

**West of Scotland Cancer Network
Gynaecological Cancer
Managed Clinical Network**



Audit Report

Ovarian Cancer Quality Performance Indicators

**Clinical Audit Data:
01 October 2021 to 30 September 2022**

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Ovarian Cancer Quality Performance Indicators

Patients Diagnosed: October 2021 - September 2022

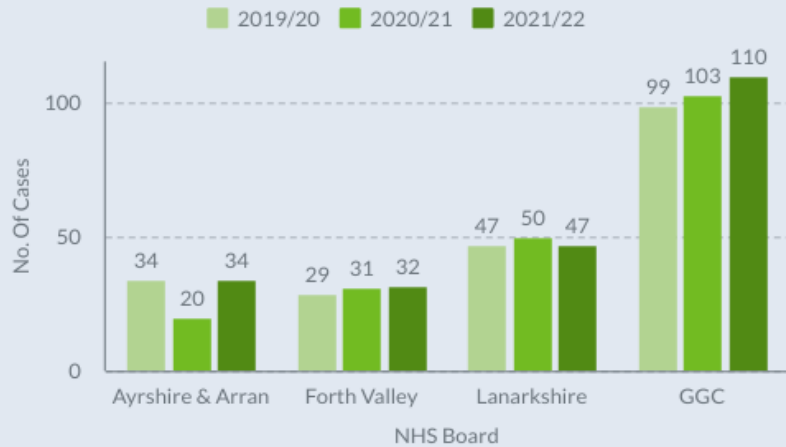
Number Diagnosed 2021/22: **223**

Case Ascertainment: **84.8%**

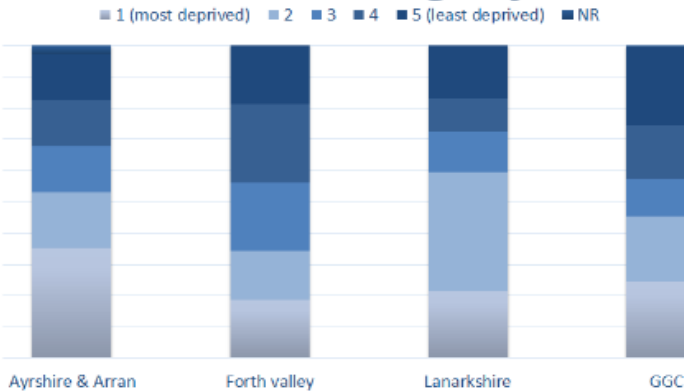
As measured against PHS ACaDMe comparative data:

Median Age at Diagnosis: **66**

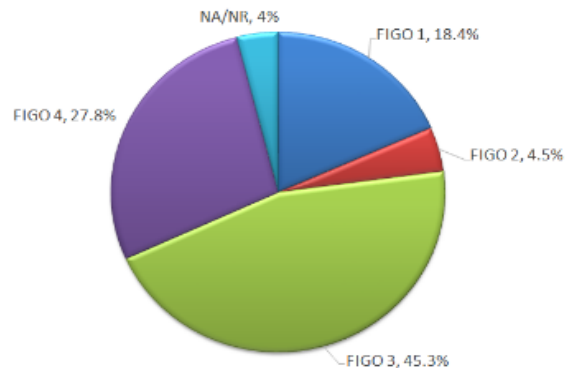
Where are patients diagnosed



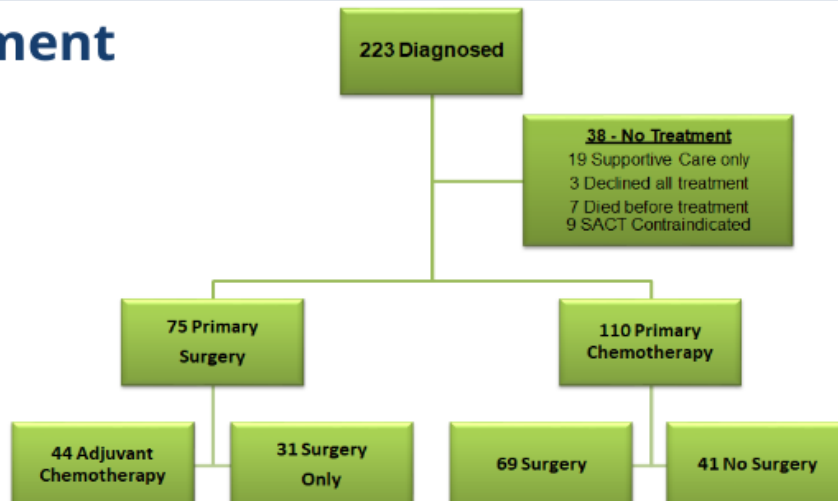
SIMD Category



FIGO Stage



Treatment



Executive Summary

This report contains an assessment of the performance of West of Scotland (WoS) gynaecological cancer services using clinical audit data relating to patients diagnosed with ovarian cancer between 1st October 2021 and 30th September 2022.

Cancer audit has underpinned much of the regional development and service improvement work of the MCN and the regular reporting of activity and performance have been fundamental in assuring the quality of care delivered across the region. The well established national Quality Performance Indicator (QPI) programme has helped to drive continuous improvement and ensure equity of care for patients across Scotland.

Overall WoS results are reassuring and demonstrate the high standard of care provided for ovarian cancer patients across the West of Scotland. Targets relating to CT or MRI scan prior to commencing treatment, histological diagnosis prior to starting chemotherapy, no residual disease following delayed surgery for advanced disease and surgical mortality were all consistently met across the region, with no deaths reported within 30 days of surgery. Encouragingly, in the majority of targets not met improvements can be seen over the last year including MDT discussion (QPI 3), patients with early stage disease having an adequate staging operation, (QPI 4) and patients undergoing genetic testing (QPI 11).

Where QPI targets were not met, the majority of NHS Boards have provided detailed commentary. In the main these indicate valid clinical reasons or that, in some cases, patient choice or co-morbidities have influenced patient management.

There are a number of actions required as a consequence of this assessment of performance against the agreed criteria.

Action Required:

QPI 6 - Histopathology reports are complete and support clinical decision-making

- MCN clinical lead to discuss with Pathology team the importance of including FIGO on histopathological reports.

QPI 9 – First-line chemotherapy

- Local leads to further review cases to determine if unfit patients were reviewed by an oncologist / experienced clinician (i.e. local leads) and if there was a delay from diagnosis to MDT discussion.
- NHS Forth Valley should review local processes to ensure audit data is reviewed prior to final data submissions to provide assurance around local data accuracy ahead of regional analysis.

QPI 10 – Surgery for Advanced Disease

- Local leads to further explore those patients not meeting the QPI criteria to determine if there have been any delays in their diagnostic pathways and provide written feedback to the MCN.

A summary of actions has been included within the Action Plan Report accompanying this report and templates have been provided to Boards.

Completed Action Plans should be returned to WoSCAN in a timely manner to allow the plans to be reviewed at the Regional Cancer Oversight Group.

Ovarian Cancer QPI Performance Summary Report

| | |
|-------------------------|------------------------|
| Clinical Leads: | |
| Date: | |
| Audit Reporting Period: | 1/10/2019 – 30/09/2022 |

| Key | |
|-----|--|
| | Above Target Result |
| | Below Target Result |
| - | No comparable measure for previous years |

| Quality Performance Indicator (QPI) | Performance by NHS Board | | | | | | | | |
|--|--------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | Target | Year | AA | FV | Lan | NG | SG | Clyde | WoS |
| QPI 2 - Proportion of patients with epithelial ovarian cancer having a CT scan or MRI of the abdomen and pelvis performed to exclude the presence of metastatic disease prior to starting treatment. | 95% | 2021/22 | 100% (32/32) | 100% (31/31) | 100% (47/47) | 100% (46/46) | 100% (35/35) | 100% (25/25) | 100% (216/216) |
| | | 2020/21 | 100% | 100% | 98% | 100% | 100% | 100% | 99.5% |
| | | 2019/20 | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| QPI 3 - Proportion of patients with epithelial ovarian cancer who are discussed at a MDT meeting before definitive treatment. | 95% | 2021/22 | 94% (30/32) | 96% (24/25) | 98% (43/44) | 100% (45/45) | 97% (33/34) | 92% (23/25) | 97% (198/205) |
| | | 2020/21 | 94% | 86% | 92% | 98% | 96% | 92% | 93% |
| | | 2019/20 | 97% | 97% | 96% | 95% | 94% | 94% | 95% |
| QPI 4 - Proportion of patients with early stage epithelial ovarian cancer (FIGO Stage 1) undergoing primary surgery for ovarian cancer, having their stage of disease adequately assessed, (TAH, BSO, Omentectomy and washings), to determine suitability for adjuvant therapies. | 90% | 2021/22 | - | 89% (8/9) | 80% (4/5) | 100% (15/15) | n/a | - | 94% (32/34) |
| | | 2020/21 | 100% | 33% | 75% | 100% | 100% | 0% | 87% |
| | | 2019/20 | 100% | 67% | 100% | 100% | 100% | n/a | 97% |

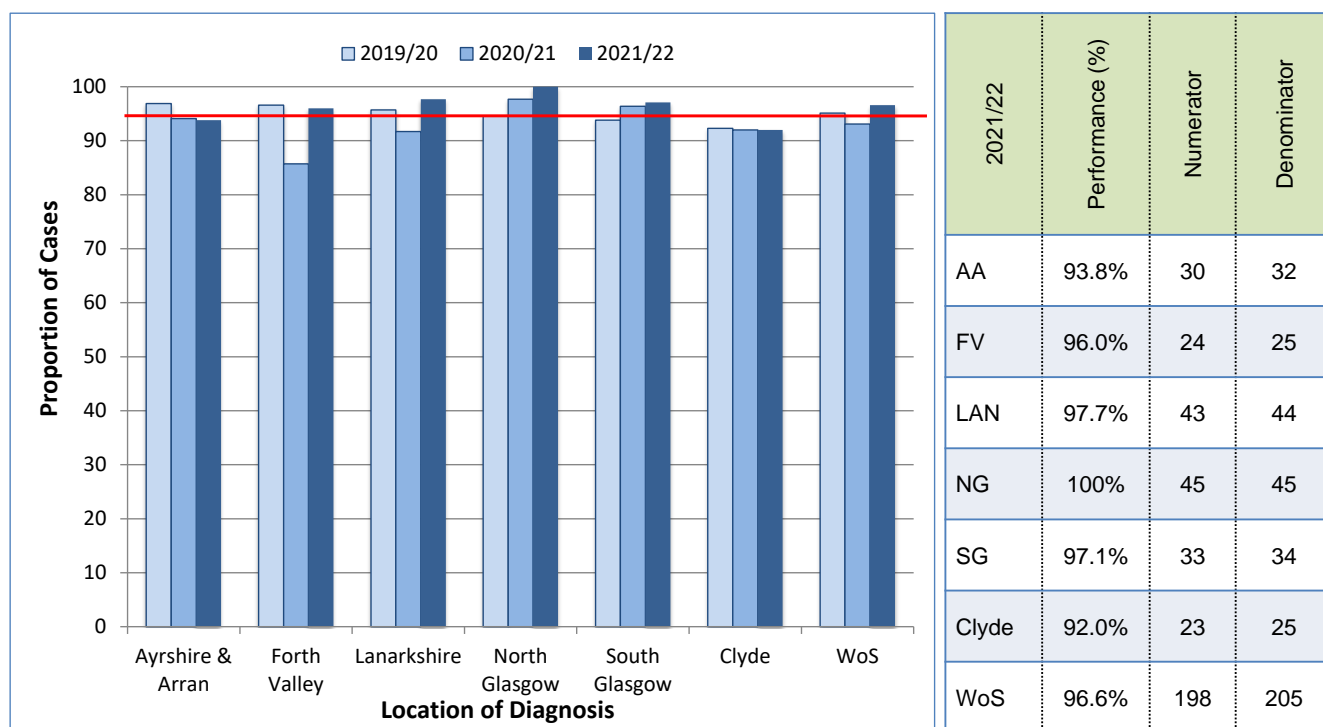
| Quality Performance Indicator (QPI) | Performance by NHS Board | | | | | | | | |
|--|--------------------------|---------|--------------|--------------|-------------|--------------|--------------|-------------|---------------|
| | Target | Year | AA | FV | Lan | NG | SG | Clyde | WoS |
| QPI 6: Proportion of patients with epithelial ovarian cancer undergoing pelvic clearance surgery having a complete pathology report as defined by the Royal College of Pathologists. | 95% | 2021/22 | 100% (7/7) | 100% (9/9) | - | 90% (93/103) | - | - | 91% (116/127) |
| | | 2020/21 | 100% | 0% | 80% | 92% | 80% | 100% | 90% |
| | 90% | 2019/20 | 100% | 50% | 100% | 97% | 100% | 100% | 97% |
| QPI 7 – Proportion of patients with epithelial ovarian cancer having a histological diagnosis obtained by percutaneous image-guided biopsy or laparoscopy prior to starting chemotherapy. | 90% | 2021/22 | 100% (19/19) | 100% (13/13) | 91% (20/22) | 96% (23/24) | 100% (20/20) | 93% (13/14) | 96% (108/112) |
| | | 2020/21 | 100% | 92% | 95% | 100% | 95% | 100% | 97% |
| | 80% | 2019/20 | 100% | 93% | 96% | 100% | 91% | 93% | 96% |
| QPI 9 - Proportion of patients with epithelial ovarian cancer who receive chemotherapy treatment with a platinum based compound. | 90% | 2021/22 | 86% (25/29) | 56% (14/25) | 73% (27/37) | 95% (39/41) | 79% (23/29) | 92% (22/24) | 81% (150/185) |
| | | 2020/21 | 80% | 62% | 76% | 88% | 92% | 81% | 80% |
| | | 2019/20 | | | | | | | |
| QPI 10(i) - Proportion of patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) undergoing surgery. | 65% | 2021/22 | 54% (14/26) | 45% (9/20) | 56% (18/32) | 71% (29/41) | 61% (20/33) | 62% (13/21) | 60% (103/173) |
| | | 2020/21 | 63% | 54% | 63% | 61% | 52% | 53% | 58% |
| | 60% | 2019/20 | 57% | 71% | 65% | 70% | 52% | 60% | 63% |
| QPI 10(ii) - Proportion of patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) undergoing surgery where no residual disease is achieved. | 60% | 2021/22 | - | n/a | n/a | 65% (20/31) | - | - | 63% (22/35) |
| | | 2020/21 | n/a | 100% | 100% | 81% | 100% | n/a | 82% |
| | 50% | 2019/20 | n/a | n/a | n/a | 74% | 100% | 67% | 74% |

| Quality Performance Indicator (QPI) | Performance by NHS Board | | | | | | | | |
|---|--------------------------|---------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|
| | Target | Year | AA | FV | Lan | NG | SG | Clyde | WoS |
| QPI 10(iii) - Proportion of patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) undergoing delayed primary surgery after chemotherapy where no residual disease is achieved. | 60% | 2021/22 | n/a | n/a | n/a | 73% (33/45) | n/a | n/a | 73% (33/45) |
| | | 2020/21 | n/a | n/a | n/a | 68% | n/a | n/a | 68% |
| | 50% | 2019/20 | n/a | n/a | n/a | 65% | n/a | n/a | 65% |
| QPI 11 - Proportion of patients with epithelial ovarian cancer who undergo genetic testing. | 90% | 2021/22 | 90% (26/29) | 86% (18/21) | 84% (31/37) | 90% (35/39) | 84% (26/31) | 88% (22/25) | 87% (158/182) |
| | | 2020/21 | 77% | 81% | 67% | 91% | 96% | 91% | 83% |
| | | 2019/20 | 89% | 88% | 88% | 94% | 77% | 93% | 88% |
| QPI 12(i) - Proportion of patients with epithelial ovarian cancer who die within 30 days of surgery. | <5% | 2021/22 | 0% (0/8) | 0% (0/10) | 0% (0/5) | 0% (0/112) | - | - | 0% (0/141) |
| | | 2020/21 | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| | | 2019/20 | 0% | 0% | 0% | 0% | 0% | 0% | 0% |

QPI 3 - Treatment planned and reviewed at a multi-disciplinary team meeting

| | |
|---------------------|---|
| QPI Title: | Patients with epithelial ovarian cancer should be discussed by a MDT prior to definitive treatment. |
| Numerator: | Number of patients with epithelial ovarian cancer discussed at the MDT before definitive treatment. |
| Denominator: | All patients with epithelial ovarian cancer |
| Exclusions: | Patients who died before first treatment. Patients with Risk of Malignancy Index <200 |
| Target: | 95% |

Figure 1: Proportion of patients with epithelial ovarian cancer who are discussed at a MDT meeting before definitive treatment.



The vast majority of patients with ovarian cancer were discussed at MDT prior to definitive treatment, with the target being met at a regional level. NHS Ayrshire & Arran and NHSGGC Clyde sector narrowly missed the 95% target. All cases not meeting the target were reviewed and reasons provided included; patients requiring emergency treatment prior to MDT discussion and patients where cancer was found after risk reduction surgery. It is recognised that 2.3% of patients undergoing risk reducing bilateral salpingo-oophorectomy will have an occult tubo-ovarian cancer (SIGN 135 Management of epithelial ovarian cancer. November 2013. Revised 2018).

Location of Surgery

QPIs 4, 6, 10(ii) and 10(iii) are reported by location of surgery rather than by location of diagnosis. Surgical management of ovarian cancer is provided by gynaecological oncologists working in the regional specialist surgical centre in Glasgow Royal Infirmary (represented by North Glasgow on charts). Some patients with an RMI of less than 200, i.e. cancer is not suspected pre-operatively, may receive surgery in their local hospital but are subsequently diagnosed with epithelial ovarian cancer when post-operative pathology is available.

In Year 2021/22 144 patients (64.5%) underwent surgery. Hospital of surgery is noted below.

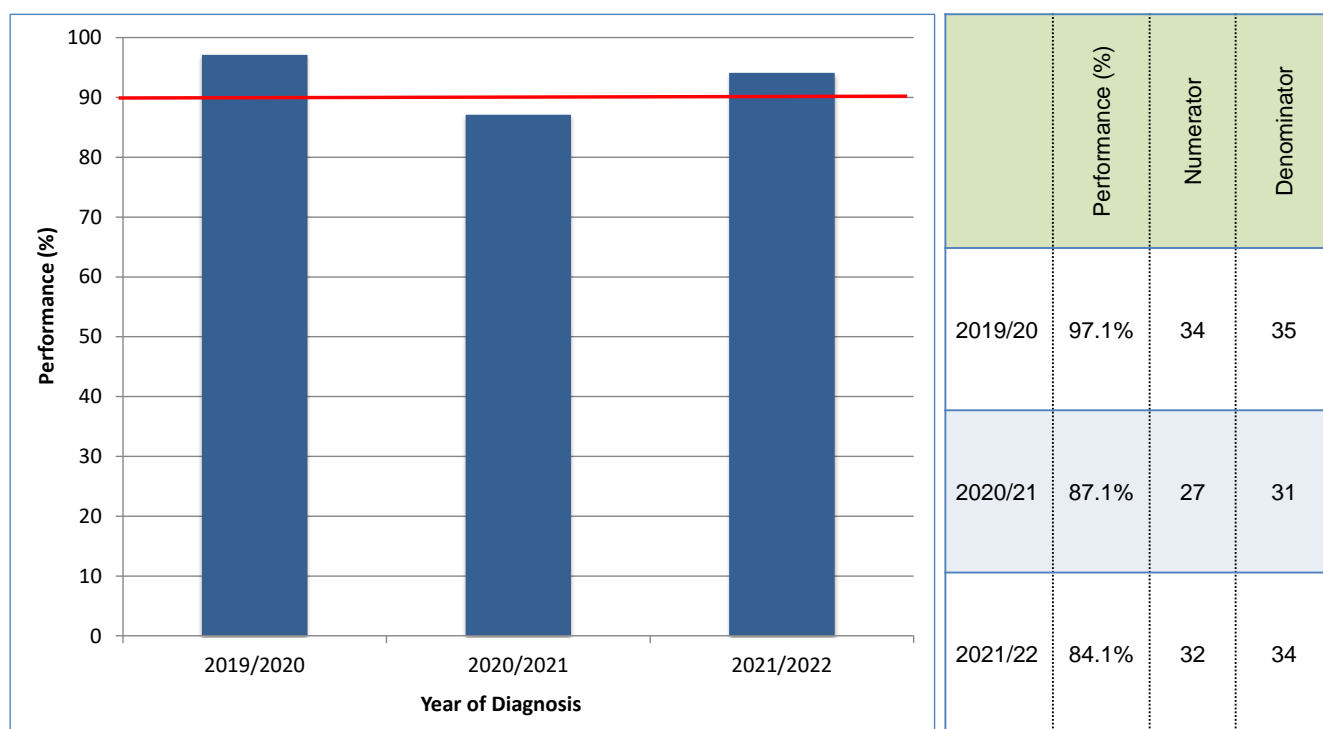
- 110 cases in regional specialist centre (GRI)
- 8 cases in NHSGGC (not specialist surgical centre)
- 10 cases in NHS Forth Valley
- 8 cases in NHS Ayrshire & Arran
- 5 cases in NHS Lanarkshire
- 3 cases operated on outwith WoS

Please note that the number of operations carried out in local hospitals is small therefore comparisons of percentages should be made with caution.

QPI 4 - Patients with early stage disease have an adequate staging operation

| | |
|---------------------|---|
| QPI Title: | Patients undergoing surgery for early stage epithelial ovarian cancer (FIGO Stage 1) have an adequate staging operation which includes Total Abdominal Hysterectomy (TAH), Bilateral Salpingo-Oophorectomy (BSO), omentectomy and washings. |
| Numerator: | Number of early stage (FIGO Stage 1) epithelial ovarian cancer patients having primary surgery involving TAH, BSO, omentectomy and washings. |
| Denominator: | All early stage (FIGO Stage 1) epithelial ovarian cancer patients undergoing primary surgery. |
| Exclusions: | Patients having fertility conserving surgery. Patients presenting for emergency surgery |
| Target: | 90% |

Figure 2: Proportion of early stage (FIGO Stage 1) epithelial ovarian cancer patients having primary surgery involving TAH, BSO, omentectomy and washings.



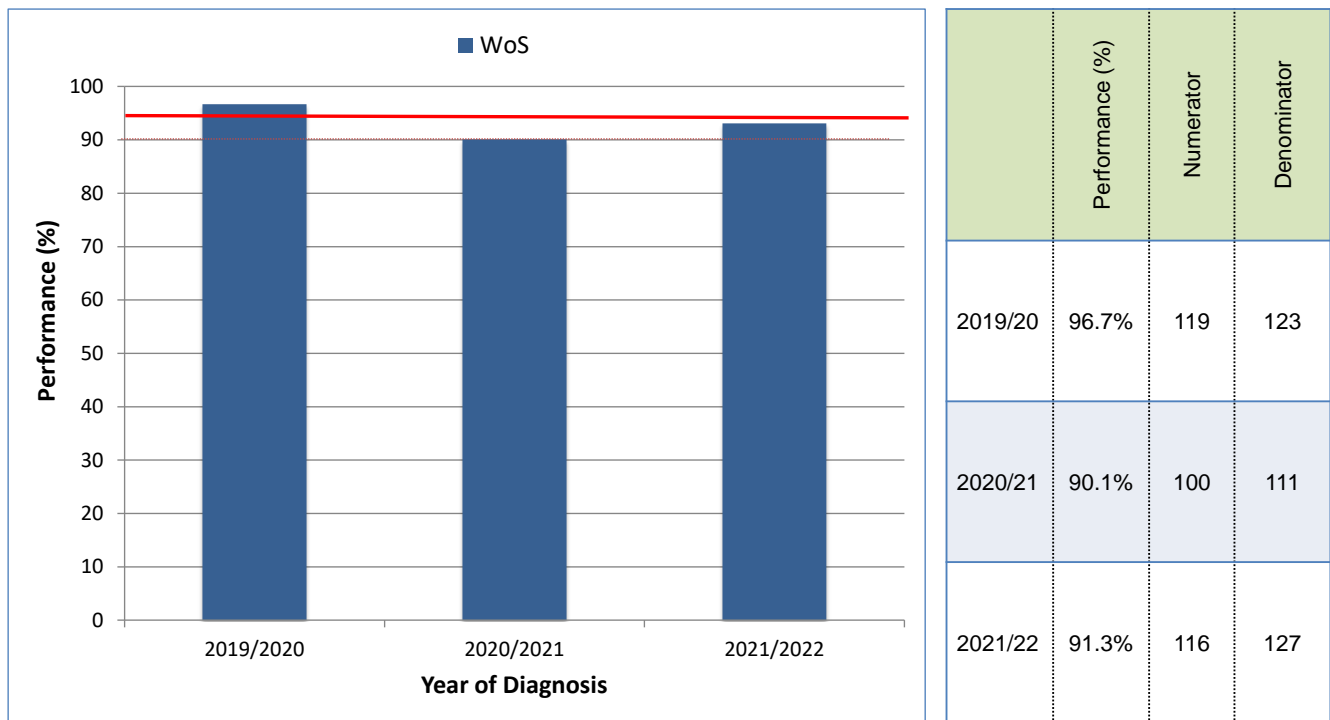
Numbers of patients included within this QPI are small which can have a considerable effect on overall proportions and making comparisons between NHS Boards difficult.

Performance against this measure has improved at regional level compared to 2020/21. NHS Forth Valley and NHS Lanarkshire did not meet the target however this relates to two patients. Review of cases indicated that one patient had a sub-total hysterectomy. A further patient had surgery for a presumed benign ovarian cyst. When cancer was confirmed histologically they then had a complete staging operation.

QPI 6 - Histopathology reports are complete and support clinical decision-making

| | |
|---------------------|--|
| QPI Title: | Histopathology reports relating to pelvic clearance surgery for patients with epithelial ovarian cancer contain all necessary information to inform treatment decision making. |
| Numerator: | Number of patients with epithelial ovarian cancer undergoing definitive cytoreductive surgery who have a complete pathology report that contains all data items as defined by the Royal College of Pathologists. |
| Denominator: | All patients with epithelial ovarian cancer undergoing definitive cytoreductive surgery. |
| Exclusions: | No Exclusions. |
| Target: | 95% |

Figure 3: Proportion of patients with epithelial ovarian cancer undergoing pelvic clearance surgery having a complete pathology report as defined by the Royal College of Pathologists



Due to the majority of operations taking place in the centre (North Glasgow) the numbers for other individual units are low therefore Figure 7 shows WoS yearly results. NHSGGC has a centralised Pathology department within the Queen Elizabeth University Hospital.

NHSGGC reviewed the small number of cases not meeting the QPI and reported that FIGO staging was not included in the histopathology report for these cases.

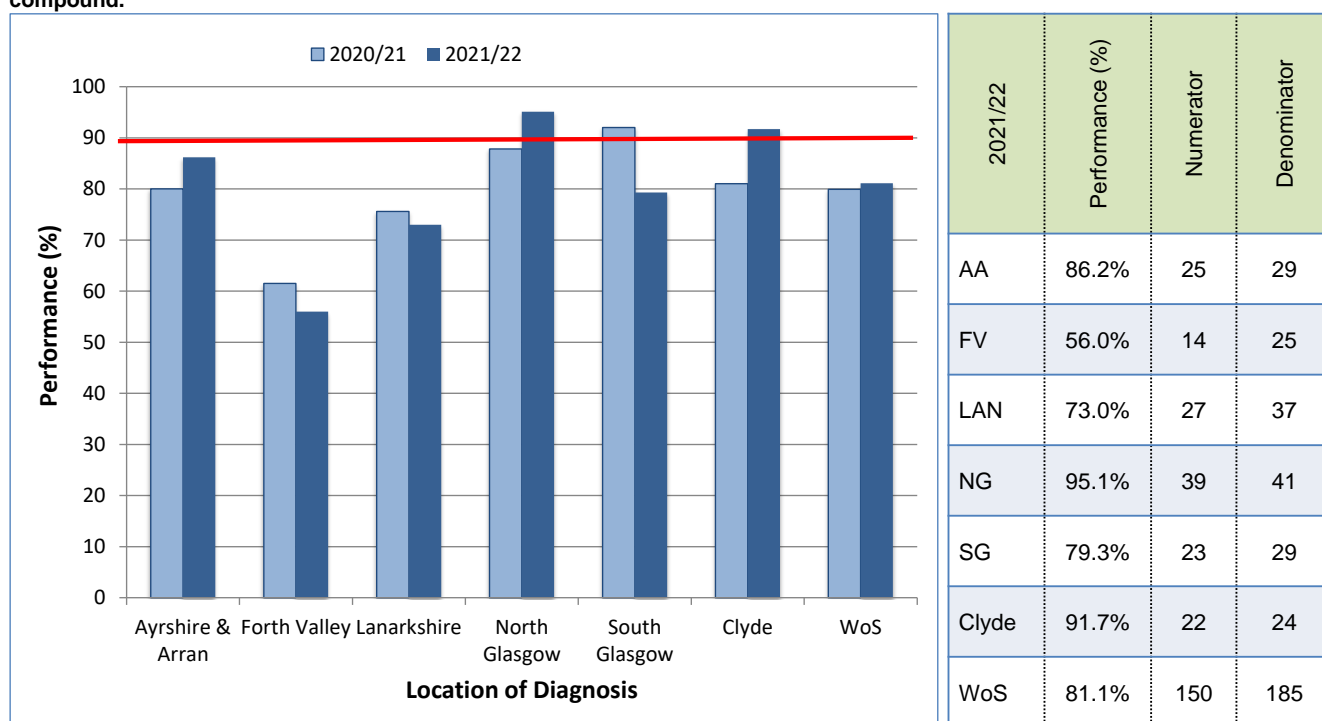
Action required:

- MCN clinical lead to discuss with Pathology team the importance of including FIGO on histopathological reports.

QPI 9 – First-line chemotherapy

| | |
|---------------------|--|
| QPI 9: | Chemotherapy treatment of epithelial ovarian cancer should include a platinum based compound |
| Numerator: | Number of patients with epithelial ovarian cancer who receive chemotherapy treatment with a platinum-based compound. |
| Denominator: | All patients with epithelial ovarian cancer. |
| Exclusions: | Stage 1-IV Low grade serous ovarian carcinomas, Stage 1A-1C3 G1/G2 Endometrioid ovarian carcinomas, Stage 1A-1C1 clear cell ovarian carcinomas, Mucinous Stage 1A Grade 1 or 2, Mucinous Stage 1B-1C3 Grade 1 or 2, Patients who decline chemotherapy treatment. |
| Target: | 90% |

Figure 4: Proportion of patients with epithelial ovarian cancer who receive chemotherapy treatment with a platinum-based compound.



Overall in the WoS 81% of patients received chemotherapy with a platinum compound with only North Glasgow achieving the 95% target. In the main, factors relating to patient fitness, patients declining treatment and rapid disease progression were cited by Boards as impacting on patient suitability for chemotherapy.

NHS Forth Valley performance was noted as 56% against the 95% target. Following the final analysis the Forth Valley audit team received additional information on 8 patients which meant they would now meet the exclusion criteria and should be removed from the overall number, raising FV performance to 82.4%.

Action Required:

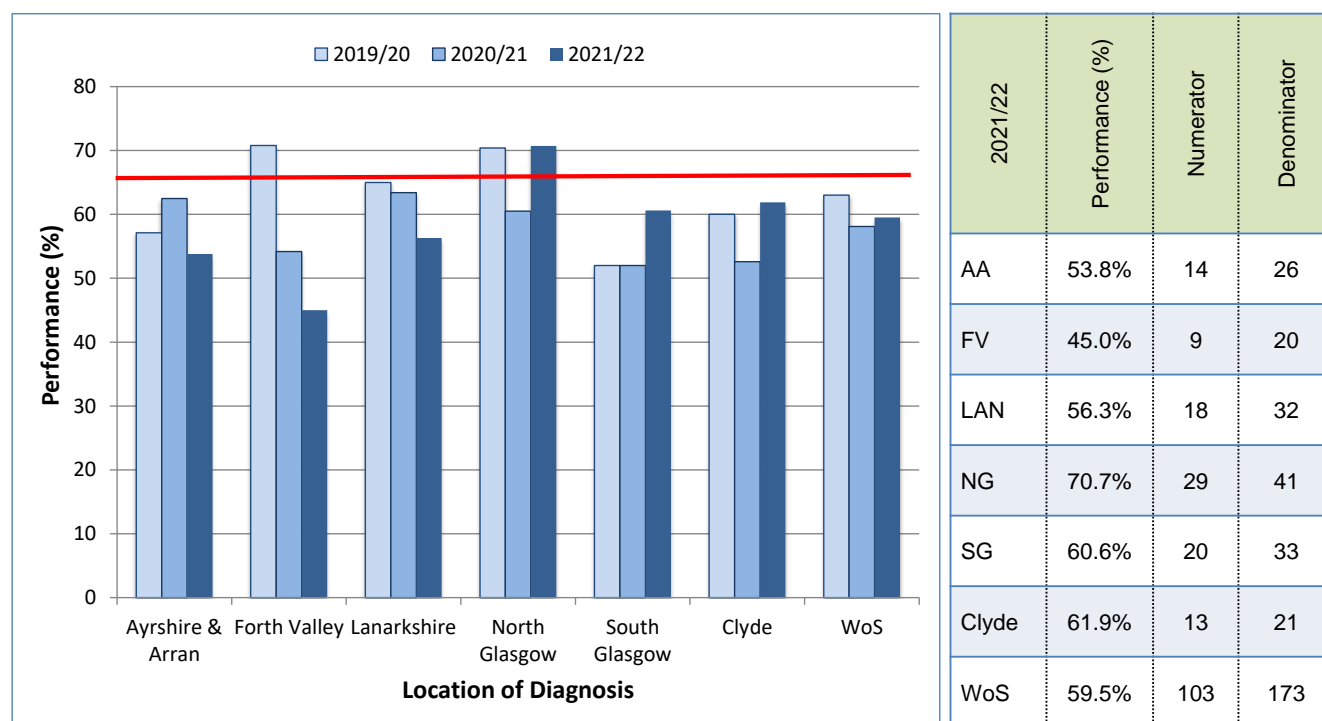
- Local leads to further review cases to determine if unfit patients were reviewed by an oncologist / experienced clinician (i.e. local leads) and if there was a delay from diagnosis to MDT discussion.

- NHS Forth Valley should review local processes to ensure audit data is reviewed prior to final data submissions to provide assurance around local data accuracy ahead of regional analysis.

QPI 10 – Surgery for Advanced Disease

| | |
|---------------------|--|
| QPI 10(i): | Patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) should undergo primary or delayed surgery. |
| Numerator: | Number of patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) undergoing surgery (primary or delayed). |
| Denominator: | All patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) |
| Exclusions: | No Exclusions |
| Target: | 65% |

Figure 5: Proportion of patients with advanced epithelial ovarian cancer (FIGO Stage 2 or higher) undergoing surgery.



All Boards reviewed patients that did not undergo primary or delayed surgery. Feedback included patients that were fit only for best supportive care; patients that had neo-adjuvant chemotherapy and died before surgery, patients that declined chemotherapy or surgery, patients that were not suitable candidates for surgery due to disease progression whilst on 'neoadjuvant' chemotherapy and patients who died before treatment. It was also noted that there was a trend towards later stage at presentation.

It would be useful to review these patients to determine if there has been any delays in their diagnostic pathways. However it is likely that this will be difficult to tease out definitive reasons and is likely to be multi-factorial.

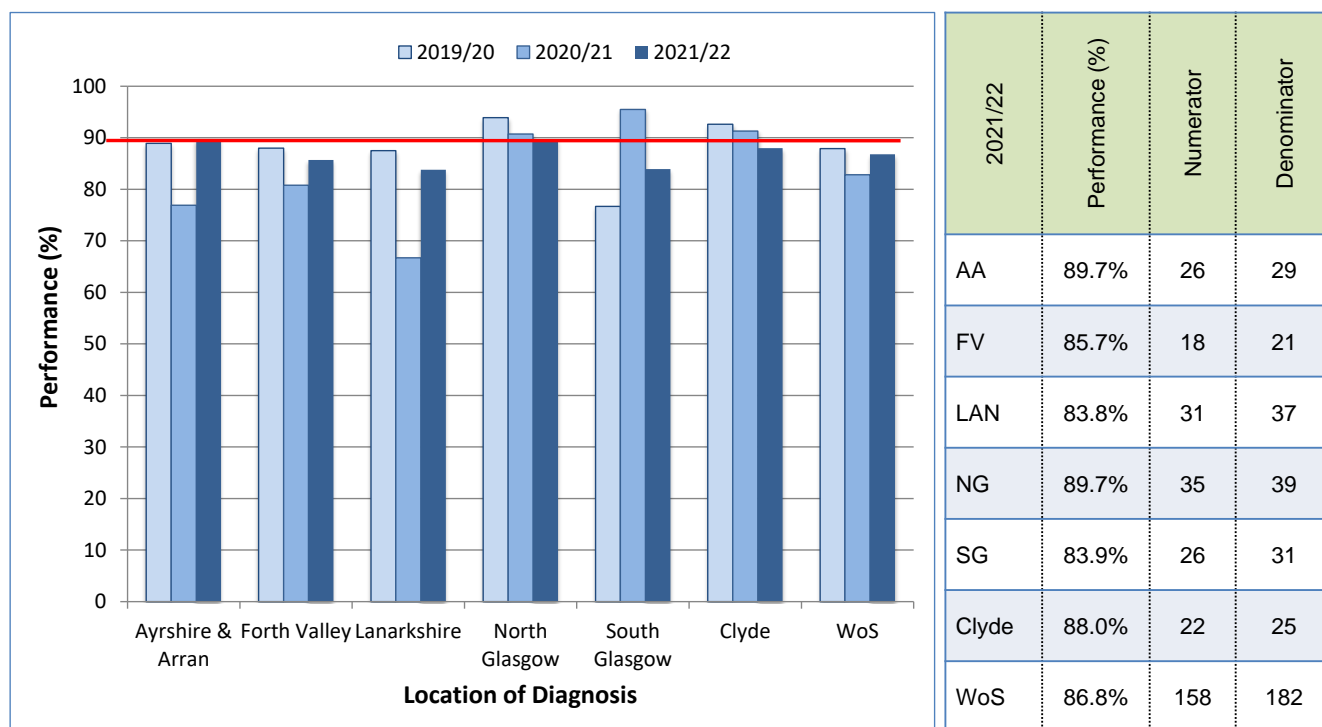
Action Required:

- Local leads to further explore those patients not meeting the QPI criteria to determine if there have been any delays in their diagnostic pathways and provide written feedback to the MCN.

QPI 11: Genetic Testing in Non-Mucinous Epithelial Ovarian Cancer.

| | |
|---------------------|---|
| QPI Title: | Patients with ovarian cancer should have access to genetic testing. |
| Numerator: | Number of patients with non-mucinous epithelial ovarian cancer who undergo genetic testing. |
| Denominator: | All patients with non-mucinous epithelial ovarian cancer. |
| Exclusions: | Patients with low grade serous disease. |
| Target: | 90% |

Figure 6: Proportion of patients with epithelial ovarian cancer who undergo genetic testing.



Board feedback on reasons for patients not undergoing genetic testing included patients that were unfit for testing, patients who declined genetic testing and cases where there was rapid patient decline. There were also a number of cases where there was no histological or cytological diagnosis and therefore genetic testing was not feasible.

It should be noted that there is ongoing discussion nationally in relation to whether patients who do not have a histological or cytological diagnosis should be included in the denominator of this QPI going forward. This issue will be discussed at the forthcoming formal review of ovarian cancer QPIs.

Appendix 1: Meta Data

| | | | | |
|----------------------|--|--------------------------------------|----------------------------|---------------------------|
| Report Title | Cancer Audit Report: Ovarian Cancer Quality Performance Indicators | | | |
| Time Period | Patients diagnosed between 01 October 2021 to 30 September 2022 | | | |
| Data extraction date | 2200 hrs on 26 th July 2023 | | | |
| Data Quality | Ovarian Cancer | | | |
| | Health Board of diagnosis | (01/10/2021-30/09/2022) Audit | Cancer Reg 2017-21* | Case Ascertainment |
| | Ayrshire & Arran | 34 | 40 | 85.0% |
| | Forth Valley | 32 | 31 | 103.2% |
| | GGC | 110 | 140 | 78.6% |
| | Lanarkshire | 47 | 52 | 90.4% |
| | WoS Total | 223 | 263 | 84.8% |

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