

Innovating in Health Care Management Education: Development of an Accelerated MBA and MPH Degree Program at Yale

Melinda M. Pettigrew, PhD, Howard P. Forman, MD, MBA, Anne F. Pistell, MBA, and Ingrid M. Nembhard, PhD, MS

Increasingly, there is recognition of the need for individuals with expertise in both management and public health to help health care organizations deliver high-quality and cost-effective care.

The Yale School of Public Health and Yale School of Management began offering an accelerated Master of Business Administration (MBA) and Master of Public Health (MPH) joint degree program in the summer of 2014. This new program enables students to earn MBA and MPH degrees simultaneously from 2 fully accredited schools in 22 months. Students will graduate with the knowledge and skills needed to become innovative leaders of health care organizations.

We discuss the rationale for the program, the developmental process, the curriculum, benefits of the program, and potential challenges. (*Am J Public Health*. 2015;105:S68–S72. doi:10.2105/AJPH.2014.302252)

THE RAPIDLY CHANGING AND complex nature of the health care system has created a demand for managers with expertise in both business and health care to lead organizations in delivering high-quality, cost-effective care. Projections suggest that the need for health care service managers will grow by 23% in 2022 compared with 2012.¹ Ideally, health care leaders have a comprehensive understanding of the core public health disciplines, as well as advanced training in management skills and strategic problem solving. The field of public health focuses on protecting and improving the health and well-being of entire populations.^{2,3} The field of management focuses on the activities of planning, organizing, controlling, and motivating to accomplish objectives efficiently and effectively.² The synergy between the two fields becomes clear once one considers improved population health as an objective that may be realized in part through able management.

The important role of prevention and public health for the broader health care system has been recognized in the Patient Protection and Affordable Care Act, which is predicted to fundamentally change the way public health is practiced in the United States.⁴ Changes emerging from health care reform, the creation of new organizational forms such as accountable care organizations, are intended to achieve the triple aim of improving each individual's experience of care, improving the health of populations, and

reducing costs.^{5–7} As part of health care reform, health care systems are now expected to address public health goals and are being evaluated for their ability to achieve them. Thus, a public health perspective is critical if we are to successfully train the next generation of leaders who will direct health care systems and other health-related organizations across the globe.

Existing Master of Public Health (MPH) programs in health care management require coursework in epidemiology, biostatistics, social and behavioral sciences, and environmental health. They also provide training in accounting, finance, operations, economics, strategy, and organizational behavior. However, they do not provide the opportunity to develop depth of management knowledge and skills by virtue of having limited management-focused offerings relative to public health offerings.² Business schools offering Master of Business Administration (MBA) programs with health care concentrations provide depth of knowledge in core business skills and a fundamental understanding of technological developments, operational practices, and regulatory changes in the health care industry. However, these programs may not provide breadth and depth of understanding of the public health perspective.

Comprehensive training in both business and public health would provide students with the interdisciplinary perspective to function as leaders capable of addressing the complex and multidimensional

health challenges of the 21st century. However, students may not be willing or able to invest the extra one or two years to get both degrees through traditional pathways. We believe this situation results in missed opportunities to develop the transformational leaders needed to improve public health and health care. An accelerated joint MBA and MPH degree program would enable future health care leaders to acquire essential health care management and public health skills in an integrative, cost-effective program.

PROGRAM DEVELOPMENT

Realizing the need to think creatively about how to prepare the next generation of leaders in health care management, we challenged ourselves to develop an innovative program that would enable students to earn an MBA and an MPH degree in just 22 months through intensive study at the Yale School of Management and the Yale School of Public Health. The Yale School of Public Health, founded in 1915 and fully accredited as a school by the Council on Education for Public Health, has one of the United States' oldest programs in public health. The Yale School of Management started in 1976 as the School of Organization and Management and is accredited by the Association to Advance Collegiate Schools of Business.

First, we convened meetings with alumni and students to discuss the value of an accelerated joint MBA and MPH program. These meetings indicated

widespread support for developing such a program. Therefore, we established a formal committee of faculty and administrators (the coauthors) responsible for program development. As a committee, we reviewed the curriculum at Yale School of Public Health, Yale School of Management, and peer institutions.

We identified several resources at Yale University that made development of a shortened degree program feasible. First, faculty at Yale School of Public Health and Yale School of Management had a history of successful collaborations to address complex public health problems. For example, diagnosis-related groups, a classification for hospital admissions, resulted from a collaboration between Robert B. Fetter at Yale School of Management and John D. Thompson at Yale School of Public Health.⁸ Diagnosis-related groups replaced cost-based reimbursement and revolutionized hospital reimbursement policies.⁹ Second, Yale School of Public Health has a two-year program in health care management leading to an MPH degree. The health care management curriculum is unique in that it combines courses at Yale School of Management with courses at Yale School of Public Health. Thus, there was a track record of collaboration between Yale School of Public Health and Yale School of Management for educational programs. Third, Yale School of Public Health currently offers accelerated core courses in epidemiology, social and behavioral sciences, and biostatistics during the summer. These courses were developed for the 11-month Advanced Professional MPH Program, which enrolls students with health-related doctoral degrees.

We leveraged courses and practical opportunities available

through both schools and used a competency-based educational framework to design a curriculum that incorporated core competencies in public health, health care management, and business.^{10,11} When the curriculum was finalized, we sought education committee and faculty approval for the program at both schools. Once these groups approved the program, Yale School of Public Health submitted notice and application of our “substantive curricular change” to the Council on Education for Public Health in August 2013. The program received Council on Education for Public Health approval in December 2013.

PROGRAM REQUIREMENTS

Students in the accelerated program at Yale must satisfactorily complete all MPH and MBA degree requirements through a combination of required and elective courses at Yale School of Public Health and Yale School of Management. Core program components are

- One summer term consisting of intensive core courses in public health,
- Core courses in management completed at Yale School of Management during year one,
- A required international experience during year one,
- Summer internship or public health practicum in the health care industry between the two years of full-time study,
- Courses in public health and health care management electives in year two,
- A health care leadership seminar that exposes students to leaders and current topics in health policy and management in years one and two,

- Capstone course in health care management.

The program includes 14 required course units at Yale School of Public Health, including three elective courses.

Students may take their remaining electives, approximately three course units or six half-course units, at either school. The full list of courses and experiential learning opportunities is provided in the box on page e3. Students are expected to master the core competencies for the MPH degree and the health care management program (see the box on page e4).

Applicants to the accelerated MBA and MPH program must apply to and be admitted by both Yale School of Public Health and Yale School of Management. The admissions committees at both schools seek candidates with a demonstrated interest and passion to play a leadership role in health care. Successful applicants should have strong quantitative skills (because both programs require extensive quantitative coursework), superior written and verbal communication skills, work experience in health care management, and community service experience.

BENEFITS TO STUDENTS, THE SCHOOL, AND PUBLIC HEALTH

In addition to enabling students to complete the MBA and MPH degrees in a shorter timeframe, the program offers several advantages for students, including (1) knowledge of US health policy, systems, and reforms; (2) knowledge of global health care management; (3) the ability to apply management principles and skills to health care organizations and public health issues; and (4) access to

extensive alumni networks in health care management at both Yale School of Management and Yale School of Public Health.

The program also provided benefits to Yale University; the process of developing the curriculum prompted the careful review and modification of the current course offerings and has helped to better educate the educational leadership of both schools. Importantly, this program expands on Yale’s already rich offerings in the area of health care management. These include a traditional two-year MPH program in health care management, a traditional three-year MBA and MPH program that is open to students in all disciplines of public health, and an MBA for executives: health care program.

As educators, we believe that the focus of this program on the integration of management and public health knowledge is critical in achieving our mission of preparing the workforce to meet the challenges of delivering the triple aim of health systems.⁵ Prospective employers will have graduates who are able to function in complex environments with demonstrable skills developed through the competency-based curriculum. These skills include the ability to interpret research and use evidence-based practices, analytic thinking that supports creativity and innovation, flexibility and comfort with change and ambiguity, operating styles that build and leverage teamwork and cooperation, and approaches that embody initiative and proactivity.¹² Evaluations of other accelerated MPH joint degree programs (e.g., Doctor of Medicine [MD] and MPH) suggest that these programs can increase diversity, enhance awareness of public health perspectives and global health, and increase commitments to working

Curriculum for the Accelerated MBA and MPH Joint Degree Program at Yale School of Public Health and Yale School of Management: 2014

Summer 1 (Core Courses at Yale School of Public Health)

Accelerated Biostatistics (2)
 Accelerated Epidemiology (1)
 Accelerated Social and Behavioral Sciences (1)

Two-week orientation at Yale School of Management

Year 1 (Primarily Core Courses at School of Management)

Fall			Spring
Basics of Accounting (2)	Sourcing and Managing Funds (2)	Operations Engine (2)	Integrated Leadership Perspective (2)
Probability Modeling and Statistics (2)	Investor (2)	Employee (2)	Innovator (2)
Basics of Economics (2)	Competitor (2)	Global Macroeconomics (2)	State and Society (2)
Individual Problem-Framing (2)	Introduction to Negotiation (0.5)	Healthcare Policy, Finance and Economics (1)	
Leadership Fundamentals (1)	Customer (2)	Elective at Yale School of Public Health (1)	
Spreadsheet Modeling (1)/Careers (1)	Managing Groups and Teams (1)	Advanced Leadership (1)	
Healthcare Leadership Seminar (0.5)			
International experience during spring break			

Summer 2

Summer internship in the health care industry

Year 2

Fall		Spring
Cost Effective Analysis and Decision-Making (1)		Global Health Care Management course (choose one): Critical Issues in Global Health (1) or Strategic Thinking in Global Health (1)
Contemporary Issues in Environmental Health (1)		Managing Health Care Organizations (1)
Elective at Yale School of Public Health (1)		Methods in Health Services Research (1)
Elective at Yale School of Public Health (1)		Elective at either school
Elective at either school		Elective at either school
Health Care Leadership Seminar (0.5)		

Note. MBA = Master of Business Administration; MPH = Master of Public Health. Numbers in parentheses indicate the number of course units or credits awarded by the host school for that course. A standard School of Management course receives two units; a standard Yale School of Public Health course receives one unit.

in underserved communities.¹³ Our program focuses on both the private and the public health sectors, and we are hopeful that similar benefits will be observed with the accelerated MBA and MPH students.

CHALLENGES IN AND SUGGESTIONS FOR NEW PROGRAM DEVELOPMENT

As mentioned earlier, several factors made it possible for us to

design a curriculum that provides rigorous training in business and public health to students in a short period. Yale School of Public Health and Yale School of Management have an understanding of, and commitment to, their respective roles in the accelerated degree program. We also have program leaders who have appointments at both schools. Such coordination is critical for the long-term success of the program. Institutions that do not have

established collaborations may face challenges in identifying individuals to oversee the joint degree program, academic turf wars, and breakdowns in communication that lead one department or school to discontinue a course that is needed for joint degree students.¹⁴ In these situations, it is important to set up joint oversight committees.

One of the perennial challenges in teaching students in public health and business is that

students have different levels of training and come from diverse educational backgrounds. Moreover, business school and schools of public health have different prerequisites. Students may enter the joint degree program with different levels of preparation and interest in specific subjects. A subset of students may face difficulties in completing courses for which they lack preparation or that are outside of their main area of interest. Close collaboration

Competencies for the MBA and MPH Joint Degree Program at Yale School of Public Health and Yale School of Management: 2014

MPH Core Competencies

1. Demonstrate a knowledge base in the disciplines of biostatistics, chronic and infectious disease epidemiology, health systems, public policy, social and behavioral sciences, and environmental health.
2. Apply basic research skills to specific public health problems in both group and individual settings, including the ability to define problems; construct, articulate, and test hypotheses; draw conclusions; and communicate findings to a variety of audiences.
3. Explain the interrelationships between a multitude of factors that can impact on a public health problem, including scientific, medical, environmental, cultural, social, behavioral, economic, political, and ethical factors.
4. Review, critique, and evaluate public health reports and research articles.
5. Apply public health concepts, principles, and methodologies obtained through formal course work to actual problems experienced in the community or work environment.
6. Critically evaluate programs, interventions, and outcomes that relate to public health practice.
7. Apply ethical standards and professional values as they relate to the practice of public health.
8. Demonstrate sensitivity to the social context within which public health professionals practice.

Health Care Management Program Competencies

1. Conduct financial analyses, including reading and analyzing financial statements.
2. Conduct economic analyses, including cost-effectiveness analysis, to inform public health management decision-making.
3. Apply operations management concepts to address organizational performance issues in health service organizations.
4. Apply the principles of marketing analysis and planning to public health programs and health service organizations.
5. Utilize statistical analysis skills to conduct health systems and policy research.
6. Utilize research design and data management skills to conduct health policy and management research.
7. Evaluate health care financing, regulatory and delivery systems.
8. Demonstrate written communication skills to effectively communicate in professional health policy and community settings.
9. Demonstrate oral communication and presentation skills to effectively communicate in professional health policy and community settings.
10. Utilize advocacy, persuasion, and negotiation skills to influence health policy and management decision-making.
11. Perform strategic analysis and planning for public health care organizations.
12. Describe legal perspectives on health policy and management issues, including assessment of legal and regulatory environments in the context of public health.
13. Apply ethical decision-making in a health care context.
14. Apply management problem-solving skills to improve functioning of organizations and agencies in health systems.
15. Demonstrate leadership, team-based collaboration, and conflict management skills.
16. Coach and provide constructive feedback to colleagues.
17. Work with and incorporate perspectives of culturally diverse groups.

Note. MBA = Master of Business Administration; MPH = Master of Public Health.

between admissions officers at both schools and clear articulation of the ideal prospective student can help alleviate some of these issues.

We acknowledge that there is a tradeoff with the accelerated MBA and MPH program. Our students will have fewer elective opportunities at each school compared with a four-year or three-year joint degree student. They will also have fewer internships, and they will be carrying a slightly

higher load of classes than traditional joint or serial degree students.

Educators interested in developing similar programs at other schools may face faculty resistance to the perceived increase in workload associated with joint degree students. To address this concern, we set a cap on the initial cohort size for the program (five students), which will prevent overburdening of individual faculty in teaching and advising

students. As the program grows, we will identify ways to compensate faculty for the time they spend with these students.

SUMMARY

In summary, we have developed an accelerated MBA and MPH program that will effectively train a cadre of highly skilled and highly sought after health care managers. We began accepting applications for the program in fall

2013. Our first cohort of students matriculated in July 2014 and will graduate in May 2016. We anticipate that we will learn a lot from guiding our first cohort through the program and that we will refine the program in the early years. Several metrics will be used to evaluate program effectiveness, including number of applications, number of admitted students, student surveys, student academic performance, alumni surveys, and employer surveys. Thus, we are

poised to deliver a program that optimizes the academic experience for the growing group of individuals interested in health care management and provides them with the knowledge and skills to function as leaders in an increasingly globalized world and achieve innovative and sustainable changes in health care. ■

About the Authors

All of the authors are with the Yale School of Public Health, New Haven, CT. Howard P. Forman and Ingrid M. Nembhard are also with the Yale School of Management, New Haven, CT.

Correspondence should be sent to Melinda M. Pettigrew, PhD, Yale School of Public Health, 60 College St, New Haven, CT 06520-8034 (e-mail: melinda.pettigrew@yale.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints" link.

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Contributors

M. M. Pettigrew participated in program development and wrote the first and final draft of the article. H. P. Forman and A. F. Pistell participated in program development and reviewed and edited drafts of the article. I. M. Nembhard participated in program development, suggested the initial outline, wrote sections of the article, and reviewed and edited drafts of the article.

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