

Health Administration, M.H.A.

Degrees Offered

- Master of Health Administration, in-person track
- Master of Health Administration, online track
- Dual PharmD-MHA program, for WVU PharmD students
- Accelerated Bachelor to Master, for WVU undergraduate students in Health Informatics and Information Management
- Accelerated Bachelor to Master, for WVU undergraduate students in Public Health or Health Services Administration

Nature of the Program

A Master of Health Administration is a professional degree focused on the organization, delivery, management and financing of health services and public health systems. It is the premier program for those seeking to lead the health organizations and health systems of the future.

The WVU MHA program prepares students for promising careers leading innovative population health-oriented organizations. Graduates leave our program with the skills necessary to work in a variety of health services and public health settings, such as hospitals, medical group practices, long-term and rehabilitation care, behavioral health, healthcare consulting, managed care, health insurance and health departments. Students are also well-prepared for post-graduate administrative fellowships.

The main program offers full flexibility with full-time, part-time, residential and online (<https://online.wvu.edu/programs/health-administration-mha/>) options available.

As the only program in West Virginia to be part of a Council on Education for Public Health (<https://ceph.org/>)-accredited School of Public Health and be granted a graduate membership in the Association for University Programs in Health Administration (<https://www.aupha.org/home/>), our MHA students and faculty have exclusive access to resource-rich networks, maintaining the program's delivery of cutting-edge health administration and training.

Program Overview

The MHA program at WVU focuses on providing students with both a breadth and depth of knowledge in areas critical to success as an administrative leader in the health sector.

The program requires 35 credits of courses in leadership and management; project management; quality improvement; healthcare finance; health policy, law and ethics; among others. Importantly, robust practice-based internships, professional development activities and other experiential opportunities allow students to apply the competencies and skills learned in the classroom and provide opportunities to network with health services leaders.

INTERNSHIP EXPERIENCE

All MHA students complete a health administration internship as a required component to the MHA program. Internships provide opportunities to apply the skills our students are learning in the classroom in practical ways that make an impact. A variety of placements are available through the program's local, state, regional and national partners in health services and public health systems. Students working full-time can complete the internship with their current organization.

PROFESSIONAL DEVELOPMENT AND CAREER READINESS

The MHA program incorporates four semesters of professional development seminars to assure our students are equipped with the essential skills and professionalism required of today's health leaders. This begins with extensive orientation sessions that offer team-building activities and meet-and-greets of MHA alumni and friends of the program. The professional development seminars include guest speakers who are leaders in the health sector and address topics such as networking, resume writing, job interview skills, etiquette, conflict resolution, negotiation, emotional intelligence and other essential leadership skills.

Learning Goals

The MHA competency model is the basis on which our curriculum is developed. As students go through the MHA program, they develop 21 competencies across five domains:

1. Communication and Relationship Management
2. Leadership Skills
3. Professionalism
4. Knowledge of the Healthcare Environment
5. Business and Analytical Skills

By the end of the MHA program, each student will be competent on most of the 21 competencies listed below and therefore be ready for entry- and mid-career positions in the health sector.

COMMUNICATION AND RELATIONSHIP MANAGEMENT

- Build collaborative and productive communication and relationships.
- Apply negotiation and conflict resolution skills.
- Prepare effective business communications.
- Demonstrate professional oral communication and presentation skills.

LEADERSHIP SKILLS

- Apply methods and techniques related to the leadership and management of health services organizations, employees and professional staff.
- Generate self-awareness through self-assessment and reflection to lead others effectively.
- Assess the potential impacts and consequences of decisions in a broad variety of situations.
- Apply problem-solving and evidence-based techniques to health services decisions.

PROFESSIONALISM

- Apply ethical decision-making principles in analyzing clinical/business situations and making decisions.
- Fulfill one's professional commitment.
- Practice community engagement and service.
- Operate as a team member and team leader to meet the goals of a project.

KNOWLEDGE OF THE HEALTHCARE ENVIRONMENT

- Examine issues in health services, including circumstances causing major changes in health systems and services.
- Analyze the legal principles and policies' impacts, such as compliance or conflict of interest, risk management and governing bodies relevant to health services organizations.
- Comprehend the determinants of health disparities and inequities in health status, health services access and use in various communities.

BUSINESS AND ANALYTIC SKILLS

- Formulate an evidence-based strategy, change and/or innovation based on environmental analysis, development of alternatives and discernment of a competitive advantage.
- Apply principles and concepts of quality and performance improvement to address relevant problems.
- Analyze health data using data processing tools and methods.
- Interpret quantitative information to inform decision making.
- Manage projects, organizational challenges or objectives through the complete process from planning to implementation and assessment.
- Apply economic principles to evaluate the impacts of decisions on individuals and health services organizations.

Required Courses

The MHA curriculum requires 35 credit hours. Most students complete the curriculum over two academic years. We offer the flexibility needed to students who may want to take less classes each semester and therefore take longer to graduate. Refer to the Masters tab for the list of courses and the suggested two-year plan of studies.

Students who join the MHA program without any knowledge of the U.S. health sector are required to take a pre-requisite course during their first semester in the program--HPML 502: U.S. Healthcare Organization and Delivery (3 credits). Students with no background in accounting, finance or healthcare data are asked to take a pre-requisite in accounting during their first semester in the program--ACCT 201: Principle of Accounting (3 credits).

TEACHING AND LEARNING METHODS

Our curriculum focuses on an active and real-world learning experience. Faculty and students are highly engaged with practitioners inside and outside of the classroom. Students learn by actively engaging with the materials through case studies, teamwork, healthcare data, consulting projects, presentations, discussions, reflective learning, case competition participation and interactions with guest speakers. Our program offers diverse and impactful external field experiences, such as site visits, internships, conference attendances, being paired with a mentor who is a health executive or administrator, and participation in networking events.

FACULTY

PROFESSORS

- Thomas Bias - PhD (West Virginia University)
- Nicholas Castle - PhD (Pennsylvania State University)
- Stephen Davis - PhD (West Virginia University)
- Darren Liu - DPH (University of Pittsburgh)

ASSOCIATE PROFESSOR

- Erik Carlton - DrPH (University of Kentucky)

ASSISTANT PROFESSOR

- Sarah Woodrum - DrPH (University of Illinois - Chicago)

ADJUNCTS

- Rachel Blasko - MHA
Executive-in-Residence
- Loubens Delice - MHA
- Courtney Pilkerton - MD, PhD
- France Weaver - PhD
- David Woodrum - MBA
Executive-in-Residence

Admissions for 2026-2027

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you.

MASTER OF HEALTH ADMINISTRATION (MHA)

ADMISSION GUIDELINES

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.5, minimum 3.0
- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/#:~:text=WVUs%20minimum%20score%20requirements%20for,TOEFL%20Essentials%3A%2090>)
- Other requirements:
 - Resume
 - Letter(s) of recommendation (2)
 - Personal statement

APPLICATION PROCESS

Our Master of Health Administration program participates in the Schools of Public Health Application Service (SOPHAS), <http://www.sophas.org/>. **The MHA Admissions process has two steps.** (1) All **MHA applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, <https://graduateadmissions.wvu.edu/>.

In addition to the application, applicants must submit to SOPHAS a personal statement, two letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and international institutions attended (even Study Abroad).

There is a SOPHAS application fee.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.
- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.
- SOPHAS grants fee waivers based on financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and international applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

Please Note: There are both SOPHAS and WVU application fees.

Major Code: 8415

Master of Health Administration

Code	Title	Hours
Minimum GPA of 3.0 is required.		
PUBH 540	Leading and Managing Health Organizations	3
HPML 510	Health Economics	3
HPML 522	Introduction to Data Analytics for Health Administrators	3
HPML 523	Healthcare Finance	3
HPML 555	Health Services Project Management	3
HPML 556	Managerial Epidemiology & Strategy	3
HPML 575	Health Insurance & Revenue Cycle	3
HPML 582	Managing Quality Improvement in Healthcare	3
HPML 601	Health Policy, Law, and Ethics	3
HPML 626	Internship	1
HPML 659	Comprehensive Experience in Healthcare Management	3
Graduate Seminar		2
HPML 596	Graduate Seminar	
Graduate Seminar		2
HPML 696	Graduate Seminar	
Total Hours		35

*

If a student (a) is not working full-time in health administration when joining the MHA Program or (b) has not majored in a public health discipline (e.g., health administration, biostatistics, public health) or equivalent, within the five years prior to admission into the MHA program, they are required to take the course listed below (HPML 502) and obtain at least a B+ in that course. That course needs to be successfully completed by the end of the 1st semester in the MHA program.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours	Summer	Hours
HPML 522		3 PUBH 540		3 HPML 626	1
HPML 575		3 HPML 523		3	
HPML 582		3 HPML 555		3	
HPML 596		1 HPML 596		1	
		10		10	1

Second Year

Fall	Hours	Spring	Hours
HPML 556		3 HPML 601	3
HPML 510		3 HPML 659	3
HPML 696		1 HPML 696	1
		7	7

Total credit hours: 35

Dual Degree

- Doctor of Pharmacy/Master of Health Administration

PharmD Requirements

Code	Title	Hours
PALM 301	Principles of Human Anatomy	3
PSIO 541	Integrative Physiology	4
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 710	Pharmacy Practice Experience 2	1

PHAR 800	Introduction to Pharmacy	4
PHAR 801	Drug Delivery	5
PHAR 802	Preparation of Pharmaceutical Products	1
PHAR 807	Pharmacy Calculations	1
PHAR 810	Community Pharmacy Practice	2
PHAR 811	Foundational Pharmacy Skills	1
PHAR 812	Drug Chemistry	2
PHAR 813	Biopharmaceutics and Pharmacogenomics	4
PHAR 814	Biochemical Pharmacology	4
PHAR 815	Self-Care	3
PHAR 817	Principles of Immunology and Microbiology	2
Community Rotation Requirement		4
PHAR 818	Intro Community Rotation	
PHAR 820	Population Health and Policy	3
PHAR 821	Pain	1
PHAR 823	Pulmonology	2
PHAR 824	Cardiology	5
PHAR 826	Evidence-Based Practice	3
PHAR 825	Nephrology	2
PHAR 830	Health Systems Pharmacy Practice	2
PHAR 833	Endocrinology	3
PHAR 835	Autoimmune Diseases	2
Research in the Pharmaceutical Sciences		2
PHAR 836	Research in Pharmacy	
PHAR 837	Quality and Outcomes in Pharmacy Practice	2
Intro to Institutional Rotation (repeated for a total of 2 credit hours)		2
PHAR 838	Intro Institutional Rotation	
PHAR 840	Pharmacy Practice Management	3
PHAR 843	Gastroenterology and Nutrition	2
PHAR 844	Infectious Diseases	3
PHAR 845	Neurology and Psychiatry	4
PHAR 848	Acute Care Practice Experience	2
PHAR 849	Ambulatory Care Practice Experience	2
PHAR 853	Hematology/Oncology	3
PHAR 854	Special Populations	3
PHAR 858	Comprehensive Assessment of Practice	3
PHAR 859	Pharmacy Law	2
Rotations		40
PHAR 760	APPE 1	
PHAR 761	APPE 2	
PHAR 762	APPE 3	
PHAR 763	APPE 4	
PHAR 764	APPE 5	
PHAR 765	APPE 6	
PHAR 766	APPE 7	
PHAR 770	Community Rotation	
PHAR 772	APPE 8	
Current Topics Requirement		2
PHAR 860	Current Topics in Pharmacy	

Total Hours

140

MHA Requirements

Code	Title	Hours
Minimum GPA of 3.0 is required.		
HPML 510	Health Economics	3
HPML 522	Introduction to Data Analytics for Health Administrators	3
HPML 523	Healthcare Finance	3
HPML 555	Health Services Project Management	3
HPML 556	Managerial Epidemiology & Strategy	3
HPML 575	Health Insurance & Revenue Cycle	3
HPML 659	Comprehensive Experience in Healthcare Management	3
Graduate Seminar		2
HPML 696	Graduate Seminar	
Total Hours		23

Suggested Plan of Studies

First Year

Fall	Hours	Spring	Hours	Summer	Hours
PALM 301		3 PHAR 810		2 Intro Community Rotation	4
PSIO 541		4 PHAR 811		1 PHAR 818	
PHAR 800		4 PHAR 812		2	
PHAR 801		5 PHAR 813		4	
PHAR 802		1 PHAR 814		4	
PHAR 807		1 PHAR 815		3	
PHAR 703		1 PHAR 817		2	
		PHAR 710		1	
		19		19	4

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
PHAR 820		3 PHAR 821		1 Intro Institutional Rotation	2
PHAR 823		2 PHAR 825		2 PHAR 838	
PHAR 824		5 PHAR 830		2	
PHAR 826		3 PHAR 833		3	
HPML 522		3 PHAR 835		2	
HPML 575		3 Research in the Pharmaceutical Sciences		2	
		PHAR 836			
		PHAR 837		2	
		HPML 555		3	
		19		17	2

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
PHAR 840		3 PHAR 859		2 Complete 2 rotations from the following:	10
PHAR 843		2 Hematology/Oncology		3 PHAR 760	
PHAR 844		3 PHAR 854		3 PHAR 761	
PHAR 845		4 PHAR 858		3 PHAR 762	
Select 1 of the following:		2 Select course not yet completed:		2 PHAR 763	
PHAR 848		PHAR 848		PHAR 764	

PHAR 849		PHAR 849		PHAR 765	
HPML 510		3 HPML 523		3 PHAR 766	
		HPML 696		1 PHAR 770	
				PHAR 772	
		17			17
					10
Fourth Year					
Fall	Hours	Spring	Hours		
PHAR 860		1 PHAR 860		1	
Complete 3 rotations from the following of those not yet completed:		15 Complete 3 rotations from the following of those not yet completed:		15	
PHAR 760		PHAR 760			
PHAR 761		PHAR 761			
PHAR 762		PHAR 762			
PHAR 763		PHAR 763			
PHAR 764		PHAR 764			
PHAR 765		PHAR 765			
PHAR 766		PHAR 766			
PHAR 770		PHAR 770			
PHAR 772		PHAR 772			
HPML 556		3 HPML 659		3	
HPML 696		1			
		20			19

Total credit hours: 163

Accelerated Programs

- Bachelor of Science in Health Informatics and Information Management & Master of Health Administration (p. 7)
- Bachelor of Science in Health Services Administration & Master of Health Administration (p. 9)

Accelerated Bachelor's/Master's Degree Requirements

Students must fulfill all degree requirements for the B.S. in Health Informatics and Information Management, including earning a minimum grade of C- in all HIIM courses required for the major and a 3.0 GPA average in all 400 level HIIM courses and all HPML courses. In addition to all the requirements of the M.H.A in Health Administration, students must also meet all the requirements of the ABM.

ABM Requirements

Code	Title	Hours
HIIM Undergraduate Coursework		107
Shared Bachelor's/Master's Coursework		14
MHA Graduate Coursework		21
Total Hours		142

Shared Coursework Curriculum Requirements

Code	Title	Hours
HIIM 366	Healthcare Analytics 1 *	2
HIIM 473	Healthcare Analytics 2 *	2
HIIM 477	Leadership in Health Informatics & Information Management *	3
HIIM 480	Health Informatics & Information Management Administration *	3
HPML 555	Health Services Project Management	3
HPML 582	Managing Quality Improvement in Healthcare	3

HPML 596	Graduate Seminar	2
Total Hours		14

*

ABM students are not required to take PUBH 540 or HPML 522 from the traditional Master's program. The SOPH accepts 10 hours of equivalent coursework from the HIIM program (HIIM 366, HIIM 473, HIIM 477, HIIM 480).

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours	
HIIM 191		1 STAT 111 (GEF 3)	3	
BIOL 102 (GEF 2)		3 PALM 205	3	
BIOL 102L (GEF 2)		1 PALM 206	1	
CS 101 (GEF 8)		4 HIIM 110	3	
PALM 200		3 HIIM 112	3	
ENGL 101 (GEF 1)		3 GEF 4, 5, 6, 7, or 8	3	
		15	16	

Second Year

Fall	Hours	Spring	Hours	
ENGL 102 (GEF 1)		3 HIIM 240	3	
HIIM 231		2 HIIM 242	2	
HIIM 233		3 HIIM 244	2	
HIIM 235		3 HIIM 246	3	
HIIM 237		1 HIIM 247	2	
GEF 4, 5, 6, 7, or 8		3 HIIM 248	1	
		PSIO 241	4	
		15	17	

Third Year

Fall	Hours	Spring	Hours	
HIIM 351		3 HIIM 360	3	
HIIM 353		3 HIIM 362	3	
HIIM 355		3 HIIM 364	3	
GEF 4, 5, 6, 7, or 8		3 HIIM 366	2	
GEF 4, 5, 6, 7, or 8		3 HIIM 368	1	
GEF 4, 5, 6, 7, or 8		3 GEF 4, 5, 6, 7, or 8	3	
		18	15	

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours	
HIIM 471		3 HIIM 480		3 HPML 626		1
HIIM 473		2 HIIM 482		3		
HIIM 477		3 HIIM 484		3		
HPML 582		3 HPML 555		3		
HPML 596		1 HPML 596		1		
		12	13			1

Fifth Year

Fall	Hours	Spring	Hours	
HPML 510		3 HPML 523	3	
HPML 556		3 HPML 601	3	
HPML 575		3 HPML 659	3	
HPML 696		1 HPML 696	1	
		10	10	

Total credit hours: 142

Accelerated Bachelor's in Health Services Administration/Master's of Health Administration Degree Requirements

The School of Public Health's Accelerated Bachelor's to Master's (ABM) program offers highly motivated Health Services Administration students with an interest in the Master of Health Administration (MHA) the opportunity to complete their Bachelor of Science and earn an MHA degree in an accelerated format.

To be eligible for this program, you must:

- Be enrolled in the Health Services Administration major.
- Have a minimum GPA of 3.5
- Earn a minimum grade of A in PUBH 205 Writing for Public Health Audiences, by the time they start the ABM.
- Have completed a minimum of 60 credits, but not more than 75 credits.
 - Transfer students must have completed 24 credit hours as degree-seeking students at WVU before applying.
- The Qualtrics application will open from October 1-March 1.
- Students applying for the ABM cannot be enrolled in a dual degree program.

Students apply using a Qualtrics application form that requires a resume, personal statement, and two references. Students applying to the ABM cannot have any documented infractions with the WVU Office of Student Conduct or any external law enforcement agencies.

Applications are due by March 1, with program admission decisions communicated by the end of the spring semester. An established ABM admissions work group reviews applications.

Students in this ABM program must maintain a minimum cumulative GPA of 3.0 throughout their enrollment in the undergraduate and graduate programs. Students in this ABM will complete all 35 credits of MHA courses, 14 credits of which will be "shared" by both degree programs. This means the ABM curriculum will allow students to substitute required graduate program courses for required bachelor's program courses. Unless given specific permission by the Dean's Office, students admitted to this ABM program must maintain full-time continuous enrollment during fall and spring terms. Enrollment requirements in the summer term of year four are completing a 350-hour internship (HPML 626, 1 credit) at the graduate level.

Students' eligibility to remain in this ABM program will be evaluated at the end of each semester. Students failing to meet program or University standards will be placed on program probation for no more than one semester, after which they will be terminated from the ABM program. Terminated students and students who choose not to continue the ABM program will be eligible to receive their bachelor's degree after completing the traditional bachelor's degree requirements.

ABM Requirements

Code	Title	Hours
BS Health Services Administration Program Requirements		106
Shared Bachelor's/Master's Coursework		14
MHA Health Administration Program Requirements		21
Total Hours		141

Shared Coursework Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.5 is required for students in the Health Services Administration major to be considered for admission to the accelerated bachelors to master's program.		
HPML 522	Introduction to Data Analytics for Health Administrators	3
HPML 555	Health Services Project Management	3
HPML 582	Managing Quality Improvement in Healthcare	3
HPML 596	Graduate Seminar	2
PUBH 540	Leading and Managing Health Organizations	3
Total Hours		14

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours	
PUBH 191		1 PUBH 200		1
PUBH 101		3 PUBH 201 (GEF 7)		3
ENGL 101 (GEF 1)		3 PUBH 243		3
GEF 2 (Suggested: BIOL 101/101L)		4 GEF 3		3
General Education/ Minor/General Electives		3 GEF 8 (Suggested: ECON 201)		3
		General Education/ Minor/General Electives		3
		14		16

Second Year

Fall	Hours	Spring	Hours	
PUBH 205		3 PUBH 202		3
PUBH 211		3 PUBH 222		3
PUBH 230		3 PUBH 331		3
GEF 1		3 GEF 6		3
General Education/ Minor/General Electives (Suggested: PALM 200)		3 General Education/ Minor/General Electives (Suggested: ACCT 201)		3
		15		15

Third Year

Fall	Hours	Spring	Hours	
PUBH 233		3 PUBH 311		3
GEF 5		3 PUBH 439		3
GEF 8 (Suggested: COMM 309)		3 GEF 8 (Suggested: ECON 202)		3
General Education/ Minor/General Electives		6 General Education/ Minor/General Electives		3
		General Education/ Minor/General Electives		3
		15		15

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours	
PUBH 400		1 PUBH 482		6 HPML 626		1
PUBH 464		3 PUBH 489		2		
HPML 582		3 PUBH 540		3		
HPML 596		1 HPML 555		3		
HPML 522		3 HPML 596		1		
General Electives		4				
		15		15		1

Fifth Year

Fall	Hours	Spring	Hours	
HPML 575		3 HPML 523		3
HPML 656		3 HPML 659		3
HPML 610		3 HPML 601		3
HPML 696		1 HPML 696		1
		10		10

Total credit hours: 141

Major Learning Outcomes

HEALTH ADMINISTRATION

I. Communication and Relationship Management

1. Build collaborative and productive communication and relationships.
2. Apply negotiation and conflict resolution skills.
3. Prepare effective business communications.
4. Demonstrate professional oral communication and presentation skills.

II. Leadership Skills

5. Apply methods and techniques related to the leadership and management of health services organizations, employees, and professional staff.
6. Generate self-awareness through self-assessment and reflection, to lead others effectively.
7. Assess the potential impacts and consequences of decisions in a broad variety of situations.
8. Apply problem-solving and evidence-based techniques to health services decisions.

III. Professionalism

9. Apply ethical decision-making principles in analyzing clinical/business situations and making decisions.
10. Fulfill one's professional commitment.
11. Practice community engagement and service.
12. Operate as a team member and team leader to meet the goals of a project.

IV. Knowledge of the Healthcare Environment

13. Examine issues in health services, including circumstances causing major changes in health systems and services.
14. Analyze the legal principles, policies' impacts, such as compliance or conflict of interest, risk management, and governing bodies relevant to health services organizations.
15. Comprehend the determinants of health disparities and inequities in health status, health services access and use in various communities.

V. Business and Analytic Skills

16. Formulate an evidence-based strategy, change, and/or innovation based on environmental analysis, development of alternatives, and discernment of a competitive advantage.
17. Apply principles and concepts of quality and performance improvement to address relevant problems.
18. Analyze health data using data processing tools and methods.
19. Interpret quantitative information to inform decision making.
20. Manage projects, organizational challenges, or objectives through the complete process, from planning, to implementation, and to assessment.
21. Apply economic principles to evaluate the impacts of decisions on individuals and health services organizations.