BGCS Call to Action – Response to findings from National Ovarian Cancer Audit Feasibility Pilot

Version 1
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Background

Results from the National Ovarian Cancer Audit feasibility pilot (OCAFP) show that 1 in 4 women with advanced ovarian cancer do not receive any anticancer treatment and only 51% receive standard of care treatment, i.e. the combination of surgery and chemotherapy. [1] The term ovarian cancer is used in a simplified way to include, at least for high grade disease, all ovarian, fallopian tube and peritoneal cancers due to their common pathogenetic and therapeutic pathways. The audit has also demonstrated wide variation in percentage of women receiving anticancer treatment for advanced ovarian cancer across the 19 Cancer Alliances. In response, the BGCS convened a multidisciplinary panel comprising BGCS regional representatives on council, gynaecological oncologists, BGCS subgroup chairs, medical/clinical oncologists, an NCRAS representative as well as representatives from NCRI. Target Ovarian Cancer and Ovarian Cancer Action, charities who co-funded the audit, were included as panel members.

The panel considered carefully presentations on ESGO Quality Performance Indicators (QPI) and Scottish QPI to see how these had worked in practice and what lessons the UK could learn from them. The panel noted that there are significant differences between ESGO and the UK in terms of data collection, which limits direct applicability of ESGO QPIs to practice in the UK: ESGO uses centre-submitted data to assess performance against metrics; UK QPI will be assessed nationally, using routinely collected datasets, on a population basis (so every patient with a diagnosis of ovarian cancer will be included). This key difference means that UK QPI and ESGO QPI are not directly comparable. The panel heard presentations from Manchester and Northern Gynaecological Oncology Centre, confirming that the national audit results were consistent with local data.

The panel agreed that identifying and disseminating best practice will be important. Moreover, the panel agreed that standardisation of decision-making at multidisciplinary team meetings (MDT) and understanding why patients do not receive treatment were key areas for future research.

This document lays out recommendations for practice. Following a consultation exercise, the document will be sent to NHSE for consideration of implementation into practice and commissioning.

Recommendations for practice

1) Actions for MDT leads in cancer centres and units in response to audit findings.

Gynaecological Cancer MDT leads should examine their individual centre/unit data on CancerStats2 platform and compare these with the mean intercept from the OCAFP. Granular local data may shed more insight into actions that are needed at each site. MDT leads are encouraged to communicate a status report and actions plan to Cancer boards/ Cancer Alliances as a response to CancerStats2 data. MDT leads need to be supported by the trust and local cancer teams to perform this task as a priority.

2) Action for Cancer Alliances

Each Cancer Alliance is encouraged to review action plans by Trusts providing cancer services in response to findings from the Audit. For example, the panel noted actions taken by the West Midlands Cancer Alliance in response; the West Midlands Cancer Alliance is implementing supra-regional MDTs building on the infrastructure embedded in the West Midlands through digital pathology and genomics initiatives. This will enable discussion of selected patients from across the Midlands to drive standardisation of decision-making.

3) Actions for Integrated Care Systems

Integrated Care Systems must address the issues around delay in diagnostic pathways with targeted interventions in Clinical Commissioning Groups (CCGs) where data show a greater proportion of patients diagnosed at advanced stage or even with unstaged disease. The BGCS notes ongoing efforts with the NHS Long Term Plan such as rapid diagnostic clinics, diagnostic centres and faster diagnosis standards that will help improve diagnostic pathways for ovarian cancer.

Recommendations for quality performance indicators (QPI) for cancer service providers and trusts at diagnosis

Principles underlying identification of metrics as QPI

The principles underlying the BGCS recommendations were that QPI should be clearly defined, robust and based on evidence derived from the OCAFP, and that the required data would be readily available through routine data collection systems via NCRAS. This was felt to be the most sustainable system for implementing QPI into routine practice. The panel considered

carefully and rejected recommendations for which no clear evidence existed. QPI are aimed both at cancer service providers and trusts providing diagnostic services.

Process

These QPI have been reviewed by NCRAS for feasibility of data capture, robustness of evaluation and reporting. Following the consultation period, we will work with relevant commissioning bodies and NHSE to ensure that these QPI are brought into standard care. These QPI will be reviewed regularly and updated as appropriate.

Definitions

The term Ovarian cancer applies to Ovarian, tubal and primary peritoneal cancer. **Definitions of key terms such as diagnosis, anticancer treatment and methodology will be as set out in the OCAFP**. These metrics will be evaluated nationally; although current analysis through OCAFP is presented by cancer alliance. Work is ongoing to enable a more granular analysis by cancer service provider, e.g. presentation of data by trusts at diagnosis rather than alliances

Analysis

All analyses of performance against QPI in advanced stage ovarian cancer (stage 2-4) will be presented maximally adjusted for age/stage/histology type/comorbidity/ deprivation. Thus, cancer alliances with older populations will not be disadvantaged. Further indices for adjustment of performance will include WHO Performance Status and BRCA germline status, if data capture is adequate.

QPI 1

Patients to be discussed at diagnosis at a specialist MDT prior to a decision for treatment. Target 95%

Numerator: Number of patients with ovarian cancer discussed at the MDT prior to a decision for definitive treatment
Denominator: All patients diagnosed with ovarian cancer.
Exclusions: Borderline ovarian tumours.

Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports

Rationale

The OCAFP finds that nearly 1 in 4 women with advanced ovarian cancer do not receive any anti-cancer treatment – worryingly, the percentage of women who do not receive anti-cancer treatment after adjustment for age and deprivation varies significantly across Cancer Alliances. The reasons for this are multifactorial but likely to do with performance status at diagnosis, delay in diagnostic pathways prior to presentation in primary care and in secondary care. Evidence suggests that patients with cancer managed by a multidisciplinary team have a better outcome. There is also evidence that the multidisciplinary management of patients increases their overall satisfaction with their care.

QPI 2

Patients diagnosed with Stage 2-4 or unstaged Ovarian cancer to receive anticancer treatment of any type. Target 80%

Numerator: patients with stage 2-4 or unstaged ovarian cancer receiving anticancer treatment
Denominator: all patients with stage 2-4 or unstaged ovarian cancer diagnosed

Exclusions: Borderline ovarian tumours.

Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports. Data in public domain to be reported adjusted for age and deprivation.

Rationale

The OCAFP shows that on average 73% of women with advanced ovarian cancer receive any anticancer treatment (model adjusted for age/performance status/ deprivation); 8/19 cancer alliances fall below this average, with 5 falling > 2 standard deviations (SD) below the average. The QPI assumes that all patients with Stage 1 disease with very rare exceptions will receive treatment. Paper from the Netherlands confirm that 84% of women with ovarian cancer receive anticancer treatment; aiming for 80% is therefore consistent with international practice.[2]

The BGCS panel accepted that not receiving systemic anticancer treatment will be appropriate for some patients and will be what some patients choose. Nevertheless, we need to ensure that patients will have been adequately informed about all available treatment options and the associated risks and benefits, as well as the consequences of supportive care only, before they reach the decision to decline any anticancer treatment. The short-term mortality report from the OCAFP will focus on understanding the group of patients who died within 1 year of diagnosis and provide useful insight.

Potential solutions: the BGCS encourages cancer services providers to incorporate systematic assessment of frailty so that fitness for surgical and systemic therapy can be assessed in a consistent manner. One factor that may be amenable to improvement within secondary care is ensuring that patients in outlier wards are assessed promptly and reviewed by acute oncology teams to ensure that patient frailty/fitness to receive treatment is assessed appropriately. The BGCS anticipates that this QPI will promote a close working relationship between trust wide acute oncology services (AOS) and Gynaecological oncology services (surgeons, oncologists, CNS team). Efforts to disseminate awareness of ovarian cancer in women who present through other routes of presentation will be vital. Implementing reflex testing of ascites for cytology in pathology labs in newly admitted patients and standardised radiological assessment for disease may be useful. Research into why patients do not receive treatment and patient preferences for treatment is needed.

QPI 3

Patients with Stage 2-4/ unstaged ovarian cancer to receive cytoreductive surgery. Minimum target 55% ; Optimal target 70%.

Numerator: patients receiving primary surgery or delayed debulking surgery after neoadjuvant chemotherapy.
Denominator: all Stage 2-4/unstaged patients with ovarian cancer
Exclusion: Borderline ovarian tumours.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports. Data in public domain to be reported adjusted for age and deprivation.

Rationale

The OCAFP shows that on average only 51% of women with Stage 2-4 and unstaged ovarian cancer receive surgery in England. In 4/19 Cancer Alliances this is >2 SD below average. There is ample evidence that patients who achieve partial response or stable disease after 3 - 4 cycles of chemotherapy benefit from surgery. Post hoc analysis from ICON8 clearly demonstrates that even those patients with stable disease, as per RECIST or GCIG CA125 criteria, seem to benefit from surgical debulking.[3]

In setting this target, the BGCS panel considered the fact that some individual Cancer Centres will have performance well above, as well below, the national mean intercept for Cancer Alliances. Thus, standards set were to promote higher standards, whilst acknowledging the efforts and resources needed in some Cancer Alliances to achieve these targets will be substantial.

Solutions

All patients receiving neoadjuvant chemotherapy (NACT) should have joint surgical gynaecological oncologist and oncologist review, documented in an MDT meeting after 3 - 4 cycles of chemotherapy, prior to decision-making for their further therapeutic steps, i.e. continuing with chemotherapy or proceeding to Delayed Debulking surgery. The BGCS is collaborating with the Association of Colorectal Surgeons of Great Britain and Ireland (ASCGBI) and Association of Surgeons of Great Britain and Ireland (ASGBI) to set out models of joint working and governance. It is anticipated that this document will support cancer centres in delivery of ovarian cancer surgery.

QPI 4a

Patients with ovarian cancer should have recording of FIGO stage, WHO performance status, at diagnosis. Target 95%

For performance status and stage
Numerator: all patients with ovarian cancer discussed at MDT
Denominator: all patients with ovarian cancer
Exclusion: borderline ovarian tumours.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports.

QPI 4b

Patients with ovarian cancer undergoing primary or interval debulking surgery should have recording of residual disease. Target 95%

Numerator: all patients with ovarian cancer undergoing surgery.
Denominator: all patients with ovarian cancer
Exclusion: borderline ovarian tumours.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports.

Rationale

Understanding decision-making and treatment variation across providers is highly enhanced by accurate data regarding residual disease at the time of surgery, performance status and disease distribution to assign surgical stage. Currently only 50% of patients with Stage 2-4 /unstaged ovarian cancer in treatment report 2020 had recorded performance status. Similarly, data completeness of residual disease within COSD is currently inadequate. Recording of stage varies significantly across England, which may reflect efforts made by MDTs to stage accurately and consider carefully patients for anticancer therapy.

QPI 5a

Patients with non-mucinous epithelial ovarian cancer on histology to be tested for germline BRCA1/2 testing. Target 90%

Numerator: all patients with non-mucinous epithelial ovarian cancer histology, including those with missing histology or unspecified histology
Denominator: all patients with ovarian cancer
Exclusion: borderline ovarian tumours, mucinous epithelial ovarian cancers.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports.

Rationale

Germline *BRCA1/2* testing identifies patients who carry an inheritable pathological variant (mutation) in *BRCA1/2*.[4] Patients with germline pathological variants show improved survival when treated with PARP inhibitors. Additionally, testing enables the possibility of cascade testing in family members, thus giving the opportunity of preventative measures for both breast and ovarian cancer. No age restrictions for BRCA testing should apply for above reasons. In setting this target the BGCS acknowledges that testing will be declined by some patients and that the proportion tested may vary across populations based on demographics. Research is needed to understand whether cultural and societal barriers exist to uptake of testing and how these may be overcome. Culturally specific interventions may be necessary to facilitate uptake of testing.

QPI 5b

Patients with advanced high grade serous and clear cell cancer on histology to be tested for tumour BRCA1/2 testing. Target 90%

Numerator: all patients with Stage 3-4/unstaged high grade serous or clear cell epithelial ovarian cancer histology, including those with missing histology or unspecified histology
Denominator: all patients with high grade serous or clear cell epithelial ovarian cancer
Exclusion: borderline ovarian tumours. Stage 1-2 cancer, histology types other than high grade serous or clear cell epithelial ovarian cancer.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: CancerStats2 and in public domain reports.

Rationale

Work within NCRAS is underway to identify patients in whom tumour BRCA testing was performed. This is still evolving, but is likely to be available at the point of implementation into practice. The BGCS has not yet set QPI for HRD testing.

QPI 6

Patients to be enrolled into an NCRI portfolio study at diagnosis. Minimum Target 5%

Numerator: number of patients with ovarian cancer discussed at the MDT recruited into a NCRI portfolio study.
Denominator: all patients diagnosed with ovarian cancer.
Exclusions: borderline ovarian tumours.
Reportable by: Hospital Trust; Integrated Cancer System; and Cancer Alliance.
Reported on: Public domain reports

Rationale

Ample evidence exists that patients want to participate in research trials, patients participating in research have better outcomes and that centres with greater research recruitment deliver better outcomes for patients. [5] This data is routinely collected through the Collaborative research networks and can be therefore robustly assessed and reported. The BGCS encourages that MDT leads work with regional research champions and the regional research delivery team to identify potential trials and sites for patients. In areas where trusts act collaboratively signposting patients to trials that are open for recruitment in other trusts
R and D departments must work collaboratively to ensure that trusts that act as patient information and identification sites also receive credit for recruitment.

QPI considered and not approved at this point

The BGCS carefully considered setting QPI around the completeness of cytoreduction, the proportion of women receiving primary surgery and the extent of surgery. These were rejected for consideration at this time for the following reasons. National data capture on residual disease is limited (currently around 80%), thus a metric for the completeness of cytoreduction is not reportable. There is no good evidence underpinning any metrics on the proportion of women who should receive either primary surgery or delayed primary surgery after neoadjuvant chemotherapy or correlation with survival. Four randomised controlled trials have demonstrated equivalence of survival.[6] Substantial variation in extent of surgical radicality in the UK exists.[7, 8] Work is underway within the OCAFP to assess the extent of variability in practice, but this methodology is not yet validated. Thus, at this time, a metric on the extent of surgical radicality cannot be introduced.

Best practice – defining excellence in care

It will be important for providers across each alliance to identify best practice and work collaboratively so that these can be shared and implemented. The BGCS notes that such work is already ongoing in the Midlands. Proposed solutions include: a regional MDT where patients who are not managed by standard treatment paradigms can be discussed and expertise shared;

support in identifying which patients would benefit from further surgery after their initial treatment; and collaborative working across the Cancer Alliance to enable alignment of resource and of expertise. Other examples of best practice include working with acute oncology services to identify women with possible ovarian cancer admitted in general medical and surgical wards and ensuring that decision making for these patients is done in conjunction with gynaecological oncology MDTs.

An enhanced commitment to careful, comprehensive and uniformly high-quality prospective data collection will be pivotal to understanding differences in survival and instituting improvements in care. More research is needed to identify the contributors to the variation in MDT decision-making and treatments across England. This includes understanding more fully the differences in local organizational factors, such as skill mix, access to theatre time, intensive care support, postoperative nursing care and the accessibility of systemic treatments at diagnosis and recurrence; all of these are likely to play a key role. The OCAFP does not shed light on access to primary care and diagnosis. This is likely to be very relevant in understanding MDT decision-making, particularly in women not receiving any anticancer treatment.

Next steps for BGCS leadership

1) Circulate draft document for consultation with BGCS membership for 3 weeks
2) Once agreed, then disseminate this to RCOG/RCGP/NHSE/ ASCGBI/ASGBI
3) BGCS will communicate this to NICE/Cancer Alliances.
4) BGCS will work with the BGCS representatives from devolved nations and with Target Ovarian cancer and Ovarian cancer action to produce an options document to conduct similar audits in Wales and Northern Ireland.
5) BGCS will communicate findings from the OCAFP to research funders NIHR/CRUK to encourage them to prioritize research into addressing inequalities in ovarian cancer and standardizing decision-making in ovarian cancer. Research is required to understand possible cultural barriers to genetic testing.

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BGCS Call to Action Panel

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