

# Assessing the Health Promotion and Chronic Disease Prevention Content of US Graduate Curricula in Law and Public Policy

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## Background

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### *Burden of Disease Context*

While the health adjusted life expectancy of Americans has improved in recent decades, the leading contributors to death and years of life lost are morbidity and chronic disability caused by chronic diseases.<sup>1</sup> Today, more than 50 percent of adults in America live with one or more chronic diseases.<sup>2</sup> As defined by the World Health Organization (WHO), chronic diseases (i.e. heart disease, stroke, cancer, chronic respiratory disease, diabetes, and mental disorders) are diseases that have a long duration and progress slowly.<sup>3</sup> These chronic diseases are a result of modifiable risk factors such as unhealthy diet, inadequate physical inactivity, medication non-adherence, excess alcohol use and tobacco use which can lead to raised blood pressure, increased blood glucose, abnormal blood lipids, and obesity.<sup>4</sup> Consequently, the economic burden of chronic diseases is significant; 86% of all healthcare spending stems from chronic medical conditions and total chronic disease treatment expenditure exceeded US\$300 billion for the Medicare population in 2010.<sup>5</sup> Additionally, public and private sectors are facing increasing absenteeism, employee healthcare costs and lost productivity.<sup>6</sup> The increasing prevalence of chronic diseases along with the rising healthcare costs, estimated at 17.9% of the national GDP, has implications for the health, productivity, economic stability and competitiveness of the working age population.<sup>7,8</sup>

### *Health Promotion and Disease Prevention*

As defined by WHO, health promotion will be used in this paper to refer to processes of enabling individuals to increase their control over as well as improve their health and encompasses factors beyond individual behavior including social and environmental agents.<sup>9</sup> Disease prevention focuses on preventing the occurrence of disease through risk factor reduction as well as slowing disease progress and mitigating the adverse effects.<sup>10</sup> Health promotion and disease prevention are fundamental tenets of public health goals and are instrumental in protecting and improving individual and population health locally and globally.

### *Health Education*

One possible contributor to the lack of proactive approaches towards health promotion and chronic disease prevention in the US health ecosystem may be a result of a lack of focus on such topics in the curricula of graduate schools. To date, there has not been an analysis on law and public policy graduate curricula, specifically, but graduates of these programs often continue onto careers that have major implications for population health such as policy, health law and regulatory roles in both public and private sectors.

## *Objective*

We analyzed and compiled data surrounding health promotion and disease prevention content contained within the curricula of health law and health policy programs available in 2013 and we discuss the implications of our findings. While public policy and law do not have specific goals related to health promotion and disease prevention, this analysis focuses on the core content from public health that public policy and law students should become familiar with in their studies.

## Methods

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There are 30 accredited law schools offering a concentration, specialization, or certification in health law, out of 202 accredited law schools according to the American Bar Association's list of approved law schools.<sup>11</sup> In a similar vein, there are 55 schools of public policy that offer a concentration or specialization in a health field, such as healthcare administration or management, out of 167 public policy schools accredited by the National Association of Schools of Public Affairs and Administration (NASPAA).<sup>12</sup> In order to determine which public policy and law schools have a health specialization, the authors accessed the school websites of all accredited law and public policy programs to determine whether the school offered a health specialization and which courses were elements of the health specialization curriculum. The authors use the word "specialization" to represent any organized health program with a pre-determined curriculum within the overall accredited program.

The evaluated schools used a range of terms synonymous to specialization including, but not limited to: concentration, emphasis, focus, track, and certification. Furthermore, the authors use the word "health" to describe any specialization related to health including: health administration, health and human services, public health, healthcare management, health systems, community health administration, and health policy. When curriculum information was not available online, the authors contacted the schools via email. Schools differed in the number of courses required for the health specialization as well as the number of courses students may take as electives.

This investigation assessed all courses (required and elective) that could be included in the curriculum for a student receiving a law or public policy degree with a health specialization. The authors qualitatively evaluated each course description with a pre-determined rubric to both categorize and determine whether health promotion and disease prevention content was included in the curriculum (see Table 1). The authors first independently evaluated the curricula of law and public policy, and then collaborated to discuss discrepancies and to reach an agreement on the appropriate categorization.

**Table 1.** Possible coursework topics were grouped into two categories based on their relevance to health promotion and disease prevention. These categories were then used to assess course descriptions for content related to health promotion and/or disease

<b>Irrelevant health promotion and disease prevention (HP/DP) course content</b>		<b>Relevant health promotion and disease prevention (HP/DP) course content</b>
Access to Care	History	Best practices
Administration (includes organization, delivery)	Human rights	Biostatistics
Advocacy	Information systems	Burden of disease
Aging	Insurance	Chronic disease
Alternative medicine	Law	Cost-effectiveness (specifically related to health)
Children/families	Leadership	Economics (specifically related to health)
Communication	Management	Epidemiology
Comparative global healthcare	Marketing	Global health
Consulting	Medical sociology	Health promotion
Contemporary issues	Policy	Mental health
Dental health	Program development	Population health
Disability	Program evaluation	Prevention
Emergency response	Psychology	Risk factors (including alcohol, obesity, physical inactivity, stress, nutrition)
Environment	Quality of care	Social and Behavioral Sciences
Ethics	Regulation	
Finance	Reproductive health	
	Research methods	
	Social Welfare	
	Urban	
	Women's health	

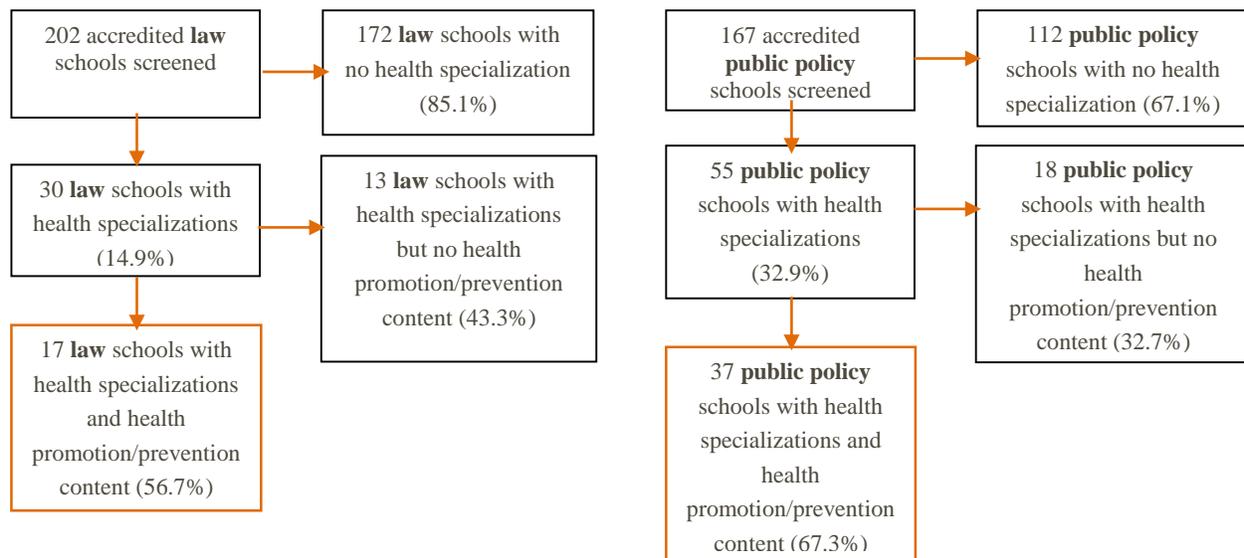
From this evaluation, 14 content areas were grouped under the relevant health promotion and disease prevention category. These 14 content areas were developed through in-depth consultations with experts and leaders in the fields of health promotion and disease prevention. A course that contained content related to any of these 14 categories was evaluated as having health promotion and disease prevention content. Percentage agreement between the authors was calculated for the evaluation of whether the course contained health promotion and disease prevention content for the 1176 total courses; the percentage agreement were 83.3% for schools of public policy and 84.2% for schools of law.

## Findings

1. Of the 1176 total courses, 688 courses (including required and elective) were evaluated from 30 accredited law schools with a health specialization, out of a total of 202 accredited law schools. Thirteen (43.3%) schools had no health promotion and disease prevention content even though they offered health specializations (see Figure 1). Of the 17 schools with health promotion and disease prevention content, 6 (20%) had at least one course with health promotion content and 8 (26.7%) had at least one course with prevention content (Table 2). Only 4 (13.3%) had any courses related to chronic diseases (see Table 2).

2. Of the total 1176 courses, 488 courses were evaluated (including required and elective) from 55 accredited public policy programs with a health specialization, out of a total of 167 accredited public policy schools. Eighteen schools (32.7%) had no health promotion and disease prevention content even though they offered a health specialization (see Figure 1). Of the 37 schools with health promotion and disease prevention content, 10 (18.2%) had at least one course with health promotion content and 10 (18.2%) had at least one course with prevention content (see Table 2). Only 5 (5.5%) had any courses related to chronic diseases (see Table 2).

**Figure 1. Results of Curricula Search**



**Table 2. The number of academic program containing course content in each of the topics relevant to health promotion and disease prevention.**

	Law		Public Policy	
	Number of schools	Percentage of schools*	Number of schools	Percentage of schools*
Best practices	1	3.3%	3	5.5%
Biostatistics	3	10%	2	3.6%
Burden of disease	1	3.3%	3	5.5%
Chronic disease	4	13.3%	5	5.5%
Cost-effectiveness	0	0	4	7.3%
Economics	4	13.3%	24	43.6%
Epidemiology	5	16.7%	18	32.7%
Global health	2	6.7%	4	7.3
Health promotion	6	20%	10	18.2%
Mental health	1	3.3%	6	10.9%
Population health	4	1.3%	7	12.7%
Prevention	8	26.7%	10	18.2%
Risk factors	5	16.7%	2	3.6%
Social and Behavioral Sciences (SBS)	4	13.3%	2	3.6%

\* Of accredited programs with a health specialization

Just over 50% of the law schools with health promotion and disease prevention coursework have content in only one relevant area. Boston University and Georgetown University have the most comprehensive programs with 7 and 8 health promotion and disease prevention content areas covered respectively (see Table 3). The majority of the public policy schools have between 2-6 health promotion and disease prevention course content areas in their curriculum. The most comprehensive public policy program is New York University with health promotion and disease prevention course content in all 14 areas of interest (see Table 4). Tables 5 and 6 provide examples of courses offered by different institutions covering each of the 14 content areas of health promotion and disease prevention.

**Table 3. Schools of law with course content in topics relevant to health promotion and disease prevention.**

	Population health	Health promotion	Mental health	Prevention	Epidemiology	Economics	Global health	Burden of disease	Chronic disease	Risk factors	Cost-effectiveness	Biostatistics	SBS	Best practices	Total
Albany University		•		•	•				•			•			5
Baylor University						•									1
Boston University	•	•		•	•	•				•				•	7
California Western	•	•		•											3
Drexel University			•												1
Georgetown				•	•	•	•		•	•		•	•		8
Georgia State				•											1
Hamline University		•													1
Loyola				•						•			•		3
Pittsburgh				•	•				•			•			4
Indiana University													•		1
Seton Hall University	•									•					2
University of Virginia								•							1
UC Hastings	•	•		•			•		•						5
University of Maryland					•										1
University of Minnesota						•				•			•		3
University of Washington		•													1

**Table 4.** Schools of public policy with course content in topics relevant to health promotion and disease prevention.

	Population health	Health promotion	Mental health	Prevention	Epidemiology	Economics	Global health	Burden of disease	Chronic disease	Risk factors	Cost-effectiveness	Biostatistics	SBS	Best practices	Total
Albany State University					•										1
American University							•								1
Baruch College	•														1
CA State U., Bakersfield	•	•													2
CA State University, Chico			•												1
Carnegie Mellon University	•	•		•				•	•					•	6
Cleveland State University			•		•						•				3
East Carolina University					•										1
Eastern Kentucky University		•		•	•										3
Georgia State University				•		•				•	•		•		5
Grambling State University					•		•								2
Grand Valley State University						•									1
Indiana University – Purdue University, Ft. Wayne					•										1
Indiana University, Northwest						•									1
Jackson State University	•			•	•	•						•			5
Long Island University, Brooklyn Campus					•	•									2
New York University	•	•	•	•	•	•	•	•	•	•	•	•	•	•	14
Portland State University						•									1
Rutgers University; New Brunswick			•		•	•									3
Seton Hall University		•				•									2
Southern University and A&M College			•	•		•			•						4
Suffolk University						•			•						2
Tennessee State University					•										1
Texas A&M University						•									1
The George Washington University		•			•	•	•								4
The Pennsylvania State University at Harrisburg						•									1
The University of Georgia	•	•				•									3
The University of New Mexico					•	•									2
University at Albany						•		•						•	3
University of Maryland, Baltimore County				•	•	•					•				4
University of Maryland, College Park						•									1
University of Nebraska at Omaha		•	•	•	•	•			•						1
University of North Dakota						•									1
University of North Florida						•									1
U. of Southern California		•		•	•	•									4
Wayne State University					•	•									2
West Virginia University	•	•		•	•										4

**Table 5.** Examples of health promotion and disease prevention courses offered by schools of law

HP/DP Category	Course Name	Institution
Best practices	LAW JD 926—Public Health Law	Boston University
Biostatistics	Public Health Law	Albany University
Burden of disease	Public Health Law and Ethics	University of Virginia
Chronic disease	Law, Healthy Lifestyles and Business Regulation	Georgetown University
Cost-effectiveness	N/A	N/A
Economics	LAW JD 867--Health Law: Business, Organization & Finance	Boston University
Epidemiology	Public Health Law	Albany University
Global health	LAW 593—National and Global Health Law	Georgetown University
Health promotion	LAW 520—Public Health Law	UC Hastings
Mental health	LAW 810S—Advanced Problems in Mental Health Law	Drexel University
Population health	LAW 520—Public Health Law	UC Hastings
Prevention	LAW JD 865—Health Law: Medicine & Ethics	Boston University
Risk factors	Law, Healthy Lifestyles and Business Regulation	Georgetown University
Social and Behavioral Sciences	Law, Healthy Lifestyles and Business Regulation	Georgetown University

**Table 6.** Examples of health promotion and disease prevention courses offered by schools of public policy

HP/DP Category	Course Name	Institution
Best practices	90-861—Health Policy	Carnegie Mellon University
Biostatistics	PHD-GP.5902—Research Methods	New York University
Burden of disease	PAD 653—Disease Policy: Managing Public Health Problems	University at Albany
Chronic disease	HLTH-832—Health Policy (covers chronic illness and disabilities)	Suffolk University
Cost-effectiveness	PUBL 652—Politics of Health	University of Maryland Baltimore City
Economics	HPAM-GP.4830--Health Economics: Principles	New York University
Epidemiology	PPAD 710—Epidemiology and Toxicology for Public Managers	Jackson State University
Global health	PA 546—Special Topics in Public Health (covers “international health”)	Grambling State University
Health promotion	PUBH 6335—Public Health and Law	The George Washington University
Mental health	1935—Mental Health and Society	Rutgers University, New Brunswick
Population health	90-833—Population Health I	Carnegie Mellon University
Prevention	PMAP 9211—Using Research to Develop Health Policy (1 session on obesity prevention policy)	Georgia State University
Risk factors	HPAM-GP.4865—Obesity Policy Research	New York University
Social and Behavioral Sciences	URPL GP 4632—Planning for Healthy Neighborhoods	New York University

## Discussion

Health policy and law are playing important roles in the health of the population and the healthcare policy landscape. For individuals in these disciplines to successfully impact population health, they must have an understanding of the health challenges faced by the US population, specifically the current burden of chronic disease, its underlying causes, and the effectiveness of interventions. We do not advocate that all health policy or health law graduates should have a foundation in population health methods and analysis that is required by Master of Public Health (MPH) graduates as outlined in the Association of Schools and Programs of Public

Health's (ASPPH) Core Competency Model.<sup>13</sup> Rather, we reasonably propose that they should, at a minimum, have a basic understanding and background in the subject. Most importantly, all students entering the healthcare workforce require a solid understanding of epidemiology. A foundation in causal theory is essential for the majority of policy and legal roles in healthcare. Without this core discipline, they have little sense of the current disease burden, causes, and interventions, which leads to policies that are devoid of content specific to the relevant risks or diseases that burden society.

The health promotion content in the majority of health programs in both law and policy is lacking. However, one thing to note is the considerable heterogeneity between programs. A student graduating from NYU in one of their health specializations for the public policy degree will have taken ample coursework relevant to the current burden of disease, while a student graduating from American University with the same concentration will have had virtually no exposure to these topics. We see this same trend mirrored in health law programs. A small handful of programs do an excellent job on these topics, while most neglect them. It is clear that some students in these two disciplines graduate with a wealth of knowledge on health promotion, disease prevention, and population health, which they could certainly implement in practice. Most students, however, go through a curriculum that does not provide them with this opportunity.

When considering the healthcare needs of the nation, it would appear crucial to improve upon and standardize these programs. We recommend an accreditation process to standardize these programs. Health specialties within other disciplines are often subject to additional accreditation requirements, so applying such a standard here has precedent. For example, within the MPH degree, the Healthcare Management concentration is subject to accreditation from the Commission on the Accreditation Healthcare Management Education (CAHME), in addition to the standard MPH requirements. This extra accreditation is voluntary, and helps ensure consistency and quality in healthcare management programs at different institutions.

Our recommendation is for health law and health policy specialties to adopt similar voluntary accreditation processes. The accreditation requirements should mirror the competencies required to function effectively in the current healthcare sector. This necessarily includes the option to take coursework in the content areas, crucial to understanding the current burden of chronic disease that we point out in this analysis. Of note, this recommendation would seemingly only affect individuals entering graduate education wanting to concentrate in health, such as Juris Doctor (JD) candidates specializing in Health Law or Master of Public Administration (MPA) candidates specializing in Health Policy and Management. An increase in health promotion and disease prevention literacy among healthcare professionals in policy and law will stimulate more effective, relevant, and evidence based health policy decision making.

## Limitations

Because the variation in the number of required and elective courses in health specialty programs and the different paths that a student can take within the curriculum, the authors chose to group all courses that could be taken. As a result, students would not have the opportunity to take all of the courses offered in each program. This choice resulted in an overestimate of the amount of curricular content related to health promotion and disease prevention that a student would be exposed to. Therefore, the already sparse content would likely be lessened further in the actual curriculum of a typical student. Additionally, faculty and course availability change year to year. We did not account for the problem that different entering classes of students at the *same* public policy or law school may also experience heterogeneity in class availability and class selection from year to year. In a similar vein, this initial assessment was primarily performed in 2013 and we anticipate further re-analyses and discussion around this topic as course content have and will change every year.

## Implications

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The findings from the literature reviewed and curricular analysis in this report highlight a need to refocus the education of some of our healthcare professionals and better utilize those with the deepest insights regarding health promotion and disease prevention into major national debates and for a of influence. The current burden of chronic disease calls for healthcare experts to be well versed in population health and in methods to control and prevent the spread of chronic diseases. Epidemiology is the core discipline that guides students in their understanding of causation and population health. Modern physicians have an increasing need for biostatistics and epidemiology, the basic sciences of public and population health. They require the competence to critically assess evidence and appropriately apply it in practice. In that vein, a foundation in health economics is also essential in understanding how disease rates can change based on market factors.<sup>14</sup> For most of the disciplines examined here, the current educational curriculum is not adequately providing this crucial knowledge base. Without a solid foundation in epidemiology, graduates creating laws and policies are unable to fully addressing causal pathways.

While our recommendation focuses on revamping the content included for the curricula of interest, one important consideration is the incentives that encourage graduates to put that content to use in their practice. The schism between medicine and public health persists, in part because the incentive for doctors to provide preventative care is undermined by the current fee-for-service payment structure. We can ensure that healthcare professionals are given the necessary knowledge content to function in a society with a disproportionate burden of chronic disease but it requires a highly efficient system with the proper incentives to encourage the healthcare workforce to utilize their skills set. Similarly, we must also consider the incentives, or

lack thereof, that affect whether professionals in law and public policy will utilize public health knowledge and skills into their practice.

The US is slipping behind its major Organization for Economic Co-operation and Development Countries (OECD) competitors regarding improvements in population health. For the US to maintain its economic competitiveness, our health policy efforts need to address the risk factors of preventable chronic diseases that disproportionately affect the US population (i.e. physical inactivity, unhealthy diet, tobacco consumption and mental illness).<sup>15</sup> While reforming health promotion and disease prevention content of graduate education curricula will not solve the problem completely, it is an essential aspect of accelerating the prevention and control of chronic diseases in working-age Americans.

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