Raising the Purchase Age of Tobacco to 21 in Massachusetts Towns:
Creating a Unified Message for Advocates of ‘Tobacco 21’

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Background

The 2012 Surgeon General’s report testified that almost 90% of smokers in the United States began smoking before the age of 21.¹ The report concludes that if young people can remain free of tobacco, most will never start to smoke. Currently, people who reach the age of 21 as a non-smoker have only a minimal chance of ever becoming a smoker.² For these reasons, there is interest in extending the benefits of restricting tobacco sales to individuals under the age of 21. Considering the potential beneficial public health impact of raising tobacco sales age to 21, some U.S. cities and counties (New York City, NY; Suffolk County, NY; Hawaii County, HI; Needham, Arlington, Sharon, Canton, Ashland, Wellesley, Dedham, Dover, Norwood, Scituate, W. Boylston, Hudson, Winchester, Wakefield, Reading, Melrose, MA) have already approved legislation for raising the age to 21 and other cities, counties and states are making legislative or regulatory efforts to approve similar proposals.
An extensive review of current tobacco control literature reveals many astounding statistics. These led me to direct the focus of my project on creating a unified message for advocates of the Tobacco 21 initiative. The American Lung Association reports that one in four high school seniors are smokers. The U.S. Department of Health and Human Services advocates that reducing minors’ tobacco use by 50% would prevent over 10 million children from becoming daily smokers and avoid 3 million premature deaths. This evidence, combined with the Surgeon General’s report indicating that 80% of adult smokers begin smoking daily before age 20 is fueling the Tobacco 21 initiative’s fire. With research findings indicating that across four countries, 90% of adult smokers regret ever starting, there is a clear and recognizable need to address the early initiation to smoking during adolescence. One of the greatest challenges in minimizing access lies in the actual purchasing of tobacco products.

With 90% of the purchasers of cigarettes for minors being under 21, research clearly reinforces that the minimum sales age for tobacco products and e-cigarettes should be raised to 21. FDA regulations set a federal floor at age 18; states and localities can raise it. My research showed few resources for advocates when addressing advisory boards, such as the Boards of Health. I decided to focus my project on supporting advocates of the Tobacco 21 initiative. In an effort to compile current research and establish a unified, compelling argument, I decided to compile “Talking Points” that can be used at any Board of Health meeting in the state of Massachusetts.
Methods

The overall goal of this practicum experience was to gain greater knowledge and experience in the application of research, policy, advocacy, and implementation of Massachusetts tobacco control issues, especially relating to the efforts working to increase the purchase age of tobacco to 21. The objectives that were developed in order to achieve this goal focused on using the methodologies of an in-depth literature review, working with local leaders and advocates in the field, and ultimately creating meaningful, feasible materials that can be used and disseminated to increase the efficacy of the efforts in this local tobacco control initiative.

Another goal was to become very knowledgeable about current research on local tobacco control issues in order to assess the feasibility of implementing an advocacy approach to local tobacco control in Massachusetts' towns. In doing so, I would then be better equipped to design materials and to identify the appropriate healthcare leaders (physicians, board of health members, town officials, or industry leaders) to disseminate this information to.

In working towards the five competencies outlined in my original scope of work, I found the process to be extremely rewarding. Concepts that seemed at first quite broad quickly became realistic and relevant. Tobacco use, addiction, and control have been a health care dilemma for as long as researchers began to identify the harms of tobacco use. Though, only in the last several decades has the dilemma become more about industry, marketing, health care premiums and coverage, disease and death, and recently, teen use. To better understand the origins of the youth tobacco use dilemma, I researched general tobacco control issues, local tobacco use, smoking behaviors and patterns, the impact of
tobacco use on adolescent development, and social factors contributing to and the result of tobacco use and sales. A background understanding of the long-term tobacco control issues we have faced for decades was essential to understanding the challenges we still face today.

My goal was to use the information gathered in literature reviews on these various subjects to design a realistic and feasible approach for addressing tobacco control at a local level based on previously demonstrated successes in the Massachusetts area. Understanding best practices in community approaches to health promotion was a competency that I looked forward to learning more about; it was illuminating to compare the various approaches of large-scale organizations such as Tobacco Free Kids and more localized efforts, such as the Massachusetts-based “The 84.”

I was also able to better understand the variety of factors that contribute to the difficulties of addressing sensitive issues in tobacco control, especially in terms of the challenges faced by advocates and the arguments made by those against the change. By collaborating with local pediatricians and health care professionals, whose involvement is described in greater detail below, and analyzing current trends in policy, I was able to better understand factors that influence tobacco control policy in Massachusetts. This understanding allowed me to target the messages of my tool kit to better meet the current needs to address a large public health issue.

In conducting my research, I was able to identify four specific arguments that could be summarized and/or counter-argued to help advocates of Tobacco 21 establish a unified message. These arguments are: the military/age argument, convenience store owner’s concerns, the impact of tobacco on the adolescent brain, and an overall
“position” that is reflected in general talking points. These four areas of discussion were
the most influential and compelling in Massachusetts towns that had already moved to 21, such as Needham, and could be better supported and emphasized when reaching out in other towns.

Planning, designing, and finalizing tailored materials that can be used across the state of Massachusetts was the most rewarding and culminating component of my project. Designing materials to support the Tobacco 21 efforts based on local regulations, social climate, and state demographics made for a very meaningful, enriching experience. Being able to also use my creative skills to add eye-catching graphics was an extra benefit. I have included these materials in this submission.

Results/Outcomes

With the end goal, or product, being a tool kit of talking points for advocates to share with Boards of Health and other leaders in local towns, I needed to conduct sufficient background research and talk with local experts in order to design a plan of action that utilizes best practices, is founded in research, and addresses the arguments against stricter regulation. In conducting the extensive literature review on tobacco control issues, adolescent use, and current trends in tobacco use, as well as completing an overview of current practices in tobacco control, I was able to evaluate the most effective approach to addressing the Tobacco 21 issues.

My research on the topic was invaluable and extremely informative. I was able to use the historic precedents and similar objections that were raised decades ago when the national minimum drinking age was proposed to be raised to 21 as a foundation for understanding the complex issues at play with the Tobacco 21 initiative. For example,
after the law was passed and implemented by most states in 1980’s, a reduction in drinking, problematic drinking, drinking and driving, and alcohol-related crashes among youth was seen.\textsuperscript{9} Opponents of raising the tobacco purchase age argue that the loss of sales will run them out of business and add an extra burden to them. Yet, the alcohol industry still survived by adapting to the changing market despite the loss of sales to under 21 year-olds. Furthermore, retailers are already required to check the I.D. of anyone who appears under the age of 27 seeking to purchase tobacco under federal rules, 21 requirement would place no additional compliance burdens on their staff.\textsuperscript{10}

I also focused my research on the evolving neuroscience of the adolescent brain and adolescent tobacco use and initiation. Ample evidence demonstrates a special susceptibility to even experimental tobacco use.\textsuperscript{11} Low minimum sales age laws exploit that susceptibility to addict children and adolescents to cigarettes for life, with relatively few cigarettes. Meanwhile, raising the sales age would appear likely to have a significant effect on current adolescent tobacco use rates, decreasing the chances of a person ever becoming tobacco dependent. By some estimates, raising the tobacco sales to 21 would reduce tobacco use prevalence by 55\% for 18-20 year-olds.\textsuperscript{12,13} In 2005, Needham, Massachusetts was the first town in the country to implement the law to raise the tobacco sales age to implement the law to raise the tobacco sales age to 21. Following the implementation of the law, the Youth Risk Behavior Surveillance System and Metro West Health Foundations’ Adolescent Health survey data showed a 47\% reduction in Needham high-school smoking rate in the four years (2006-2010) after the legislation was implemented.\textsuperscript{14} The results of the data on the impact of Needham’s groundbreaking achievements are presented in the accompanying PowerPoint presentation. These
findings, among others, were clear evidence that there was a need to compile strong arguments for continuing to raise the tobacco purchase age.

**Practicum Project Support**

In addition to my Practicum Supervisor Alixandra Nozzolillo and the staff at the Center for Adolescent Health Research and Policy, I met with leaders in the fields of healthcare, advocacy, and tobacco control. There were three physicians that played key roles in my practicum project.

Dr. Lester Hartman is a Pediatrician in Westwood and Mansfield Massachusetts. He was instrumental in the passage of Needham’s Tobacco 21 law and continues to volunteer his time to advocate at Board of Health meetings across the state when towns are considering a Tobacco 21 bill. Dr. Hartman was extremely helpful in working with me on tailoring the approach of the Tobacco 21 Talking Points sheets. He helped me become familiar with and better understand Massachusetts’ regulations and laws pertaining to sales, taxes, and locations of sales, industry influence, lobbying, and the methodology of law changing in town government. Because he had ample experience directly presenting to Boards of Health, talking with him about his personal challenges in communicating issues from a scientific or research approach was extremely helpful. Dr. Hartman helped me to identify the arguments against the initiative as well as pull together the research findings I had compiled in order to create meaningful messages to Boards of Health. Based on his experiences, I was able to compile real-life examples of arguments made and establish counterpoints through research and science.
Dr. Jonathan Winickoff is a Pediatrician who works in Waltham, Massachusetts. He has focused his research efforts on tobacco control in the pediatric setting and is also a major advocate in the Tobacco 21 circle. Dr. Winickoff provided a great deal of insight into the larger context of Tobacco 21, such as the efforts being made to remove cigarettes from pharmacies like CVS. I also worked closely with Dr. Jeannie VanCleave. Dr. VanCleave is considered an expert in practice change at the primary care level and is also well known for her involvement in unifying key stakeholders in areas of maternal and child wellness. Dr. VanCleave served as a consultant for various large-scale health campaigns, such as the Act FRESH public health campaign, and was a valuable resource when reviewing the literature on best practice approaches in public health advocacy and change.

Lessons Learned

One of the most rewarding events that occurred with this project was being able to pull the materials together just in time for a very important Board of Health meeting in Foxboro, MA. This meeting was originally scheduled for late July but was pushed up unexpectedly to late June. In an effort to make the greatest impact with the materials I was developing, I was able to coordinate with Dr. Lester Hartman to assemble packets for each Board of Health member as well as meeting attendees. After nearly six hours of hand-binding 200 copies of my Tobacco 21 Talking Points packet and pulling together other relevant materials for dissemination such as recent article publications, the meeting went off beautifully. I was unable to attend the meeting, but I received incredible feedback. The Board agreed to draft regulations to reassess current laws and limit the purchase age of tobacco. Dr. Hartman, who presented the documents personally,
reiterated that they had, for the first time, truly been able to clearly and concisely “attack” the counterpoints with a valid argument based in research.

I was surprised by the limited research on the short and long-term outcomes of regulations that have been put in place across other states besides Massachusetts, as well as internationally. For example, California and Canada are two predecessors of Massachusetts in relation to Tobacco 21-type regulations (more specifically focused regulations on how tobacco products must be stored out of eye-sight) at both local and state-wide (or province-wide in Canada) levels. However, there are few, if any, outcome analyses of the impact of these regulations. This information would be highly valuable to those advocating for this public health change, yet, it simply is not there. An extensive literature review on the topic focusing on these two areas produced very little in terms of usable data or replicable research. Anecdotal evidence is somewhat available as well as qualitative data from business owners and residents reflecting on their stance on the initiative. Some of the only clear data is the current research on Needham, Massachusetts. Extrapolating these findings is only the tip of the iceberg. This research is presented in the accompanying PowerPoint presentation. Eventually, larger scale impact studies will need to be carried out in order to further support the adoption of the Tobacco 21 initiative and related regulations, such as removing tobacco products from pharmacies.

As a result of this project, I have come to better understand the complexity of public health advocacy and the influences of the co-existing entities and relationships that govern how decisions are made. This experience taught me that the decisions around public health issues can be rooted more deeply in politics, economics and business, lobbying, and industry than public health. I learned a lot about how understanding and
respecting these relationships, as well as utilizing and identifying the advantages and weaknesses of each, is an important component to effective public health practice.

Suggestions for Future Projects

Given that one requirement for acceptance into the MPH Public Health Practice Program at UMASS Amherst is to be employed in a public health setting, it may be very common for students to carry out their practicum projects at their places of work. One component that could have improved the practicum experience was greater emphasis, connection, and/or reference to the practicum in other courses earlier on in the program. For example, the Research Methods course requires the identification of one specific topic at the beginning of the course, to be researched and studied over the 12-week period. However, with the anticipation of the practicum soon after completing this course, and with support from and collaboration among the professors, students would benefit from a “look ahead” discussion. It would have been extremely valuable to try to link research topic interests with potential practicum experiences in future semesters. This would offer greater opportunity for the application of classroom learning to complement a rich and developed practicum project. This may especially be true for students who want to study something somewhat different from the topic their professional role covers. I personally chose to study maternal factors influencing prenatal care and newborn outcomes during my Research Methods course. With additional support, the practicum requirements ahead of time, and the opportunity to explore practicum options outside of my workplace, I would have enjoyed exploring a topic of interest outside of my professional realm.
References


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