National Histopathology Quality Improvement Programme

9th National Data Report

1 JAN - 31 DEC 2021

FACULTY OF PATHOLOGY
ROYAL COLLEGE OF PHYSICIANS OF IRELAND

HSE

ROYAL COLLEGE OF PHYSICIANS OF IRELAND

EXECUTIVE SUMMARY

The National Histopathology Quality Improvement (NHQI) Programme is proud to present the ninth annual national data report. This report is presents data collected from the National Quality Assurance and Improvement System (NQAIS-Histopathology), from 1 January to 31 December 2021 from 28 laboratories, both public and private.

Between 2020 and 2021, the volume of cases nationally increased by 19.7% (79,823 cases), specimens increased by 23.9% (166,866 specimens) and blocks increased by 19.8% (234,187 blocks). An increase of 61.1% can be seen for the national volume of cases requiring immunohistochemical (IHC) stains between 2016 and 2021, an increase of 19.8% in the number of All Stains cases can also be seen for the same time period reflecting the increasing complexity of histology specimens and patient case mix. As laboratories attempt to re-establish workload to pre-pandemic levels, they are faced with significant challenges, in addition to resourcing issues due to ongoing high levels of COVID-19 in the community.

The national data for all sites combined are well above targets for the peer review QI activities of intradepartmental consultation (IDC), multidisciplinary team (MDT) review and addendum reporting for histology, cytology and where relevant, autopsy cases.

Since the outset of the NHQI programme, participating laboratories have dedicated considerable time and effort to the accurate recording of data, with high data completeness rates maintained from the start. Over the years considerable improvements have been achieved by local laboratories in the coding of turnaround times (TAT), however more accurate coding for addendum reporting and frozen section cases has been expressly requested by the working group in the last two reports. The NHQI working group recommends local audits are carried out to ensure cases are recorded and uploaded to NQAIS-Histopathology appropriately particularly for amended/corrected and supplementary report codes. A zero rate of amended/corrected reports should trigger an audit of supplementary reports, as it is highly unlikely that a department would have no corrected or amended reports.

Laboratory services are dependent on IT infrastructure, for the tracking of cases through the laboratory, ordering of tests and issuing of reports. As a result, the cyber attack had a significant impact on the delivery of laboratory services and on TATs. The national TAT averages for all sites combined for small biopsy specimens did not meet the target of 80% of cases completed by day 5 or less, similar to 2020 findings. A split target of 80% cases completed by day 7 and 100% cases completed by day 10 was applied to 2021 data for GI endoscopic biopsy cases. The data reveal that Cancer Centres (CCs) were below both targets in 2021, General Centres (GCs) met the 7-day target but were significantly below the 10-day target. The national average for non-biopsy cancer resection cases TAT for all sites combined has been below the target of 80% of cases completed by day 7 or less in both 2020 and 2021. The combined average TAT for all sites for non-biopsy other cases was also below target in 2020 and 2021. The national average for non-gynaecological cytology FNA decreased by 6.2% in 2021 falling below target and the average for all sites for non-gynaecological cytology exfoliative TAT has remained above the target of 80% of cases completed by day 5 or less, as in 2020. The NHQI working group are recommending that each department monitor TATs and investigate the root cause of challenges faced in achieving TAT targets.

All GCs and CCs have consistently reached and exceeded the target of 97% for Frozen Section Concordance Rate in 2020 and 2021.The national averages for all sites combined, and GCs specifically, were outside the target range for FS deferral rates. Deferral rates should be considered in terms of the numbers of cases of FS concordance cases as in some sites these numbers are very low leading to higher levels of deferral rates being reported. The data illustrate that all sites have faced difficulty in achieving the FS TAT target of 85% cases complete in 20 minutes in both 2020 and 2021.

Year on year, workload continues to increase in histopathology laboratories across the country, reflecting the rise in specimen volumes, and complexity of cases. Laboratories require adequate resourcing to continue to provide a high-quality service. The ongoing pressures on TATs, as reflected in this report and in previous years highlight a huge resourcing issue regarding both scientist and medical staffing.

KEY RECOMMENDATIONS AND OBSERVATIONS

DATA QUALITY

1 Sites are strongly encouraged by the NHQI working group to ensure local coding practices are consistent. Sites are also asked to consult the QI Guidelines where they can find a detailed table on all P and Q codes.

WORKLOAD

2 Data from 2021 shows a return to pre-pandemic figures of histology cases with increases in specimens, blocks and immunohistochemistry.

3 The nationwide reach of the NHQI programme to public and private laboratories ensures a comprehensive and accurate dataset.

4 The increased figures in all units should be interpreted in tandem with the poor turnaround times (TATs), reflecting the shortage of medical laboratory scientists nationally.

INTRADEPARTMENTAL CONSULTATION

5 The NHQI working group continue to strongly encourage the ongoing monitoring of IDC to assist in the achievement of targets.

6 The NHQI working group recommend that local audit and root cause analysis be used in centres that are reporting % IDC below target and in particular for those with 'zero' IDC figures to establish the reasons for this.

7 The absence of data on autopsy IDC from many General Centres (GCs) and Cancer Centres (CCs) and the apparent decrease in % IDC for Autopsy cases suggests that a review of quality indicators in autopsy practice may be timely.

MULTIDISCIPLINARY TEAM REVIEW (MDT)

8 The high volume of both GCs and CCs recording 100% MDT Agreement may indicate the need to look at re-evaluating the status of MDT Review as an actively managed KQI. In the meantime, the NHQI working group recommend that current standards continue to be met and monitored.

9 The NHQI working group recommend that centres familiarise themselves with the further refinement and guidance on the use of this code in the updated guidelines issued in 2021 (Version 7.0).

10 The NHQI working group also recommend that centres review their process for capturing the Q017 code particularly if their percentage of cases recorded as MDT reviewed is low.

ADDENDUM REPORTS

11 The NHQI working group recommend local audits are carried out to ensure that amended/corrected and supplementary report codes are being applied correctly. Specifically, zero rates of amended/corrected reports should trigger an audit of supplementary reports, as it is highly unlikely that a department would have no corrected or amended reports.

12 It is recommended that cases giving rise to amended reports are reviewed intra-departmentally, so that learning can be gleaned from these cases.

13 In the event that patient harm may have occurred, reporting to the local hospital quality management/incident management team is required as per local and national protocols.

TURNAROUND TIME (TAT)

14 As the NHQI data are a useful tool, the NHQI working group recommend that each department monitors TATs and investigates the root cause of challenges faced in achieving TAT targets.

15 The NHQI working group suggest sites carry out a root cause analysis (RCA) project to assess local processes in relation to P01 TAT supported by RCPI programme management.

FROZEN SECTION (FS)

16 The NHQI 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 remain a challenge. Achieving FS Deferral Rate targets is also challenging, in particular in centres with low numbers of FS cases.

9th NATIONAL DATA REPORT
KEY FINDINGS

CHAPTER 4: WORKLOAD

1. Between 2020 and 2021, the volume of cases nationally increased by 19.7% (79,823 cases), specimens increased by 23.9%% (166,866 specimens) and blocks increased by 19.8% (234,187 blocks).
2. An increase of 61.1% can be seen for the national volume of cases requiring immunohistochemical (IHC) stains between 2016 and 2020, an increase of 19.8% in the number of All Stains cases can also be seen for the same time period, perhaps reflecting the increased complexity of histology specimens and patient case mix.
3. The increased figures in all units should be interpreted in tandem with the poor turnaround times, reflecting the shortage of histology scientists nationally.

CHAPTER 5: INTRADEPARTMENTAL CONSULTATION (IDC)

4. Data from 2020 and 2021 reveal that all sites combined 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.
5. In both 2020 and 2021 a combined average for All Sites reveals they have exceeded the achievable target of 9% for Non-Gynaecological Cytology FNA (P06).

CHAPTER 6: MULTIDISCIPLINARY TEAM REVIEW (MDT)

6. MDT review represents a significant workload with 11.3% (54,424) of all cases presented at MDT meetings in 2021.
7. The data reveal that the national average of all GCs and CCs, in their respective groups and combined, have been consistently above the target of greater than or equal to 95% MDT Agreement in both 2020 and 2021 for histology (P01 - P04) and cytology (P06, P07) cases.

CHAPTER 7: ADDENDUM REPORTS

8. In 2021, the national average for combined Amended/Corrected reporting for all sites was below the recommended targets of less than or equal to 1% for both histology and cytology cases, at 0.3% for histology cases (P01 – P04) and 0.2% for all cytology cases (P05 - P09), and with no change from 2020 figures.

CHAPTER 8: TURNAROUND TIME (TAT)

9. The national average for GCs for or Small Biopsy (P01) in 2021 was 70%, 10% below the target of 80% cases completed in 5 days or less and a 9.9% decrease from 2020. CCs recorded a national average of 57.1% in 2021, a decrease of 9.6% from 2020.

10. Eleven out of the 17 GCs that provided data for GI Endoscopic Biopsy TAT met the 80% cases completed by day 7 target, no sites reached 100% cases complete by day 10, however two sites were above 99%. Two out of the eight CCs reached the 80% completed by day 7 target, no sites achieved 100% cases complete by day 10, but one site achieved over 99% cases complete.

11. In 2021, the combined average for all sites for Non-Biopsy Cancer Resection (P03) TAT was 68.8% 11.2% below target of 80% cases completed in 7 days or less.

12. The national average for Non-Gynaecological Cytology FNA (P06) TAT for all sites combined was 77.5% in 2021, a 6.2% decrease from 2020 figures. This is the second year that GCs have not met the target of 80% of cases completed in 5 days of less.

13. The national average for Non-Gynaecological Cytology FNA (P06) had been above target in 2020 but fell below the target of 80% of cases completed in 5 days or less at 77.5% in 2021.

CHAPTER 9: FROZEN SECTION (FS)

14. All GCs and CCs combined have consistently reached and exceeded the target of 97% for FS Concordance Rate in 2020 and 2021.

15. The national average of all sites combined reveal a high level of FS Deferral at 8.2%, which is outside the target range of less than or equal to 5% and greater than 1% and a 3.6% decrease from 2020. The majority of FS Concordance are recorded in CCs accounting for 82% of all these cases. This provides context when reviewing the data and particularly in relation to the low numbers of FS cases performed in GCs (12%).

16. The national average for FS TAT for all sites combined in 2021 was 67.6%, a 2.6% decrease from 2020 and below the target of 85% cases complete within 20 minutes.