

Tax incentives for preceptors of nurse practitioner students in Massachusetts: A potential solution

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ABSTRACT

With a growing population, there is an increasing need for nurse practitioners to improve access to health care. There is currently a shortage of nurse practitioner (NP) preceptors across Massachusetts, making clinical placements difficult and at times unachievable. The lack of NP preceptors has a direct impact on student outcomes, educational programs, and ultimately access to care. The authors explored lessons learned about the national scale of this problem and whether Massachusetts should entertain legislative initiatives similar to other states as a solution. Data were collected from the boards of nursing and the national and state chapters of the American Association of Nurse Practitioners regarding current and pending legislation. State and federal sources and the Massachusetts Association of Colleges of Nursing provided statistical and qualitative data on current and future needs for NP preceptors. States that have successfully passed legislation have awarded tax incentives to NP preceptors, although none of the existing regulations have assessed for their effectiveness in improving preceptor availability. Massachusetts may benefit from legislation to improve NP student access to preceptors; however, incentives related to geographical location may best serve both students and the greater population.

Keywords: Clinical placement; legislation; nurse practitioner; preceptor; tax initiatives.

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Introduction

Massachusetts currently has an estimated population of 6.8 million residents (United States Census Bureau, 2017) with a projected growth to 7.1 million by 2025 (Renski & Strate, 2015). Currently, in Massachusetts, there are 107 cities and towns without a primary care practice and approximately 413 primary care physicians per 100,000 residents (Massachusetts Department of Public Health, 2016). A projected national shortage of between 14,800 and 49,300 primary care physicians by 2030 (Association of American Medical Colleges, 2018) may perpetuate the problem of access to convenient primary care within these areas of Massachusetts and across the nation. With a growing population, there is a need for nurse practitioners (NPs) to fill the gap to improve access to care for the residents of Massachusetts.

There is currently a shortage of NP clinical preceptors across Massachusetts, making clinical placements

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difficult and at times unachievable. The lack of NP preceptors has a direct impact on student outcomes, educational programs, and ultimately access to care. Students are being held back in their academic programs, losing financial aid, and schools of nursing are beginning to suffer economic repercussions. With a continued inability to place NP students with preceptors, the residents of Massachusetts may in the long-term be faced with reduced timely access to quality health care. The purpose of this analysis was to explore lessons learned about the national scale of this problem and to determine whether Massachusetts should entertain legislative initiatives similar to other states as a solution

Background

Unlike medical interns and residents, preceptorship placements have been an ongoing issue for NPs (American Association of Colleges of Nursing, 2015). The lack of a solution to this problem further divides NPs from their medical colleague's secondary to preceptor ability to claim reimbursement through Medicare. Physicians precepting intern and resident medical students are able to claim reimbursement through Medicare for most services provided (Centers for Medicare and Medicaid Services [CMS], 2018). This may explain little difficulty for physician

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interns and resident students finding clinical placements as compared to NP students.

Physician assistant student placement has also been a challenge with 65 schools nationwide stating difficulty with placement 34.8% of the time (Herrick & Pearl, 2015). Unlike NPs, national legislation was introduced by physician assistants to remedy this problem. Although legislation is pending at this time, Bill H. R. 1605 (2017) "Physician Assistant Education Public Health Initiatives Act of 2017" was introduced to the House of Representatives in March 2017. If this bill were to pass into law, title XVII of the Social Security Act (Medicare) would be amended to allow merit-based incentive payment systems for physician assistant student preceptors (H. R. 1605, 2017), not unlike the Medicare reimbursement system in place for physicians precepting physician interns and residents.

During the academic year 2017–2018, there were an estimated 1,506 NP students in Massachusetts requiring clinical placements, of which only 68.3% had confirmed placement for the semester needed (Massachusetts Department of Education, 2018). Clinical placements for the remaining 31.7% of students were delayed anywhere from 1 week to an entire 15-week academic semester, with the median delay being 3 weeks and average delay being 3.375 weeks (Massachusetts Association of Colleges of Nursing [MACN] Survey, 2018). Pediatrics, obstetrics, and women's health were identified as the three most challenging areas to secure a preceptor for NP students (MACN Survey, 2018). Reasons for delay in clinical placement varied across surveyed Massachusetts colleges of nursing regardless of specialty area; however, there were common themes between institutions.

Clinical placements may be delayed because of institutional issues or preceptor needs, or clinical site logistics. Massachusetts colleges of nursing identified several factors that may contribute to difficulty securing a clinical preceptor for NP students. Difficulty in completing affiliation and clinical clearance paperwork as well as cancellation of committed preceptors were among the top reasons clinical placements were delayed (MACN Survey, 2018). Reasons for refusal of a NP student were recorded by Massachusetts colleges of nursing, and rationales were consistent across the colleges and with national studies.

The overwhelming reason why preceptors refused NP students was because of the lack of financial compensation (MACN Survey, 2018). Seven of 12 colleges of nursing in Massachusetts reported that a primary reason for preceptor denial of a student was a lack of incentive or financial compensation (MACN Survey, 2018). Some online Advanced Practice Registered Nurse (APRN) programs provide payment to preceptors, which is also why preceptors at times stated they will not accept students from nonpaying institutions (MACN Survey, 2018). A study performed by Logan et al. also confirmed the lack of provider compensation to be a main barrier to NP student

placement (Logan, Kovacs, & Barry, 2015). Tax incentives may be a successful method of enticing NP preceptors as evidenced by the current incentives in place for medical student preceptors and the legislation filed to include incentives for physician assistant student preceptors.

Another reason for preceptor refusal of a NP student was implementation of a new electronic health record (EHR) (MACN Survey, 2018). Approximately 24% of NP preceptors identified EHR issues being a barrier to student placement (Roberts, Wheeler, Tyler, & Padden, 2017). Electronic health record training is time consuming, and credentialing a student is likely to cost the clinical site or the school of nursing thousands of dollars (Forsberg, Swartwout, Murphy, Danko, & Delaney, 2013). The time required to orient a student unfamiliar with the EHR in use may be viewed as a burden. Licensed practitioners may be hesitant to precept NP students because of documentation guidelines set forth by the CMS, requiring increased time demands in both training and review (Forsberg, et al., 2013) as well as perceived decreased productivity (Logan et al., 2015).

Last, a lack of time or scheduling ability and a lack of physical space within the clinical setting were identified as major barriers to securing preceptors (Roberts et al., 2017). Several Massachusetts colleges of nursing reported scheduling conflicts with licensed providers. These conflicts were due to providers practicing on a part time basis, having limited availability secondary to increased provider responsibilities within their practice organization, or scheduling vacations during the academic clinical semester (MACN Survey, 2018). Student time conflicts were not identified as a primary barrier to contracting with a preceptor.

Scope of the problem

The scope of the NP preceptor shortage has not been comprehensively addressed from a student or academic institution perspective in the literature. After informally speaking with NP students and deans of colleges of nursing in Massachusetts, some potential implications of this shortage were noted. NP students may be held back in completing their studies because of the lack of timely access to a preceptor. If student placement is minimally delayed, the student may experience emotional stress not only in first securing a preceptor but also in completing the required hours to continue through the academic program and reach a target graduation date. Clinical placements may be delayed up to an entire academic semester (MACN Survey, 2018). In this case, NP students may lose their financial aid status. This may affect their standing within the program and ability to remain in the program because of financial strain.

Many colleges of nursing in across Massachusetts stated difficulty securing preceptors in obstetrics/gynecology and pediatrics (MACN Survey, 2018). This may negatively affect the number of students requiring placement in these areas and may ultimately affect access to care in the future. More

research is needed to determine whether a lack of a specialized preceptor is hindering NP student placements in Massachusetts because this may affect high-risk populations across the state.

Another implication of the lack of preceptor access is its effect on educational institutions. Colleges of nursing will be negatively affected if NP students are forced to wait a semester for clinical placement or withdraw from an academic program because of financial hardship related to the difficulty of finding a preceptor. Financial repercussions would include loss of tuition, but also potential loss of students. If NP students continue to have such difficulty with clinical placements, they would likely begin to venture to other academic institutions that are more able to secure preceptors in a timely manner. This ultimately may result in acceptance of fewer students into NP programs, decreased institutional revenue, and, more importantly, fewer NP graduates to provide quality care to the public. These implications were formed through informal face-to-face interactions with NPs and NP students because no research has been performed on the implications of the lack of preceptor availability and must be considered with caution. Further research is needed to fully understand the issues NP students and colleges of nursing face related to the lack of timely preceptor placement.

National issue

The shortage of NP preceptors is a widespread problem across the United States. There has been attempted state legislation in many states and ongoing discussion in several more, and four states have actively passed legislation to address this issue. All state boards of nursing and the American Association of Nurse Practitioners (AANP) state chapters were contacted to determine how widespread the problem of the lack of clinical preceptors for NP students was and how other states addressed this issue.

All state boards of nursing were contacted through email and telephone in October 2018 to determine whether legislative initiatives have been addressed or implemented for NP preceptors to increase successful clinical placement of NP students. Of the 50 boards of nursing, 38 responses were obtained (Figure 1). More than half of the boards of nursing (54%) stated legislation regarding tax initiatives for NP student preceptors was not being discussed. Responses from three boards of nursing (6%) stated that there was active legislation regarding tax incentives in their state, and two boards of nursing (4%) responded there were other initiatives to improve NP student access to preceptors in their state. Many responses from the boards of nursing recommended APRN organizations be contacted for further information because most boards of nursing stated they could not

Responses of the Boards of Nursing to Nurse Practitioner Preceptor
Tax Credit Initiatives

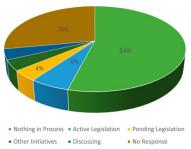


Figure 1. Responses of the boards of nursing.

introduce legislation; however, two boards of nursing (4%) implied there has been discussion of potential legislation. Of the boards of nursing who stated that potential legislation may be introduced by professional organizations, all but one state identified tax incentives as a likely solution. Iowa Board of Nursing stated that they are working on implementation of loan forgiveness and scholarships for NPs willing to precept NP students; however, this is not officially proposed legislation.

The state chapters of the AANP were not as responsive as the boards of nursing. Only 22 APRN professional organizations responded to emails and telephone calls that were made in October 2018; however, one professional organization stated they could not disclose any information. Of the professional organizations that responded, five states have not discussed timely clinical placement of NP students as an active problem. One of the states that gave this response has current active legislation in that state. Potential legislation or alternate solutions are being discussed in nine states currently, seven of which have independent scope of practice for NPs and two have restricted practice. Three more states have tabled the discussion at this time because of the inability to gain traction secondary to the financial climate of the state. Legislation is under review and negotiation in three states. NP scope of practice in these states with pending legislation is mixed; two states are independent, and one state is restricted (Figure 2).

Responses of the APRN Professional Organization to Nurse Practitioner Preceptor Tax Credit Initiatives

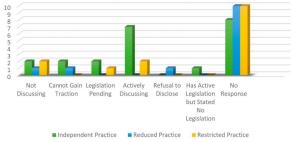


Figure 2. Responses of the state chapters of AANP.

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Lawmakers in Alabama, Kentucky, New York, South Carolina, and Minnesota have attempted to pass legislation to address NP preceptor shortages. Of these states, the scope of practice for NPs is also mixed: Alabama, Kentucky, and New York have reduced scope of practice, South Carolina has restricted scope of practice, and Minnesota has independent scope of practice. The bills in these states have been tabled and remain in legislation with potential to be addressed in the future.

In Alabama, the Rural Health Organization had attempted to pass legislation for NP and physician assistant student preceptors to receive tax credits of \$750; however, the bill has remained inactive for two legislative sessions. The state chapter of the AANP had denied collaboration with the Rural Health Organization on this bill. Although it is unknown why the bill did not gain traction, perhaps the formation of a larger coalition would have encouraged the bill to go further. The Minnesota State Chapter of AANP disclosed that a bill has been proposed but has been tabled in legislation. The bill suggested an incentive for up to \$5,000 for any licensed practitioner to precept medical students, physician assistant students, and NP students.

New York, South Carolina, and Kentucky also have submitted bills to legislation that have not passed into law. The bill that was submitted in New York remains in discussion in the Senate, per the New York Board of Nursing. The bill recommends a \$1,000 tax credit for licensed practitioners to claim for precepting students for 100 hours. The bill stipulates that a tax credit cannot exceed \$3,000 per fiscal year (New York State Senate, 2017). South Carolina had introduced a bill into legislation for up to a \$1,000 income tax credit for physician preceptors and up to a \$750 income tax credit for NP or physician assistant preceptors for NP or physician assistant students. The bill has been revised several times and is dependent on payment types covered within the NPs practice. If Medicaid-insured, Medicare-insured, and selfpay comprise at least 50% of the NPs practice, a tax credit of \$750 per clinical rotation with a maximum credit of \$3,000 is allowed, and if these payment types total at least 30% of the NPs practice, a \$500 tax credit with a cap of \$2,000 for the year is allowed. The credit will not be allowed for a NP practice that does not provide care to less than 30% of Medicaid-insured or Medicare-insured or self-pay patients. The bill is currently in the House of the State Congress (South Carolina General Assembly, 2019). Kentucky has introduced legislation for an income tax credit with frequent revisions as well. In 2016, a bill suggested a \$500 income tax credit per clinical rotation for a preceptor who is a licensed physician only. The bill was revised to only include physician preceptors in underserved areas to receive a \$500 tax credit per clinical rotation; however, the tax credit could not be less than \$1,500 and was capped at \$3,000. Therefore, the licensed

physician preceptor must commit to precept NP or physician assistant students for at least three clinical rotations (Kentucky Legislature, 2018).

There are four states that have active legislation involving tax incentives for preceptors for NP students. Maryland, Georgia, Colorado, and Hawaii are pioneer states in implementing tax incentive legislation to improve clinical preceptor placement for NP students. Georgia is the only state with restricted scope of practice laws for NPs, the three other states allow for independent practice.

Before passing legislation in Maryland, the state was ranked last in the number of physicians entering into primary care after graduation (Laff, 2016). This ranking propelled legislation for licensed physicians in parts of the state found to have a "health care workforce shortage" in specialties of primary care, dental, and mental health. All preceptors to medical, NP, and physician assistant students must be licensed physicians and may receive a tax credit of \$1,000 per student as long as they provide 12 weeks of clinical training. Physician preceptors may receive a tax credit of up to \$10,000 per fiscal year (Maryland Department of Legislative Services, 2016). This legislation was enacted into law in 2016, and no evaluation research of the effectiveness of the law in increasing access to preceptors and improving access to care was performed.

Georgia first initiated a tax incentive for preceptors of medical students only in 2014. In the laws' initial passing, only licensed practicing physicians were able to be preceptors. In 2017, an amendment was proposed to include licensed NPs and physician assistants as preceptors, and tax deductions were granted to include physician assistant and NP students; however, the tax deductions remain unequal depending on the discipline. Preceptors of medical students will receive a \$500 tax credit for the first three clinical rotations and \$1,000 for the fourth through the 10th per fiscal year. Preceptors of NP and physician assistant students will receive a \$375 tax credit for the first three clinical rotations and \$750 for the fourth through the 10th per fiscal year. Despite this inequity, the law is designed to improve access to clinical placements. This amendment was passed by both the Georgia State House of Representatives and the Senate in March 2018 and is pending enactment into law (Georgia General Assembly, 2018).

Colorado passed legislation to provide a tax incentive for those licensed practitioners willing to precept medical, NP, physician assistant, pharmacy, and physical therapy students in rural and frontier areas in 2016. An income tax credit of \$1,000 per calendar year is awarded to up to 200 preceptors licensed to practice in those areas where access to care is limited. The tax credit is awarded if preceptorship is otherwise uncompensated and lasts a minimum of 4 weeks. In addition, because of the recent

implementation of this law, no evaluation of effectiveness has been performed (Colorado General Assembly, 2016).

Hawaii is the most recent state to pass tax incentive legislation to improve access to preceptors for NP students. Per taxable year, a licensed practitioner may receive up to a maximum deduction of \$5,000 (State of Hawaii, 2018). The state of Hawaii has allocated \$1.5 million to provide preceptors \$1,000 per medical, pharmacy, and NP student mentored. The law took effect on January 1, 2019 (State of Hawaii, 2018).

State policy opportunities

In the four states where legislation has been actively passed, there has been no evaluation of the effectiveness of the laws put into place. Although several states have pending legislation and are discussing legislation, there are no data to show that tax incentives are the most effective option to increase clinical preceptors for NP students. Despite the ambiguity of the effectiveness of enacted and pending legislation, Massachusetts NP student access to timely preceptor placement remains an active problem.

Several options may be considered a potential solution to the lack of NP preceptors in Massachusetts. Like several other states, Massachusetts could discuss and potentially enact an income tax credit or deduction to improve access to preceptors for NP students. If this were to be considered, it would be imperative for the advancement of the APRN practice that the preceptor would be clearly defined to include licensed NPs and physicians. Inclusion of NP preceptors to receive the tax incentive alongside physician preceptors promotes equality between disciplines. Furthermore, NP students may be provided with a better understanding of the NP role in Massachusetts if precepted by a NP in lieu of a physician.

Ideally, instead of individual states submitting their own legislation to their state congress, a true national movement may be the most effective. Physicians are guaranteed reimbursement through Medicare for specific services provided by medical student interns and residents. Physician assistants have submitted legislation for similar incentives to improve access to preceptors for students. Why should NP students be different? States should form a coalition to increase access to preceptors for NP students and attempt federal legislation, with equal reimbursement across all states. Difficulty in this would be finding one voice and agreeing on terms because the scope of practice varies from state to state.

A geographical tax incentive may be beneficial and effective in Massachusetts for preceptors of NP students if national action does not come to fruition. There are counties in Massachusetts that have very little access to primary care physicians (Massachusetts Department of Public Health, 2016), and NPs may help to fill this gap. With

the growing population in Massachusetts and the projected shortage of primary care physicians, an increase in NP preceptors may help to alleviate the potential problem of future lack of access.

Although NPs are unable to practice independently in Massachusetts, more NPs are needed outside of Middlesex and Suffolk counties to provide quality care to residents. Unlike Middlesex and Suffolk counties, less than 10% of primary care physician practices are located throughout the rest of the state (Massachusetts Department of Public Health, 2016). In several areas of Massachusetts, there are no primary care physicians located for miles, and in the majority of Massachusetts, primary care physicians care for more than 1,500 residents each (Massachusetts Department of Public Health, 2016). The addition of more NPs to these areas could tremendously increase access to quality primary care for thousands of residents. An income tax incentive, not unlike the law enacted in Colorado for more remote geographical areas, could be hugely beneficial to students, preceptors, and the general population of Massachusetts.

Another consideration for potential tax incentive legislation in Massachusetts would be to determine who would receive the tax incentive. In the four states with active legislation, the preceptor is the recipient of the tax credit or deduction. A problem identified through the MACN survey was that clinical sites at times had no space for the NP student (MACN Survey, 2018). Perhaps an incentive for the clinical site may be considered to incentivize sites to create a space for students.

Although all states with active legislation have implemented tax incentives, perhaps alternative legislation may be beneficial in Massachusetts. Iowa has not implemented legislation; however, loan forgiveness and scholarships for NP preceptors are being actively worked on by the boards of nursing. Some preceptors in Massachusetts requested compensation through CEU credits (MACN Survey, 2018), which is consistent with findings from a study conducted by Webb, Lopez, & Guarino (2015). In Massachusetts, most of the preceptors desire financial compensation (MACN Survey, 2018), and these alternate solutions could indirectly satisfy their wishes.

Conclusion

Tax incentive legislation, either on a national or state level, has the potential to improve timely access to preceptors for NP students, while satisfying the desire of preceptors for financial compensation and improving quality care to the public. The lack of clinical preceptors for NP students is a national issue because of the increasing patient population and projected shortage of primary care providers (Association of American Medical Colleges, 2018). Increasing student access to NP preceptors requires an immediate solution to maintain

timely graduation rates, entry to practice, and timely access to care for patients. Several states are actively discussing solutions to the lack of clinical preceptors for NP students, varying from tax incentives to tuition reimbursement, scholarship, and compensation for CEUs. If state collaboration to advance a policy solution to the problem on a federal level is not a possibility, legislation in Massachusetts should be considered and encouraged as a potential solution for the current NP preceptor shortage. Four states across the country have already enacted legislation as a solution to encourage NP student preceptor placement. As a leader in health care, Massachusetts should be guided by these states to advance the practice of APRNs by promoting prompt clinical placement for NP students, thereby encouraging timely entry into practice and improved access to care for all residents in Massachusetts.

Authors' contributions: K. V. Carelli obtained data from the boards of nursing and AANP State Chapters, created the figures in the manuscript, and wrote the first draft of the manuscript. She is the primary author and the contact author. P. N. Gatiba obtained data on current, pending, and inactive legislation. She edited the manuscript and is the second author. L. S. Thompson provided access to MACN and coordinated data collection with MACN and the lobbying firm Governmental Strategies, Inc. She performed the final edits on the manuscript and is the mentor author.

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