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## Evaluating the perception among rheumatologists of maintenance of board certification in the United States

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**Running title:** MOC program evaluation by rheumatologists

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## **Abstract**

**Objectives:** There continues to be a debate about the value and purpose of maintenance of certification programs (MOC) in the United States. The goal of this study is to assess the impact, value, and purpose of MOC in rheumatology.

**Methods:** A survey was sent to 3,107 rheumatologists in the United States. The survey addressed how rheumatologists perceive the value and impact of MOC on rheumatology practice and patient care.

**Results:** A total of 515 rheumatologists completed this survey. The majority (74.8%) believed there is no significant value in MOC, beyond what is already achieved from Continuing Medical Education. Most rheumatologists did not believe MOC is valuable in improving patients care (63.5%), and the majority felt that the primary reason for creating MOC is either financial well-being of board certifying organizations (43.4%) or to satisfy administrative requirements in health systems (30%). Although 65.6% perceived staying current with new knowledge as a positive impact of MOC, MOC was perceived to result in time away from providing patient care (74.6%) and time away from family (74%). When asked about anticipated effects of requiring MOC, 77.7% reported physician burnout, 67.4% early physician retirement, and 63.9% anticipated an effect on reducing the overall number of practicing rheumatologist.

**Conclusions:** The majority of rheumatologists do not believe there is significant value for MOC. There is evidence for lack of trust in board certifying organizations, and rheumatologists believe MOC contributes to physician burnout, early retirement, and loss in the rheumatology workforce.

### **Significance & Innovation**

- The survey assessed the value and impact of maintenance of board certification (MOC) from the perspective of rheumatologists in the United States.
- Overall, there appears to be no perceived significant value for MOC among rheumatologists.
- MOC is perceived to contribute to shortage in the rheumatology workforce in the United States, without proven benefit to patients.
- There is evidence for lack of trust among rheumatologists in board certifying organizations. A financial conflict of interest in creating MOC is perceived to be a likely reason for creating MOC among rheumatologist.

## Introduction

Board certification in medical specialties in the United States was initially introduced at the turn of the twentieth century to provide a mechanism to demonstrate clinical competence of practicing physicians. Achieving board certification for a specific specialty or subspecialty used to be a landmark life-long accomplishment for physicians after completing medical training. Board certification in the United States is overseen by the American Board of Medical Specialties (ABMS), an umbrella self-governing organization which includes specialty board members such as the American Board of Internal Medicine (ABIM) and the American Board of Pediatrics. Over time, organizations entrusted by physicians to conduct and issue board certifications ended life-long certification, and issued time-limited board certificates that require regular renewals. Although ensuring continuous medical education of physicians was suggested to be the motive for this change, this move remains controversial as a benefit to patients by this process has not been supported by credible scientific non-conflicted data, and because it excluded or “grandfathered” physicians who have received their initial board certification at an arbitrary earlier time point (1). More recent changes in board recertification requirements and the expansion of a controversial maintenance of certification (MOC) program finally caught the public attention and resulted in significant

discussion at the national level and within the medical community about the value, motive, and consequences behind this program and board recertification (2, 3). It has been suspected that this program financially supports board certifying organizations who have been growing in size, and although self-declared as non-profit organizations, have actively participated in lobbying activities (4, 5). Interestingly, MOC programs operated by a specialty body of the ABMS were included as measure for physician quality and payment incentives within the Affordable Care Act (6, 7). Non-transparent and at times questionable financial practices of board certifying organizations have surfaced in the public domain eroding trust in these organization of physicians and medical societies (4). Apologies and re-structuring attempts have been made in response (8), but the core issue of whether recertification and maintenance of certification programs positively impacts health care has remained unclear (9, 10). It is alarming that despite no demonstrated uncontroversial clear benefit to patients from MOC, the mean estimated cost of ABIMs MOC program for all internal medicine physicians is estimated to be ~\$5.7 billion over a 10 year period, of which \$561 million is fees payable to ABIM (11).

Board certification which started as a voluntary achievement, and remains so in theory, has become involuntary in practice making participation in MOC programs mandatory for many if not most physicians in order to maintain employment, clinical privileges, or reimbursement. The controversy surrounding the motive behind creating MOC, the value of MOC, and the fear for this requirement to interfere with the ability to practice, has prompted legislatures in several states to prohibit using MOC as a condition for employment, licensure, securing clinical privileges, and reimbursement. Oklahoma was the first state to pass such legislation. The National Board of Physicians and Surgeons (NBPAS) was established as a grass root organization to provide an alternative recertification process that would allow physicians to recertify to maintain their practices with a fraction of the cost required by ABMS and ABIM. To date NBPAS, which uses participation in continuing medical education activities (CME) as a basis for recertification, has certified over 7,000 physicians and is accepted by 90 hospitals and health systems within the United States (12).

Rheumatologists have been following the controversy regarding MOC and board recertification very closely. Indeed, the American College of Rheumatology has questioned the value of ABIM MOC program, and issued a statement raising concerns regarding cost of MOC, lack of evidence to support beneficial impact of MOC on clinical care, and concerns about the financial stewardship of the ABIM (13).

The goal of this survey study was to assess the current perception of practicing rheumatologists in the United States of the value of board recertification and maintenance of board certification programs, and assess the impact of this program on rheumatologists and the rheumatology workforce.

## **Methods**

A survey was designed to assess the impact and perceived value of maintenance of board certification in rheumatology. The survey consisted of 20 questions, including 19 closed ended and 1 open ended question (**Appendix 1**). The questions were designed to address issues relevant to concerns discussed in recent editorials, opinion pieces, and medical society statements about MOC (2-5, 13). The two questions pertaining to perceived positive and negative impact of board recertification and MOC were randomized such that half of the respondents receive each of the two questions first. The survey included one ranking question and the order of the possible answers for this question were also randomized. Ten practicing rheumatologists at the University of

Michigan, including a mixture of predominantly clinical faculty and physician scientists, who are ABIM board certified and participating in MOC were asked to provide input on the survey questions before the survey questions were finalized. These 10 rheumatologists and the authors were excluded from taking the survey for the purpose of this study. The survey design and all survey questions were reviewed by staff at the Consulting for Statistics, Computing & Analytic Research (CSCAR) at the University of Michigan. The survey was constructed using SurveyMonkey (San Mateo, CA) and sent via email to 3,107 rheumatologists within the United States. Invitations to participate in this survey were initially sent out to all 3,107 rheumatologists on March 6, 2018 with responses collected until March 26, 2018 when participation in this survey was closed. Analysis of survey results was performed in the computing environment R.

## Results

A total of 515 rheumatologists completed the survey. With an estimated number of ~5,000 practicing rheumatologists in the United States, this sample size provides 95% confidence that the expected responses of practicing rheumatologists in the United States are within a margin of error of less than 5% of the responses obtained from the rheumatologists who completed this survey.

The majority of respondents were adult rheumatologists (91.2%), while 6.4% were pediatric rheumatologists, and 2.3% were both adult and pediatric rheumatologists. 44.9% of respondents identified private practice as their primary work setting and 43.4% practiced in a university or academic setting. Of the total respondents, 60.7% and 39.3% were male and female rheumatologists, respectively. In terms of age, the majority of respondents were either between 40-49 years old (31.1%) or between 60-69 years old (29.9%) (**Table 1**). The geographic distribution for the location of practice of rheumatologists who responded to this survey is shown in **Figure 1**.

The majority of surveyed rheumatologists in the United States (74.8%) did not think there is significant additional value in MOC, beyond what is already achieved from Continuing Medical Education (CME). Indeed, 63.5% of rheumatologists did not believe

board recertification and MOC are valuable in terms of improving patients care (**Figure 2**). When asked about the primary reason for creating MOC the majority of rheumatologists felt it was financial well-being of board certifying organizations (43.4%) or to satisfy administrative requirements in health systems (30%). Only 15.1% believed improving patient care was the primary reason for MOC (**Figure 2**). The majority of rheumatologists believed board certification should be a life-long credential (63.7%).

Notably, when asked about positive and negative impacts of MOC, the majority reported that MOC results in time away from providing patient care (74.6%), time away from family (74%), and psychological stress (69.7%). In addition, 88.5% of rheumatologists believed MOC imposes financial burden without proven benefits to patients. When asked about possible positive impacts of MOC, 65.6% perceived staying current with new knowledge as a positive impact. Most rheumatologists did not identify patient reassurance, improved quality of patient care, or increased patient satisfaction as possible positive impact of MOC. When asked about anticipated effects of requiring MOC, 77.7% reported physician burnout, 67.4% early physician retirement, and 63.9% anticipated an effect on reducing the overall number of practicing rheumatologist. Only 14.2% believed requiring MOC will improve the overall quality of practicing rheumatologists in the United States, and 75.2% favor a legislation in their state to remove MOC as a requirement for employment, insurance reimbursement, or securing clinical privileges (**Figure 3**).

Of interest, 58.9% believe board certification in rheumatology should be administered or overseen by other organizations such as the ACR. 53.7% of surveyed rheumatologists reported participation in basic, translational, or clinical research in rheumatology. Of the respondents who reported participating in research activities, 39.6% believed MOC is adversely affecting their ability to perform research or research related activities.

Our survey included one open ended question, which asked rheumatologists to provide any other relevant thoughts or comments. We received comments from 186 survey respondents. To summarize these responses, we grouped individual ideas or thoughts into categories that summarize themes discussed. These were ranked based on the number of times a theme is mentioned among all responses and the top 5



themes are listed in **Table 2**. Overall, these comments echoed the results derived from the closed ended questions in the survey and stress issues such as questioning the value of MOC over CME activities, the relevance of materials covered by recertification exams to daily rheumatology clinical practice, the high expense associated with MOC, and the motive behind developing MOC programs.

## **Discussion**

We conducted this study to assess the attitude and perception of the value and impact of maintenance of certification programs from the perspective of rheumatologists, and how this might affect rheumatology practice and the rheumatology workforce in the United States. The data derived from this survey study suggest an overall lack of value for these programs, as perceived by practicing rheumatologist, which is consistent with other recent studies across different specialties (10). Physicians, including rheumatologists, are committed to life-long learning and appreciate the importance of keeping up to date with recent knowledge and development in the field to provide the best possible patient care. It seems that the

majority of rheumatologists do not believe that maintenance of certification programs are the best means to achieve this goal and ensure physician competence. The majority believe that MOC programs do not add significant value to participation in continuous medical education, which is already required to maintain and renew state medical licensures. Indeed, unlike MOC programs, CME activities can be more flexible and allow individual rheumatologists to participate in educational activities that are most relevant to their individual practices or patient populations they manage. In addition, this can be achieved with a fraction of the cost required to participate in MOC programs. A recent cost analysis suggests that ABIMs MOC is associated with significant testing and time cost for rheumatologists participating in that program, with a mean cost of the program over 10 years of \$21,606 per rheumatologist and a mean cost aggregated for rheumatology as a specialty of \$89 million, of which \$11 million are fees payable to ABIM (11).

Importantly, the overwhelming perception of rheumatologists in the United States is that enforcing MOC participation results in physician burnout and a reduction in the rheumatology workforce. When asked about whether rheumatologists are required to participate in MOC for employment or insurance reimbursement, 36.2% of rheumatologist reported that they are required to participate in MOC and another 23.7% reported they are not sure if they are required to participate. These data suggest that while the concept of board certification was initially introduced as a voluntary achievement, time-limited certification and now maintenance of certification is becoming required for many rheumatologists to sustain employment or practice. The 2015 ACR Workforce Study suggested a shortage in the rheumatology workforce currently, and predicts a decline in the number of practicing rheumatologist by 2030 with a supply that is ~ 2-fold outnumbered by the demand for rheumatologist in the United States (14, 15). If participation in MOC indeed does not have a significant value on improving patient care in rheumatology, as indicated by the perception of practicing rheumatologists, and if it remains a requirement to practice for at least over a third of rheumatologists in the United States, then an argument can be made that elimination of MOC might be a way to sustain and improve the rheumatology workforce without compromising quality. To

our knowledge, there have not been any studies to show that rheumatologists participating in MOC activities provide better care.

A striking finding from our study is the indication that there seem to be a lack of trust in board certifying organization and their motives among practicing rheumatologist in the United States. When asked to rank in order what is thought to be the reason for creating MOC programs, financial well-being of board certifying organizations was the highest ranked answer. Improving patients care, which is the motive claimed by board certifying organizations, was the least likely ranked reason. Regardless of what the motive might be, these results suggest that practicing physicians, and in this case rheumatologists, do not trust board certifying organizations. Therefore, we suggest that these organizations revisit their relationships with practicing physicians, and facilitate true collaboration with physicians to determine the best way to assess and ensure physician competence and knowledge. Of interest, ~60% of rheumatologists believe that alternative organizations, such as the ACR, should be involved in administering or overseeing board certification of rheumatologist.

The NIH has warned that imposing time-consuming MOC programs appears to discourage physician-scientists from maintaining clinical practice (16). This is a potentially serious problem in rheumatology as physician-scientists are the drivers of new discoveries that result in better treatment options and improved care of patients with rheumatologic conditions. Researchers who maintain their own clinical practice are able to stay connected with research questions that are of immediate interest to the patients and diseases they study. In addition, eliminating or reducing the number of physician-scientists who participate in patient care will reduced the number of some of the most qualified and talented physicians who can take care of the most complicated patients in rheumatology and their specific disease(s) of expertise. Along these lines, our survey revealed that about 40% of rheumatologists who participate in research report a negative impact of MOC on their research careers, as reflected by adversely affecting their ability to perform research or research related activities.

Limitations of our study include that the survey focused on evaluating perception and attitude of rheumatologists and the results cannot be interpreted to provide actual consequences of MOC impact. Nonetheless, the perceptions captured in this survey

and rheumatologists opinions about MOC at the very least should invite a serious independent non-conflicted evaluation of these programs. The survey did not address alternative ways for structuring MOC. However, our results indicate that most rheumatologists believe that participating in CME activities is sufficient and perceive no significant additional value for MOC program in its entirety. This is consistent with the ACR statement on MOC suggesting that earning MOC points (mandated MOC educational activities) is redundant (13).

In summary, our results suggest that the majority of rheumatologists in the United States are concerned about recertification exams and maintenance of certification programs. It appears that these programs are not perceived to be of significant value and do seem to have the potential to contribute to shortage in the rheumatology workforce in the United States. Importantly, there is evidence for eroding credibility and lack of trust in board certifying organizations among rheumatologists, and a notion that imposing a time limit on board certification and mandating participation in expensive maintenance of certification programs is largely driven by financial interests of these organizations rather than improving patient care. The medical community in general and the rheumatology community in particular needs to address the gradual transformation of board certification and maintenance of certification from a voluntary activity to practically a requirement for many physicians to be able to practice medicine and get reimbursed for services provided. It is important to caution against lobbying activities driven by financial interests in setting health care policies, especially in mandating expensive programs such as MOC, in the absence of convincing data to demonstrate improved patient care, which could result in serious consequences in a field threatened by a large shortage in the workforce such as in rheumatology.

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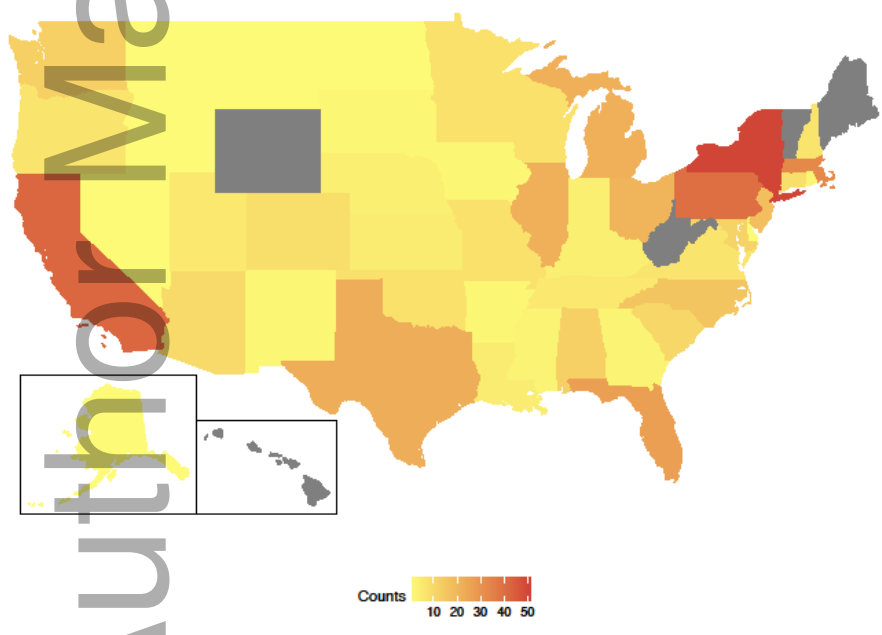
**Figure legends**

**Figure 1:** The geographic distribution of rheumatologists who responded to this survey.

**Figure 2:** Summary of responses evaluating the value of maintenance of certification (MOC) among rheumatologists beyond continuous medical education (CME) and as it pertains to improving patient care, and the perceived reasons for creating maintenance of certification programs.

**Figure 3:** Summary of responses evaluating the impact of maintenance of certification (MOC) among rheumatologists.

Figure 1





**Figure 2**

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**Figure 3**

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**Table 1: Demographics and primary specialty and work setting of rheumatologists who completed this survey. 514 out of 515 survey respondents provided these information.**

	Count	Frequency (%)
<b>Primary Specialty (n=514)</b>		
Adult Rheumatology	469	91.2
Pediatric Rheumatology	33	6.4
Both Adult and Pediatric Rheumatology	12	2.3
<b>Primary Work Setting (n=514)</b>		
Academia/University	223	43.4
Private practice	231	44.9
Government	19	3.7
Industry/Pharmaceutical company	3	0.6
Other	38	7.4
<b>Age (n=514)</b>		
30-39	29	5.6
40-49	160	31.1
50-59	142	27.6
60-69	152	29.6
70 or older	31	6.0
<b>Gender (n=514)</b>		
Female	202	39.3
Male	312	60.7

**Table 2: Top ranked themes described by respondents in the open question of this survey asking for any additional relevant thoughts or comments**

<b>Rank #</b>	<b>Theme</b>
1	Critical of monetary and time cost of MOC and/or impact on patient care
2	Critical of the MOC idea and process
3	CME is sufficient and more relevant than MOC to stay up to date
4	Critical of ABIM and its motives
5	MOC exam is not relevant to clinical practice