

1 **Implications for the future of Obstetrics and Gynaecology following the COVID-19 pandemic:**

2 **A commentary**

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11 *Running Title: COVID 19: Implications for the future*  
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## 29 **Implications for the future of Obstetrics and Gynaecology following the COVID-19 pandemic:**

### 30 **A Commentary**

#### 31 **Introduction**

32

33 In March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic. At  
34 the time of writing, more than 261,184 cases of COVID-19 have been confirmed in the UK resulting  
35 in over 36,914 directly attributable deaths.<sup>1</sup> The National Health Service (NHS) has been confronted  
36 with the unprecedented task of dealing with the enormity of the resultant morbidity and mortality. In  
37 addition, the workforce has been depleted as a direct consequence of the disease, in most cases  
38 temporarily, but in some tragic cases permanently.

39

40 A lack of appreciation of the range of symptoms associated with COVID-19, as well as the prevalence  
41 of asymptomatic carriers of the virus, contributed to hospitals becoming ‘hotspots’ for infection. In  
42 order to reduce potential exposure and infection amongst healthcare professionals and patients, a  
43 widespread restructuring of services and clinical practice was rapidly undertaken. In the field of  
44 obstetrics and gynaecology (O&G), professional bodies implemented a multitude of reactive  
45 strategies as emergency measures in response to COVID-19, as summarised in Table S1.

46

47 Despite being prompted by unprecedented adversity, many of the changes in process, clinical  
48 management, and innovations introduced in response to COVID-19 may have a long-lasting impact,  
49 which could result in the adoption of a more streamlined approach to healthcare. It is essential that we  
50 examine whether reverting back to the way healthcare was delivered prior to the pandemic is  
51 desirable. From an academic perspective, clinical researchers have seen an accelerated institutional  
52 and ethics approval process for COVID-19 related research; with approvals being granted within two  
53 weeks. Clinicians have been empowered to make rapid changes in how they deliver care, for example,  
54 the swift adoption of novel technology, with telephone triage, virtual consultations, online meetings,  
55 and home monitoring being implemented widely. Moreover, at a time when the NHS is underfunded  
56 and waiting times continue to rise, many of these changes may offer cost effective benefits and reduce

57 waiting times.<sup>2</sup> Additionally, it is inevitable that public perception and societal values will have  
58 changed as a consequence of the pandemic. The aim of this manuscript is to discuss the impact of  
59 COVID-19 on practice within the field of O&G, and how it may subsequently help shape the future of  
60 the speciality.

61

## 62 **Telemedicine in Obstetrics and Gynaecology**

63 The primary objective of restructuring healthcare services was to reduce the risk of viral transmission  
64 without jeopardising standards of healthcare. The Royal College of Obstetricians and Gynaecologists  
65 (RCOG) recommended that women should be managed by remote communication for outpatient  
66 antenatal and gynaecology clinics where possible.<sup>3</sup> Telemedicine encompasses methods such as web-  
67 based programmes, video teleconferences and telephone consultations. In such cases, it is essential to  
68 determine which cases are suitable, with consideration of the limitations of not being able to examine  
69 or undertake investigations immediately.

70

71 Whilst it may be appropriate for routine gynaecology outpatient clinics, there may be apprehension  
72 regarding implementation for rapid access clinic (RAC) appointments, due to potential delay in  
73 diagnosis or management of cancer. However, we have observed the efficient implementation of  
74 virtual consultations within our own department during the pandemic, particularly when informing  
75 patients of their investigation results and discussing further management following initial RAC  
76 attendance. In particular, the communication skills required to break bad news do not appear to be  
77 jeopardised, with previous data suggesting video consultations offer a greater sense of privacy, in the  
78 comfort of their own home environment.<sup>4</sup> Positive patient experiences have also been demonstrated in  
79 other emotive areas of gynaecology, such as termination of pregnancy, where telemedicine has  
80 provided quicker assessments and offered a more patient centred approach with greater accessibility  
81 to treatment options and avoidance of travel time.<sup>5</sup> In the context of post-operative follow up, informal  
82 feedback from patients in our unit is consistent with findings from a study following the  
83 implementation of peri-operative internet-based patient care pathways, which suggested that in

84 addition to being cost-effective, patients report an improvement in quality of life, less pain and  
85 reduced recovery times.<sup>6</sup>

86

87 The implementation of telemedicine within obstetrics may provoke apprehension regarding aspects of  
88 care that traditionally require in person monitoring, such as during antenatal care, where regular blood  
89 pressure monitoring and fetal assessment is required. However, the potential of telemedicine is  
90 enhanced by the proven efficacy of home blood pressure monitors,<sup>7</sup> and development of wearable  
91 fetal electrocardiography sensors.<sup>8</sup> This may make it realistic and achievable in well selected cases.  
92 The development of pregnancy-related mobile applications or ‘apps’, subject to appropriate  
93 regulation, also enable the opportunity for greater patient involvement. This has been identified to  
94 provide a greater sense of autonomy, whilst enhancing patient care.<sup>7</sup> Moreover, the replacement of  
95 traditional antenatal, labour or breastfeeding classes with virtual multidisciplinary classes may  
96 enhance accessibility, and allow greater consistency in teaching methods.<sup>9</sup> However, despite the  
97 undoubted potential of telemedicine in O&G, many healthcare professionals remain sceptical, due to  
98 fear of late presentation of emergencies, lack of personalised care and concern regarding the  
99 replacement of the human workforce by machines.<sup>10</sup>

100

101 Telemedicine can also facilitate training and education, and contribute towards continued professional  
102 development. For example, remote feedback from experienced surgeons during real-time surgery, has  
103 been shown to provide a cost effective method of learning with similar efficacy and safety profile as  
104 in person mentoring.<sup>11</sup> It also facilitates multi-site learning, which allows greater consistency in  
105 teaching and training methods.<sup>9</sup> Telemedicine can also facilitate multidisciplinary meetings between  
106 health professionals. For example, 81% of 667 participants involved in an online gynaecology  
107 oncology teleconference, felt that the experience enhanced educational training between colleagues,  
108 and offered a time saving opportunity to access to a wide range of expert specialists.<sup>12</sup>

109

110 Despite evidence that restructuring services can have multiple advantages, it may adversely impact  
111 health outcomes amongst vulnerable groups such as low-income populations and ethnic minorities.<sup>13</sup>

112 In the context of telemedicine, communication inequality inhibits certain individuals, from seeking  
113 access to healthcare, such as immigrant or refugee populations, low literacy levels or without access  
114 to internet/technology. It is imperative therefore, when considering the transition from temporary  
115 implementation of service provision to long term application, that such limitations are addressed to  
116 ensure healthcare is not compromised amongst vulnerable groups.

117

### 118 **Referral pathways**

119 Owing to demographic changes, such as an increasingly aging population and evolution in societal  
120 expectations, there has been a rise in number of new referrals to secondary care over the last two  
121 decades, at significant expense to NHS resources.<sup>14</sup> In order to reduce demand and clinically  
122 prioritise, extensive triaging strategies have been implemented to ensure the appropriateness of  
123 referrals to secondary care. For example, the utilisation of telemedicine between O&G specialists and  
124 general practitioners (GP) prior to the pandemic resulted in a third of referrals being de-escalated back  
125 for management in primary care.<sup>15</sup> This suggests a significant proportion of referrals could be  
126 managed by the GP providing they have access to specialist input. Moreover, in the context of RAC,  
127 data from a single centre identified half of referrals were inappropriate when compared to protocol  
128 driven referral criteria.<sup>16</sup> By continuing to implement measures to reduce the number of unnecessary  
129 referrals, an anticipated reduction in demand should shorten waiting times and enable more timely  
130 diagnosis and management.

131

### 132 **Service Provision**

133 In order to maintain the quality of care provided to women, restructuring of services was  
134 implemented, primarily to increase utilisation of outpatient management. The introduction of ‘one  
135 stop’ clinics in both obstetrics and gynaecology reduce the number of appointments required. This is  
136 associated with a reduction in time from referral to investigation, improves service efficiency and is  
137 highly acceptable to patients.<sup>17,18</sup>

138

139 In gynaecology, updated recommendations further emphasised a preference for expectant or medical  
140 management of miscarriage and ectopic pregnancies over surgical management (**Table S1**). Not only  
141 is expectant management more cost-effective,<sup>19</sup> but 84% of women would opt for it in the future after  
142 using it previously, suggesting it is highly acceptable to patients.<sup>20</sup>

143

144 During the government imposed ‘lockdown’, risking exposure by leaving home to collect  
145 contraception may impact compliance. Irrespective of the pandemic, 1 in 5 pregnancies are  
146 unplanned,<sup>21</sup> and postnatal women who are breastfeeding are thought to be at particularly high-risk  
147 for unintended pregnancy.<sup>22</sup> Current guidance suggests all women should be informed during  
148 pregnancy of the superior effectiveness of long-acting reversible contraception (LARC), particularly  
149 as it is more efficacious, cost effective, and can be used immediately postnatally.<sup>23</sup> A number of units  
150 have taken this opportunity to escalate postnatal contraceptive services, in order to help prevent  
151 unintended pregnancy by offering it prior to discharge. The progesterone only pill or progesterone  
152 only implant can be offered, and those who undergo elective Caesarean section have the additional  
153 option of an intrauterine system (IUS) or intrauterine device (IUD). Given the ongoing trend of  
154 unplanned pregnancies, proactive contraceptive counselling during pregnancy, and enhanced  
155 accessibility should continue after the pandemic. This may facilitate the achievement of women’s  
156 reproductive aspirations, and concomitantly reduce NHS workload and the associated economic  
157 burden.

158

### 159 **Patient perceptions**

160 Following the first week of the government imposed ‘lockdown’, there was a 25% reduction in  
161 number of accident and emergency (A&E) attendances, despite the provision that leaving home for  
162 medical treatment was allowed.<sup>24</sup> It is therefore likely that the perception of what was previously  
163 deemed an emergency has changed, with the risk associated with attending hospital outweighing the  
164 necessity for attendance.<sup>25</sup> However, it is inevitable that patients with significant pathology, who are  
165 acutely unwell or have symptoms suggestive of cancer, who truly need A&E or urgent care, have

166 avoided such in a bid to avoid exposure to the virus, signifying the less publicised but significant  
167 collateral damage of COVID-19.<sup>25</sup>

168

169 Becoming pregnant during the COVID-19 pandemic has been associated with greater uncertainty and  
170 anxiety, as demonstrated by a study of almost two thousand participants whereby 68% of women  
171 reported elevated pregnancy related anxiety.<sup>26</sup> Within our own maternity triage unit, we observed a  
172 30% reduction in attendance from an average number of 28 patients per day before the pandemic, to  
173 20 thereafter, with a trough being evident in association with an escalation in the number of reported  
174 COVID-19 daily deaths (**Figure 1**). While it is unknown which patients did not attend, if it were  
175 women with presenting complaints such as abdominal pain, vaginal bleeding or reduced fetal  
176 movements, this may subsequently have an adverse impact upon the stillbirth rate.<sup>27</sup> This highlights  
177 the need for appropriate education, antenatal counselling and implementation of public health  
178 strategies, to ensure women continue to seek appropriate care when necessary.

179

180 A further public health opportunity lies in the promotion of wellbeing and the empowerment of  
181 women to take responsibility for their own health. It has been well publicised that outcomes following  
182 COVID-19 are worse in individuals who are obese or live a sedentary lifestyle.<sup>28, 29</sup> For most people,  
183 lifestyle changes are rarely maintained from positive intention alone. However, decisive change is  
184 often triggered by a specific event, experience, or consequence; referred to as the ‘Sentinel Event  
185 Effect’.<sup>30</sup> It is highly likely COVID-19 will promote positive lifestyle changes, particularly in light of  
186 the vulnerability many may have felt by being at increased risk as a consequence to potentially  
187 reversible lifestyle choices. By permanently adopting lifestyles including an increase in exercise and  
188 an improved diet, there are likely to be significant long-term health benefits.<sup>31</sup>

189

### 190 **Wellbeing amongst healthcare professionals**

191 The attrition rates for trainees within O&G are among the highest of all specialities. Just over 30%  
192 leave the speciality and at least 75% give it consideration.<sup>32</sup> Commonly reported reasons for leaving  
193 include a lack of morale, concerns relating to bullying and undermining, administrative issues related

194 to training, and poor work-life balance or support.<sup>32</sup> Moreover, according to a recent study, 36% of all  
195 doctors working within O&G in the UK met the criteria for burnout using a validated tool.<sup>33</sup> When  
196 focussing on trainees alone, the level of burnout rose to 43%.<sup>33</sup> The existential threat posed by the  
197 global pandemic, coupled with the perils associated with treating COVID-19 patients and the need to  
198 reduce personal risk of disease, seem likely to exacerbate psychological strain amongst doctors  
199 worldwide, further impacting on wellbeing and retention in the specialty. In a survey amongst  
200 Obstetric and Gynaecology junior doctors within the UK, 64.9% reported they had received adequate  
201 training on two-person donning and doffing of PPE, but remained anxious regarding the safety of PPE  
202 provided.<sup>34</sup> Such anxieties can be reduced through increased use of practical and e-learning resources  
203 for training and active involvement in the planning of service provision within departments.<sup>34</sup>

204

205 In a study of 500 healthcare professionals working during the COVID-19 pandemic in Singapore,  
206 14.5% were identified to have anxiety, 8.9% had depression and 7.7% had levels of stress consistent  
207 with post-traumatic stress disorder (PTSD).<sup>35</sup> A perceived lack of control over decision making is  
208 believed to promote stress,<sup>35</sup> which is unavoidable when treating a novel disease with no vaccine or  
209 cure. In addition, a reduction in elective services and changes in rotas may inadvertently make it  
210 impossible for individuals to meet training competencies, further increasing levels of anxiety amongst  
211 trainees. Conversely, having pride and seeing value in ones work has been shown to help prevent  
212 burnout.<sup>33</sup> As such, it is possible the appreciation and gratitude demonstrated by the public throughout  
213 the crisis will enhance feelings of existence and self-worth amongst clinicians.

214

## 215 **The future**

216 COVID-19 has necessitated significant restructuring of our health care system and greatly impacted  
217 service provision. Novel, albeit unfamiliar methods including the implementation of telemedicine has  
218 evolved how we interact with patients and other healthcare professionals. Despite being hurriedly  
219 implemented, a number of these strategies can be built upon that have the potential to enhance patient  
220 care, cost effectiveness and quality of life amongst healthcare professionals, as summarised in **Figure**  
221 **2**. However, it is essential that multifaceted auditing and evaluation of outcomes is undertaken



222 following the changes implemented during the pandemic, before consideration is given to permanent  
223 changes in practice.

224

#### **KEY MESSAGES**

- The COVID-19 global pandemic has necessitated significant restructuring of our health care system and has greatly impacted the service offered.
- A number of strategies implemented in response to the pandemic can be built upon to facilitate the adoption of a more streamlined approach within O&G in the future.
- Embracing such changes may improve healthcare for women, optimise quality of life of healthcare professionals and reduce financial burden on the NHS.

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226

#### **Contributors and sources**

228 The purpose of this manuscript is to understand how implementation of new strategies aiming to  
229 prioritise and optimise clinical care within O&G in response to the COVID-19 pandemic may  
230 improve service provision in the future. A comprehensive literature review was performed in order to  
231 provide evidence for the pertinent clinical arguments discussed. LSK wrote the article. SS and TB  
232 helped write the article and reviewed the final draft. JB, JY, KJ, CS, JBN, RS and CL provided input  
233 and revised the final draft. BPJ conceived the manuscript, helped write the article and reviewed the  
234 final draft.

235

#### **Conflicts of Interest**

237 The authors have no conflicts of interests to declare.

238

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240 No ethical approval was required for the purpose of this paper.

241

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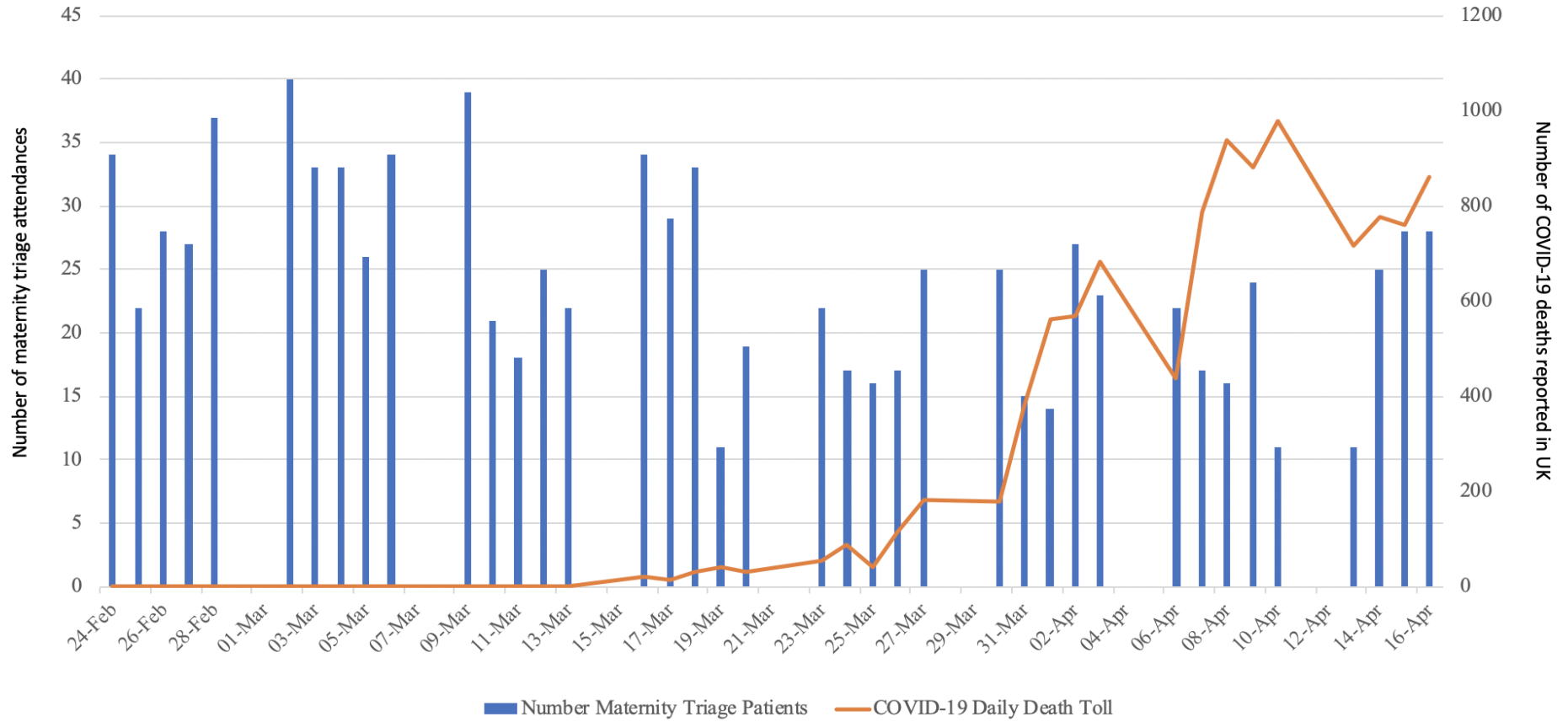
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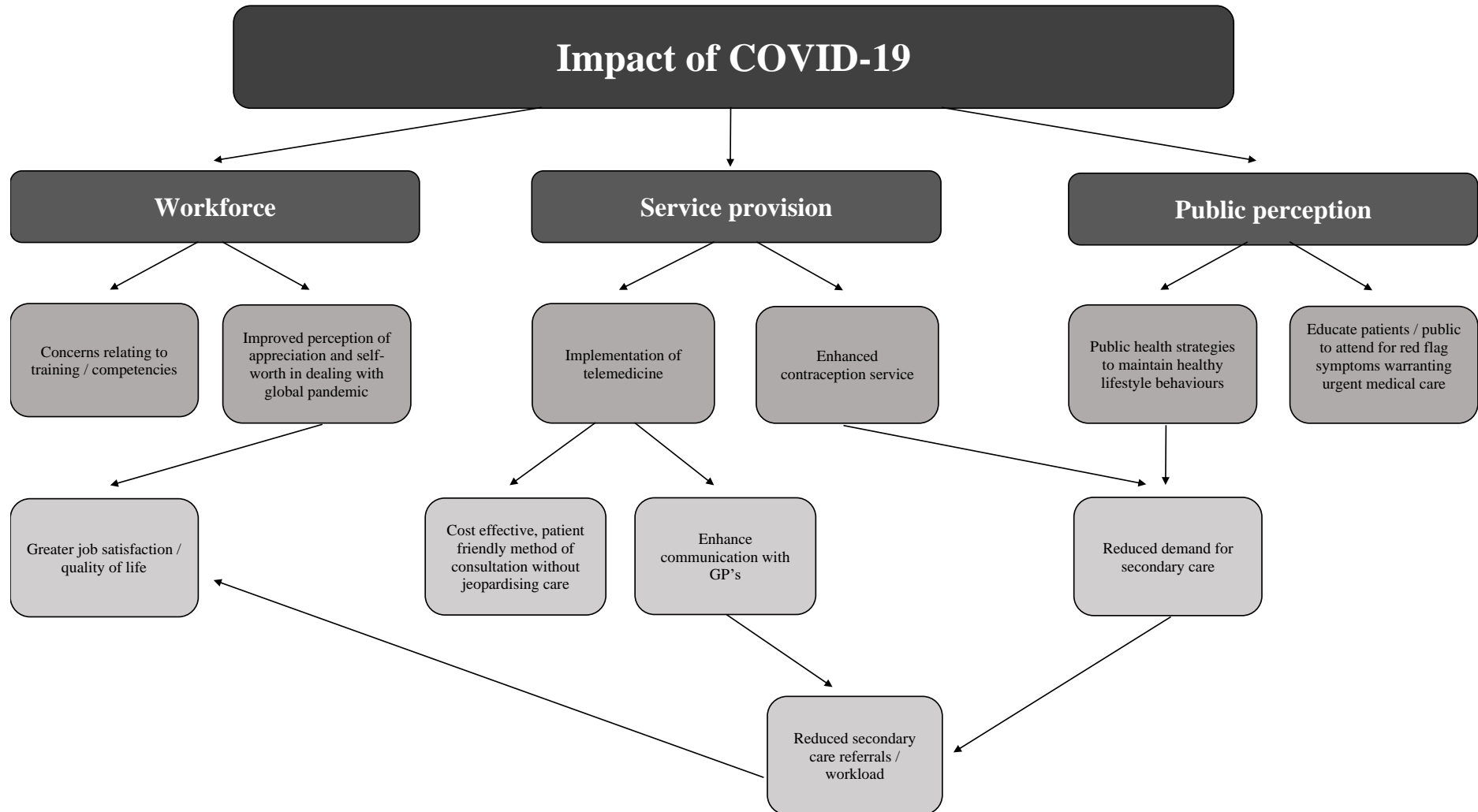
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**Figure 1: Number of maternity triage attendances and number of COVID-19 daily death toll reported in the UK.**



**Figure 2: Impact of COVID-19 within Obstetrics and Gynaecology**





**Table S1: Summary of amendments to RCOG clinical guidance in response to the COVID-19 global pandemic.**

Guidance (National Body)	Change to Service Provision	Change to Clinical Practice	COVID-19 Patients
<p><b>Coronavirus (COVID-19) infection and pregnancy</b></p> <p>(RCOG)</p>	<ul style="list-style-type: none"> <li>• Continue to attend scan appointments if deemed high risk pregnancy</li> <li>• Attend routine antenatal clinical appointments alone</li> <li>• Reduce induction of labour for indications not medically indicated</li> <li>• Improve outpatient provision of induction of labour</li> <li>• Reduce routine growth scans, if not for a strict guidance based indication</li> <li>• Avoid shared waiting areas</li> <li>• Electronic record systems should be used</li> <li>• Any women who has had a routine appointment delayed for more than 3 weeks should be contacted and rescheduled urgently</li> <li>• Departments should consider organising dry-run simulation exercises to prepare staff and build confidence</li> <li>• Clinicians should be aware of the increased risk to women from black and minority ethnic (BAME) backgrounds and therefore have a lower threshold to review, admit and consider MDT discussion on further management</li> </ul>	<ul style="list-style-type: none"> <li>• Teleconferencing or videoconferencing appointments</li> <li>• Cease monoxide monitoring</li> <li>• If self -isolating consider venous thromboembolism (VTE) risk, if score is <math>\geq 3</math>, send a prescription of low molecular weight heparin (LMWH) via post to the patient with a video link of how to self-administer</li> <li>• All women with suspected or confirmed COVID-19 should be discharged with 10 days LMWH prophylaxis</li> </ul>	<ul style="list-style-type: none"> <li>• Staff should wear full PPE</li> <li>• Provide women with a mask</li> <li>• Women should be escorted immediately to an isolation room or cohort bay/ward</li> <li>• Delay routine appointments e.g. growth scans, oral glucose tolerance test</li> <li>• Carry out a discussion with a multidisciplinary team (MDT) including infectious disease or general medical specialist and senior Obstetrician</li> <li>• Women in early latent phase labour should be encouraged to stay at home</li> <li>• Discourage home birth/midwifery led delivery</li> <li>• Encourage epidural or spinal analgesia</li> <li>• Elective/planned obstetric procedures should be scheduled at the end of an operating list</li> <li>• Non- elective emergency procedures should be performed in a second theatre. Inform women that donning PPE may cause delay in delivery</li> <li>• Aim to keep oxygen saturations &gt; 94% in labour</li> <li>• Avoid use of birthing pools</li> <li>• Consider shortening the length of second stage in labour with elective instrumental birth in symptomatic women becoming hypoxic/exhausted</li> <li>• Perform hourly observations of oxygen saturation and respiratory rate</li> <li>• Complete an hourly fluid balance chart. Consider fluid boluses of 250-500mls then assess for fluid overload</li> </ul>

<p><b>Guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus (COVID-19) pandemic</b></p> <p>(RCOG)</p>	<ul style="list-style-type: none"> <li>• All women should be initially screened for COVID-19 before entering the department</li> <li>• All women should attend appointments alone or with a maximum of one partner/visitor</li> <li>• Continue with national screening programmes</li> <li>• Local failsafe method should be established to ensure all women who are reoffered appointments attend</li> <li>• Daily discussions regarding service provision with senior team members should take place</li> <li>• If there is insufficient staff, prioritise scans in the following order: 1) Anomaly (18<sup>+0</sup>-23<sup>+0</sup>), 2) US +/- screening at (11<sup>+2</sup>-14<sup>+1</sup>), 3) Growth scans</li> </ul>	<ul style="list-style-type: none"> <li>• Women who wish to have screening for trisomy 21,18,13 but have missed combined screening (11<sup>+2</sup>-14<sup>+1</sup>) and present at the following gestations should have the following:</li> <li>• (14<sup>+2</sup>-17<sup>+6</sup>) A dating scan and offered quadruple screening for trisomy 21. Use head circumference for quadruple test</li> <li>• (18<sup>+0</sup>-20<sup>+0</sup>) An anomaly scan and offered quadruple screening for trisomy 21. Use head circumference for quadruple test</li> <li>• (20<sup>+1</sup>-23<sup>+0</sup>) An anomaly scan only, which is the screening test for trisomy 18 and 13 in this instance</li> <li>• (&gt;23<sup>+1</sup>) perform full clinical US examination of fetus</li> <li>• If a service provider can only offer a single scan, perform between (18<sup>+0</sup>-20<sup>+0</sup>) with an option of the quadruple test to screen for trisomy 21</li> <li>• If US examination is not possible, offer quadruple test based on the last menstrual period between (14<sup>+2</sup>-20<sup>+0</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>• Administer LMWH to all women unless birth expected within 12 hours. Continue for at least 10 days</li> <li>• Do not delay CT chest or X-ray to make a diagnosis</li> <li>• Pregnant women with moderate or severe COVID symptoms who do not present with obstetric concerns, should be cared for by the same MDT as a non-pregnant women with additional input from the maternity team.</li> <li>• Symptomatic women: rebook appointment in 7 days from onset of symptoms</li> <li>• If living with others with symptoms: rebook appointment 14 days from symptom onset</li> </ul>
<p><b>Rationalising early pregnancy services in the evolving Coronavirus (COVID-19) pandemic</b></p> <p>(RCOG)</p>	<ul style="list-style-type: none"> <li>• Triage clinical importance of pre-existing appointments as per red, yellow, green triage action (Red: scans and visits should be undertaken without delay. Yellow: scans and visits can be delayed without affecting clinical care. Green: scans and visits can be avoided for the duration of the pandemic)</li> <li>• Local failsafe should be established to ensure appointments are reviewed and re-offered</li> <li>• Weekly MDT meeting within unit</li> </ul>	<ul style="list-style-type: none"> <li>• Women should not attend early pregnancy units (EPU) without a telephone triage consultation first</li> <li>• All women should attend appointments alone</li> <li>• Omit anti D if risk of COVID-19 outweighs the benefits of administering</li> </ul>	<ul style="list-style-type: none"> <li>• If urgent ultrasound (US) required, an allocated room and US machine should be designated for this</li> </ul>

<p style="text-align: center;"><b>Miscarriage</b></p> <ul style="list-style-type: none"> <li>Do not offer further routine US for expectant or medical management. Repeat a human chorionic gonadotrophin (hCG) test at home in 3 weeks</li> <li>Encourage outpatient treatment</li> </ul>	<p style="text-align: center;"><b>Miscarriage</b></p> <ul style="list-style-type: none"> <li>Provide counselling over the phone</li> <li>Consider use of manual vacuum aspiration for missed miscarriage</li> </ul>	<p style="text-align: center;"><b>Miscarriage</b></p> <ul style="list-style-type: none"> <li>Consider regional anaesthesia</li> </ul>
<p style="text-align: center;"><b>Intrauterine pregnancy (IUP) of unknown viability</b></p> <ul style="list-style-type: none"> <li>No further US recommended</li> <li>If findings consistent with menstrual date, no follow up required</li> </ul>	<p style="text-align: center;"><b>Intrauterine pregnancy (IUP) of unknown viability</b></p> <ul style="list-style-type: none"> <li>If findings not consistent with menstrual date, explain the risk of miscarriage and consider telephone follow up in 2 weeks</li> </ul>	<ul style="list-style-type: none"> <li>NS (not specified)</li> </ul>
<p style="text-align: center;"><b>Pregnancy of unknown location (PUL)</b></p> <ul style="list-style-type: none"> <li>Use the serial hCG and progesterone at presentation to triage women</li> </ul>	<p style="text-align: center;"><b>Pregnancy of unknown location (PUL)</b></p> <ul style="list-style-type: none"> <li>Low risk/failing PUL: repeat test at home in 2 weeks</li> <li>Low risk of IUP: Advise scan in 1 week</li> <li>High risk ectopic: Repeat hCG and or scan in 48 hours</li> </ul>	<ul style="list-style-type: none"> <li>NS</li> </ul>
<p style="text-align: center;"><b>Ectopic</b></p> <ul style="list-style-type: none"> <li>Emphasis on conservative management</li> </ul> <p>Expectant:</p> <ul style="list-style-type: none"> <li>Do not offer repeat US routinely</li> </ul> <p>Surgical:</p> <ul style="list-style-type: none"> <li>Only consider if no other management option feasible</li> </ul>	<p style="text-align: center;"><b>Ectopic</b></p> <p>Expectant:</p> <ul style="list-style-type: none"> <li>Repeat hCG weekly</li> </ul> <p>Surgical:</p> <ul style="list-style-type: none"> <li>Laparoscopic surgery should only be undertaken with strict precaution to filter CO<sub>2</sub> escaping into operating theatre</li> <li>Consider mini laparotomy if above criteria cannot be met</li> <li>Only evacuate the pneumoperitoneum via direct suction using vacuum suction unit</li> <li>Swabs, suction and retrieval devices should be used to minimise droplet transmission</li> </ul>	<p style="text-align: center;"><b>Ectopic</b></p> <ul style="list-style-type: none"> <li>Medical and surgical cases to be discussed at EPU MDT</li> </ul> <p>Surgical:</p> <ul style="list-style-type: none"> <li>All theatre staff should use PPE</li> </ul> <p>If there is risk of bowel involvement, perform laparotomy</p>
<p><b>Management of abnormal uterine bleeding in the evolving Coronavirus (COVID-19) pandemic</b></p> <p>Royal College of Obstetricians and Gynaecologists (RCOG) British Society for Gynaecological Endoscopy (BSGE) British Gynaecological Cancer Society (BGCS)</p> <ul style="list-style-type: none"> <li>For post-menopausal bleeding, offer transvaginal scan, outpatient hysteroscopy and or blind endometrial biopsy (EB) at the same visit</li> <li>Defer endometrial surveillance for non-atypical endometrial hyperplasia in women without abnormal uterine bleeding</li> <li>In cases of post coital bleeding, if no in date negative cervical screening test is present; patients should present for speculum examination in the primary or secondary care</li> </ul>	<ul style="list-style-type: none"> <li>Women should be managed by remote communication (e.g. video or telephone)</li> <li>In cases of treatment for heavy menstrual bleeding (HMB), consider moving to a 3 month duration injection once patient tolerance of gonadotrophic releasing hormone (GnRH) analogues has been established, or delivery via the nasal route</li> <li>Addback hormone replacement therapy (HRT) should be considered once HMB is controlled, if GnRH analogue treatment is continued beyond 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>Delay secondary care until no longer infectious</li> <li>Consider conscious sedation and regional anaesthesia in cases of inpatient hysteroscopy</li> </ul>

<p><b>Coronavirus infection and abortion care</b></p> <p>(RCOG) The Faculty of Sexual and Reproductive Healthcare (FSRH) British Society of Abortion Care Providers (BSACP)</p>	<ul style="list-style-type: none"> <li>• Medical professionals can conduct consultation and prescribe medication from their home</li> <li>• Women can undertake medical abortion at home</li> <li>• Medical treatment can be posted to the patients home address</li> <li>• Abortion care can be provided without pre-procedure blood test or US</li> <li>• Offer web based sexually transmitted infection (STI) screening if required</li> </ul>	<ul style="list-style-type: none"> <li>• A blind EB that produces an ‘insufficient sample’ should be considered normal</li> <li>• Consider insertion of a LNG-IUS at the time of EB or hysteroscopy in cases highly suspicious of Endometrial hyperplasia or cancer</li> <li>• Remote consultation</li> <li>• Provide written information prior to consultation (e.g. via email or link)</li> <li>• Remote or self- assessment of outcome using low sensitivity pregnancy test sent to the patient</li> <li>• Provide a further dose of misoprostol 400 micrograms where gestation is over 8 weeks and abortion not occurred 3-4 hours following treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Defer abortion if possible</li> <li>• If face to face contact required, see at the end of a clinic or transfer to a unit equipped to treat COVID-19 patients</li> </ul>
<p><b>Framework for care of patients with gynaecological cancer during the (COVID-19) pandemic</b></p> <p>(BGCS)</p>	<ul style="list-style-type: none"> <li>• Decisions regarding prioritisation of treatment should be made at MDT</li> <li>• Cancer units and centres will need to make joint decisions on location of cancer surgery</li> <li>• Triage two week wait referrals</li> <li>• Patients with pelvic masses identified by careful triage as likely benign, after MDT discussion for difficult cases, can have surgery deferred by 3-6 months</li> <li>• Surgical priority categorisation of patients amended</li> <li>• As general principles, patients receiving curative radiotherapy for locally advanced disease should be prioritised over patients receiving adjuvant therapy. Where adjuvant therapy is likely to reduce local recurrence, but not likely to prolong survival, patients should be carefully counselled and treatment withheld</li> <li>• Given the anticipated resource constraints on imaging guided biopsies, a pragmatic decision to rely on a cell block to confirm malignancy may be necessary. If possible and relevant, the cell block may be used for additional testing such as breast cancer gene (BRCA) status</li> </ul>	<ul style="list-style-type: none"> <li>• Greater utilisation of non-surgical options including radical radiotherapy or neo-adjuvant chemotherapy to delay major resection surgery</li> <li>• Utilisation of procedures such as sentinel lymph node assessment</li> <li>• Virtual clinics for routine follow ups</li> <li>• Patients scheduled for interval debulking surgery (IDS) can be assessed after 3 cycles with CT scan (+/- diffusion weighted MRI) or consideration of laparoscopy and proceed to IDS, if there is a potential for macroscopic cytoreduction. Patients may also be counselled to continue with chemotherapy and the decision for surgery reviewed after 6 cycles of chemotherapy depending on resource availability</li> <li>• In the absence of evidence overall survival benefit from secondary debulking in recurrent ovarian cancer, these patients should be managed with chemotherapy unless surgery would relieve symptoms. These patients should be classed as priority level 3</li> <li>• Patients should be tested for possible BRCA mutations (germline and somatic) so that they may access poly ADP ribose polymerase (PARP) inhibitors if they have a BRCA mutation. PARP inhibitors could be started at the end of</li> </ul>	<ul style="list-style-type: none"> <li>• NS</li> </ul>

<p><b>Colposcopy guidance during (COVID-19) pandemic</b></p> <p>The British Society for Colposcopy and Cervical Pathology (BSCCP) (RCOG)</p>	<ul style="list-style-type: none"> <li>• Only women who have had recent cervical smears suggesting: high grade moderate or worse, borderline nuclear changes (BNC) in endocervical cells, possible glandular neoplasia, suspicion of invasive disease should be seen for colposcopy</li> <li>• Cease primary screening</li> <li>• Triage two week wait referrals</li> <li>• Allow provision for a weekly rapid access clinic for suspected cervical cancers</li> </ul>	<p>chemotherapy and the number of cycles of chemotherapy should be determined on the basis of CA125 and CT response. In the current situation, some patients may access PARP inhibitors before the opportunity for surgery arises</p> <ul style="list-style-type: none"> <li>• Virtual (telephone/video) consultation with dedicated help-line</li> <li>• Laser ablation and excision should not be used due to vaporisation</li> <li>• Minimise cold (thermal) coagulation with diathermy under 'see and treat' therapeutic options</li> <li>• A serviced smoke extractor must be used for any large loop excision of transformation zone (LLETZ) procedure</li> </ul>	<ul style="list-style-type: none"> <li>• Defer colposcopy assessment until symptoms resolve or woman tested negative</li> <li>• Staff should wear appropriate personal protective equipment (PPE)</li> </ul>
<p><b>Guidance for the care of fertility patients during the Coronavirus (COVID-19) pandemic</b></p> <p>British Fertility Society (BFS)</p>	<ul style="list-style-type: none"> <li>• Cease initiation of new fertility treatments e.g. in vitro fertilisation (IVF), frozen embryo transfer, surgical sperm retrieval, insemination and ovulation induction</li> <li>• Complete treatment already commenced in women who are well</li> <li>• Suspend diagnostic tests such as semen analysis or post vasectomy testing</li> <li>• Continue non elective fertility preservation e.g. sperm and oocyte or embryo storage for cancer patients</li> </ul>	<ul style="list-style-type: none"> <li>• Consider GnRH agonist trigger and freeze all to reduce ovarian hyperstimulation syndrome (OHSS)</li> <li>• Telephone or video consultations</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid pregnancy</li> <li>• If in stimulation phase of treatment but not yet received trigger, advise treatment cancellation</li> <li>• If received hCG or GnRH agonist trigger, proceed to egg collection and freeze all</li> <li>• Avoid embryo transfer if develops symptoms following egg collection</li> <li>• Avoid intrauterine insemination (IUI)</li> </ul>
<p><b>Essential services in sexual and reproductive healthcare</b></p> <p>(FSRH)</p>	<ul style="list-style-type: none"> <li>• Extend the use of online contraception services across the UK</li> <li>• Provide free condoms via pharmacies to vulnerable groups</li> <li>• The Medicines Act should be updated to enable the supply of desogestrel progesterone only pill (POP) as a pharmacy drug</li> <li>• POP can be safely supplied without a prescription and could be used as a bridging method for those who do not have access to their regular form of contraception</li> <li>• The General Pharmaceutical Council should agree to allow 3-month emergency supply of oral contraceptives (rather than just one month)</li> </ul>	<ul style="list-style-type: none"> <li>• Routine long-acting reversible contraceptives (LARC) removals/exchanges can be deferred</li> <li>• Extended use of Nexplanon for 4 years, copper IUD for 12 years, LNG-IUS for 6 years</li> <li>• Advise use of condoms or POP desogestrel for women approaching end of use with Jaydess or Kyleena</li> <li>• Telephone/video consultations</li> <li>• If commencing combined hormonal contraceptive (CHC)/POP, arrange community pharmacy or click and collect delivery</li> <li>• If BMI and BP has been checked within last 12 months, can offer repeat prescription of CHC without repeating these assessments</li> </ul>	<ul style="list-style-type: none"> <li>• NS</li> </ul>
<p><b>Guidance on management of Urogynaecological conditions and</b></p>	<ul style="list-style-type: none"> <li>• Use telephone consultation to triage delays e.g. delay review for 3 months, within 30 days or within 7 days</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone consultation</li> </ul>	<ul style="list-style-type: none"> <li>• Defer assessment until asymptomatic</li> </ul>

***vaginal pessary use during the  
(COVID-19) pandemic***

British Society of Urogynaecology (BSUG)

- Delay procedures including percutaneous tibial nerve stimulation (PTNS), bladder instillations, botox injections, urethra bulking agents, diagnostic cystoscopy
- In trial without a catheter (TWOC) follow up patients, teach self- catheterisation or consider delay of TWOC
- Delay change of suprapubic catheter for 3 months or arrange district nurse to change