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# BMJ Open

## Maintenance of Professional Competence in Ireland: A National Survey of Doctors' Attitudes and Experiences

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3 **Maintenance of Professional Competence in Ireland: A National Survey of Doctors' Attitudes and**  
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5 **Experiences**  
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3 1 **Abstract (300 words)**  
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6 2 **Objectives:** Programmes to ensure doctors' Maintenance of Professional Competence (MPC) have  
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8 3 been established in many countries. Since 2011, doctors in Ireland have been legally required to  
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10 4 participate in MPC. A significant minority has been slow to engage with MPC, mirroring the  
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12 5 contested nature of such programmes internationally. This study aimed to describe doctors'  
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14 6 attitudes and experiences of MPC in Ireland with a view to enhancing engagement.  
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18 7 **Participants:** All registered medical practitioners in Ireland required to undertake MPC in 2018 were  
19  
20 8 surveyed using a thirty-three item cross-sectional mixed-methods survey designed to elicit attitudes,  
21  
22 9 experiences and suggestions for improvement.  
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24

25 10 **Results:** There were 5,368 responses (response rate 41.5%). Attitudes to MPC were generally  
26  
27 11 positive, but the time, effort and expense involved outweighed the benefit for half of doctors. Thirty-  
28  
29 12 eight percent agreed that MPC is a tick-box exercise. Heavy workload, travel, requirement to record  
30  
31 13 CPD activities, and demands placed on personal time were difficulties cited. Additional support, as  
32  
33 14 well as higher quality, more varied educational activities were amongst suggested improvements.  
34  
35 15 Thirteen percent lacked confidence that they could meet requirements, citing employment status as  
36  
37 16 the primary issue. MPC was particularly challenging for those working less than full-time, in locum or  
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39 17 non-clinical roles, and taking maternity or sick leave. Seventy-seven percent stated a definite  
40  
41 18 intention to comply with MPC requirements. Being male, or having a basic medical qualification from  
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43 19 outside Ireland was associated with less firm intention to comply.  
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48 20 **Conclusions:** Doctors need to be convinced of the benefits of MPC to them and their patients. A  
49  
50 21 combination of clear communication and improved relevance to practice would help. Addition of a  
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52 22 facilitated element e.g. appraisal and varied ways to meet requirements would support  
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54 23 participation. MPC should be adequately resourced, including provision of high quality free  
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56 24 educational activities. Systems should be established to continually evaluate doctors' perspectives.  
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## Strengths and Limitations of this Study

Strengths include;

- Strong response rate for a national online survey of all doctors (n=5368, 41.5%)
- Representativeness of the respondents
- Diverse stakeholders involved in the research, including patient representation
- Survey design was undertaken in accordance with best practice, informed by literature and theory. Post hoc analysis of the survey confirmed its validity.

Limitations include;

- Although the response rate to the survey was excellent there were still large numbers of non-responders. We cannot be sure that the findings presented here represent the views of non-responders.

## 39 Introduction

40 Historically, once a doctor entered independent practice, career-long maintenance of professional  
41 knowledge and skills was assumed [1]. In recent decades, evolving doctor-patient relationships, a  
42 drive for accountability, and high-profile cases of malpractice [2] have led medical regulators to put  
43 continuous evaluative processes in place to ensure that doctors are up to date and fit to practise [3].  
44 A variety of terms are used to describe these programmes; revalidation, recertification, relicensing,  
45 maintenance of certification and maintenance of licensure [4, 5]. In this paper, we will use the term  
46 Maintenance of Professional Competence (MPC).  
47 MPC programme requirements vary from country to country but, in general, involve educational and  
48 assessment elements such as; evidence of good professional standing; participation in knowledge  
49 self-assessments; examinations; quality improvement projects or audits; appraisal; peer and patient  
50 feedback; and continuing professional development (CPD)[3, 5–7]. The intended outcomes of these  
51 activities are manifold and include; improving patient safety and the quality of patient care;  
52 encouraging doctors to commit to lifelong learning; and enhancing the continuing professional  
53 development of doctors [5, 8]. While there is evidence that some MPC activities, such as interactive  
54 CME/CPD, appraisal, review of patient complaints and multisource feedback, have an impact on  
55 doctors' knowledge, skills, attitudes and behaviours, it is less clear that MPC significantly impacts  
56 patient outcomes [3]. This has led to much debate about whether and how MPC programmes should  
57 be implemented.

58 In keeping with international trends, in Ireland doctors have been legally mandated to participate in  
59 MPC since 2011. The Medical Council, the regulator for doctors in Ireland, has established a range of  
60 Professional Competence Schemes (PCS) to administer the process through thirteen national bodies  
61 responsible for postgraduate medical training. Doctors are required to enrol in and submit evidence  
62 of educational activities annually through a PCS. Each doctor is expected to obtain a minimum of 50  
63 credits per year (1 credit= 1 hour) through CPD activity. A minimum requirement of 20 credits each is

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3 64 set for external and internal CPD, with the remainder coming from personal learning and  
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5 65 research/teaching categories. In addition, each doctor is required to complete one quality  
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7 66 improvement (clinical/non-clinical) audit per year [9].  
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10 67 Following its introduction in Ireland, a significant minority of doctors were slow to engage with MPC.  
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12 68 By 2016, 16.3% had still not enrolled in a PCS despite a legal requirement to do so. Active measures  
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14 69 by the Medical Council have addressed enrolment reducing this figure to 1.7% in 2018 [10].  
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16 70 Nonetheless, engagement remains a problem, with one postgraduate training body reporting 30% of  
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18 71 doctors not meeting the requirements laid down by the Medical Council [11]. Failure amongst  
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20 72 doctors to engage fully with a legal requirement linked to competence has the potential to  
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22 73 undermine the trust the public have in their doctors. It also creates risk for employers, indemnifiers  
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24 74 and a significant challenge for the regulator.  
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29 75 This paper reports a national survey of doctors in Ireland, funded by the Health Research Board  
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31 76 Ireland. The aim of this study was to describe doctors' attitudes, experiences and suggestions for  
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33 77 improvement in relation to current systems for Maintenance of Professional Competence (MPC) in  
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35 78 Ireland. The research was underpinned by an integrated approach to knowledge translation. The  
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37 79 research team included representation from a range of stakeholders; the regulator, postgraduate  
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39 80 training bodies, the health service and patients.  
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## 43 81 **Methods:**

### 44 82 *Study design and setting*

45  
46 83 As the regulatory body for the medical profession in Ireland, the Medical Council has amongst its roles  
47  
48 84 maintenance of the Register of Medical Practitioners and must satisfy itself as to medical practitioners  
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50 85 ongoing maintenance of professional competence. The Register of Medical Practitioners is comprised  
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52 86 of four divisions shown in Table 1 below. Those registered in the general, supervised and specialist  
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54 87 division are required to participate in MPC.  
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Division	Registrants
<b>General Division</b>	Medical practitioners who have not completed specialist training and do not occupy a postgraduate training post. Nineteen percent of doctors in this division are GPs.
<b>Specialist Division</b>	Medical practitioners who have completed specialist training recognised by the Council and can practise independently as a specialist. Thirty nine percent of doctors in this division are GPs.
<b>Supervised Division</b>	Medical practitioners who have been offered a post that has been approved by the national Health Service Executive (HSE), which has specific supervisory arrangements.
<b>Trainee Specialist Division</b>	Trainee specialist registration is specifically for medical practitioners who practise in individually numbered, identifiable postgraduate training posts.

88 Table 1. Divisions of the Register of Medical Practitioners

89 This study was a cross-sectional mixed-methods survey of all registered medical practitioners in  
 90 Ireland mandated to participate in MPC in 2018 (n = 12,920).

#### 91 *Survey instrument*

92 We designed a questionnaire to elicit doctors' experience, attitudes and suggestions for  
 93 improvement of MPC. We drew on several sources to develop the questionnaire. We reviewed the  
 94 literature, held a focus group with doctors undertaking MPC, and sought input from our knowledge-  
 95 user research partners to identify key areas of interest. The Theory of Planned Behaviour (TPB)[12],  
 96 acted as a sensitising concept in the design of the survey. TPB posits that an individual's attitude  
 97 towards a behaviour, the subjective norms relating to that behaviour and the individual's perceived  
 98 control of the behaviour, shape behavioural intentions and the behaviour itself [12]. In the case of  
 99 MPC, this focussed attention not only on doctors' attitudes to MPC, and the barriers to participation  
 100 they encountered, but also on their perceptions of the attitudes of others such as patients and  
 101 colleagues, and the consequences of failure to participate. The questionnaire was piloted with a  
 102 further group of doctors (n = 30) representative of our target population, following which it was  
 103 further revised and refined to improve clarity and length. The final version of the questionnaire  
 104 consisted of thirty statements relating to MPC and three free text questions. A Likert-type format

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3 105 was used for the statements with five response codes ranging from 1 = strongly agree to 5 = strongly  
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5 106 disagree. A copy of the questionnaire can be found in Appendix A.  
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### 8 107 *Patient Involvement*

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11 108 The research team included Mrs. Margaret Murphy, a patient safety advocate and then External  
12  
13 109 Lead Advisor, WHO Patients for Patient Safety, a network of 200-plus patient safety champions from  
14  
15 110 51 countries. Mrs. Murphy was a member of the project steering committee. She approved the  
16  
17 111 design and conduct of the study and contributed to design of the questionnaire. Patient perspectives  
18  
19 112 were reflected in items addressing the impact of MPC on patient outcomes, doctors' perceptions of  
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21 113 the importance of MPC to patients and the possibility of patient feedback contributing to doctors'  
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23 114 MPC.  
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### 26 115 *Data collection*

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30 116 All doctors registered with the Medical Council are required to complete an online Annual Retention  
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32 117 of Registration process. In June/July 2018, information about the survey and a link to complete it  
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34 118 were included in the process as a pop-up targeting those in the relevant divisions of the register.  
35  
36 119 The information and link were also sent in email reminders to doctors in the weeks following the  
37  
38 120 annual retention process. Survey responses were linked to demographic data held by the Medical  
39  
40 121 Council using registration numbers. Once the data was collated the registration numbers were  
41  
42 122 removed and replaced with participant numbers to anonymise the data.  
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### 46 123 *Data analysis*

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49 124 Descriptive statistics (frequencies and percentages) were generated to describe both the  
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51 125 demographic characteristics of respondents and responses to each survey item. Proportional odds  
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53 126 regression models were used to formally test the associations between responses to attitudinal  
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55 127 items and intention to comply with the requirements of MPC. To validate the survey instrument we  
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57 128 estimated a full Confirmatory Factor Analysis (CFA) model with four latent factors based on the  
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3 129 various Likert response survey questions organised under headings drawn from the Theory of  
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5 130 Planned Behaviour; attitudes; facilitators; barriers; and social norms. To accommodate the ordered  
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7 131 categorical nature of the indicators, we used a robust Weighted Least Squares estimator. We  
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10 132 calculated factor scores for each participant based on the model result and explored associations  
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12 133 between these factor scores and demographic characteristics with confidence of capability to  
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14 134 comply with requirements of MPC and intention to comply. Thematic analysis [13] was conducted  
15  
16 135 on the responses to the open-ended survey questions.

### 19 136 *Ethics*

22 137 This study received ethical approval through the University College Cork Social Research Ethics  
23  
24 138 Committee. Informed consent was obtained from all participants.

### 27 139 **Results**

30 140 There were 5,368 responses to the survey from a population of 12, 920, giving a response rate of  
31  
32 141 41.5%. Male doctors accounted for 61% of responses. Median age was 47 years (IQR 38-56). 58%  
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34 142 were in the specialist division of the register and 39% were in the general division and 0.7% in the  
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36 143 supervised division. 56% had gained their Basic Medical Qualification (BMQ) in Ireland and a further  
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38 144 14% within the EU. Respondents were representative of the survey population, with slight over  
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40 145 representation of males (61.2% vs 57.7%) and doctors registered in the general division (39.3% vs  
41  
42 146 36.5%). There was good representation across specialties and countries of Basic Medical  
43  
44 147 Qualification. Graduates of Irish medical schools were slightly under-represented in the General  
45  
46 148 Division (29.4% vs 27.4%) and overrepresented in the Specialist division (73.8% vs 79.4%).

51 149

54 150 The majority of respondents held positive views on the general benefits of MPC, agreeing that it  
55  
56 151 reassures patients and the public (65%), encourages doctors to continually learn and keep up to date  
57  
58 152 (77%) and raises the standard of practice of all doctors (62%). At a more personal level, being

153 encouraged to participate in educational activities was the most agreed benefit (70%), followed  
154 closely by being encouraged to reflect more on one's professional development (67%).

155 When the benefits were set against the time, effort and expense involved in the process only 51%  
156 agreed that MPC was a worthwhile exercise and 38% agreed with the statement that MPC was a tick  
157 box exercise. MPC was considered to have resulted in changes in practice by a small majority (53%).  
158 MPC wasn't seen as being particularly important to patients (57%) or to colleagues (56%) and only  
159 58% felt that non-compliance risked removal from the register.

160 Figures 1 and 2 here

### 161 *Barriers to participation in MPC*

162 The main barriers to participation were lack of protected time and expense (see Fig. 3). Expense of  
163 locum cover to allow participation in CPD was also a significant barrier. Audit skills were lacking in a  
164 significant minority (27.2%). Doctors  $\leq$  34 years of age or over 55 years were more likely to report  
165 these difficulties (35% and 32% respectively  $p < 0.001$ ).

166 A small group of doctors (12.8%) did not understand what they were required to do to maintain  
167 professional competence. A small majority (55%) agreed that current arrangements and information  
168 were sufficient. A significant minority expressed ambivalence or dissatisfaction with their ability to  
169 access high quality CPD. 49% disagreed or were ambivalent towards the statement that they match  
170 their choice of CPD to their learning needs.

171 Respondents provided over 1,300 comments relating to barriers to meaningful participation in MPC.  
172 Six themes, with associated subthemes, were identified, and are outlined in Table 2 below, ranked  
173 by frequency. Illustrative quotes are shown along with the respondent's area of practice, area of  
174 basic medical qualification (BMQ – Ireland, Other EU, non EU), and division of the register.

175 Figure 3 here

1.1 Time involved in meeting the requirements of MPC	Time for participation in MPC activities <ul style="list-style-type: none"> <li>○ Workload</li> <li>○ Travel to attend CPD activities</li> <li>○ Recording MPC activities</li> </ul> MPC time vs personal time
1.2 Expense of participation in MPC	Cumulative expense of MPC Impact of expense on the selection of CPD activities Insufficient CPD funding Expense related to specific groups of doctors
1.3 Availability and quality of CPD activities	Lack of relevance of CPD courses to scope of practice <ul style="list-style-type: none"> <li>○ CPD too general, not specialised</li> <li>○ Repetitive content</li> <li>○ Lack of recognition of all professional activities</li> <li>○ Lack of value for money</li> </ul> Difficulty of accessing CPD course <ul style="list-style-type: none"> <li>○ Geographical location</li> <li>○ Short notice of upcoming CPD courses</li> <li>○ Poor availability of online CPD courses</li> <li>○ Limited number of places available on CPD courses</li> </ul>
1.4 Employment status	Working abroad <ul style="list-style-type: none"> <li>○ Employed outside of Ireland</li> <li>○ Recently returned to Ireland after working abroad</li> </ul> Not employed in Ireland (looking for jobs) Non-fulltime employment Maternity or sick leave Non-clinical role
1.5 Record-keeping	Tedious and time-consuming process Cumbersome online platform
1.6 Audit	Lack of skills, training and support Frequency of audit Lack of relevance to scope of practice Time-consuming process

176 Table 2. Barriers to meaningful engagement with MPC - themes and subthemes

177

178 Consistent with the Likert-scaled responses, the time and expense of participation in MPC were the  
179 most frequently cited barriers.

180 *Time involved in meeting the requirements of MPC*

***'After a 10-12 hour very difficult day it can really interfere with personal time leading to stress and reduces time for family and friends. Due to increased pressures in primary care, paper work on call practice management etc. CPD while obviously very worthwhile has to be squeezed in and this leads to some resentment and less time for personal reading of which only 5 points are allocated.'* (GP, BMQ Ireland, specialist division)**

181

182 *Expense of participation in MPC*

***'I am forced to usually only choose free events and local to me due to time and financial constraints, so I do not get to actually choose the things that would be most beneficial educationally. This is because locum costs or costs from family life/babysitters etc. is too much and if there are also course fees it is just not financially viable.'* (GP, BMQ Ireland, specialist division)**

183

184 Some felt that the allowance or subsidy that they receive for CPD activity was inadequate. Specific  
185 groups of doctors such as those on maternity leave, non-partner General Practitioners (GPs), non-  
186 consultant hospital doctors (NCHDs) and locums found it particularly challenging to cover the cost  
187 related to meeting the requirements of MPC.

***'I feel that non-partner/non-[principal] GPs are at a significant disadvantage, the cost of CPD in addition to paying out of pocket for Medical council etc. None of these costs are tax deductible for us. Everything is straight out of our pocket. We do not get a payment for study leave as [GP principals/ partners] do. We also face discrimination .. as we have to continue to complete CPD with no maternity leave payments.'* (GP, BMQ Ireland, specialist division)**

188

189 *Availability and quality of CPD materials*

190 The availability of CPD to match doctors' scope of practice, and the quality of the CPD, were the  
191 main barriers under this theme. Repetitive content, the geographical concentration of events in  
192 Dublin, and poor availability of online courses were cited.

***'The standard of educational activities provided by the relevant training bodies can be quite weak and repetitive in Ireland.'* (Psychiatry, BMQ Ireland, specialist division)**

193

194 *Employment Status*

195 Doctors not in fulltime clinical employment in Ireland found it challenging to meet the requirements  
196 of MPC.

***'Working as a locum or as a sessional doctor for short periods is a barrier to carrying out audit. Maternity leave - possible to get external points but internal points and audit difficult to impossible. I was informed that I could make it up in later years. I do not think it is fair to ask***

*people to do an extra audit to make up for time off on maternity leave. I moved city yearly since starting the CPD scheme and worked as locum, sessional work and other jobs. In that time, I also had a maternity leave... I found it difficult in those years to make up points'. (GP, BMQ Ireland, general division)*

197

#### 198 *Record Keeping*

199 Recording of CPD activities on cumbersome online platforms was identified as a further barrier.

*'The process of recording activity through the online portal is a very tedious and time consuming. ....sitting down to spend a considerable amount of time engaging with the process is demoralising'. (Obstetrics and gynaecology, BMQ Ireland, specialist division)*

200

#### 201 *Audit*

202 Participants cited the audit as a barrier to participation in MPC. Issues relating to the audit included  
 203 the lack of training, skills, and information provided on how to conduct an audit. Many participants  
 204 regarded audit as a pointless exercise with no clear benefit. Others believed audit was irrelevant to  
 205 their practice and "only suitable for academics". Some participants thought that the yearly audit was  
 206 excessive and onerous, and would prefer an audit spread over a number of years.

207

#### 208 **Suggestions for Improvement of MPC processes**

209 The majority of respondents (58%) were not in favour of using patient feedback as part of MPC.  
 210 Using feedback from colleagues also received a tepid reception with 51% agreeing that they would  
 211 welcome it. 61% would like to see a quality improvement initiative option. Recommendations for  
 212 improvement mirrored the barriers identified. Suggestions for improvement captured by the open-  
 213 ended survey question are thematically outlined in Table 3 below, and ranked by frequency.

<i>Suggestion</i>	<i>Subthemes</i>
<b>2.1 Remove or change audit</b>	Remove audit Reduce audit frequency

	Audit alternative
<b>2.2 Provide additional support</b>	Make allowances for individual circumstances Provide more information
<b>2.3 Increase the quality and range of CPD activities</b>	Provide more online courses Increase the quantity, quality and variety of local CPD courses
<b>2.4 Reduce the expense of PCS and CPD courses</b>	Subsidise CPD activities Provide locum cover Make expenses tax deductible
<b>2.5 Changes to current scheme</b>	Change points system Introduce new methods Place more emphasis on learning Make participation voluntary
<b>2.6 More protected time</b>	
<b>2.7 Tailor PCS to specialty or scope of practice</b>	Specialty specific requirements and courses Recognition of non-clinical roles (i.e., credit for teaching)

214 Table 3. Suggestions for Improvement of MPC processes ranked by frequency

215

216 The most frequent suggested improvement was to remove or change the audit component.

***'The requirement to complete a full audit cycle within one year every single year encourages you to pick a subject dealing with small numbers so that it can all be completed in time. In my opinion, you should be allowed to carry out larger audits over a period of two or three years which would provide more useful and comprehensive information and therefore be much more beneficial. You could easily show evidence of working on the audit every year and this should be enough to satisfy the Medical Council in my view.'* (GP, BMQ Ireland, specialist division)**

217

218 Participants felt that additional support should be provided by making allowances for individual  
219 circumstances and providing more information.

***Allow excess points to be carried over from one year to the next. I feel the Colleges should be more aware and sensitive to individuals' circumstances e.g. illness, bereavement etc. (Radiology, BMQ Ireland, specialist division)***

220

221

222 Provision of more online CPD, as well as improving the quality and quantity of offerings would make  
223 MPC a more useful experience for participants.

***The body should be responsible for providing mandatory free online and in person educational activities, seminars and meetings covering all medical updates and specialties. (Psychiatry, BMQ non-EU, general division)***



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6 225 There were a variety of suggestions as to how expense of MPC could be reduced, including greater  
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8 226 subsidies, provision of locum cover, and making expenses tax deductible. Further suggestions  
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10 227 included making changes to how CPD points are awarded, introduction of new methods to evaluate  
11  
12  
13 228 doctors and placing more emphasis on learning.

14  
15  
16 ***The basic premise of most educational activities being offered in these schemes as being of***  
17 ***educational value is flawed. There is little value in sitting in a conference from an educational***  
18 ***point of view. Learning needs to be more active and self-directed. Most CPD schemes do not***  
19 ***facilitate this in any meaningful way. (Medical specialty, BMQ non-EU, general division)***  
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23  
24 230 In Ireland doctors' entitlement to study leave varies according to role. Those not currently entitled to  
25  
26 231 such leave identified this as an area to be addressed.

27  
28  
29 ***We should have protected time included in our contract. It's ridiculous having to go at night in***  
30 ***the winter and give up weekend family time to go to meetings. (GP, BMQ Ireland, general***  
31 ***division)***  
32

33 232  
34

35 233 Finally, respondents suggested greater tailoring of the requirements of MPC to doctors' scope of  
36  
37 234 practice.

38  
39  
40 ***PCS at the moment is general and you can fill education or courses you like. I think it would be***  
41 ***more productive if stratified into subspecialties, that might help people stay more focused and***  
42 ***sharp into one speciality and relevant education. (Medical specialty, BMQ non-EU, general***  
43 ***division)***  
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#### 47 236 **Confidence in ability to meet requirements of MPC**

48  
49 237 87% of respondents agreed that they were confident that they could meet the requirements of MPC.  
50  
51 238 A proportional odds regression model showed that confidence in meeting requirements was related  
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53  
54 239 to more positive attitudes to MPC, but not related to respondent characteristics e.g. gender or  
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56 240 division of the register.  
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241 In total, over 700 doctors said they were not confident that they could meet requirements. Of  
 242 these, 315 provided comments explaining why they lacked confidence. Five main reasons and  
 243 associated subthemes were identified, which are outlined in Table 4 below and ranked by frequency.

<i>Reason</i>	<i>Subthemes</i>
<b>3.1 Employment status</b>	Not in full-time practice Non-clinical role Maternity leave Working abroad Sick leave Career break
<b>3.2 Lack of time</b>	Cover for clinical work Busy clinical workload Personal/family time
<b>3.3 Audit</b>	Time Lack of skills, training and support Employment status
<b>3.4 Expense</b>	
<b>3.5 Quantity and quality of CPD courses</b>	Lack of relevant CPD courses Not enough online courses

244 Table 4. Reasons for lacking confidence in ability to meet requirements of MPC

### 246 Intention to comply with MPC

247 77% stated that they intended to comply with requirements. 23% were either unsure or disagreed.

248 Associations between Likert-scaled survey items and intention to comply were estimated using  
 249 proportional odds regression models. This confirmed the relationship between intention to comply  
 250 and positive attitudes to MPC, weaker endorsement of barriers to MPC, stronger endorsement of  
 251 facilitators and stronger endorsement of social norms e.g. importance to patients. This was similar  
 252 to the findings in relation to confidence of ability to comply.

253 Relationship between gender, region of Basic Medical Qualification, division of the register, role,  
 254 service model, nationality and intent was significant only for gender and region of BMQ. Male  
 255 doctors and those who obtained their BMQ outside Ireland were more uncertain of their intention  
 256 to comply with the requirements of MPC.

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3 **257 Discussion**  
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7 259 This study was the first national survey of doctors' attitudes towards Maintenance of Professional  
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9 260 Competence since its introduction in Ireland in 2011. While attitudes to MPC were generally  
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11 261 positive, up to one-third of doctors were unconvinced of its impact. The time, effort and expense  
12  
13 262 involved in MPC outweighed any perceived benefit for half of doctors. A significant minority (38%)  
14  
15 263 felt that MPC is a tick-box exercise and over 40% did not view MPC as important to patients or  
16  
17 264 colleagues, or consequential in terms of sanction from the Medical Council. Seventy-seven percent  
18  
19 265 of respondents stated a definite intention to comply with the requirements of MPC, which is  
20  
21 266 surprisingly low in the context of the legal requirement to do so. Those who were less certain of  
22  
23 267 intention to comply held more negative views of the process, in terms of general attitudes,  
24  
25 268 perception of impact on own practice and endorsement of the presence of multiple barriers to  
26  
27 269 participation. These findings point to the importance of convincing doctors that MPC is worthwhile.  
28  
29 270 Being male, or having a Basic Medical Qualification from outside Ireland also predicted greater  
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31 271 likelihood of not expressing firm intention to comply.  
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36 272 Engaging doctors in MPC in a meaningful way requires clear communication of the purpose of the  
37  
38 273 process and explicit linkage of the mandated activities to that purpose. Confusion about the  
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40 274 objectives of MPC and lack of evidence of its effectiveness have hampered doctors' commitment to  
41  
42 275 the process internationally [6, 14]. The findings of this research suggest that a similar situation  
43  
44 276 prevails in Ireland. While promotion of MPC and the PCS schemes in Ireland refer to doctor  
45  
46 277 competence, quality of care and patient safety [9], the requirements currently in place are aimed  
47  
48 278 primarily at assuring doctors' attendance at approved CPD sessions. The relationship between CPD  
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50 279 and competence, quality of care and patient safety is supported by limited evidence [3, 15], which  
51  
52 280 may explain the significant minority of doctors who were unconvinced of its impact in enhancing  
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54 281 standards of medical practice and reassuring the public.  
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3 282 Furthermore, 49% of respondents to our survey disagreed or were ambivalent towards the  
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5 283 statement that they match their choice of CPD to their learning needs. Qualitative comments  
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7 284 suggest that convenient timing and location, availability and expense contribute to the choice of CPD  
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9 285 undertaken. Thus, MPC can become a tick-box exercise, focussed on scoring the required points  
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11 286 before the annual deadline rather than meeting learning needs. While the compulsory annual audit  
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13 287 might have been expected to be a useful activity embedded in doctors' day-to-day practice, our  
14  
15 288 findings suggest that, on the contrary, it is seen by many a time consuming and ineffective exercise.  
16  
17 289 Comments suggested that the single year timeframe forces a decision to do small scale audits that  
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19 290 have little perceived impact. This goes some way to explaining why only 53% of respondents agreed  
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21 291 that their own practice had been impacted by participation in MPC. Removal of the audit, or change  
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23 292 to the requirements relating to it was the most frequent suggestion to improve MPC. The literature  
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25 293 suggests that any model of MPC that seeks to impact practice should feature a facilitated approach  
26  
27 294 through activities such as regular performance review, appraisal, mentoring, etc. [3], something that  
28  
29 295 is lacking in the current Irish system. Facilitation can involve exploration of learning needs, targeted  
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31 296 choice of CPD, and linking audit to practice. It has also been shown to provide emotional support  
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33 297 and to enhance engagement with the process [16]  
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39 298 Inadequate resourcing of MPC was evident in the barriers to engagement identified by respondents.  
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41 299 Time associated with participating in the MPC process was the greatest barrier. Heavy workload,  
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43 300 requirement to travel and to record CPD activities, and the demands this placed on personal time  
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45 301 were amongst the difficulties arising. Respondents repeatedly referred to the need for funded  
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47 302 protected time for MPC, including provision of locum cover. The current strain in the Irish health  
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49 303 system, with short-staffing and heavy service demands, can make it challenging for those entitled to  
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51 304 study leave to take it. Time constraints are cited internationally as a barrier to MPC [17, 18].  
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56 305 Expense of participation in MPC was the second most endorsed barrier. Internationally the question  
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58 306 of who should bear the expense of MPC is a hotly contested topic. Our respondents' comments echo  
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3 307 the concerns of doctors in other jurisdictions that MPC is a money-making exercise for those who  
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5 308 regulate and run programmes [15]. Doctors pay annual registration fees to the Medical Council,  
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7 309 membership or fellowship fees to postgraduate training bodies and, professional indemnity fees. The  
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10 310 addition of a fee for enrolment in a Professional Competence Scheme, fees for CPD activities and the  
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12 311 associated locum cover, travel and accommodation, add up to significant expense. Respondents  
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14 312 indicated that this is an issue particularly for doctors for whom professional expenses are not tax  
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16 313 deductible and who may not have a CPD allowance; those working less than full-time, as non-  
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18 314 consultant hospital doctors or salaried GPs and those taking maternity/parental or sick leave. While  
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20 315 some doctors do have an allowance for CPD activities this varies across different groups and is not  
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23 316 universal.

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26 317 If MPC programmes are to be successful, CPD to match learning needs must be readily available and  
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28 318 of high quality. Respondents commented that available CPD was of limited range and tended to be  
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30 319 repetitive. Geographical location, excessive expense, inadequate advertising/notice and limited  
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32 320 places all contributed to inaccessibility of current CPD offerings. A strong preference for greater  
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34 321 availability of online learning was expressed, as well as greater variety and better quality courses  
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36 322 outside Dublin. Recent work in the Irish context has documented the broad CPD needs of both GPs  
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38 323 and hospital consultants and provides useful information to support more effective provision of CPD  
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40 324 [19–22].

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45 325 The vast majority of doctors understood what the requirements for MPC were, but many did not  
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47 326 find PCS sufficiently flexible or information provided adequate. Foremost amongst suggestions for  
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49 327 improvement was the provision of more information and support for doctors. Greater flexibility,  
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51 328 reflecting recognition of the individual circumstances of doctors, e.g. sick leave, was also felt to be  
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53 329 important. This included allowing greater flexibility between categories of points and requiring fewer  
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55 330 points from part-time workers. The arbitrary nature of the threshold of 50 CPD points would suggest  
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57 331 that these are reasonable suggestions.  
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3 332 There is a subgroup of doctors for whom the combination of expense and the specific requirements  
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5 333 of MPC present a real challenge. Thirteen percent of respondents expressed lack of confidence in  
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7 334 their ability to meet MPC requirements. The main reason cited for lack of confidence was  
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10 335 employment status. Meeting the requirements of MPC is particularly challenging for those working  
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12 336 less than full-time, in locum posts, in non-clinical roles, taking maternity or sick leave and those living  
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14 337 outside Ireland for part of the year. Again, this is something that is common across other  
15  
16 338 jurisdictions [23]. Greater flexibility in requirements would support participation amongst this group.

#### 19 339 Strengths and limitations

20 340 Amongst the strengths of this study are the diverse stakeholders involved in the research, the strong  
21  
22 341 response rate to the questionnaire and the representativeness of the respondents. Survey design  
23  
24 342 was undertaken in accordance with best practice, informed by literature and theory. Post hoc  
25  
26 343 analysis of the survey confirmed its validity. Although the response rate to the survey was excellent  
27  
28 344 there were still large numbers of non-responders. We cannot be sure that the findings presented  
29  
30 345 here represent the views of non-responders.

#### 35 346 Conclusions

36 347 We have presented the views of over 5,000 doctors participating in MPC in Ireland. The problems  
37  
38 348 with implementation of MPC identified in this study are not unique to the Irish context. As MPC  
39  
40 349 continues to evolve internationally other jurisdictions grapple with the same challenges. Enhancing  
41  
42 350 doctors' engagement in MPC in Ireland will require a comprehensive strategy focussed on better  
43  
44 351 communication, adequate resourcing and ongoing evaluation of the process.

#### 48 352 References

- 49 353 1. Sklar DP: **What Happens After Medical School? Current Controversies About Licensure,**  
50  
51 354 **Maintenance of Certification, and Continuing Professional Development.** *Acad Med* 2016, **91**:1–3.  
52  
53 355 2. Dixon-Woods M, Yeung K, Bosk CL: **Why is UK medicine no longer a self-regulating profession?**  
54  
55 356 **The role of scandals involving “bad apple” doctors.** *Soc Sci Med* 2011, **73**:1452–1459.  
56  
57  
58  
59  
60

- 1  
2  
3 357 3. Archer J, Pitt R, Nunn S, Regan de Bere S: *The Evidence and Options for Medical Revalidation in the*  
4  
5 358 *Australian Context*. Plymouth, UK; 2015.  
6  
7  
8 359 4. Horsley T, Lockyer J, Cogo E, Zeiter J, Bursey F, Campbell C: **National programmes for validating**  
9  
10 360 **physician competence and fitness for practice: a scoping review**. *BMJ Open* 2016, **6**:e010368.  
11  
12  
13 361 5. Shaw K, Cassel C, Black C, Levinson W: **Shared medical regulation in a time of increasing calls for**  
14  
15 362 **accountability and transparency**. *JAMA* 2009, **302**.  
16  
17  
18 363 6. Tazzyman A, Ferguson J, Walshe K, Boyd A, Tredinnick-Rowe J, Hillier C, Regan De Bere S, Archer J:  
19  
20 364 **The Evolving Purposes of Medical Revalidation in the United Kingdom**. *Acad Med* 2017, **93**:1.  
21  
22  
23 365 7. Miller S: **American board of medical specialities and repositioning for excellence in lifelong**  
24  
25 366 **learning: maintenance of certification**. *J Contin Educ Health Prof* 2005, **25**:151–156.  
26  
27  
28 367 8. Merkur S, Mossialos E, Long M, McKee M: **Physician revalidation in Europe**. *Clin Med J R Coll*  
29  
30 368 *Physicians London* 2008, **8**:371–376.  
31  
32  
33 369 9. Medical Council: *Professional Competence; Promoting Quality Assurance*. Dublin, Ireland, Ireland;  
34  
35 370 2010.  
36  
37  
38 371 10. Medical Council: *Maintenance of Professional Competence. Report of Progress 2011-2018*.  
39  
40 372 Dublin, Ireland; 2018.  
41  
42  
43 373 11. Hanlon H, Prihodova L, Russel T, Donegan D, O'Shaughnessy A, Hoey H: **Attitudes, benefits and**  
44  
45 374 **barriers to participating in mandatory continuing professional development scheme in doctors in**  
46  
47 375 **Ireland**. In *Association for Medical Education in Europe Annual Scientific Meeting*. Vienna: AMEE;  
48  
49 376 2019:8K4.  
50  
51  
52 377 12. Ajzen I: **From intentions to actions: A theory of planned behavior**. In *Action-control: From*  
53  
54 378 *cognition to behavior*. Edited by Kuhl J, Beckman J. Heidelberg: Springer; 1985:11–39.  
55  
56  
57 379 13. Braun V, Clarke V: **Using thematic analysis in psychology**. *Using Qual Res Psychol* 2006, **3**:77–  
58  
59  
60

- 1  
2  
3 380 101.  
4  
5  
6 381 14. Archer J, Regan De Bere S, Nunn S, Clark J, Corrigan O: **No one has yet properly articulated what**  
7  
8 382 **we are trying to achieve: A discourse analysis of interviews with revalidation policy leaders in the**  
9  
10 383 **United Kingdom.** *Acad Med* 2015, **90**:88–93.  
11  
12  
13 384 15. Teirstein PS: **Boarded to Death — Why Maintenance of Certification Is Bad for Doctors and**  
14  
15 385 **Patients.** *N Engl J Med* 2015, **372**:106–108.  
16  
17  
18 386 16. NHS England and NHS Improvement: *Medical Appraisal : Feedback from GPs in 2018-19.* London;  
19 387 2019.  
20  
21  
22  
23 388 17. Cook DA, Holmboe ES, Sorensen KJ, Berger RA, Wilkinson JM: **Getting maintenance of**  
24  
25 389 **certification to work: A grounded theory study of physicians’ perceptions.** *JAMA Intern Med* 2015,  
26  
27 390 **175**:35–42.  
28  
29  
30  
31 391 18. Ikenwilo D, Skåtun D: **Perceived need and barriers to continuing professional development**  
32  
33 392 **among doctors.** *Health Policy* 2014:195–202.  
34  
35  
36 393 19. Maher B, O’Neill R, Faruqui A, Bergin C, Horgan M, Bennett D, O’Tuathaigh CMP: **Survey of Irish**  
37  
38 394 **general practitioners’ preferences for continuing professional development.** *Educ Prim Care* 2018,  
39  
40 395 **29**:13–21.  
41  
42  
43 396 20. Maher B, Faruqui A, Horgan M, Bergin C, Tuathaigh CO, Bennett D: **Continuing professional**  
44  
45 397 **development and Irish hospital doctors: A survey of current use and future needs.** *Clin Med J R Coll*  
46  
47 398 *Physicians London* 2017, **17**:307–315.  
48  
49  
50  
51 399 21. Dowling S, Last J, Finnegan H, O’Connor K, Cullen W: **Does locally delivered small group**  
52  
53 400 **continuing medical education (CME) meet the learning needs of rural general practitioners?** *Educ*  
54  
55 401 *Prim Care* 2019, **30**:145–151.  
56  
57  
58 402 22. Dowling S, Last J, Finnegan H, O’Connor K, Cullen W: **What are the current “top five” perceived**  
59  
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403 **educational needs of Irish general practitioners?** *Ir J Med Sci* 2019.

404 23. Agius S, Baron R, Lewis B, Hayden J: **What do GP educators perceive to be the opportunities and**

405 **challenges of introducing revalidation?** *Educ Prim Care* 2011, **22**:386–392.

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3 407 **Declarations**  
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5  
6 408 ***Ethics approval and consent to participate***  
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8  
9 409 Ethical approval was granted by the Social Research Ethics Committee, University College Cork. All  
10  
11 410 participants gave fully informed consent.  
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14 411 ***Consent for publication***  
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16  
17 412 Not applicable  
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19  
20 413 ***Availability of data and materials***  
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22  
23 414 The datasets generated and/or analysed during the current study are not publicly available due to  
24  
25 415 participants not having consented to public availability, but are available from the corresponding  
26  
27 416 author on reasonable request.  
28

29  
30 417 ***Competing interests***  
31

32  
33 418 EG, AW, DD and DB declare that they have no competing interests. JC and JOF are employed by the  
34  
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36

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42  
43 422 in the design of the study and collection, analysis, and interpretation of data nor in writing this  
44  
45 423 manuscript.  
46

47  
48 424 ***Authors' contributions***  
49

50  
51 425 DB designed the study. JOF, AW, JC and DB designed the questionnaire. JOF and JC administered the  
52  
53 426 questionnaire and collected the data. DD performed the statistical analysis. All authors contributed  
54  
55 427 to the analysis and interpretation of the data. EG, AW and DB drafted the paper which was edited  
56  
57 428 and approved by all authors. All authors have agreed both to be personally accountable for their  
58  
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3 429 own contributions and to ensure that questions related to the accuracy or integrity of any part of the  
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5 430 work, even ones in which the author was not personally involved, are appropriately investigated,  
6  
7 431 resolved, and the resolution documented in the literature.  
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9

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12

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36 443 We are grateful to Ireland's doctors who shared their perspectives with us on this important topic in  
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38 444 great numbers.  
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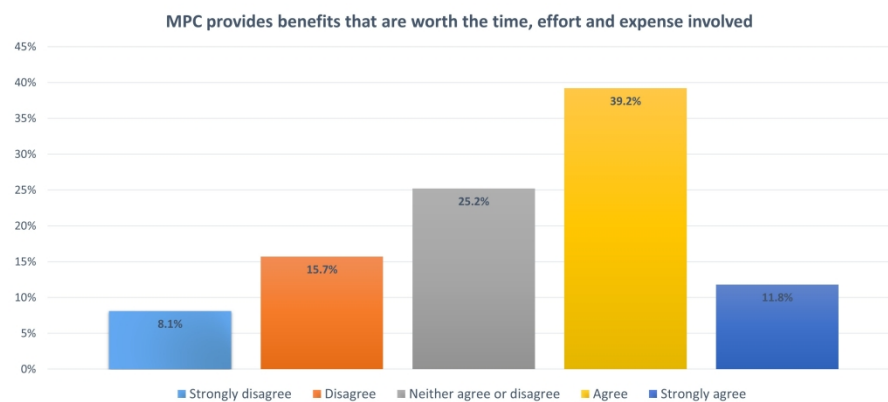


Figure 1. Distribution of responses to the statement that MPC provides benefits that are worth the time, effort and expense involved.

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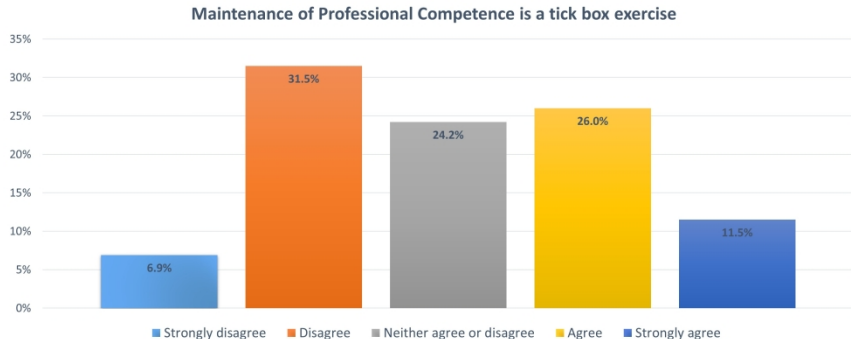


Figure 2. Distribution of responses to the statement that MPC is a tick box exercise

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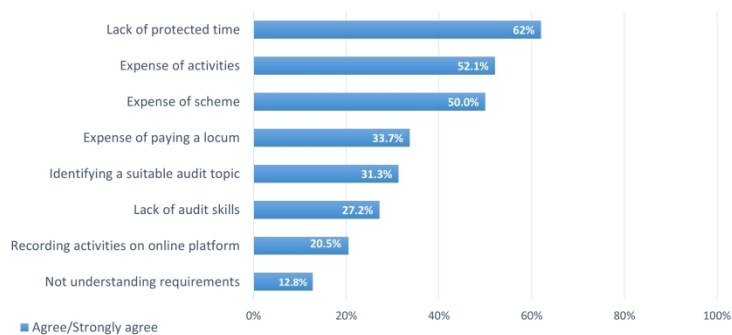


Figure 3. Barriers to meaningful engagement with MPC

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## APPENDIX A – SURVEY QUESTIONNAIRE

Since 2011 doctors have been required to demonstrate Maintenance of Professional Competence by enrolling in Professional Competence Schemes and recording their educational activities. This survey is about your attitudes to and experience of participation in Maintenance of Professional Competence. Your responses should relate to your experience in IRELAND ONLY.

Maintenance of Professional Competence	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Reassures patients and the public that doctors are fit to practice	1	2	3	4	5
2. Encourages doctors to continually learn and keep up to date	1	2	3	4	5
3. Raises the standard of practice of all doctors	1	2	3	4	5
Participation in Maintenance of Professional Competence	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4. Encourages me to reflect more on my professional development	1	2	3	4	5
5. Encourages me to participate in more educational activities	1	2	3	4	5
6. Has resulted in changes in my practice	1	2	3	4	5
7. Provides benefits that are worth the time, effort and expense involved	1	2	3	4	5

Please indicate your agreement with these statements about BARRIERS to <b>your own</b> engagement with Maintenance of Professional Competence in Ireland	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I do not understand what I am required to do for Maintenance of Professional Competence		1	2	3	4	5
2. Lack of protected time makes it difficult to undertake activities to earn points	0	1	2	3	4	5
3. The expense of the annual Professional Competence Scheme fee is a barrier		1	2	3	4	5
4. The expense of Continuing Professional Development(CPD) activities is a barrier		1	2	3	4	5
5. The expense of paying a locum to allow me to attend CPD activities is a barrier	0	1	2	3	4	5
6. The requirement to record my learning activities through an online platform has been a barrier		1	2	3	4	5
7. Lack of audit skills has been a barrier		1	2	3	4	5
8. Difficulty identifying a suitable audit topic has been a barrier		1	2	3	4	5
9. Please provide details of any other barriers or reasons for not participating in Maintenance of Professional Competence here:						

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Please indicate your agreement with the following statements about factors which SUPPORT <b>your own</b> engagement with Maintenance of Professional Competence in Ireland	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. The CPD activities I need to address gaps in my knowledge and practice are currently available		1	2	3	4	5
2. I can access high quality CPD activities		1	2	3	4	5
3. My Professional Competence Scheme provides enough flexible ways to meet requirements		1	2	3	4	5
4. My Professional Competence Scheme provides useful information to help me to meet requirements		1	2	3	4	5
Please indicate your agreement with the following statements	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
5. Maintenance of Professional Competence is a tick box exercise		1	2	3	4	5
6. I match my CPD activities to gaps in my knowledge and practice		1	2	3	4	5
7. I would welcome the opportunity to use patient feedback to demonstrate my professional competence	0	1	2	3	4	5
8. I would welcome the opportunity to use feedback from colleagues to demonstrate my professional competence		1	2	3	4	5
9. I would welcome the opportunity to submit a quality improvement initiative rather than an audit	0	1	2	3	4	5
10. I am concerned that information I provide to my Professional Competence Scheme about my knowledge and practice could be used against me if my competence was in question		1	2	3	4	5
11. It is important to my patients that I meet the requirements for Professional Competence	0	1	2	3	4	5

12. It is important to my colleagues that I meet the requirements for Professional Competence		1	2	3	4	5
13. Doctors who do not participate in Maintenance of Competence risk being removed from the register		1	2	3	4	5
14. I am confident that I can fulfil the requirements for Maintenance of Competence		1	2	3	4	5
15. If you are not confident of meeting the requirements for Maintenance of Competence, please indicate why not here						
16. Please rate your intention to comply with requirements for Maintenance of Competence in the future	Intend not to comply	Probably won't comply	Unsure about my intentions	Probably will comply	Intend to comply	
17. If you could change two things about Maintenance of Competence/ Professional Competence Schemes to make them more relevant, efficient and effective for you, what would they be?						
Would you be willing to participate in a <b>confidential interview</b> on the topic of Professional Competence Schemes.? We are particularly interested in talking to doctors who have not enrolled or participated, or who have found doing so difficult.	YES/NO					
If so please provide an email contact						

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For peer review only

# BMJ Open

## Maintenance of Professional Competence in Ireland: A National Survey of Doctors' Attitudes and Experiences

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3 **Maintenance of Professional Competence in Ireland: A National Survey of Doctors' Attitudes and**  
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5 **Experiences**  
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3 1 **Abstract (300 words)**  
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6 2 **Objectives:** Programmes to ensure doctors' Maintenance of Professional Competence (MPC) have  
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8 3 been established in many countries. Since 2011, doctors in Ireland have been legally required to  
9  
10 4 participate in MPC. A significant minority has been slow to engage with MPC, mirroring the  
11  
12 5 contested nature of such programmes internationally. This study aimed to describe doctors'  
13  
14 6 attitudes and experiences of MPC in Ireland with a view to enhancing engagement.  
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17  
18 7 **Participants:** All registered medical practitioners in Ireland required to undertake MPC in 2018 were  
19  
20 8 surveyed using a thirty-three item cross-sectional mixed-methods survey designed to elicit attitudes,  
21  
22 9 experiences and suggestions for improvement.  
23  
24

25 10 **Results:** There were 5,368 responses (response rate 42%). Attitudes to MPC were generally positive,  
26  
27 11 but the time, effort and expense involved outweighed the benefit for half of doctors. Thirty-eight  
28  
29 12 percent agreed that MPC is a tick-box exercise. Heavy workload, travel, requirement to record CPD  
30  
31 13 activities, and demands placed on personal time were difficulties cited. Additional support, as well  
32  
33 14 as higher quality, more varied educational activities were amongst suggested improvements.  
34  
35 15 Thirteen percent lacked confidence that they could meet requirements, citing employment status as  
36  
37 16 the primary issue. MPC was particularly challenging for those working less than full-time, in locum or  
38  
39 17 non-clinical roles, and taking maternity or sick leave. Seventy-seven percent stated a definite  
40  
41 18 intention to comply with MPC requirements. Being male, or having a basic medical qualification from  
42  
43 19 outside Ireland was associated with less firm intention to comply.  
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48 20 **Conclusions:** Doctors need to be convinced of the benefits of MPC to them and their patients. A  
49  
50 21 combination of clear communication and improved relevance to practice would help. Addition of a  
51  
52 22 facilitated element e.g. appraisal and varied ways to meet requirements would support  
53  
54 23 participation. MPC should be adequately resourced, including provision of high quality free  
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56 24 educational activities. Systems should be established to continually evaluate doctors' perspectives.  
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## Strengths and Limitations of this Study

Strengths include;

- Strong response rate for a national online survey of all doctors (n=5368, 42%)
- Representativeness of the respondents
- Diverse stakeholders involved in the research, including patient representation
- Survey design was undertaken in accordance with best practice, informed by literature and theory. Post hoc analysis of the survey confirmed its validity.

Limitations include;

- Although the response rate to the survey was excellent there were still large numbers of non-responders. We cannot be sure that the findings presented here represent the views of non-responders.



## 39 Introduction

40 Historically, once a doctor entered independent practice, career-long maintenance of professional  
41 knowledge and skills was assumed [1]. In recent decades, evolving doctor-patient relationships, a  
42 drive for accountability, and high-profile cases of malpractice [2] have led medical regulators to put  
43 continuous evaluative processes in place to ensure that doctors are up to date and fit to practise [3].  
44 A variety of terms are used to describe these programmes; revalidation, recertification, relicensing,  
45 maintenance of certification and maintenance of licensure [4, 5]. In this paper, we will use the term  
46 Maintenance of Professional Competence (MPC).  
47 MPC programme requirements vary from country to country but, in general, involve educational and  
48 assessment elements such as; evidence of good professional standing; participation in knowledge  
49 self-assessments; examinations; quality improvement projects or audits; appraisal; peer and patient  
50 feedback; and continuing professional development (CPD)[3, 5–7]. The intended outcomes of these  
51 activities are manifold and include; improving patient safety and the quality of patient care;  
52 encouraging doctors to commit to lifelong learning; and enhancing the continuing professional  
53 development of doctors [5, 8]. While there is evidence that some MPC activities, such as interactive  
54 CME/CPD, appraisal, review of patient complaints and multisource feedback, have an impact on  
55 doctors' knowledge, skills, attitudes and behaviours, it is less clear that MPC significantly impacts  
56 patient outcomes [3]. This has led to much debate about whether and how MPC programmes should  
57 be implemented.

58 In keeping with international trends, in Ireland doctors have been legally mandated to participate in  
59 MPC since 2011. The Medical Council, the regulator for doctors in Ireland, has established a range of  
60 Professional Competence Schemes (PCS) to administer the process through thirteen national bodies  
61 responsible for postgraduate medical training. Doctors are required to enrol in and submit evidence  
62 of educational activities annually through a PCS. Each doctor is expected to obtain a minimum of 50  
63 credits per year (1 credit= 1 hour) through CPD activity. A minimum requirement of 20 credits each is

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3 64 set for external and internal CPD, with the remainder coming from personal learning and  
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5 65 research/teaching categories. In addition, each doctor is required to complete one quality  
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7 66 improvement (clinical/non-clinical) audit per year [9].  
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10 67 Following its introduction in Ireland, a significant minority of doctors were slow to engage with MPC.  
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12 68 By 2016, 16.3% had still not enrolled in a PCS despite a legal requirement to do so. Active measures  
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14 69 by the Medical Council have addressed enrolment reducing this figure to 1.7% in 2018 [10].  
15  
16 70 Nonetheless, engagement remains a problem, with one postgraduate training body reporting 30% of  
17  
18 71 doctors not meeting the requirements laid down by the Medical Council [11]. Failure amongst  
19  
20 72 doctors to engage fully with a legal requirement linked to competence has the potential to  
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22 73 undermine the trust the public have in their doctors. It also creates risk for employers, indemnifiers  
23  
24 74 and a significant challenge for the regulator.  
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29 75 This paper reports a national survey of doctors in Ireland, funded by the Health Research Board  
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31 76 Ireland. The aim of this study was to describe doctors' attitudes, experiences and suggestions for  
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33 77 improvement in relation to current systems for Maintenance of Professional Competence (MPC) in  
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35 78 Ireland. The research was underpinned by an integrated approach to knowledge translation. The  
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37 79 research team included representation from a range of stakeholders; the regulator, postgraduate  
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39 80 training bodies, the health service and patients.  
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## 43 81 **Methods:**

### 44 82 *Study design and setting*

45  
46 83 As the regulatory body for the medical profession in Ireland, the Medical Council has amongst its roles  
47  
48 84 maintenance of the Register of Medical Practitioners and must satisfy itself as to medical practitioners  
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50 85 ongoing maintenance of professional competence. The Register of Medical Practitioners is comprised  
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52 86 of four divisions shown in Table 1 below. Those registered in the general, supervised and specialist  
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54 87 division are required to participate in MPC.  
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88 Table 1. Divisions of the Register of Medical Practitioners

Division	Registrants
<b>General Division</b>	Medical practitioners who have not completed specialist training and do not occupy a postgraduate training post. Nineteen percent of doctors in this division are GPs.
<b>Specialist Division</b>	Medical practitioners who have completed specialist training recognised by the Council and can practise independently as a specialist. Thirty nine percent of doctors in this division are GPs.
<b>Supervised Division</b>	Medical practitioners who have been offered a post that has been approved by the national Health Service Executive (HSE), which has specific supervisory arrangements.
<b>Trainee Specialist Division</b>	Trainee specialist registration is specifically for medical practitioners who practise in individually numbered, identifiable postgraduate training posts.

89 This study was a cross-sectional mixed-methods survey of all registered medical practitioners in  
 90 Ireland mandated to participate in MPC in 2018 (n = 12,920).

#### 91 *Survey instrument*

92 We designed a questionnaire to elicit doctors' experience, attitudes and suggestions for  
 93 improvement of MPC. We drew on several sources to develop the questionnaire. We reviewed the  
 94 literature, held a focus group with doctors undertaking MPC, and sought input from our knowledge-  
 95 user research partners to identify key areas of interest. The Theory of Planned Behaviour (TPB)[12],  
 96 acted as a sensitising concept in the design of the survey. TPB posits that an individual's attitude  
 97 towards a behaviour, the subjective norms relating to that behaviour and the individual's perceived  
 98 control of the behaviour, shape behavioural intentions and the behaviour itself [12]. In the case of  
 99 MPC, this focussed attention not only on doctors' attitudes to MPC, and the barriers to participation  
 100 they encountered, but also on their perceptions of the attitudes of others such as patients and  
 101 colleagues, and the consequences of failure to participate. The questionnaire was piloted with a  
 102 further group of doctors (n = 30) representative of our target population, following which it was  
 103 further revised and refined to improve clarity and length. The final version of the questionnaire  
 104 consisted of thirty statements relating to MPC and three free text questions. A Likert-type format

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3 105 was used for the statements with five response codes ranging from 1 = strongly agree to 5 = strongly  
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5 106 disagree. A copy of the questionnaire can be found in Appendix A.  
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8 107 *Patient Involvement*  
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11 108 The research team included Mrs. Margaret Murphy, a patient safety advocate and then External  
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13 109 Lead Advisor, WHO Patients for Patient Safety, a network of 200-plus patient safety champions from  
14  
15 110 51 countries. Mrs. Murphy was a member of the project steering committee. She approved the  
16  
17 111 design and conduct of the study and contributed to design of the questionnaire. Patient perspectives  
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19 112 were reflected in items addressing the impact of MPC on patient outcomes, doctors' perceptions of  
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21 113 the importance of MPC to patients and the possibility of patient feedback contributing to doctors'  
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23 114 MPC.  
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27 115 *Data collection*  
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30 116 All doctors registered with the Medical Council are required to complete an online Annual Retention  
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32 117 of Registration process. In June/July 2018, information about the survey and a link to complete it  
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34 118 were included in the process as a pop-up targeting those in the relevant divisions of the register.  
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36 119 The information and link were also sent in email reminders to doctors in the weeks following the  
37  
38 120 annual retention process. Survey responses were linked to demographic data held by the Medical  
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40 121 Council using registration numbers. Once the data was collated the registration numbers were  
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42 122 removed and replaced with participant numbers to anonymise the data.  
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46 123 *Data analysis*  
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49 124 Descriptive statistics (frequencies and percentages) were generated to describe both the  
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51 125 demographic characteristics of respondents and responses to each survey item. Proportional odds  
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53 126 regression models were used to formally test the associations between responses to attitudinal  
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55 127 items and intention to comply with the requirements of MPC. To validate the survey instrument we  
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57 128 estimated a full Confirmatory Factor Analysis (CFA) model with four latent factors based on the  
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3 129 various Likert response survey questions organised under headings drawn from the Theory of  
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5 130 Planned Behaviour; attitudes; facilitators; barriers; and social norms. To accommodate the ordered  
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7 131 categorical nature of the indicators, we used a robust Weighted Least Squares estimator. We  
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10 132 calculated factor scores for each participant based on the model result and explored associations  
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12 133 between these factor scores and demographic characteristics with confidence of capability to  
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14 134 comply with requirements of MPC and intention to comply. Thematic analysis [13] was conducted  
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16 135 on the responses to the open-ended survey questions.

### 19 136 *Ethics*

22 137 This study received ethical approval through the University College Cork Social Research Ethics  
23  
24 138 Committee. Informed consent was obtained from all participants.

### 27 139 **Results**

30 140 There were 5,368 responses to the survey from a population of 12, 920, giving a response rate of  
31  
32 141 41.5%. Men accounted for 61% of responses. Median age was 47 years (IQR 38-56). 58% were in the  
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34 142 specialist division of the register and 39% were in the general division and 0.7% in the supervised  
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36 143 division. 56% had gained their Basic Medical Qualification (BMQ) in Ireland and a further 14% within  
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38 144 the EU. Respondents were representative of the survey population, with slight over representation  
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40 145 of men (61.2% vs 57.7%) and doctors registered in the general division (39.3% vs 36.5%). There was  
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42 146 good representation across specialties and countries of Basic Medical Qualification. Graduates of  
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44 147 Irish medical schools were slightly under-represented in the General Division (29.4% vs 27.4%) and  
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46 148 overrepresented in the Specialist division (73.8% vs 79.4%).

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54 150 The majority of respondents held positive views on the general benefits of MPC, agreeing that it  
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56 151 reassures patients and the public (65%), encourages doctors to continually learn and keep up to date  
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58 152 (77%) and raises the standard of practice of all doctors (62%). At a more personal level, being

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3 153 encouraged to participate in educational activities was the most agreed benefit (70%), followed  
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5 154 closely by being encouraged to reflect more on one's professional development (67%).  
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8 155 When the benefits were set against the time, effort and expense involved in the process only 51%  
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10 156 agreed that MPC was a worthwhile exercise (see Figure 1) and 38% agreed with the statement that  
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12 157 MPC was a tick box exercise (see Figure 2). MPC was considered to have resulted in changes in  
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14 158 practice by a small majority (53%). MPC wasn't seen as being particularly important to patients  
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16 159 (57%) or to colleagues (56%) and only 58% felt that non-compliance risked removal from the  
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18 160 register.  
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22 161 Figures 1 and 2 here  
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#### 25 162 *Barriers to participation in MPC*

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28 163 The main barriers to participation were lack of protected time and expense (see Fig. 3). Expense of  
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30 164 locum cover to allow participation in CPD was also a significant barrier. Audit skills were lacking in a  
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32 165 significant minority (27.2%). Doctors  $\leq$  34 years of age or over 55 years were more likely to report  
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34 166 these difficulties (35% and 32% respectively  $p < 0.001$ ).  
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38 167 A small group of doctors (12.8%) did not understand what they were required to do to maintain  
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40 168 professional competence. A small majority (55%) agreed that current arrangements and information  
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42 169 were sufficient. A significant minority expressed ambivalence or dissatisfaction with their ability to  
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44 170 access high quality CPD. 49% disagreed or were ambivalent towards the statement that they match  
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46 171 their choice of CPD to their learning needs.  
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49 172 Respondents provided over 1,300 comments relating to barriers to meaningful participation in MPC.  
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51 173 Six themes, with associated subthemes, were identified, and are outlined in Table 2 below, ranked  
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53 174 by frequency. Illustrative quotes are shown along with the respondent's area of practice, area of  
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55 175 basic medical qualification (BMQ – Ireland, Other EU, non EU), and division of the register.  
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59 176 Figure 3 here  
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177 Table 2. Barriers to meaningful engagement with MPC - themes and subthemes

Barriers	Barrier Subthemes
<b>Time involved in meeting the requirements of MPC</b>	Time for participation in MPC activities <ul style="list-style-type: none"> <li>○ Workload</li> <li>○ Travel to attend CPD activities</li> <li>○ Recording MPC activities</li> </ul> MPC time vs personal time
<b>Expense of participation in MPC</b>	Cumulative expense of MPC Impact of expense on the selection of CPD activities Insufficient CPD funding Expense related to specific groups of doctors
<b>Availability and quality of CPD activities</b>	Lack of relevance of CPD courses to scope of practice <ul style="list-style-type: none"> <li>○ CPD too general, not specialised</li> <li>○ Repetitive content</li> <li>○ Lack of recognition of all professional activities</li> <li>○ Lack of value for money</li> </ul> Difficulty of accessing CPD course <ul style="list-style-type: none"> <li>○ Geographical location</li> <li>○ Short notice of upcoming CPD courses</li> <li>○ Poor availability of online CPD courses</li> <li>○ Limited number of places available on CPD courses</li> </ul>
<b>Employment status</b>	Working abroad <ul style="list-style-type: none"> <li>○ Employed outside of Ireland</li> <li>○ Recently returned to Ireland after working abroad</li> </ul> Not employed in Ireland (looking for jobs) Non-fulltime employment Maternity or sick leave Non-clinical role
<b>Record-keeping</b>	Tedious and time-consuming process Cumbersome online platform
<b>Audit</b>	Lack of skills, training and support Frequency of audit Lack of relevance to scope of practice Time-consuming process

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179 Consistent with the Likert-scaled responses, the time and expense of participation in MPC were the

180 most frequently cited barriers.

181 *Time involved in meeting the requirements of MPC*

***'After a 10-12 hour very difficult day it can really interfere with personal time leading to stress and reduces time for family and friends. Due to increased pressures in primary care, paper work on call practice management etc. CPD while obviously very worthwhile has to be squeezed in and this leads to some resentment and less time for personal reading of which only 5 points are allocated.'* (GP, BMQ Ireland, specialist division)**

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3 183 *Expense of participation in MPC*  
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6 ***'I am forced to usually only choose free events and local to me due to time and financial***  
7 ***constraints, so I do not get to actually choose the things that would be most beneficial***  
8 ***educationally. This is because locum costs or costs from family life/babysitters etc. is too much***  
9 ***and if there are also course fees it is just not financially viable.'*** (GP, BMQ Ireland, specialist  
10 ***division)***  
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16 185 Some felt that the allowance or subsidy that they receive for CPD activity was inadequate. Specific  
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18 186 groups of doctors such as those on maternity leave, non-partner General Practitioners (GPs), non-  
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20 187 consultant hospital doctors (NCHDs) and locums found it particularly challenging to cover the cost  
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22 188 related to meeting the requirements of MPC.  
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25  
26 ***'I feel that non-partner/non-[principal] GPs are at a significant disadvantage, the cost of CPD in***  
27 ***addition to paying out of pocket for Medical Council etc. None of these costs are tax deductible***  
28 ***for us. Everything is straight out of our pocket. We do not get a payment for study leave as [GP***  
29 ***principals/ partners] do. We also face discrimination .. as we have to continue to complete CPD***  
30 ***with no maternity leave payments.'*** (GP, BMQ Ireland, specialist division)  
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36 190 *Availability and quality of CPD materials*  
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39 191 The availability of CPD to match doctors' scope of practice, and the quality of the CPD, were the  
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41 192 main barriers under this theme. Repetitive content, the geographical concentration of events in  
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43 193 Dublin, and poor availability of online courses were cited.  
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46 ***'The standard of educational activities provided by the relevant training bodies can be quite weak***  
47 ***and repetitive in Ireland.'*** (Psychiatry, BMQ Ireland, specialist division)  
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52 195 *Employment Status*  
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55 196 Doctors not in fulltime clinical employment in Ireland found it challenging to meet the requirements  
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57 197 of MPC.  
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4 ***'Working as a locum or as a sessional doctor for short periods is a barrier to carrying out audit. Maternity leave - possible to get external points but internal points and audit difficult to impossible. I was informed that I could make it up in later years. I do not think it is fair to ask people to do an extra audit to make up for time off on maternity leave. I moved city yearly since starting the CPD scheme and worked as locum, sessional work and other jobs. In that time, I also had a maternity leave... I found it difficult in those years to make up points'. (GP, BMQ Ireland, general division)***  
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16 199 *Record Keeping*17  
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19 200 Recording of CPD activities on cumbersome online platforms was identified as a further barrier.  
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22 ***'The process of recording activity through the online portal is a very tedious and time consuming. ....sitting down to spend a considerable amount of time engaging with the process is demoralising'. (Obstetrics and gynaecology, BMQ Ireland, specialist division)***  
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29 202 *Audit*30  
31  
32 203 Participants cited the audit as a barrier to participation in MPC. Issues relating to the audit included33  
34 204 the lack of training, skills, and information provided on how to conduct an audit. Many participants35  
36 205 regarded audit as a pointless exercise with no clear benefit. Others believed audit was irrelevant to37  
38 206 their practice and "only suitable for academics". Some participants thought that the yearly audit was39  
40 207 excessive and onerous, and would prefer an audit spread over a number of years.  
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44 20845  
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47 209 **Suggestions for Improvement of MPC processes**48  
49 210 The majority of respondents (58%) were not in favour of using patient feedback as part of MPC.50  
51 211 Using feedback from colleagues also received a tepid reception with 51% agreeing that they would52  
53 212 welcome it. 61% would like to see a quality improvement initiative option. Recommendations for54  
55 213 improvement mirrored the barriers identified. Suggestions for improvement captured by the open-56  
57 214 ended survey question are thematically outlined in Table 3 below, and ranked by frequency.  
58  
59  
60

215 Table 3. Suggestions for Improvement of MPC processes ranked by frequency

<i>Suggestion</i>	<i>Subthemes</i>
<b>Remove or change audit</b>	Remove audit Reduce audit frequency Audit alternative
<b>Provide additional support</b>	Make allowances for individual circumstances Provide more information
<b>Increase the quality and range of CPD activities</b>	Provide more online courses Increase the quantity, quality and variety of local CPD courses
<b>Reduce the expense of PCS and CPD courses</b>	Subsidise CPD activities Provide locum cover Make expenses tax deductible
<b>Changes to current scheme</b>	Change points system Introduce new methods Place more emphasis on learning Make participation voluntary
<b>More protected time</b>	
<b>Tailor PCS to specialty or scope of practice</b>	Specialty specific requirements and courses Recognition of non-clinical roles (i.e., credit for teaching)

216

217

218 The most frequent suggested improvement was to remove or change the audit component.

***'The requirement to complete a full audit cycle within one year every single year encourages you to pick a subject dealing with small numbers so that it can all be completed in time. In my opinion, you should be allowed to carry out larger audits over a period of two or three years which would provide more useful and comprehensive information and therefore be much more beneficial. You could easily show evidence of working on the audit every year and this should be enough to satisfy the Medical Council in my view.'* (GP, BMQ Ireland, specialist division)**

219

220 Participants felt that additional support should be provided by making allowances for individual  
221 circumstances and providing more information.

***Allow excess points to be carried over from one year to the next. I feel the Colleges should be more aware and sensitive to individuals' circumstances e.g. illness, bereavement etc. (Radiology, BMQ Ireland, specialist division)***

222

223

224 Provision of more online CPD, as well as improving the quality and quantity of offerings would make  
225 MPC a more useful experience for participants.

***The body should be responsible for providing mandatory free online and in person educational activities, seminars and meetings covering all medical updates and specialties. (Psychiatry, BMQ non-EU, general division)***

226

227 There were a variety of suggestions as to how expense of MPC could be reduced, including greater  
228 subsidies, provision of locum cover, and making expenses tax deductible. Further suggestions  
229 included making changes to how CPD points are awarded, introduction of new methods to evaluate  
230 doctors and placing more emphasis on learning.

***The basic premise of most educational activities being offered in these schemes as being of educational value is flawed. There is little value in sitting in a conference from an educational point of view. Learning needs to be more active and self-directed. Most CPD schemes do not facilitate this in any meaningful way. (Medical specialty, BMQ non-EU, general division)***

231

232 In Ireland doctors' entitlement to study leave varies according to role. Those not currently entitled to  
233 such leave identified this as an area to be addressed.

***We should have protected time included in our contract. It's ridiculous having to go at night in the winter and give up weekend family time to go to meetings. (GP, BMQ Ireland, general division)***

234

235 Finally, respondents suggested greater tailoring of the requirements of MPC to doctors' scope of  
236 practice.

***PCS at the moment is general and you can fill education or courses you like. I think it would be more productive if stratified into subspecialties, that might help people stay more focused and sharp into one speciality and relevant education. (Medical specialty, BMQ non-EU, general division)***

237

#### 238 **Confidence in ability to meet requirements of MPC**

239 87% of respondents agreed that they were confident that they could meet the requirements of MPC.  
240 A proportional odds regression model showed that confidence in meeting requirements was related  
241 to more positive attitudes to MPC, but not related to respondent characteristics e.g. gender or  
242 division of the register.

243 In total, over 700 doctors said they were not confident that they could meet requirements. Of  
 244 these, 315 provided comments explaining why they lacked confidence. Five main reasons and  
 245 associated subthemes were identified, which are outlined in Table 4 below and ranked by frequency.

246 Table 4. Reasons for lacking confidence in ability to meet requirements of MPC

247

<b>Reason</b>	<b>Subthemes</b>
<b>Employment status</b>	Not in full-time practice Non-clinical role Maternity leave Working abroad Sick leave Career break
<b>Lack of time</b>	Cover for clinical work Busy clinical workload Personal/family time
<b>Audit</b>	Time Lack of skills, training and support Employment status
<b>Expense</b>	
<b>Quantity and quality of CPD courses</b>	Lack of relevant CPD courses Not enough online courses

248

#### 249 **Intention to comply with MPC**

250 77% stated that they intended to comply with requirements. 23% were either unsure or disagreed.

251 Associations between Likert-scaled survey items and intention to comply were estimated using

252 proportional odds regression models. This confirmed the relationship between intention to comply

253 and positive attitudes to MPC, weaker endorsement of barriers to MPC, stronger endorsement of

254 facilitators and stronger endorsement of social norms e.g. importance to patients. This was similar

255 to the findings in relation to confidence of ability to comply.

256 Relationship between gender, region of Basic Medical Qualification, division of the register, role,

257 service model, nationality and intent was significant only for gender and region of BMQ. Men and

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3 258 those who obtained their BMQ outside Ireland were more uncertain of their intention to comply  
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5 259 with the requirements of MPC.  
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8 260 **Discussion**  
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12 262 This study was the first national survey of doctors' attitudes towards Maintenance of Professional  
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14 263 Competence since its introduction in Ireland in 2011. While attitudes to MPC were generally  
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16 264 positive, up to one-third of doctors were unconvinced of its impact. The time, effort and expense  
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18 265 involved in MPC outweighed any perceived benefit for half of doctors. A significant minority (38%)  
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20 266 felt that MPC is a tick-box exercise and over 40% did not view MPC as important to patients or  
21  
22 267 colleagues, or consequential in terms of sanction from the Medical Council. Seventy-seven percent  
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24 268 of respondents stated a definite intention to comply with the requirements of MPC, which is  
25  
26 269 surprisingly low in the context of the legal requirement to do so. Those who were less certain of  
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28 270 intention to comply held more negative views of the process, in terms of general attitudes,  
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30 271 perception of impact on own practice and endorsement of the presence of multiple barriers to  
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32 272 participation. These findings point to the importance of convincing doctors that MPC is worthwhile.  
33  
34 273 Being male, or having a Basic Medical Qualification from outside Ireland also predicted greater  
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36 274 likelihood of not expressing firm intention to comply.  
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42 275 Engaging doctors in MPC in a meaningful way requires clear communication of the purpose of the  
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44 276 process and explicit linkage of the mandated activities to that purpose. Confusion about the  
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46 277 objectives of MPC and lack of evidence of its effectiveness have hampered doctors' commitment to  
47  
48 278 the process internationally [6, 14]. The findings of this research suggest that a similar situation  
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50 279 prevails in Ireland. While promotion of MPC and the PCS schemes in Ireland refer to doctor  
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52 280 competence, quality of care and patient safety [9], the requirements currently in place are aimed  
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54 281 primarily at assuring doctors' attendance at approved CPD sessions. The relationship between CPD  
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56 282 and competence, quality of care and patient safety is supported by limited evidence [3, 15], which  
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3 283 may explain the significant minority of doctors who were unconvinced of its impact in enhancing  
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5 284 standards of medical practice and reassuring the public.  
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8 285 Furthermore, 49% of respondents to our survey disagreed or were ambivalent towards the  
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10 286 statement that they match their choice of CPD to their learning needs. Qualitative comments  
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12 287 suggest that convenient timing and location, availability and expense contribute to the choice of CPD  
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14 288 undertaken. Thus, MPC can become a tick-box exercise, focussed on scoring the required points  
15  
16 289 before the annual deadline rather than meeting learning needs. While the compulsory annual audit  
17  
18 290 might have been expected to be a useful activity embedded in doctors' day-to-day practice, our  
19  
20 291 findings suggest that, on the contrary, it is seen by many a time consuming and ineffective exercise.  
21  
22 292 Comments suggested that the single year timeframe forces a decision to do small scale audits that  
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24 293 have little perceived impact. This goes some way to explaining why only 53% of respondents agreed  
25  
26 294 that their own practice had been impacted by participation in MPC. Removal of the audit, or change  
27  
28 295 to the requirements relating to it was the most frequent suggestion to improve MPC. The literature  
29  
30 296 suggests that any model of MPC that seeks to impact practice should feature a facilitated approach  
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32 297 through activities such as regular performance review, appraisal, mentoring, etc. [3], something that  
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34 298 is lacking in the current Irish system. Facilitation can involve exploration of learning needs, targeted  
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36 299 choice of CPD, and linking audit to practice. It has also been shown to provide emotional support  
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38 300 and to enhance engagement with the process [16]  
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45 301 Inadequate resourcing of MPC was evident in the barriers to engagement identified by respondents.  
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47 302 Time associated with participating in the MPC process was the greatest barrier. Heavy workload,  
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49 303 requirement to travel and to record CPD activities, and the demands this placed on personal time  
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51 304 were amongst the difficulties arising. Respondents repeatedly referred to the need for funded  
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53 305 protected time for MPC, including provision of locum cover. The current strain in the Irish health  
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55 306 system, with short-staffing and heavy service demands, can make it challenging for those entitled to  
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57 307 study leave to take it. Time constraints are cited internationally as a barrier to MPC [17, 18].  
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3 308 Expense of participation in MPC was the second most endorsed barrier. Internationally the question  
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5 309 of who should bear the expense of MPC is a hotly contested topic. Our respondents' comments echo  
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7 310 the concerns of doctors in other jurisdictions that MPC is a money-making exercise for those who  
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9 311 regulate and run programmes [15]. Doctors pay annual registration fees to the Medical Council,  
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11 312 membership or fellowship fees to postgraduate training bodies and, professional indemnity fees. The  
12  
13 313 addition of a fee for enrolment in a Professional Competence Scheme, fees for CPD activities and the  
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15 314 associated locum cover, travel and accommodation, add up to significant expense. Respondents  
16  
17 315 indicated that this is an issue particularly for doctors for whom professional expenses are not tax  
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19 316 deductible and who may not have a CPD allowance; those working less than full-time, as non-  
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21 317 consultant hospital doctors or salaried GPs and those taking maternity/parental or sick leave. While  
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23 318 some doctors do have an allowance for CPD activities this varies across different groups and is not  
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25 319 universal.

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30 320 If MPC programmes are to be successful, CPD to match learning needs must be readily available and  
31  
32 321 of high quality. Respondents commented that available CPD was of limited range and tended to be  
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34 322 repetitive. Geographical location, excessive expense, inadequate advertising/notice and limited  
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36 323 places all contributed to inaccessibility of current CPD offerings. A strong preference for greater  
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38 324 availability of online learning was expressed, as well as greater variety and better quality courses  
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40 325 outside Dublin. Recent work in the Irish context has documented the broad CPD needs of both GPs  
41  
42 326 and hospital consultants and provides useful information to support more effective provision of CPD  
43  
44 327 [19–22].

45  
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48  
49 328 The vast majority of doctors understood what the requirements for MPC were, but many did not  
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51 329 find PCS sufficiently flexible or information provided adequate. Foremost amongst suggestions for  
52  
53 330 improvement was the provision of more information and support for doctors. Greater flexibility,  
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55 331 reflecting recognition of the individual circumstances of doctors, e.g. sick leave, was also felt to be  
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57 332 important. This included allowing greater flexibility between categories of points and requiring fewer  
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3 333 points from part-time workers. The arbitrary nature of the threshold of 50 CPD points would suggest  
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5 334 that these are reasonable suggestions.  
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7

8 335 There is a subgroup of doctors for whom the combination of expense and the specific requirements  
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10 336 of MPC present a real challenge. Thirteen percent of respondents expressed lack of confidence in  
11  
12 337 their ability to meet MPC requirements. The main reason cited for lack of confidence was  
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14 338 employment status. Meeting the requirements of MPC is particularly challenging for those working  
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16 339 less than full-time, in locum posts, in non-clinical roles, taking maternity or sick leave and those living  
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18 340 outside Ireland for part of the year. Again, this is something that is common across other  
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20  
21 341 jurisdictions [23]. Greater flexibility in requirements would support participation amongst this group.  
22  
23

#### 24 342 Strengths and limitations

25  
26 343 Amongst the strengths of this study are the diverse stakeholders involved in the research, the strong  
27  
28 344 response rate to the questionnaire and the representativeness of the respondents. Survey design  
29  
30 345 was undertaken in accordance with best practice, informed by literature and theory. Post hoc  
31  
32 346 analysis of the survey confirmed its validity. Although the response rate to the survey was excellent  
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34 347 there were still large numbers of non-responders. We cannot be sure that the findings presented  
35  
36 348 here represent the views of non-responders.  
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39

#### 40 349 Conclusions

41  
42 350 We have presented the views of over 5,000 doctors participating in MPC in Ireland. The problems  
43  
44 351 with implementation of MPC identified in this study are not unique to the Irish context. As MPC  
45  
46 352 continues to evolve internationally other jurisdictions grapple with the same challenges. Enhancing  
47  
48 353 doctors' engagement in MPC in Ireland will require a comprehensive strategy focussed on better  
49  
50 354 communication, adequate resourcing and ongoing evaluation of the process.  
51  
52  
53

#### 54 355 **Contributorship statement**

55  
56  
57 356 DB designed the study. JOF, AW, JC and DB designed the questionnaire. JOF and JC administered the  
58  
59 357 questionnaire and collected the data. DD performed the statistical analysis. All authors contributed  
60



1  
2  
3 358 to the analysis and interpretation of the data. EG, AW and DB drafted the paper which was edited  
4  
5 359 and approved by all authors. All authors have agreed both to be personally accountable for their  
6  
7 360 own contributions and to ensure that questions related to the accuracy or integrity of any part of the  
8  
9 361 work, even ones in which the author was not personally involved, are appropriately investigated,  
10  
11 362 resolved, and the resolution documented in the literature.  
12  
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14

### 15 363 **Competing interests**

16  
17  
18 364 Two of the authors, Janet O'Farrell and Jantze Cotter, are employed by the Medical Council of  
19  
20 365 Ireland. The Medical Council of Ireland is the regulatory body for doctors responsible for the  
21  
22 366 Maintenance of Competence programme that is the focus of this research.  
23  
24

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26  
27  
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29  
30

### 31 369 **Data sharing statement**

32  
33  
34 370 The datasets generated and/or analysed during the current study are not publicly available due to  
35  
36 371 participants not having consented to public availability, but are available from the corresponding  
37  
38 372 author on reasonable request.  
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### 43 375 **References**

- 44  
45  
46 376 1. Sklar DP: **What Happens After Medical School? Current Controversies About Licensure,**  
47  
48 377 **Maintenance of Certification, and Continuing Professional Development.** *Acad Med* 2016, **91**:1–3.  
49  
50  
51 378 2. Dixon-Woods M, Yeung K, Bosk CL: **Why is UK medicine no longer a self-regulating profession?**  
52  
53 379 **The role of scandals involving “ bad apple” doctors.** *Soc Sci Med* 2011, **73**:1452–1459.  
54  
55  
56 380 3. Archer J, Pitt R, Nunn S, Regan de Bere S: *The Evidence and Options for Medical Revalidation in the*  
57  
58 381 *Australian Context.* Plymouth, UK; 2015.  
59  
60

- 1  
2  
3 382 4. Horsley T, Lockyer J, Cogo E, Zeiter J, Bursey F, Campbell C: **National programmes for validating**  
4  
5 383 **physician competence and fitness for practice: a scoping review.** *BMJ Open* 2016, **6**:e010368.  
6  
7  
8 384 5. Shaw K, Cassel C, Black C, Levinson W: **Shared medical regulation in a time of increasing calls for**  
9  
10 385 **accountability and transparency.** *JAMA* 2009, **302**.  
11  
12  
13 386 6. Tazzyman A, Ferguson J, Walshe K, Boyd A, Tredinnick-Rowe J, Hillier C, Regan De Bere S, Archer J:  
14  
15 387 **The Evolving Purposes of Medical Revalidation in the United Kingdom.** *Acad Med* 2017, **93**:1.  
16  
17  
18 388 7. Miller S: **American board of medical specialities and repositioning for excellence in lifelong**  
19  
20 389 **learning: maintenance of certification.** *J Contin Educ Health Prof* 2005, **25**:151–156.  
21  
22  
23 390 8. Merkur S, Mossialos E, Long M, McKee M: **Physician revalidation in Europe.** *Clin Med J R Coll*  
24  
25 391 *Physicians London* 2008, **8**:371–376.  
26  
27  
28 392 9. Medical Council: *Professional Competence; Promoting Quality Assurance.* Dublin, Ireland, Ireland;  
29  
30 393 2010.  
31  
32  
33 394 10. Medical Council: *Maintenance of Professional Competence. Report of Progress 2011-2018.*  
34  
35 395 Dublin, Ireland; 2018.  
36  
37  
38 396 11. Hanlon H, Prihodova L, Russel T, Donegan D, O'Shaughnessy A, Hoey H: **Attitudes, benefits and**  
39  
40 397 **barriers to participating in mandatory continuing professional development scheme in doctors in**  
41  
42 398 **Ireland.** In *Association for Medical Education in Europe Annual Scientific Meeting.* Vienna: AMEE;  
43  
44 399 2019:8K4.  
45  
46  
47 400 12. Ajzen I: **From intentions to actions: A theory of planned behavior.** In *Action-control: From*  
48  
49 401 *cognition to behavior.* Edited by Kuhl J, Beckman J. Heidelberg: Springer; 1985:11–39.  
50  
51  
52 402 13. Braun V, Clarke V: **Using thematic analysis in psychology.** *Using Qual Res Psychol* 2006, **3**:77–  
53  
54 403 101.  
55  
56  
57 404 14. Archer J, Regan De Bere S, Nunn S, Clark J, Corrigan O: **No one has yet properly articulated what**  
58  
59  
60

- 1  
2  
3 405 **we are trying to achieve: A discourse analysis of interviews with revalidation policy leaders in the**  
4  
5 406 **United Kingdom. *Acad Med* 2015, **90**:88–93.**  
6  
7  
8 407 15. Teirstein PS: **Boarded to Death — Why Maintenance of Certification Is Bad for Doctors and**  
9  
10 408 **Patients. *N Engl J Med* 2015, **372**:106–108.**  
11  
12  
13 409 16. NHS England and NHS Improvement: *Medical Appraisal : Feedback from GPs in 2018-19*. London;  
14  
15 410 2019.  
16  
17  
18 411 17. Cook DA, Holmboe ES, Sorensen KJ, Berger RA, Wilkinson JM: **Getting maintenance of**  
19  
20 412 **certification to work: A grounded theory study of physicians’ perceptions. *JAMA Intern Med* 2015,**  
21  
22 413 **175**:35–42.  
23  
24  
25 414 18. Ikenwilo D, Skåtun D: **Perceived need and barriers to continuing professional development**  
26  
27 415 **among doctors. *Health Policy* 2014:195–202.**  
28  
29  
30 416 19. Maher B, O’Neill R, Faruqi A, Bergin C, Horgan M, Bennett D, O’Tuathaigh CMP: **Survey of Irish**  
31  
32 417 **general practitioners’ preferences for continuing professional development. *Educ Prim Care* 2018,**  
33  
34 418 **29**:13–21.  
35  
36  
37 419 20. Maher B, Faruqi A, Horgan M, Bergin C, Tuathaigh CO, Bennett D: **Continuing professional**  
38  
39 420 **development and Irish hospital doctors: A survey of current use and future needs. *Clin Med J R Coll***  
40  
41 421 ***Physicians London* 2017, **17**:307–315.**  
42  
43  
44 422 21. Dowling S, Last J, Finnegan H, O’Connor K, Cullen W: **Does locally delivered small group**  
45  
46 423 **continuing medical education (CME) meet the learning needs of rural general practitioners? *Educ***  
47  
48 424 ***Prim Care* 2019, **30**:145–151.**  
49  
50  
51 425 22. Dowling S, Last J, Finnegan H, O’Connor K, Cullen W: **What are the current “top five” perceived**  
52  
53 426 **educational needs of Irish general practitioners? *Ir J Med Sci* 2019.**  
54  
55  
56 427 23. Agius S, Baron R, Lewis B, Hayden J: **What do GP educators perceive to be the opportunities and**  
57  
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1  
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3 428 **challenges of introducing revalidation?** *Educ Prim Care* 2011, **22**:386–392.  
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8 430 **Figure legends**

9  
10 431 Figure 1. Distribution of responses to the statement that MPC provides benefits that are worth the  
11 432 time, effort and expense involved

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13  
14 433 Figure 2. Distribution of responses to the statement that MPC is a tick box exercise

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16 434 Figure 3. Barriers to meaningful engagement with MPC  
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For peer review only

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3 435 **Declarations**

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5  
6 436 ***Ethics approval and consent to participate***

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8  
9 437 Ethical approval was granted by the Social Research Ethics Committee, University College Cork.

10  
11 438 Reference no. 2017-118

12  
13  
14 439 ***Consent for publication***

15  
16  
17 440 Not applicable

18  
19  
20 441

21  
22  
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24  
25  
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29  
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33  
34 447 Health Organisation Patients for Patient Safety Ireland; Prof. Dubhfeasa Slattery, formerly Head of  
35  
36 448 Clinical Risk at the State Claims Agency, Dublin, Ireland, currently Professor of Professionalism, Royal  
37  
38 449 College of Surgeons of Ireland, Dublin, Ireland; Prof. Ellen O'Sullivan, Chair, Irish Forum of  
39  
40 450 Postgraduate Training Bodies, Dublin, Ireland; Prof. Mary Horgan, President of the Royal College of  
41  
42 451 Physicians of Ireland, Dublin, Ireland; Dr. Graham McMahon, President and Chief Executive Officer,  
43  
44 452 Accreditation Council for Continuing Medical Education, United States

45  
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47  
48 453 We are grateful to Ireland's doctors who shared their perspectives with us on this important topic in  
49  
50 454 great numbers.

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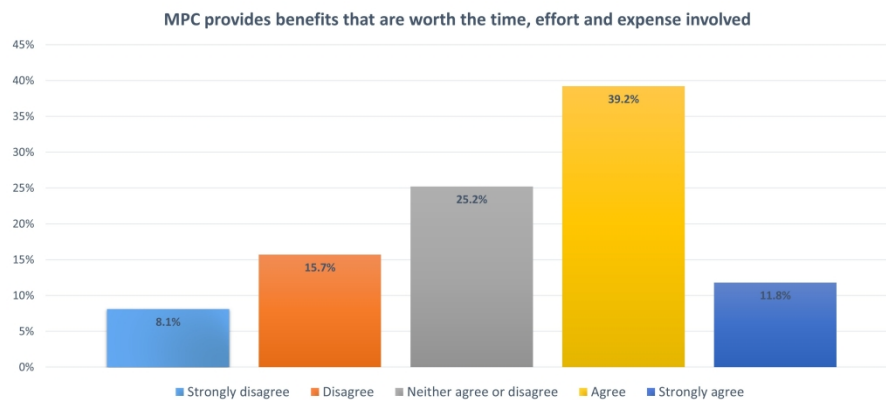


Figure 1. Distribution of responses to the statement that MPC provides benefits that are worth the time, effort and expense involved.

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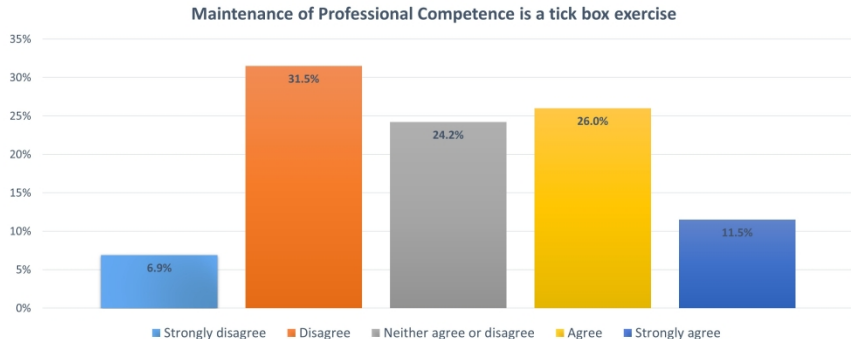


Figure 2. Distribution of responses to the statement that MPC is a tick box exercise

338x190mm (300 x 300 DPI)

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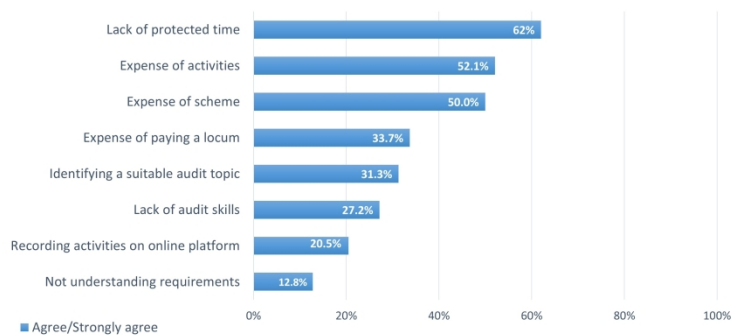


Figure 3. Barriers to meaningful engagement with MPC

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## APPENDIX A – SURVEY QUESTIONNAIRE

Since 2011 doctors have been required to demonstrate Maintenance of Professional Competence by enrolling in Professional Competence Schemes and recording their educational activities. This survey is about your attitudes to and experience of participation in Maintenance of Professional Competence. Your responses should relate to your experience in IRELAND ONLY.

Maintenance of Professional Competence	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Reassures patients and the public that doctors are fit to practice	1	2	3	4	5
2. Encourages doctors to continually learn and keep up to date	1	2	3	4	5
3. Raises the standard of practice of all doctors	1	2	3	4	5
Participation in Maintenance of Professional Competence	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4. Encourages me to reflect more on my professional development	1	2	3	4	5
5. Encourages me to participate in more educational activities	1	2	3	4	5
6. Has resulted in changes in my practice	1	2	3	4	5
7. Provides benefits that are worth the time, effort and expense involved	1	2	3	4	5

Please indicate your agreement with these statements about BARRIERS to <b>your own</b> engagement with Maintenance of Professional Competence in Ireland	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I do not understand what I am required to do for Maintenance of Professional Competence		1	2	3	4	5
2. Lack of protected time makes it difficult to undertake activities to earn points	0	1	2	3	4	5
3. The expense of the annual Professional Competence Scheme fee is a barrier		1	2	3	4	5
4. The expense of Continuing Professional Development(CPD) activities is a barrier		1	2	3	4	5
5. The expense of paying a locum to allow me to attend CPD activities is a barrier	0	1	2	3	4	5
6. The requirement to record my learning activities through an online platform has been a barrier		1	2	3	4	5
7. Lack of audit skills has been a barrier		1	2	3	4	5
8. Difficulty identifying a suitable audit topic has been a barrier		1	2	3	4	5
9. Please provide details of any other barriers or reasons for not participating in Maintenance of Professional Competence here:						

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Please indicate your agreement with the following statements about factors which SUPPORT <b>your own</b> engagement with Maintenance of Professional Competence in Ireland	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. The CPD activities I need to address gaps in my knowledge and practice are currently available		1	2	3	4	5
2. I can access high quality CPD activities		1	2	3	4	5
3. My Professional Competence Scheme provides enough flexible ways to meet requirements		1	2	3	4	5
4. My Professional Competence Scheme provides useful information to help me to meet requirements		1	2	3	4	5
Please indicate your agreement with the following statements	Not applicable	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
5. Maintenance of Professional Competence is a tick box exercise		1	2	3	4	5
6. I match my CPD activities to gaps in my knowledge and practice		1	2	3	4	5
7. I would welcome the opportunity to use patient feedback to demonstrate my professional competence	0	1	2	3	4	5
8. I would welcome the opportunity to use feedback from colleagues to demonstrate my professional competence		1	2	3	4	5
9. I would welcome the opportunity to submit a quality improvement initiative rather than an audit	0	1	2	3	4	5
10. I am concerned that information I provide to my Professional Competence Scheme about my knowledge and practice could be used against me if my competence was in question		1	2	3	4	5
11. It is important to my patients that I meet the requirements for Professional Competence	0	1	2	3	4	5

12. It is important to my colleagues that I meet the requirements for Professional Competence		1	2	3	4	5
13. Doctors who do not participate in Maintenance of Competence risk being removed from the register		1	2	3	4	5
14. I am confident that I can fulfil the requirements for Maintenance of Competence		1	2	3	4	5
15. If you are not confident of meeting the requirements for Maintenance of Competence, please indicate why not here						
16. Please rate your intention to comply with requirements for Maintenance of Competence in the future	Intend not to comply	Probably won't comply	Unsure about my intentions	Probably will comply	Intend to comply	
17. If you could change two things about Maintenance of Competence/ Professional Competence Schemes to make them more relevant, efficient and effective for you, what would they be?						
Would you be willing to participate in a <b>confidential interview</b> on the topic of Professional Competence Schemes.? We are particularly interested in talking to doctors who have not enrolled or participated, or who have found doing so difficult.	YES/NO					
If so please provide an email contact						

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For peer review only

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	
<b>Title and abstract</b>	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	See pg 1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	See pg 2
<b>Introduction</b>			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	See pg 4-5
Objectives	3	State specific objectives, including any prespecified hypotheses	See pg 5
<b>Methods</b>			
Study design	4	Present key elements of study design early in the paper	See pg 4-5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	See pg 7
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	See pg 7
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	See pg 6-7
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	See pg 6
Bias	9	Describe any efforts to address potential sources of bias	See pgs 6 and 8
Study size	10	Explain how the study size was arrived at	See pg 7
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	See pgs 7-8
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	See pgs 7-8
		(b) Describe any methods used to examine subgroups and interactions	See pgs 7-8
		(c) Explain how missing data were addressed	N/A
		(d) If applicable, describe analytical methods taking account of sampling strategy	N/A
		(e) Describe any sensitivity analyses	N/A
<b>Results</b>			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	See pg 8
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	See pg 8
		(b) Indicate number of participants with missing data for each variable of interest	N/A

Outcome data	15*	Report numbers of outcome events or summary measures	See pg 9
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	N/A
		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	See pg 9
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	See pg 16
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	See pg 19
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	See pgs 16-19
Generalisability	21	Discuss the generalisability (external validity) of the study results	See pg 20
<b>Other information</b>			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	See pg 23

\*Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).