

# The Clinical Informatics Practice Pathway Should Be Maintained for Now but Transformed into an Alternative to In-Place Fellowships

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Appl Clin Inform 2022;13:398–399.

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The announcement that the American Board of Preventive Medicine has received initial approval from the American Board of Medical Specialties to extend the Practice Pathway for clinical informatics (CI) has met with considerable division within the physician informatics community.

Although I support extension of the Practice Pathway for some additional time during the pandemic, I acknowledge its adverse impact on CI fellowship programs. However, I hope this debate will lead to discussion beyond the either-or decision of allowing “grandfathering” or not. In particular, I hope that CI, and medicine more generally, will move beyond the notion of in-place fellowships to allow more flexible training pathways while maintaining their rigor.

The in-place model for fellowship training made sense in the 20th century model of career development, where one completed education and training in their chosen profession and then entered the workforce for their career. In the 21st century, however, many professionals, especially in knowledge careers, change career pathways long after their primary education and training experience. The development of new technologies and methods to deliver education, particularly online education, has facilitated this. In addition, education and training have moved to more competency-based models, with less emphasis on time spent and more on knowledge and skills required.<sup>1</sup>

Since the inception of the CI subspecialty, I have expressed concern about the end of the Practice Pathway that will make entry into the CI field difficult for those who are not able to pause their careers and family life to pursue a 2-year in-place fellowship.<sup>2</sup> This view emanates from where I sit, as Director of an online graduate program in CI, which has seen dozens of physicians successfully enter the CI field, and just about all of them taking the board exam being able to pass and becoming board-certified.<sup>3</sup>

I have two concerns about the fellowship-only pathway to certification. One has always been that it will essentially lock out mid-career physicians from fully entering the CI field. Once one has completed their initial training pathway through medical school–residency–fellowship, it is difficult for many to interrupt work, family, and life to do a 2-year fellowship at a fellow’s salary and probably in a different geographic location.

The second concern is that although we now have over 50 fellowships and 100 positions, is this enough to train the CI workforce that is needed? We do not know the magnitude of the workforce required, but it may be that in-place fellowships are not enough to meet workforce needs. There are approximately 6,000 hospitals in the United States, yet currently the number of board-certified CI physicians is about one-third of that.<sup>4</sup>

I agree that we have passed the point where the Practice Pathway should allow physicians to become board-certified with essentially no formal training. However, I argue instead for this approach to be transformed into a method by which those who are unable to halt careers, salary, and family to pursue a pathway to certification that is mostly virtual and asynchronous yet still rigorous and supervised. Ironically, the pandemic has taught us that CI practice and education can be performed in a mostly virtual format.

I would actually oppose the fellowships being completely remote, but instead it would be novel and innovative if there were some sort of hybrid training pathway, with fellows connected to an institution that could offer courses and allow supervised, mentored training experiences in health care organizations. Fellows would participate in a mostly remote way, but also have periodic in-person experiences, including stints that might be for several weeks or more and would involve direct interaction with faculty and colleagues. The field of Hospice and Palliative Medicine developed such an

received

February 22, 2022

accepted after revision

February 28, 2022

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Georg Thieme Verlag KG,  
Rüdigerstraße 14,  
70469 Stuttgart, Germany

DOI <https://doi.org/10.1055/s-0042-1745722>.  
ISSN 1869-0327.

approach prior to the COVID-19 pandemic.<sup>5</sup> Even CI somewhat emulates this approach now, as a half-dozen CI fellowships make use of online didactic courses from Oregon Health and Science University.

In addition to a supposed lack of rigor, there are two other reasons commonly stated in opposition to this sort of approach. One is that the Accreditation Council for Graduate Medical Education (ACGME) rules do not allow training to be done mostly outside the confines of approved medical centers. This may be the case, but my reply is that we should be working with ACGME to change these impediments in modern times. The second concern is the financial model. In particular, few fellowship programs would desire to fund fellows who were mostly unconnected to their medical centers. The answer to this is a recognition that fellows would likely need to pay for their training instead of being paid, i.e., tuition and fees. A perusal of websites of current CI master's degree programs shows that most physicians should be able to afford this, and standard financial aid mechanisms, mostly student loans, would allow such paths to be pursued.

I applaud that for now the Practice Pathway will still allow those to pursue board certification. Hopefully the CI field can transition to a training process beyond the Practice Pathway that allows entry into the field without an in-place fellowship. As informaticians, we should be at the forefront of pioneering this approach in graduate medical education.

### Conflict of Interest

W.R.H. reports financial or nonfinancial interests from Oregon Health and Science University as he serves as: (1) Program Director of the online master's degree program and (2) Associate Program Director of the Clinical Informatics Fellowship, and from American Medical Informatics Association as he serves as Course Director of the Clinical Informatics Board Review Course.

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