2019 figures for the same period (Table 10.4).

FNA cytology provides an important diagnostic pathway for a number of cancers including lung cancer, informing both staging and treatment decisions. The reduction in numbers of FNA cytology specimens during this period reflects the reduction in numbers of patients being seen and assessed.

Case numbers recovered and exceeded 2019 levels in September 2020, with the highest increase of 23% Non-Gynaecological Cytology FNA cases observed in December 2020 when compared to the same month in 2019.

Overall, Non-Gynaecological Cytology FNA cases in 2020 were at 95% of 2019 figures. This represents 524 fewer cases in 2020 compared to 2019.



## CONCLUSION

The negative impact of the COVID-19 pandemic on healthcare has highlighted the need for accurate real-time data, as provided by the NHQI programme, so as informed decisions can be made to minimise the disruption of service delivery.

NQAIS-Histopathology data from NHQI programme played a vital role in assessing the impact on cancer services in Ireland and is a reminder to programme participants to continually audit their data to ensure accuracy of coding.

The importance of collecting both public and private data by NHQI programme was highlighted as a significant proportion of cancer surgeries performed in private hospitals during the first wave of the pandemic were captured, in contrast to other datasets used to assess cancer from NCCP/HSE.

Given the increased activity observed in November/December 2020, the NHQI Programme will play a vital role in the recovery of diagnostic cancer services during the recovery phase of the pandemic.

# APPENDIX A: SUPPORTING DATA FOR GRAPHS

## CHAPTER 5: INTRADEPARTMENTAL CONSULTATION (IDC)

TABLE A.5.1: 2020 v 2019 Histology (P01, P02, P03 and P04) % IDC

Location ID	2019 IDC Histology		2020 IDC Histology		2019 v 2020 IDC Histology	
	No. of Cases	% Q006	No. of Cases	% Q006	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q006
<b>Total CCs Sites</b>	231079	6.3%	193109	7.2%	-16.4%	0.9%
<b>CC1</b>	43880	5.5%	38444	4.9%	-12%	-0.6%
<b>CC2</b>	35837	3.0%	29449	4.8%	-18%	1.8%
<b>CC3</b>	29210	6.0%	25074	6.6%	-14%	0.6%
<b>CC4</b>	37237	3.5%	30670	3.9%	-18%	0.5%
<b>CC5</b>	19927	6.6%	17663	7.1%	-11%	0.5%
<b>CC6</b>	27255	6.6%	21749	7.3%	-20%	0.8%
<b>CC7</b>	16863	7.5%	13940	8.4%	-17%	0.9%
<b>CC8</b>	20870	11.9%	16120	14.3%	-23%	2.5%
<b>Total GCs Sites</b>	<b>211571</b>	<b>5.2%</b>	<b>174869</b>	<b>6.5%</b>	<b>-17%</b>	<b>1.3%</b>
<b>GC3</b>	3055	3.4%	2367	4.4%	-23%	1.0%
<b>GC4</b>	5937	3.6%	5263	4.8%	-11%	1.2%
<b>GC7</b>	23556	3.6%	20033	3.4%	-15%	-0.2%
<b>GC8</b>	14972	3.6%	10388	5.4%	-31%	1.7%
<b>GC9</b>	17208	3.9%	12305	3.6%	-28%	-0.2%
<b>GC10</b>	11445	5.2%	9081	8.0%	-21%	2.8%
<b>GC11</b>	6040	17.5%	5163	23.7%	-15%	6.2%
<b>GC12</b>	6651	4.2%	5132	5.5%	-23%	1.2%
<b>GC13</b>	7950	6.6%	7031	10.2%	-12%	3.5%
<b>GC15</b>	9947	9.3%	9542	8.9%	-4%	-0.4%
<b>GC16</b>	4994	11.4%	3348	12.1%	-33%	0.6%
<b>GC19</b>	5611	7.7%	4970	11.5%	-11%	3.8%
<b>GC20</b>	6856	0.8%	6033	0.3%	-12%	-0.6%
<b>GC23</b>	13569	1.1%	14891	0.8%	10%	-0.3%
<b>GC24</b>	22861	4.0%	18081	5.2%	-21%	1.2%
<b>GC25</b>	9787	4.9%	7595	6.4%	-22%	1.5%
<b>GC27</b>	10844	5.6%	9128	7.4%	-16%	1.7%
<b>GC28</b>	20416	3.2%	16698	2.6%	-18%	-0.6%
<b>GC30</b>	5665	1.5%	4037	3.2%	-29%	1.8%
<b>GC45</b>	4207	3.0%	3783	2.4%	-10%	-0.7%
<b>All Sites</b>	<b>442650</b>	<b>5.8%</b>	<b>367978</b>	<b>6.8%</b>	<b>-17%</b>	<b>1.1%</b>

**TABLE A.5.2: 2020 v 2019 Non-Gynaecological Cytology FNA (P06) % IDC**

Location ID	2019 IDC P06		2020 IDC P06		2019 v 2020 IDC P06	
	No. of Cases	% Q006	No. of Cases	% Q006	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q006
<b>Total CC Sites</b>	<b>7382</b>	<b>13.3%</b>	<b>7341</b>	<b>12.3%</b>	<b>-0.6%</b>	<b>-1.0%</b>
CC1	1902	10.0%	1627	11.3%	-16.9%	1.3%
CC2	1126	11.8%	922	10.6%	-22.1%	-1.2%
CC3	2100	8.0%	2121	8.9%	1.0%	0.9%
CC4	781	7.2%	688	9.2%	-13.5%	2.0%
CC5	752	19.8%	713	13.5%	-5.5%	-6.4%
CC6	106	28.3%	85	22.4%	-24.7%	-6.0%
CC7	443	21.4%	424	22.9%	-4.5%	1.4%
CC8	172	0.0%	761	0.0%	77.4%	0.0%
<b>Total GC Sites</b>	<b>2985</b>	<b>21.4%</b>	<b>2502</b>	<b>20.6%</b>	<b>-19.3%</b>	<b>-0.8%</b>
GC3	1	100.0%	2	50.0%	50.0%	-50.0%
GC4	5	20.0%	9	22.2%	44.4%	2.2%
GC7	600	13.3%	484	6.4%	-24.0%	-6.9%
GC8	243	6.2%	283	6.0%	14.1%	-0.2%
GC9	260	14.6%	180	12.2%	-44.4%	-2.4%
GC10	493	5.9%	396	16.2%	-24.5%	10.3%
GC11	118	30.5%	97	47.4%	-21.6%	16.9%
GC12	211	8.1%	134	5.2%	-57.5%	-2.8%
GC13	29	6.9%	51	21.6%	43.1%	14.7%
GC15	63	42.9%	28	28.6%	-125.0%	-14.3%
GC16	150	16.0%	115	45.2%	-30.4%	29.2%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	116	4.3%	132	4.6%	12.1%	0.2%
GC24	293	19.1%	328	22.3%	10.7%	3.2%
GC25	206	12.1%	125	12.0%	-64.8%	-0.1%
GC27	51	47.1%	72	38.9%	29.2%	-8.2%
GC28	80	25.0%	28	17.9%	-185.7%	-7.1%
GC30	50	0.0%	31	0.0%	-61.3%	0.0%
GC45	16	12.5%	7	14.3%	-128.6%	1.8%
<b>All sites</b>	<b>10367</b>	<b>17.3%</b>	<b>9843</b>	<b>16.5%</b>	<b>-5.3%</b>	<b>-0.9%</b>

**TABLE A.5.3: 2020 v 2019 NON-GYNAECOLOGICAL CYTOLOGY EXFOLIATIVE (P07) % IDC**

Location ID	2019 IDC P07		2020 IDC P07		2019 v 2020 IDC P07	
	No. of Cases	% Q006	No. of Cases	% Q006	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q006
<b>All CC Sites</b>	<b>12120</b>	<b>5.1%</b>	<b>11653</b>	<b>6.6%</b>	<b>-3.9%</b>	<b>1.4%</b>
CC1	3357	3.5%	3033	4.9%	-11%	1.3%
CC2	1384	4.5%	1067	7.6%	-30%	3.1%
CC3	3173	3.3%	2874	3.5%	-10%	0.2%
CC4	1647	2.8%	1235	3.2%	-33%	0.5%
CC5	660	8.2%	591	7.1%	-12%	-1.1%
CC6	509	7.3%	681	9.8%	25%	2.6%
CC7	964	11.6%	774	16.4%	-25%	4.8%
CC8	426	0.0%	1398	0.0%	70%	0.0%
<b>All GC Sites</b>	<b>8146</b>	<b>7.1%</b>	<b>6528</b>	<b>8.6%</b>	<b>-25%</b>	<b>1.5%</b>
GC3	104	8.7%	166	16.3%	37%	7.6%
GC4	-	-	-	-	-	-
GC7	630	4.4%	210	2.9%	-200%	-1.6%
GC8	845	0.6%	634	1.9%	-33%	1.3%
GC9	351	4.3%	320	5.6%	-10%	1.4%
GC10	519	3.7%	447	6.7%	-16%	3.1%
GC11	324	31.2%	324	37.0%	0%	5.9%
GC12	715	1.1%	518	1.5%	-38%	0.4%
GC13	378	3.2%	334	4.8%	-13%	1.6%
GC15	289	21.1%	255	11.8%	-13%	-9.4%
GC16	297	15.8%	218	18.4%	-36%	2.5%
GC19	-	-	-	-	-	-
GC20	44	0.0%	44	0.0%	0%	0.0%
GC23	786	0.6%	751	0.7%	-5%	0.0%
GC24	1592	2.6%	1173	4.9%	-36%	2.4%
GC25	321	6.2%	348	10.3%	8%	4.1%
GC27	236	13.1%	292	19.5%	19%	6.4%
GC28	239	9.6%	187	7.5%	-28%	-2.1%
GC30	257	0.8%	198	4.0%	-30%	3.3%
GC45	219	0.9%	109	0.9%	-101%	0.0%
<b>All Sites</b>	<b>20266</b>	<b>6.1%</b>	<b>18181</b>	<b>7.6%</b>	<b>-11%</b>	<b>1.5%</b>

TABLE A.5.4: 2020 v 2019 AUTOPSY (P10 &amp; P11) % IDC

Location ID	2019 IDC Autopsy		2020 IDC Autopsy		2019 v 2020 IDC Autopsy	
	No. of Cases	% Q006	No. of Cases	% Q006	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q006
<b>Total CC Sites</b>	<b>697</b>	<b>2.8%</b>	<b>545</b>	<b>1.0%</b>	<b>-21.8%</b>	<b>-1.8%</b>
CC1	-	-	5	0.0%	-	-
CC2	130	0.0%	129	0.0%	-0.8%	0.0%
CC3	2	0.0%	-	-	-	-
CC4	281	0.7%	278	5.0%	-1.1%	4.3%
CC5	184	3.3%	128	0.0%	-30.4%	-3.3%
CC6	-	-	-	-	-	-
CC7	100	10.0%	5	0.0%	-95.0%	-10.0%
CC8	-	-	-	-	-	-
<b>Total GC Sites</b>	<b>1867</b>	<b>1.8%</b>	<b>2009</b>	<b>1.1%</b>	<b>7.6%</b>	<b>-0.7%</b>
GC3	36	2.8%	65	0.0%	80.6%	-2.8%
GC4	1	0.0%	0	0.0%	-100.0%	0.0%
GC7	-	-	1	0.0%	-	-
GC8	173	0.0%	201	0.5%	16.2%	0.5%
GC9	-	-	-	-	-	-
GC10	937	0.0%	964	0.0%	2.9%	0.0%
GC11	-	-	-	-	-	-
GC12	-	-	-	-	-	-
GC13	-	-	-	-	-	-
GC15	-	-	-	-	-	-
GC16	-	-	-	-	-	-
GC17	81	0.0%	0	0.0%	-100.0%	0.0%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	-	-	-	-	-	-
GC24	336	9.2%	325	7.4%	-3.3%	-1.9%
GC25	151	0.0%	273	0.0%	80.8%	0.0%
GC27	152	2.0%	180	2.2%	18.4%	0.3%
GC28	-	-	-	-	-	-
GC30	-	-	-	-	-	-
GC45	41	2.4%	-	-	-	-
<b>Total All Sites</b>	<b>2564</b>	<b>2.3%</b>	<b>2554</b>	<b>1.1%</b>	<b>-0.4%</b>	<b>-1.2%</b>

## CHAPTER 6: MULTIDISCIPLINARY TEAM REVIEW

TABLE A.6.1: 2020 V 2019 MDT AGREEMENT SMALL BIOPSY (P01)

Location ID	2019 MDT P01		2020 MDT P01		2019 v 2020 MDT P01	
	No. of MDTs	% Q017 or Q018	No. of MDTs	% Q017 or Q018	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q017/Q018
<b>All CC Sites</b>	<b>14935</b>	<b>99.9%</b>	<b>12871</b>	<b>99.9%</b>	<b>-13.8%</b>	<b>0.0%</b>
CC1	2605	100.0%	1893	100.0%	-27.3%	0.0%
CC2	3035	99.8%	2516	100.0%	-17.1%	0.2%
CC3	1619	99.9%	1581	100.0%	-2.3%	0.1%
CC4	1289	100.0%	1256	100.0%	-2.6%	0.0%
CC5	2267	100.0%	1959	100.0%	-13.6%	0.0%
CC6	1155	100.0%	1070	100.0%	-7.4%	0.0%
CC7	2698	99.5%	2422	99.1%	-10.2%	-0.4%
CC8	267	100.0%	174	100.0%	-34.8%	0.0%
<b>All GC Sites</b>	<b>4491</b>	<b>99.6%</b>	<b>4176</b>	<b>99.8%</b>	<b>-7.0%</b>	<b>0.2%</b>
GC3	7	100.0%	3	100.0%	-57.1%	0.0%
GC4	47	100.0%	51	100.0%	8.5%	0.0%
GC7	414	100.0%	371	100.0%	-10.4%	0.0%
GC8	25	100.0%	21	100.0%	-16.0%	0.0%
GC9	636	97.5%	407	98.0%	-36.0%	0.5%
GC10	706	99.7%	585	100.0%	-17.1%	0.3%
GC11	124	97.6%	153	100.0%	23.4%	2.4%
GC12	332	99.4%	354	100.0%	6.6%	0.6%
GC13	412	99.8%	479	100.0%	16.3%	0.2%
GC15	76	100.0%	75	100.0%	-1.3%	0.0%
GC16	80	100.0%	17	100.0%	-78.8%	0.0%
GC19	97	99.0%	57	98.3%	-41.2%	-0.7%
GC20	44	100.0%	51	100.0%	15.9%	0.0%
GC23	402	100.0%	382	100.0%	-5.0%	0.0%
GC24	664	99.1%	803	99.6%	20.9%	0.5%
GC25	170	100.0%	113	100.0%	-33.5%	0.0%
GC27	81	100.0%	64	100.0%	-21.0%	0.0%
GC28	-	-	16	100.0%	-	-
GC30	21	100.0%	13	100.0%	-38.1%	0.0%
GC45	153	100.0%	161	100.0%	5.2%	0.0%
<b>All sites</b>	<b>19426</b>	<b>99.7%</b>	<b>17047</b>	<b>99.8%</b>	<b>-12.2%</b>	<b>0.1%</b>

TABLE A.6.2: 2020 V 2019 MDT AGREEMENT GI ENDOSCOPIC BIOPSY (P02)

Location ID	2019 MDT P02		2020 MDT P02		2019 v 2020 MDT P02	
	No. of MDTs	% Q017 or Q018	No. of MDTs	% Q017 or Q018	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q017/Q018
<b>All CC Sites</b>	<b>5049</b>	<b>99.8%</b>	<b>4282</b>	<b>99.8%</b>	<b>-15.2%</b>	<b>0.0%</b>
CC1	364	100.0%	281	100.0%	-22.8%	0.0%
CC2	1107	99.9%	855	100.0%	-22.8%	0.1%
CC3	498	99.8%	545	100.0%	9.4%	0.2%
CC4	1246	99.6%	1065	99.3%	-14.5%	-0.3%
CC5	784	99.7%	633	100.0%	-19.3%	0.3%
CC6	459	100.0%	413	100.0%	-10.0%	0.0%
CC7	133	99.2%	188	98.9%	41.4%	-0.3%
CC8	458	100.0%	302	100.0%	-34.1%	0.0%
<b>All GC Sites</b>	<b>2688</b>	<b>99.6%</b>	<b>2155</b>	<b>98.7%</b>	<b>-19.8%</b>	<b>-0.8%</b>
GC3	6	100.0%	7	100.0%	16.7%	0.0%
GC4	-	-	-	-	-	-
GC7	98	100.0%	49	100.0%	-50.0%	0.0%
GC8	111	97.2%	94	97.9%	-15.3%	0.7%
GC9	69	97.1%	39	97.4%	-43.5%	0.3%
GC10	204	100.0%	95	100.0%	-53.4%	0.0%
GC11	31	100.0%	12	100.0%	-61.3%	0.0%
GC12	33	100.0%	27	100.0%	-18.2%	0.0%
GC13	155	99.4%	123	100.0%	-20.6%	0.6%
GC15	33	100.0%	14	100.0%	-57.6%	0.0%
GC16	4	100.0%	6	83.3%	50.0%	-16.7%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	227	100.0%	114	100.0%	-49.8%	0.0%
GC24	350	99.7%	373	99.7%	6.6%	0.0%
GC25	450	99.8%	355	100.0%	-21.1%	0.2%
GC27	102	100.0%	86	100.0%	-15.7%	0.0%
GC28	-	-	28	100.0%	-	-
GC30	80	100.0%	73	100.0%	-8.8%	0.0%
GC45	735	100.0%	660	100.0%	-10.2%	0.0%
<b>All sites</b>	<b>7737</b>	<b>99.7%</b>	<b>6437</b>	<b>99.3%</b>	<b>-16.8%</b>	<b>-0.4%</b>

TABLE A.6.3: 2020 V 2019 MDT AGREEMENT NON-BIOPSY CANCER RESECTION (P03)

Location ID	2019 MDT P03		2020 MDT P03		2019 v 2020 MDT P03	
	No. of MDTs	% Q017 or Q018	No. of MDTs	% Q017 or Q018	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q017/Q018
<b>All CC Sites</b>	<b>7892</b>	<b>99.8%</b>	<b>7576</b>	<b>99.8%</b>	<b>-4.0%</b>	<b>0.0%</b>
CC1	1231	100.0%	974	100.0%	-20.9%	0.0%
CC2	1851	99.7%	1635	99.8%	-11.7%	0.1%
CC3	1163	99.8%	1235	100.0%	6.2%	0.2%
CC4	1097	100.0%	1138	99.8%	3.7%	-0.2%
CC5	1148	100.0%	981	100.0%	-14.5%	0.0%
CC6	470	99.8%	680	100.0%	44.7%	0.2%
CC7	743	98.9%	702	99.0%	-5.5%	0.1%
CC8	189	100.0%	231	100.0%	22.2%	0.0%
<b>All GC Sites</b>	<b>1651</b>	<b>99.9%</b>	<b>1444</b>	<b>99.9%</b>	<b>-12.5%</b>	<b>0.1%</b>
GC3	1	100.0%	2	100.0%	100.0%	0.0%
GC4	2	100.0%	4	100.0%	100.0%	0.0%
GC7	30	100.0%	42	100.0%	40.0%	0.0%
GC8	16	100.0%	16	100.0%	0.0%	0.0%
GC9	407	99.0%	332	98.8%	-18.4%	-0.2%
GC10	306	100.0%	277	100.0%	-9.5%	0.0%
GC11	10	100.0%	7	100.0%	-30.0%	0.0%
GC12	120	100.0%	112	100.0%	-6.7%	0.0%
GC13	124	100.0%	98	100.0%	-21.0%	0.0%
GC15	25	100.0%	19	100.0%	-24.0%	0.0%
GC16	5	100.0%	3	100.0%	-40.0%	0.0%
GC19	1	100.0%	1	100.0%	0.0%	0.0%
GC20	-	-	-	-	-	-
GC23	256	100.0%	233	100.0%	-9.0%	0.0%
GC24	216	98.6%	161	100.0%	-25.5%	1.4%
GC25	24	100.0%	43	100.0%	79.2%	0.0%
GC27	42	100.0%	28	100.0%	-33.3%	0.0%
GC28	-	-	4	100.0%	-	-
GC30	29	100.0%	30	100.0%	3.4%	0.0%
GC45	37	100.0%	32	100.0%	-13.5%	0.0%
<b>All sites</b>	<b>9543</b>	<b>99.8%</b>	<b>9020</b>	<b>99.9%</b>	<b>-5.5%</b>	<b>0.1%</b>



TABLE A.6.4: 2020 V 2019 MDT AGREEMENT NON-BIOPSY OTHER (P04)

Location ID	2019 MDT P04		2020 MDT P04		2019 v 2020 MDT P04	
	No. of MDTs	% Q017 or Q018	No. of MDTs	% Q017 or Q018	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q017/Q018
<b>All CC Sites</b>	<b>9811</b>	<b>99.9%</b>	<b>9251</b>	<b>99.8%</b>	<b>-5.7%</b>	<b>-0.1%</b>
CC1	882	99.8%	723	99.9%	-18.0%	0.1%
CC2	2474	99.8%	2369	100.0%	-4.2%	0.1%
CC3	1754	100.0%	1863	100.0%	6.2%	0.0%
CC4	1088	99.8%	1039	100.0%	-4.5%	0.2%
CC5	1530	100.0%	1428	99.9%	-6.7%	-0.1%
CC6	827	100.0%	592	100.0%	-28.4%	0.0%
CC7	917	99.7%	941	98.9%	2.6%	-0.7%
CC8	339	100.0%	296	100.0%	-12.7%	0.0%
<b>All GC Sites</b>	<b>2595</b>	<b>99.6%</b>	<b>2435</b>	<b>99.3%</b>	<b>-6.2%</b>	<b>-0.3%</b>
GC3	14	100.0%	12	91.7%	-14.3%	-8.3%
GC4	32	100.0%	90	100.0%	181.3%	0.0%
GC7	246	100.0%	288	100.0%	17.1%	0.0%
GC8	13	100.0%	6	100.0%	-53.8%	0.0%
GC9	360	98.1%	268	97.0%	-25.6%	-1.1%
GC10	216	100.0%	133	100.0%	-38.4%	0.0%
GC11	49	95.9%	56	98.2%	14.3%	2.3%
GC12	151	100.0%	83	100.0%	-45.0%	0.0%
GC13	79	100.0%	65	100.0%	-17.7%	0.0%
GC15	27	100.0%	25	100.0%	-7.4%	0.0%
GC16	10	100.0%	8	100.0%	-20.0%	0.0%
GC19	31	100.0%	29	100.0%	-6.5%	0.0%
GC20	57	100.0%	75	100.0%	31.6%	0.0%
GC23	458	99.6%	382	100.0%	-16.6%	0.4%
GC24	652	99.2%	693	99.7%	6.3%	0.5%
GC25	65	100.0%	65	100.0%	0.0%	0.0%
GC27	98	100.0%	72	100.0%	-26.5%	0.0%
GC28	1	100.0%	53	100.0%	5200.0%	0.0%
GC30	23	100.0%	13	100.0%	-43.5%	0.0%
GC45	13	100.0%	19	100.0%	46.2%	0.0%
<b>All sites</b>	<b>12406</b>	<b>99.8%</b>	<b>11686</b>	<b>99.6%</b>	<b>-5.8%</b>	<b>-0.2%</b>

TABLE A.6.5: 2020 V 2019 MDT AGREEMENT CYTOLOGY (P06 AND P07)

Location ID	2019 MDT P06 AND P07		2020 MDT P06 AND P07		2019 v 2020 MDT P06 AND P07	
	No. of MDTs	% Q017 or Q018	No. of MDTs	% Q017 or Q018	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q017/Q018
<b>All CC Sites</b>	<b>3557</b>	<b>99.9%</b>	<b>3183</b>	<b>99.6%</b>	<b>-10.5%</b>	<b>-0.3%</b>
CC1	847	100.0%	632	100.0%	-25.4%	0.0%
CC2	954	100.0%	803	99.9%	-15.8%	-0.1%
CC3	614	100.0%	646	100.0%	5.2%	0.0%
CC4	340	100.0%	421	100.0%	23.8%	0.0%
CC5	358	100.0%	330	100.0%	-7.8%	0.0%
CC6	-	-	-	-	-	-
CC7	444	99.5%	351	98.0%	-20.9%	-1.6%
CC8	-	-	-	-	-	-
<b>All GC Sites</b>	<b>1173</b>	<b>99.6%</b>	<b>928</b>	<b>99.7%</b>	<b>-20.9%</b>	<b>0.1%</b>
GC3	1	100.0%	3	100.0%	200.0%	0.0%
GC4	-	-	-	-	-	-
GC7	125	100.0%	32	100.0%	-74.4%	0.0%
GC8	1	100.0%	3	100.0%	200.0%	0.0%
GC9	118	100.0%	77	100.0%	-34.7%	0.0%
GC10	370	100.0%	291	100.0%	-21.4%	0.0%
GC11	58	100.0%	54	100.0%	-6.9%	0.0%
GC12	14	100.0%	13	100.0%	-7.1%	0.0%
GC13	10	100.0%	10	100.0%	0.0%	0.0%
GC15	24	100.0%	25	100.0%	4.2%	0.0%
GC16	117	97.4%	21	95.2%	-82.1%	-2.2%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	129	100.0%	116	100.0%	-10.1%	0.0%
GC24	151	100.0%	200	100.0%	32.5%	0.0%
GC25	30	96.7%	53	100.0%	76.7%	3.3%
GC27	22	100.0%	23	100.0%	4.5%	0.0%
GC28	-	-	3	100.0%	-	-
GC30	2	100.0%	2	100.0%	0.0%	0.0%
GC45	1	100.0%	2	100.0%	100.0%	0.0%
<b>All sites</b>	<b>4730</b>	<b>99.8%</b>	<b>4111</b>	<b>99.7%</b>	<b>-13.1%</b>	<b>-0.1%</b>

## CHAPTER 7: ADDENDUM REPORTS

TABLE A.7.1: 2020 V 2019 HISTOLOGY AMENDED/CORRECTED REPORTS (P01, P02, P03 AND P04)

Location ID	2019 Histology Amended/Corrected Reports		2020 Histology Amended/Corrected Reports		2019 v 2020 Histology Amended/Corrected Reports	
	No. of Cases	% Q021/22	No. of Cases	% Q021/22	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q021/Q022
<b>All CC Sites</b>	<b>231079</b>	<b>0.3%</b>	<b>193109</b>	<b>0.4%</b>	<b>-16.4%</b>	<b>0.1%</b>
CC1	43880	0.2%	38444	0.2%	-12.4%	0.0%
CC2	35837	0.5%	29449	0.4%	-17.8%	-0.1%
CC3	29210	0.6%	25074	0.5%	-14.2%	-0.1%
CC4	37237	0.4%	30670	0.5%	-17.6%	0.1%
CC5	19927	0.4%	17663	0.3%	-11.4%	-0.1%
CC6	27255	0.2%	21749	0.3%	-20.2%	0.1%
CC7	16863	0.3%	13940	1.0%	-17.3%	0.7%
CC8	20870	0.1%	16120	0.1%	-22.8%	-0.1%
<b>All GC Sites</b>	<b>211571</b>	<b>0.2%</b>	<b>174869</b>	<b>0.2%</b>	<b>-17.3%</b>	<b>0.0%</b>
GC3	3055	0.0%	2367	0.0%	-22.5%	0.0%
GC4	5937	0.2%	5263	0.3%	-11.4%	0.1%
GC7	23556	0.0%	20033	0.0%	-15.0%	0.0%
GC8	14972	0.1%	10388	0.0%	-30.6%	-0.1%
GC9	17208	0.3%	12305	0.2%	-28.5%	-0.1%
GC10	11445	0.4%	9081	0.2%	-20.7%	-0.1%
GC11	6040	0.4%	5163	0.1%	-14.5%	-0.2%
GC12	6651	0.3%	5132	0.5%	-22.8%	0.2%
GC13	7950	0.1%	7031	0.3%	-11.6%	0.2%
GC15	9947	0.2%	9542	0.3%	-4.1%	0.1%
GC16	4994	0.2%	3348	0.2%	-33.0%	0.0%
GC19	5611	0.1%	4970	0.3%	-11.4%	0.1%
GC20	6856	0.4%	6033	0.2%	-12.0%	-0.2%
GC23	13569	0.1%	14891	0.0%	9.7%	-0.1%
GC24	22861	0.3%	18081	0.5%	-20.9%	0.2%
GC25	9787	0.2%	7595	0.2%	-22.4%	0.0%
GC27	10844	0.1%	9128	0.0%	-15.8%	-0.1%
GC28	20416	0.1%	16698	0.0%	-18.2%	-0.1%
GC30	5665	0.1%	4037	0.1%	-28.7%	0.1%
GC45	4207	0.3%	3783	0.2%	-10.1%	-0.1%
<b>All sites</b>	<b>442650</b>	<b>0.3%</b>	<b>367978</b>	<b>0.3%</b>	<b>-16.9%</b>	<b>0.0%</b>

TABLE A.7.2: 2020 V 2019 CYTOLOGY AMENDED/CORRECTED REPORTS (P05, P06, P07 AND P09)

Location ID	2019 Cytology Amended/Corrected Reports		2020 Cytology Amended/Corrected Reports		2019 v 2020 Cytology Amended/Corrected Reports	
	No. of Cases	% Q021/22	No. of Cases	% Q021/22	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q021/Q022
<b>All CC Sites</b>	<b>20459</b>	<b>0.3%</b>	<b>19784</b>	<b>0.3%</b>	<b>-3.3%</b>	<b>0.0%</b>
<b>CC1</b>	5259	0.3%	4660	0.3%	-11.4%	0.1%
<b>CC2</b>	2703	0.8%	2162	0.6%	-20.0%	-0.2%
<b>CC3</b>	5538	0.3%	5129	0.4%	-7.4%	0.1%
<b>CC4</b>	2626	0.3%	2074	0.4%	-21.0%	0.1%
<b>CC5</b>	1536	0.2%	1416	0.0%	-7.8%	-0.2%
<b>CC6</b>	648	0.2%	804	0.0%	24.1%	-0.2%
<b>CC7</b>	1551	0.3%	1380	0.7%	-11.0%	0.4%
<b>CC8</b>	598	0.0%	2159	0.0%	261.0%	0.0%
<b>All GC Sites</b>	<b>11288</b>	<b>1.3%</b>	<b>9168</b>	<b>0.1%</b>	<b>-18.8%</b>	<b>-1.1%</b>
<b>GC3</b>	105	0.0%	168	0.0%	60.0%	0.0%
<b>GC4</b>	5	20.0%	9	0.0%	80.0%	-20.0%
<b>GC7</b>	1230	0.1%	695	0.0%	-43.5%	-0.1%
<b>GC8</b>	1137	0.3%	937	0.1%	-17.6%	-0.2%
<b>GC9</b>	631	0.0%	526	0.2%	-16.6%	0.2%
<b>GC10</b>	1062	0.5%	892	0.2%	-16.0%	-0.3%
<b>GC11</b>	442	0.7%	421	0.2%	-4.8%	-0.4%
<b>GC12</b>	926	0.5%	653	0.0%	-29.5%	-0.5%
<b>GC13</b>	437	0.0%	421	0.7%	-3.7%	0.7%
<b>GC15</b>	360	0.8%	288	0.0%	-20.0%	-0.8%
<b>GC16</b>	447	0.2%	333	0.0%	-25.5%	-0.2%
<b>GC19</b>	-	-	-	-	-	-
<b>GC20</b>	44	0.0%	44	0.0%	0.0%	0.0%
<b>GC23</b>	902	0.0%	883	0.0%	-2.1%	0.0%
<b>GC24</b>	1885	0.3%	1501	0.2%	-20.4%	-0.1%
<b>GC25</b>	527	1.0%	473	0.4%	-10.2%	-0.5%
<b>GC27</b>	287	0.0%	364	0.3%	26.8%	0.3%
<b>GC28</b>	319	0.0%	215	0.0%	-32.6%	0.0%
<b>GC30</b>	307	0.0%	229	0.4%	-25.4%	0.4%
<b>GC45</b>	235	0.0%	116	0.0%	-50.6%	0.0%
<b>All sites</b>	<b>31747</b>	<b>0.8%</b>	<b>28952</b>	<b>0.2%</b>	<b>-8.8%</b>	<b>-0.6%</b>

## CHAPTER 8: TURNAROUND TIME

TABLE A.8.1: 2020 V 2019 TAT SMALL BIOPSY (P01) 80% COMPLETED BY DAY 5

Location ID	2019 TAT P01		2020 TAT P01		2019 v 2020 TAT P01	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 5
<b>All CC Sites</b>	<b>49190</b>	<b>66.9%</b>	<b>41618</b>	<b>66.7%</b>	<b>-15.4%</b>	<b>-0.2%</b>
CC1	10859	76.5%	8624	77.1%	-20.6%	0.6%
CC2	7117	69.0%	5719	65.3%	-19.6%	-3.7%
CC3	6752	81.7%	5639	81.2%	-16.5%	-0.5%
CC4	6811	59.0%	5753	64.7%	-15.5%	5.7%
CC5	5564	73.1%	4654	74.9%	-16.4%	1.8%
CC6	4893	54.3%	4794	57.2%	-2.0%	2.9%
CC7	5814	87.1%	4967	87.4%	-14.6%	0.3%
CC8	1380	34.7%	1468	25.9%	6.4%	-8.8%
<b>All GC Sites</b>	<b>53785</b>	<b>77.5%</b>	<b>46785</b>	<b>79.8%</b>	<b>-13.0%</b>	<b>2.3%</b>
GC3	480	66.5%	270	75.2%	-43.8%	8.7%
GC4	4434	97.9%	3658	96.6%	-17.5%	-1.3%
GC7	7406	79.3%	6851	54.1%	-7.5%	-25.2%
GC8	701	80.9%	499	82.6%	-28.8%	1.7%
GC9	1853	87.4%	1310	78.6%	-29.3%	-8.7%
GC10	1643	83.5%	1540	83.3%	-6.3%	-0.3%
GC11	2413	23.0%	2545	25.6%	5.5%	2.6%
GC12	913	83.8%	938	83.2%	2.7%	-0.6%
GC13	2287	84.8%	2601	97.4%	13.7%	12.6%
GC15	3661	96.4%	3576	92.0%	-2.3%	-4.3%
GC16	352	92.9%	282	98.6%	-19.9%	5.7%
GC19	4846	86.2%	3975	87.9%	-18.0%	1.8%
GC20	2743	50.5%	2063	86.6%	-24.8%	36.1%
GC23	1184	57.9%	1395	71.0%	17.8%	13.0%
GC24	4267	83.6%	3392	82.2%	-20.5%	-1.4%
GC25	1691	77.8%	1375	85.5%	-18.7%	7.8%
GC27	2782	70.5%	2329	69.9%	-16.3%	-0.5%
GC28	5953	77.4%	4550	59.9%	-23.6%	-17.5%
GC30	1027	76.9%	794	93.3%	-22.7%	16.4%
GC45	3149	93.4%	2842	93.2%	-9.7%	-0.2%
<b>All sites</b>	<b>102975</b>	<b>72.2%</b>	<b>88403</b>	<b>73.3%</b>	<b>-14.2%</b>	<b>1.1%</b>

**TABLE A.8.2: 2020 V 2019 GI ENDOSCOPIC BIOPSY (P02) TAT 80% COMPLETED BY DAY 5**

Location ID	2019 TAT P02		2020 TAT P02		2019 v 2020 TAT P02	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 5
<b>All CC Sites</b>	<b>72757</b>	<b>54.7%</b>	<b>57748</b>	<b>59.3%</b>	<b>-20.6%</b>	<b>4.5%</b>
CC1	12853	60.6%	11294	82.6%	-12.1%	21.9%
CC2	12099	41.8%	9639	32.8%	-20.3%	-9.1%
CC3	10564	33.6%	8576	39.3%	-18.8%	5.7%
CC4	11628	61.4%	9525	65.3%	-18.1%	3.9%
CC5	5825	72.5%	5053	76.3%	-13.3%	3.8%
CC6	8442	42.5%	6453	37.6%	-23.6%	-4.9%
CC7	4345	91.5%	3170	92.6%	-27.0%	1.1%
CC8	7001	34.0%	4038	47.7%	-42.3%	13.8%
<b>All GC Sites</b>	<b>75351</b>	<b>80.9%</b>	<b>60010</b>	<b>81.2%</b>	<b>-20.4%</b>	<b>0.3%</b>
GC3	1128	64.9%	814	73.7%	-27.8%	8.8%
GC4	-	-	-	-	-	-
GC7	7090	81.7%	5754	45.1%	-18.8%	-36.6%
GC8	5944	86.9%	3964	89.0%	-33.3%	2.2%
GC9	6306	90.2%	4356	66.2%	-30.9%	-24.0%
GC10	4444	92.4%	3289	91.7%	-26.0%	-0.7%
GC11	1087	34.5%	593	37.6%	-45.4%	3.1%
GC12	2717	98.5%	2152	98.3%	-20.8%	-0.2%
GC13	3193	85.9%	2424	99.2%	-24.1%	13.3%
GC15	2842	99.5%	2706	96.9%	-4.8%	-2.6%
GC16	2341	98.8%	1601	99.6%	-31.6%	0.8%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	6333	33.0%	6547	70.7%	3.4%	37.7%
GC24	11023	91.6%	8962	91.2%	-18.7%	-0.4%
GC25	5702	87.0%	4475	93.1%	-21.5%	6.1%
GC27	2938	79.7%	2606	77.2%	-11.3%	-2.5%
GC28	9297	82.9%	7739	60.4%	-16.8%	-22.5%
GC30	2121	74.9%	1273	95.7%	-40.0%	20.8%
GC45	845	92.7%	755	95.0%	-10.7%	2.3%
<b>All sites</b>	<b>148108</b>	<b>67.8%</b>	<b>117758</b>	<b>70.2%</b>	<b>-20.5%</b>	<b>2.4%</b>

**TABLE A.8.3: 2020 V 2019 NON-BIOPSY CANCER RESECTION (P03) TAT 80% COMPLETED BY DAY 7**

Location ID	2019 TAT P03		2020 TAT P03		2019 v 2020 TAT P03	
	No. of Cases	% by Day 7	No. of Cases	% by Day 7	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 7
<b>All CC Sites</b>	<b>13050</b>	<b>73.6%</b>	<b>12409</b>	<b>73.7%</b>	<b>-4.9%</b>	<b>0.2%</b>
CC1	2305	74.7%	2106	80.2%	-8.6%	5.5%
CC2	2596	85.6%	2265	87.6%	-12.8%	2.0%
CC3	1977	78.0%	1752	75.3%	-11.4%	-2.6%
CC4	2102	75.6%	2014	77.7%	-4.2%	2.1%
CC5	1558	74.9%	1436	70.8%	-7.8%	-4.2%
CC6	654	59.9%	859	67.8%	31.3%	7.8%
CC7	1026	93.8%	959	89.9%	-6.5%	-3.9%
CC8	832	46.0%	1018	40.8%	22.4%	-5.3%
<b>All GC Sites</b>	<b>3831</b>	<b>77.7%</b>	<b>3732</b>	<b>77.2%</b>	<b>-2.6%</b>	<b>-0.5%</b>
GC3	4	100.0%	8	100.0%	100.0%	0.0%
GC4	11	81.8%	15	93.3%	36.4%	11.5%
GC7	218	81.7%	169	74.0%	-22.5%	-7.7%
GC8	95	55.8%	121	72.7%	27.4%	16.9%
GC9	1075	96.2%	974	92.5%	-9.4%	-3.7%
GC10	1010	89.1%	1145	89.3%	13.4%	0.2%
GC11	148	49.3%	49	59.2%	-66.9%	9.9%
GC12	158	65.8%	185	67.6%	17.1%	1.8%
GC13	138	84.1%	110	98.2%	-20.3%	14.1%
GC15	51	92.2%	39	92.3%	-23.5%	0.2%
GC16	18	61.1%	11	100.0%	-38.9%	38.9%
GC19	4	75.0%	1	0.0%	-75.0%	-75.0%
GC20	-	-	-	-	-	-
GC23	381	77.7%	448	79.7%	17.6%	2.0%
GC24	276	87.7%	213	86.9%	-22.8%	-0.8%
GC25	41	75.6%	65	86.2%	58.5%	10.5%
GC27	66	77.3%	50	76.0%	-24.2%	-1.3%
GC28	33	72.7%	29	44.8%	-12.1%	-27.9%
GC30	35	82.9%	38	92.1%	8.6%	9.3%
GC45	69	69.6%	62	61.3%	-10.1%	-8.3%
<b>All sites</b>	<b>2607</b>	<b>75.6%</b>	<b>2280</b>	<b>75.5%</b>	<b>-12.5%</b>	<b>-0.2%</b>

**TABLE A.8.4: 2020 V 2019 NON-BIOPSY OTHER (P04) TAT 80% COMPLETED BY DAY 7**

Location ID	2019 TAT P04		2020 TAT P04		2019 v 2020 TAT P04	
	No. of Cases	% by Day 7	No. of Cases	% by Day 7	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 7
<b>All CC Sites</b>	<b>96082</b>	<b>72.5%</b>	<b>81334</b>	<b>74.0%</b>	<b>-15.3%</b>	<b>1.5%</b>
<b>CC1</b>	17863	77.9%	16420	82.2%	-8.1%	4.3%
<b>CC2</b>	14025	79.0%	11826	77.3%	-15.7%	-1.7%
<b>CC3</b>	9917	84.6%	9107	84.0%	-8.2%	-0.6%
<b>CC4</b>	16696	57.9%	13378	64.3%	-19.9%	6.4%
<b>CC5</b>	6980	78.6%	6520	84.5%	-6.6%	5.9%
<b>CC6</b>	13266	70.0%	9643	60.8%	-27.3%	-9.2%
<b>CC7</b>	5678	86.8%	4844	87.3%	-14.7%	0.5%
<b>CC8</b>	11657	45.4%	9596	51.7%	-17.7%	6.3%
<b>All GC Sites</b>	<b>78604</b>	<b>84.5%</b>	<b>64342</b>	<b>84.6%</b>	<b>-18.1%</b>	<b>0.0%</b>
<b>GC3</b>	1443	65.6%	1275	69.0%	-11.6%	3.5%
<b>GC4</b>	1492	94.1%	1590	71.5%	6.6%	-22.6%
<b>GC7</b>	8842	92.8%	7259	78.1%	-17.9%	-14.8%
<b>GC8</b>	8232	85.3%	5804	88.3%	-29.5%	3.0%
<b>GC9</b>	7974	95.2%	5665	78.5%	-29.0%	-16.6%
<b>GC10</b>	4348	92.4%	3107	90.9%	-28.5%	-1.5%
<b>GC11</b>	2392	46.6%	1976	39.9%	-17.4%	-6.7%
<b>GC12</b>	2863	97.4%	1857	97.2%	-35.1%	-0.2%
<b>GC13</b>	2332	93.5%	1896	99.0%	-18.7%	5.5%
<b>GC15</b>	3393	96.7%	3221	95.3%	-5.1%	-1.4%
<b>GC16</b>	2283	98.7%	1454	99.5%	-36.3%	0.8%
<b>GC19</b>	761	85.4%	994	89.3%	30.6%	3.9%
<b>GC20</b>	4113	57.2%	3970	90.2%	-3.5%	33.0%
<b>GC23</b>	5671	69.4%	6501	77.3%	14.6%	7.8%
<b>GC24</b>	7295	93.2%	5514	93.5%	-24.4%	0.3%
<b>GC25</b>	2353	91.2%	1680	93.8%	-28.6%	2.6%
<b>GC27</b>	5058	86.3%	4143	86.1%	-18.1%	-0.2%
<b>GC28</b>	5133	88.3%	4380	77.3%	-14.7%	-11.0%
<b>GC30</b>	2482	65.9%	1932	84.4%	-22.2%	18.5%
<b>GC45</b>	144	95.8%	124	92.7%	-13.9%	-3.1%
<b>All sites</b>	<b>18759</b>	<b>78.5%</b>	<b>16366</b>	<b>79.3%</b>	<b>-12.8%</b>	<b>0.8%</b>



**TABLE A.8.5: 2020 V 2019 NON-GYNAECOLOGICAL CYTOLOGY FNA (P06) TAT 80% COMPLETED BY DAY 5**

Location ID	2019 TAT P06		2020 TAT P06		2019 v 2020 TAT P06	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 5
<b>All CC Sites</b>	<b>7382</b>	<b>85.3%</b>	<b>7341</b>	<b>84.8%</b>	<b>-0.6%</b>	<b>-0.5%</b>
CC1	1902	98.4%	1627	98.3%	-14.5%	-0.1%
CC2	1126	97.1%	922	94.9%	-18.1%	-2.2%
CC3	2100	94.8%	2121	92.1%	1.0%	-2.7%
CC4	781	98.5%	688	97.1%	-11.9%	-1.4%
CC5	752	95.5%	713	96.1%	-5.2%	0.6%
CC6	106	76.4%	85	84.7%	-19.8%	8.3%
CC7	443	86.9%	424	90.8%	-4.3%	3.9%
CC8	172	34.9%	761	24.4%	342.4%	-10.4%
<b>All GC Sites</b>	<b>2985</b>	<b>84.1%</b>	<b>4131</b>	<b>82.5%</b>	<b>38.4%</b>	<b>-1.6%</b>
GC3	1	100.0%	2	100.0%	100.0%	0.0%
GC4	5	100.0%	9	77.8%	80.0%	-22.2%
GC7	600	87.3%	484	65.3%	-19.3%	-22.0%
GC8	243	67.9%	283	74.2%	16.5%	6.3%
GC9	260	90.0%	180	90.0%	-30.8%	0.0%
GC10	493	93.5%	396	87.6%	-19.7%	-5.9%
GC11	118	53.4%	97	52.6%	-17.8%	-0.8%
GC12	211	94.3%	134	96.3%	-36.5%	2.0%
GC13	29	93.1%	51	96.1%	75.9%	3.0%
GC15	63	93.7%	28	100.0%	-55.6%	6.4%
GC16	150	96.7%	115	98.3%	-23.3%	1.6%
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	116	51.7%	132	82.6%	13.8%	30.9%
GC24	293	93.5%	328	92.4%	11.9%	-1.1%
GC25	206	89.3%	125	89.6%	-39.3%	0.3%
GC27	51	72.6%	72	72.2%	41.2%	-0.3%
GC28	80	57.5%	28	53.6%	-65.0%	-3.9%
GC30	50	92.0%	31	100.0%	-38.0%	8.0%
GC45	16	87.5%	7	57.1%	-56.3%	-30.4%
<b>All sites</b>	<b>10367</b>	<b>84.7%</b>	<b>1629</b>	<b>83.7%</b>	<b>-84.3%</b>	<b>-1.0%</b>

**TABLE A.8.6: 2020 V 2019 NON-GYNAECOLOGICAL CYTOLOGY FNA (P07) 80% COMPLETED BY DAY 5**

Location ID	2019 TAT P07		2020 TAT P07		2019 v 2020 TAT P07	
	No. of Cases	% by Day 5	No. of Cases	% by Day 5	% ↑ or ↓ No. of Cases	% ↑ or ↓ by Day 5
<b>All CC Sites</b>	<b>12120</b>	<b>87.5%</b>	<b>11653</b>	<b>85.6%</b>	<b>-3.9%</b>	<b>-1.9%</b>
CC1	3357	99.5%	3033	99.2%	-9.7%	-0.3%
CC2	1384	95.0%	1067	94.7%	-22.9%	-0.3%
CC3	3173	97.0%	2874	94.5%	-9.4%	-2.5%
CC4	1647	98.4%	1235	97.7%	-25.0%	-0.8%
CC5	660	91.1%	591	93.6%	-10.5%	2.5%
CC6	509	82.5%	681	85.0%	33.8%	2.5%
CC7	964	90.3%	774	91.0%	-19.7%	0.7%
CC8	426	46.5%	1398	29.4%	228.2%	-17.1%
<b>All GC Sites</b>	<b>11607</b>	<b>81.7%</b>	<b>9727</b>	<b>82.5%</b>	<b>-16.2%</b>	<b>0.8%</b>
GC3	104	83.7%	166	89.2%	59.6%	5.5%
GC4	-	-	-	-	-	-
GC7	630	91.3%	210	84.8%	-66.7%	-6.5%
GC8	845	91.5%	634	89.0%	-25.0%	-2.5%
GC9	351	90.9%	320	90.0%	-8.8%	-0.9%
GC10	519	91.1%	447	89.3%	-13.9%	-1.9%
GC11	324	54.0%	324	50.6%	0.0%	-3.4%
GC12	715	92.6%	518	96.7%	-27.6%	4.1%
GC13	378	83.9%	334	95.5%	-11.6%	11.7%
GC15	289	99.3%	255	100.0%	-11.8%	0.7%
GC16	297	100.0%	218	100.0%	-26.6%	0.0%
GC19	-	-	-	-	-	-
GC20	44	11.4%	44	15.9%	0.0%	4.6%
GC23	786	70.9%	751	78.6%	-4.5%	7.7%
GC24	1592	94.0%	1173	94.5%	-26.3%	0.6%
GC25	321	94.7%	348	96.6%	8.4%	1.9%
GC27	236	83.9%	292	81.2%	23.7%	-2.7%
GC28	239	57.3%	187	56.2%	-21.8%	-1.2%
GC30	257	92.6%	198	93.4%	-23.0%	0.8%
GC45	219	87.2%	109	83.5%	-50.2%	-3.7%
<b>All sites</b>	<b>3461</b>	<b>84.6%</b>	<b>3199</b>	<b>84.1%</b>	<b>-7.6%</b>	<b>-0.5%</b>

## CHAPTER 9: FROZEN SECTION

TABLE A.9.1: 2020 V 2019 FS CONCORDANCE

Location ID	2019 FS Correlation		2020 FS Correlation		2019 v 2020 FS Correlation	
	No. of FS Correlation Cases	% Q007	No. of FS Correlation Cases	% Q007	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q007
<b>Total CC Sites</b>	<b>1015</b>	<b>99.1%</b>	<b>883</b>	<b>98.3%</b>	<b>-13.0%</b>	<b>-0.8%</b>
CC1	88	96.6%	115	94.8%	30.7%	-1.8%
CC2	101	100.0%	98	99.0%	-3.0%	-1.0%
CC3	85	98.8%	48	95.8%	-43.5%	-3.0%
CC4	37	100.0%	36	100.0%	-2.7%	0.0%
CC5	578	100.0%	508	99.6%	-12.1%	-0.4%
CC6	13	100.0%	5	100.0%	-61.5%	0.0%
CC7	112	97.3%	75	97.3%	-33.0%	0.0%
CC8	1	100.0%	-2	100.0%	-300.0%	0.0%
<b>Total GC Sites</b>	<b>174</b>	<b>98.7%</b>	<b>120</b>	<b>97.8%</b>	<b>-31.0%</b>	<b>-0.9%</b>
GC3	-	-	-	-	-	-
GC4	-	-	-	-	-	-
GC7	12	100.0%	16	100.0%	33.3%	0.0%
GC8	17	100.0%	4	100.0%	-76.5%	0.0%
GC9	28	96.4%	22	95.5%	-21.4%	-0.9%
GC10	9	88.9%	5	100.0%	-44.4%	11.1%
GC11	-	-	-	-	-	-
GC12	5	100.0%	3	100.0%	-40.0%	0.0%
GC13	5	100.0%	6	100.0%	20.0%	0.0%
GC15	12	100.0%	5	80.0%	-58.3%	-20.0%
GC16	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	-	-	1	100.0%	-	-
GC24	18	100.0%	19	100.0%	5.6%	0.0%
GC25	2	100.0%	-	-	-	-
GC27	-	-	-	-	-	-
GC28	8	100.0%	6	100.0%	-25.0%	0.0%
GC30	-	-	-	-	-	-
GC45	58	100.0%	33	100.0%	-43.1%	0.0%
<b>All Sites</b>	<b>1189</b>	<b>98.9%</b>	<b>1003</b>	<b>98.0%</b>	<b>-15.6%</b>	<b>-0.8%</b>

TABLE A.9.2: 2020 V 2019 FS DEFERRAL RATE

Location ID	2019 FS Deferral		2020 FS Deferral		2019 v 2020 FS Deferral	
	No. of FS Correlation Cases	% Q008	No. of FS Correlation Cases	% Q008	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q008
<b>Total CC Sites</b>	<b>1049</b>	<b>2.4%</b>	<b>937</b>	<b>18.0%</b>	<b>-10.7%</b>	<b>15.6%</b>
CC1	90	1.1%	115	0.0%	27.8%	-1.1%
CC2	103	1.0%	108	4.6%	4.9%	3.7%
CC3	89	2.3%	56	7.1%	-37.1%	4.9%
CC4	45	8.9%	44	9.1%	-2.2%	0.2%
CC5	582	0.3%	516	0.8%	-11.3%	0.4%
CC6	13	0.0%	7	14.3%	-46.2%	14.3%
CC7	126	5.6%	89	7.9%	-29.4%	2.3%
CC8	1	0.0%	2	100.0%	100.0%	100.0%
<b>Total GC Sites</b>	<b>184</b>	<b>1.4%</b>	<b>132</b>	<b>5.6%</b>	<b>-28.3%</b>	<b>4.2%</b>
GC3	-	-	-	-	-	-
GC4	-	-	-	-	-	-
GC7	12	0.0%	16	0.0%	33.3%	0.0%
GC8	17	0.0%	4	0.0%	-76.5%	0.0%
GC9	30	3.3%	22	0.0%	-26.7%	-3.3%
GC10	9	0.0%	5	0.0%	-44.4%	0.0%
GC11	-	-	-	-	-	-
GC12	5	0.0%	3	0.0%	-40.0%	0.0%
GC13	5	0.0%	6	0.0%	20.0%	0.0%
GC15	12	0.0%	5	0.0%	-58.3%	0.0%
GC16	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	-	-	1	0.0%	-	-
GC24	22	9.1%	25	12.0%	13.6%	2.9%
GC25	2	0.0%	2	50.0%	0.0%	50.0%
GC27	-	-	-	-	-	-
GC28	8	0.0%	6	0.0%	-25.0%	0.0%
GC30	-	-	-	-	-	-
GC45	62	3.2%	37	5.4%	-40.3%	2.2%
<b>All Sites</b>	<b>1233</b>	<b>1.9%</b>	<b>1069</b>	<b>11.8%</b>	<b>-13.3%</b>	<b>9.9%</b>

TABLE A.9.3: 2020 V 2019 FS TURNAROUND TIME

Location ID	2019 FS TAT		2020 FS TAT		2019 v 2020 FS TAT	
	No. of TAT FS Cases	% Q061	No. of TAT FS Cases	% Q061	% ↑ or ↓ No. of Cases	% ↑ or ↓ Q061
<b>Total CC Sites</b>	<b>1065</b>	<b>77.3%</b>	<b>960</b>	<b>71.9%</b>	<b>-9.9%</b>	<b>-5.4%</b>
CC1	84	72.6%	110	68.2%	31.0%	-4.4%
CC2	104	59.6%	110	32.7%	5.8%	-26.9%
CC3	92	84.8%	63	82.5%	-31.5%	-2.2%
CC4	45	82.2%	44	75.0%	-2.2%	-7.2%
CC5	597	76.6%	538	94.1%	-9.9%	17.5%
CC6	13	69.2%	7	57.1%	-46.2%	-12.1%
CC7	129	73.6%	87	65.5%	-32.6%	-8.1%
CC8	1	100.0%	1	100.0%	0.0%	0.0%
<b>Total GC Sites</b>	<b>199</b>	<b>84.5%</b>	<b>134</b>	<b>68.4%</b>	<b>-32.7%</b>	<b>-16.1%</b>
GC3	-	-	-	-	-	-
GC4	-	-	-	-	-	-
GC7	12	100.0%	16	100.0%	33.3%	0.0%
GC8	18	77.8%	4	100.0%	-77.8%	22.2%
GC9	29	86.2%	25	76.0%	-13.8%	-10.2%
GC10	17	88.2%	8	100.0%	-52.9%	11.8%
GC11	-	-	-	-	-	-
GC12	5	100.0%	3	33.3%	-40.0%	-66.7%
GC13	5	80.0%	6	66.7%	20.0%	-13.3%
GC15	12	100.0%	3	66.7%	-75.0%	-33.3%
GC16	-	-	-	-	-	-
GC19	-	-	-	-	-	-
GC20	-	-	-	-	-	-
GC23	-	-	1	0.0%	-	-
GC24	22	77.3%	23	87.0%	4.5%	9.7%
GC25	3	33.3%	1	0.0%	-66.7%	-33.3%
GC27	-	-	-	-	-	-
GC28	15	100.0%	9	100.0%	-40.0%	0.0%
GC30	-	-	-	-	-	-
GC45	61	86.9%	35	91.4%	-42.6%	4.5%
<b>All Sites</b>	<b>1264</b>	<b>80.9%</b>	<b>1094</b>	<b>70.2%</b>	<b>-13.4%</b>	<b>-10.8%</b>





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