Response to Letter “A Single Entry Level into the Perfusion Profession is Not the Solution” by Colligan and Patel

To the Editor,

I would like to thank the authors for their response to “The Case for a Single Entry Level into Perfusion Profession by 2020” (1). I am pleased that the writers have agreed on several issues and the need for change. Discussing these issues and working together from various viewpoints is critical to promoting the further development of the profession. The authors agree that there are more complex cases today with increased morbidity and mortality risk and that it requires an increased knowledge base for clinical perfusionists. They propose revising the accreditation standards to include simulation, evidence-based medicine, and interprofessionalism, which supports an increased educational level. They also agreed that high-fidelity simulation plays an important role in perfusion education and they further proposed that it be incorporated into the certification processes. Both of these suggestions are forward-thinking and I applaud their foresight in these matters.

I am also in agreement that there is a lack of published data on board scores and passing rates and would invite the Accreditation Committee-Perfusion Education to reveal board scores and pass rates for individual schools so we can compare outcomes by educational levels. I believe it is important to be transparent with this information and that it should be public knowledge so potential applicants are better informed regarding success rates of individual programs.

Regarding their comments on educational technology, although there are many published references that high-technology educational facilities enhance learning since the seminal work by Robert Kozma (2,3), I agree it is more than the facilities that determine quality of education. I also agree that rigor is extremely important but that is a completely separate issue from educational technology and also difficult to measure. My point in the editorial was that the focus should be on didactic education first to create a solid academic foundation and then introduce the clinical education. This is the model for medical training and I believe it is essential given the increased body of knowledge in our field.

The argument that nursing has many entry levels so it is acceptable in perfusion is not comparable or relevant. There are approximately 2.8 million practicing nurses in many different healthcare roles but only 4000 perfusionists who have a very specific and defined clinical role. Currently, many hospitals are trying to increase the educational level of nurses because hospitals recognize that higher educational levels are associated with decreases in mortality, readmission rates, and length of stay. In October 2010, the Institute of Medicine released its landmark report on The Future of Nursing (4), which called for increasing the number of baccalaureate-prepared nurses in the workforce to 80% and doubling the population of nurses with doctorates. This report stated that to respond “to the demands of an evolving health care system and meet the changing needs of patients, nurses must achieve higher levels of education.” In a study published in the October 2014 issue of Medical Care (5), a 10% increase in the proportion of baccalaureate-prepared nurses on hospital units was associated with lowering the odds of patient mortality by 10.9%. In this study, “Economic Evaluation of the 80% Baccalaureate Nurse Workforce Recommendation,” the authors also found that increasing the amount of care provided by BSNs to 80% would result in significantly lower readmission rates and shorter lengths of stay. In The Lancet in May 2014, “Nurse Staffing and Education and Hospital Mortality in Nine European Countries: A Retrospective Observational Study” found similar benefits to patients with an increased level of education in nurses. This confirms the reports of three other publications on the impact of educational level on patient outcomes (6–8). Improvements in outcomes after open heart surgery would also be expected to occur if the educational level of graduating perfusionists is increased, similar to the effect seen in nursing.

Reviewing the scholarly activity of perfusion programs by their number of publications through the JECT search engine revealed that more than 90% of the journal publications from perfusion schools are from BS and MS programs. This is a significantly greater proportion than the number of graduates from those programs.

Finally, the perfusion profession cannot operate in a vacuum; we are part of larger healthcare and academic systems and should be able to function effectively in that environment. Academic partners abandon programs when their requirements are not being met. Other health professions function successfully within an academic environment. Perfusion education programs should be part of an academic community in order to ensure that our profession and scientific contributions are recognized.
I believe that the authors would agree that the perfusion profession struggles for recognition because of multiple entry points and requirements. This is a fragmented education process and is not comparable to other professions that have a high level of responsibility for human lives.

The changes that I have proposed are for the future of the profession. I understand that it will take several years, but this process will assure a solid future of our profession. As other professions have increased their educational requirements, we should not be left behind. We have to mandate these changes; otherwise, they will not occur, and although the authors recognize the importance of graduate-level programs and even a clinical doctorate, they do not want to mandate a single entry level. That is an interesting juxtaposition.

This is an important beginning for this conversation in our profession. I hope that the conversation continues at our national meetings and throughout the perfusion community so that we can move forward as a profession and establish ourselves as true health professionals within the academic community with our own body of knowledge. What will follow is the recognition that the perfusion profession truly deserves.

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REFERENCES