

MARYLAND HIGHER EDUCATION COMMISSION
ACADEMIC PROGRAM PROPOSAL

PROPOSAL FOR:

- NEW INSTRUCTIONAL PROGRAM**
 SUBSTANTIAL EXPANSION/MAJOR MODIFICATION
 COOPERATIVE DEGREE PROGRAM
 WITHIN EXISTING RESOURCES or **REQUIRING NEW RESOURCES**

(For each proposed program, attach a separate cover page. For example, two cover pages would accompany a proposal for a degree program and a certificate program.)

Johns Hopkins University

Institution Submitting Proposal

2017

Projected Implementation Date

Master of Applied Science

Award to be Offered

Population Health Management

Title of Proposed Program

Suggested HEGIS Code

51.0701

Suggested CIP Code

Bloomberg School of Public Health

Department of Proposed Program

Michael Klag, Dean

Name of Department Head

Natalie Lopez

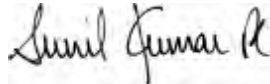
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1/20/2017

Signature and Date

President/Chief Executive Approval

N/A

Date

Date Endorsed/Approved by Governing Board

**The Johns Hopkins University
Bloomberg School of Public Health
Proposal for New Academic Degree Program**

Master of Applied Science in Population Health Management

A. Centrality to institutional mission statement and planning priorities

1. Program description and alignment with mission

The Johns Hopkins University Bloomberg School of Public Health (BSPH) proposes the new degree of Master of Applied Science in Population Health Management. Offered by the Online Programs for Applied Learning (OPAL), in collaboration with the Department of Health Policy and Management, the proposed program will be delivered online and is intended for part-time graduate students.

The Master of Applied Science (MAS) in Population Health Management will provide an opportunity for advanced education. The program is designed for working professionals interested in a graduate-level degree, participants in this program will develop advanced skills in population health leadership and management, informatics, assessment, and social and behavioral techniques to engage communities and improve health. The proposed degree will consist of online intensive graduate-level coursework and will culminate in an Integrative Activity.

The proposed programs align with the missions of both Johns Hopkins University and the Bloomberg School of Public Health, as described below.

2. Alignment with institutional strategic goals

The mission of The Johns Hopkins University is to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world. The mission of the School is to improve health through discovery, dissemination, and translation of knowledge and the education of a diverse global community of research scientists and public health professionals. The proposed program is consistent with both missions and is well aligned with many of the School's strategic goals:

- *Prepare leaders in public health science and practice to address current and future public health challenges.* It is a goal of the proposed program to provide skills-based education in population health management to the global public health workforce. The program competencies focus on preparing experienced professionals with a comprehensive approach to developing population health management systems and strategies.

- *Promote, value, and achieve excellence in teaching and learning.* The Bloomberg School aims to combine technology with modern-day pedagogy to retain the same high standards that it incorporates into all of its academic programs.
- *Advance the evidence base for the practice of public health and strengthen local, national, and global partnerships with public health practitioners.* Through the proposed program, the Bloomberg School will offer advanced training in population health management relevant to addressing public health problems. The part-time, online structure of the program will allow the School to reach a global constituency of learners.
- *Raise awareness of public health in the global community.* The proposed curriculum includes courses designed to introduce learners to the breadth of public health.

The proposed program builds on the strengths of the Bloomberg School, which provides unmatched opportunities for advanced training, focuses on both local and global issues, and prepares students to address public health problems through multidisciplinary approaches that apply the latest scientific knowledge.

The program will provide students with a variety of approaches to developing population health management systems and strategies, and leading transformation to value-based, population-focused care delivery. The proposed program incorporates an interdisciplinary approach to understanding and leading population health management systems. The program will equip students with the necessary competencies required in order to effectively navigate and succeed under value-based reimbursement models and population-oriented health delivery initiatives. Target audiences include clinicians, especially physicians, and mid-career health organization managers or public administrators.

B. Adequacy of curriculum design and delivery to related learning outcomes

1. Program outline and requirements

A full course listing, with course titles and descriptions, is provided in Appendix A.

Admission standards will be as rigorous as those established for other master's degree and certificate programs at the School. Academic transcripts, TOEFL or IELTS (where applicable), letters of recommendation, and statements of purpose will all be carefully considered in the admissions process. Specifically, the admissions requirements for the MAS program are:

- (i) A baccalaureate-level degree from an accredited college or university;
- (ii) Three letters of recommendation;
- (iii) A statement of purpose that demonstrates compatibility of the applicant's career goals with the educational objectives of the program;
- (iv) At least 3 years of health-related work experience;

- (v) A current résumé or CV that demonstrates previous health care accomplishments; and
- (vi) English language proficiency as demonstrated by the TOEFL or IELTS.

The proposed program requires students to successfully complete 51 credits, including a culminating experience, called the Integrative Activity. The program will consist of required core courses in epidemiology, biostatistics, assessment, and health care leadership and management. The program can be completed over a minimum of eight 8-week terms, to a maximum of 4 years.

All courses must be taken for credit and a letter grade. To maintain satisfactory academic performance and good academic standing, students in this program must maintain a minimum grade point average of 2.75 on a 4.0 scale.

The proposed program will culminate in an Integrative Activity. The goal of the activity is for students to synthesize knowledge and skills obtained through coursework in a final project that demonstrates their mastery of the program competencies. Students will work on a service-learning project that is designed to bring together diverse organizations in order to impact some aspect of population health. Students must assess organizational strategy, design measures for monitoring and assuring improvement, develop financial structure models and provide evidence of alignment of purpose in the form of a final paper.

The OPAL Program Manager will track progress and ensure that each student has completed all degree requirements. The OPAL Director will be responsible for writing to the School's Office of Registration and Records to attest to the fulfillment of these requirements for each enrolled student.

2. Educational objectives and student learning outcomes

The health care services delivery landscape is rapidly transforming. New competencies are required for clinicians, especially physicians, and mid-level managers or administrators in order to effectively navigate and succeed under value-based reimbursement models and population-oriented health delivery initiatives being demanded by federal and state governments.

The proposed program provides students the opportunity to learn from experts and develop advanced skills in population health leadership and management, informatics, assessment, and social and behavioral techniques to engage communities and improve health.

Upon completion of the proposed program, students will be able to:

1. Apply the essentials of public health practice to identifying determinants of population health that impact health outcomes in a community and design low cost interventions;
2. Apply leadership in the formation and management of health systems organizations that consist of, and rely upon, diverse stakeholders in the organization and delivery of

community-based systems of care;

3. Communicate effectively to constituencies both within and outside of the health system;
4. Articulate and apply frameworks for collecting, analyzing, and using data to inform decisions, facilitate care coordination, and improve health outcomes of targeted populations within and outside the health system;
5. Support state and local public health agency efforts in assessing health needs, quality of services, and strategies for health services research.
6. Evaluate payment systems and risk mitigation strategies and develop new structures to function under evolving value-based payment models emphasizing low cost, high quality care;
7. Describe new methods for assessing the health needs of a population, working with stakeholders to establish meaningful targets, and applying scientific frameworks for measuring and reporting progress;
8. Apply social and behavioral constructs to developing and enhancing community engagement and involvement in improving health;
9. Engage in a population health practicum designed to allow the student to work on a project to integrate clinical care and public health practice around an identified community need.

3. General education requirements

Not applicable

4. Specialized accreditation/certification requirements

Not applicable

5. Contractual agreements with other institutions

Not applicable

C. Critical and compelling regional or statewide need as identified in the State Plan

1. Demand and need for program

A 2013 survey of leaders of local health departments across the U.S. assessed data needs among the public health workforce and asked about the challenges to advancing a public health workforce agenda. Among the top five challenges, respondents identified the need for improved content, structural and delivery mechanisms for distance-based learning.¹

Online education in population health management will provide the public health workforce with the skills to assess needs, and apply the best methods for managing

¹ Kaufman NJ, Castrucci BC, Pearsol J, et al. Thinking beyond the silos: Emerging priorities in workforce development for state and local government public health agencies. *J Public Health Management Practice* 2014;20(6):557-565.

hospital and health systems as they transform to value-based, population-focused care delivery. The online format will enable learners to remain in the workforce while obtaining that training.

The proposed program will prepare current and future health practitioners, clinicians, researchers, policymakers, and scholars to take on a rapidly transforming health care services delivery landscape and highly complex public health, science, and health care challenges that emerge daily.

Graduates of the program will be equipped to drive the responsible development of new knowledge and new ways of saving lives and improving health to further progress across core disciplines in science and technology, and public health and medicine in Maryland, and beyond. The Maryland workforce is of particular interest given the state's waiver to implement Global Budgets driven by population health metrics.

Over recent years, health care management and administration graduate programs have increased slowly in number; however, among existing programs, there has been rapid growth in the number of graduates over the same time period. These data suggest that this proposal serves to fill an existing need in this discipline. More specifically, very few Maryland programs are comparable to the proposed programs.

2. Alignment with Maryland State Plan for Postsecondary Education

The 2013–2017 Maryland State Plan for Postsecondary Education articulates six goals for postsecondary education: 1) quality and effectiveness; 2) access, affordability and completion; 3) diversity; 4) innovation; 5) economic growth and vitality; and 6) data use and distribution. The MAS in Population Health Management addresses several of these goals.

The program furthers Goal 2 by providing a fully online, part-time degree designed for working professionals seeking additional training or credentials. The focus on population health management will provide students with skills that are transferable to a multitude of settings. The typical student will take two courses each term and complete the 51-credit degree program in two years. In addition, the program is priced at a competitive level for the emerging online marketplace.

The program supports Goal 3 through a commitment to the fundamental belief that all students, regardless of their backgrounds or personal attributes, should have access to, and feel welcome in, high-quality educational programming. The University regularly evaluates progress towards this goal and the program will maintain policies, practices and services that serve the diverse population of Maryland.

The proposed program is consistent with Goal 4, innovation, which articulates Maryland's aspiration to be "a national leader in the exploration, development, and implementation of creative and diverse education and training opportunities that will align with State goals, increase student engagement, and improve learning outcomes..." The program seeks to reduce costs and improve learning "by transforming the way that

instruction is delivered and learning environments are designed.” The “new modes of delivery and programmatic initiatives” will serve the State’s increasingly diverse student population and advance the State’s goal of being a “national and international leader in higher education.” By leveraging technology in innovative ways, the School makes population health management accessible so that students can pursue “anytime, anywhere” learning opportunities. Students who do not live in the Maryland region will be able to complete the program, thus supporting the State Plan’s innovation and completion goals.

Additionally, the program, through the preparation of highly qualified hospital and health system clinicians and managers, will contribute to the economic growth and vitality goal (Goal 5) by providing life-long learning to scientists and healthcare professionals so they can maintain the skills they need to succeed in the workforce. Program graduates will stimulate economic growth, innovation, and vitality by supporting a knowledge-based economy and advancing research. The program’s advisory board will incorporate feedback from professional organizations and public health stakeholders to ensure that the program is aligned with workforce needs.

D. Quantifiable and reliable evidence and documentation of market supply and demand in the region and State

1. Market demand

In recent years the demand for health care services professionals with population health management knowledge and expertise has been increasing due to a high growth market fueled by changes to health policy and an aging U.S. population. Health care management and administration programs under the 51.0701 CIP code have been growing slowly, with the total program count increasing only 8% in the last five years, while total graduate counts have grown 49% over the same time period. Clearly this proposal could fill a need that exists for additional programs in this discipline. The MAS in Population Health Management will provide students with a pathway to career opportunities in academia, policy, clinical, government, non-profits, or industry. These and similar employment opportunities are available nationwide.

According to Burning Glass Technologies, a 12-month review of 32,807 job postings related to healthcare administration positions revealed that 27% of these positions require a minimum of a graduate or professional degree; this is far greater than the comparable proportion for similar management positions outside of healthcare.

In addition, according to data from the U.S. Bureau of Labor Statistics (2014), a high growth rate of 16.9% is projected for medical and healthcare service managers, more than twice the national average of 6.5% employment growth. The current job market is strong and there are a large number of management roles in healthcare. Medical and health services managers are projected to have 84,200 estimated replacement jobs from 2014-2014 and 56,300 new jobs that will be created on top of the 248,800 existing jobs.

2. Educational and training needs in the region

The Bloomberg School of Public Health is responding to the rapidly evolving changes in health care delivery resulting from Federal health care reform efforts and state-wide initiatives such as the Total Patient Revenue system in Maryland. The significant push towards a value-based payment system is causing health systems to take a “population” view of the delivery system. As such, factors long-viewed as essential to good health (social determinants) within the public health domain are now becoming critical factors to health care delivery system reform. As a leader in public health education, the Bloomberg School determined there is a need to expand the competencies of current health care professionals in the public health domain by integrating these essential competencies with evolving management concepts related to population health. Other than the Jefferson School of Population Health, there are few credible programs nationwide offering such a program to working health care and community health professionals.

Projected admissions for the master’s program are as follows

Year 1: 35 students

Year 2: 35 students

Year 3: 35 students

Year 4: 35 students

Year 5: 35 students

3. Prospective graduates

The average part-time student admitted for the Fall 2017 term would complete the program in 2019. Twenty-eight students are expected to graduate in 2019, and each year thereafter.

E. Reasonableness of program duplication

1. Similar programs

In Maryland, there are four masters-level programs currently approved or endorsed by MHEC under CIP code 51.0701. The programs are offered by Johns Hopkins University, Mount St. Mary’s University and Stevenson University.

Table 2: Count of Graduates from Masters Programs under CIP 51.0701 in the state of Maryland

School Name	Program Name	Graduate count by Year				
		2011	2012	2013	2014	2015
Johns Hopkins University (Carey Business School)	Healthcare Management	0	0	0	0	2
Johns Hopkins University (Bloomberg School of Public Health)	Health Policy & Management	40	53	55	66	81
Mount St. Mary's University	Health Administration	0	0	0	25	33
Stevenson University	Healthcare Management	0	0	0	1	1

The MS in Healthcare Management at The Johns Hopkins Carey Business School is a healthcare administration program offered from the business perspective, with half of the required coursework being foundation courses that are shared with the MBA program and other graduate business degrees. The 36-credit degree can be taken online or onsite in Baltimore or Washington, D.C. as a part-time student, or onsite in Baltimore as a full-time student.

The Master of Health Administration (MHA) degree in Health Policy & Management at The Johns Hopkins Bloomberg School of Public Health is a two-year, full-time program involving predominantly onsite courses and an 11-month field placement. The program is designed to train future managers and leaders within healthcare provider organizations and consulting firms who are committed to improving the delivery of health services throughout the U.S.

The MHA program at Mount St. Mary's University is a 36-credit program that is delivered onsite in Frederick, MD, through the School of Business. Cohorts of up to 24 students are admitted twice a year and the program takes two years to complete.

The Master of Science in Healthcare Management program at Stevenson University is a fully online, part-time, 36-credit program that offers concentration options for Quality Management and Patient Safety or Project Management in Healthcare.

The proposed program is targeted to mid-career healthcare executives and physicians transitioning into, or taking on more, leadership roles in health management systems adopting population-based strategies. Unlike the programs listed above, this curriculum represents an interdisciplinary approach, merging public health expertise with contemporary health care management practice, to develop an understanding of, and ability to effectively lead, population health management systems in the transformation to value-based, population-focused care delivery.

2. Program justification

The MAS in Population Health Management will provide concrete training in assessment and program development with particular focus on the application of social and behavioral techniques and population health leadership and management in healthcare delivery.

This program is an interdisciplinary approach to understanding and leading population health management systems. It is oriented towards clinicians and managers actively engaged in hospital and health systems transformation to value-based, population-focused care delivery.

The program will be grounded in real-world challenges and informed by leading edge scholarship, with a diverse faculty of the leading experts in the field and a student body bringing lived experiences to the virtual classroom.

F. Relevance to Historically Black Institutions (HBIs)

An appropriate student for the MAS in Population Health Management would apply after attending and completing a baccalaureate degree at any undergraduate institution, including any of Maryland's Historically Black Institutions. The proposed program would not directly affect the implementation, maintenance, uniqueness, identity or mission of these institutions.

There are no known Masters programs in Population Health Management at any of the Historically Black Institutions in Maryland.

G. Evidence of compliance with the [Principles of Good Practice](#)

See Appendix B for the evidence that this program complies with the Principles of Good Practice noted above.

H. Adequacy of faculty resources

See Appendix C for a representative list of faculty who will teach courses, and advise students, in the proposed program.

Program faculty hold full-time, adjunct or joint appointments at the Bloomberg School or Johns Hopkins School of Medicine. Program faculty have been recognized for their excellence in teaching and have produced leading public health research while continuing to generate path-breaking scholarship.

I. Adequacy of library resources

The book collections at the Johns Hopkins University number almost two and one-half million volumes, selected to support the studies of all departments and divisions of the University. The William H. Welch Medical Library collects current scholarly information, primarily electronic, which supports the research, clinical, administrative, and educational needs of its clients. The collection covers health, the practice of medicine and related

biomedical and allied health care disciplines, public health and related disciplines, nursing, research literature, methodological literature, reviews or state-of-the-art reports, and in-depth, authoritative analyses of areas influencing biomedicine and health care. The library's emphasis is on providing materials at point of need. As a result, the collection includes more than 7,200 electronic journals, more than 400 databases, and more than 13,000 e-books. The library has staff members assigned to each department to aid in research and best practices for library services.

J. Adequacy of physical facilities, infrastructure and instructional equipment

All courses in the proposed program will be offered online. The program will have no discernible impact on the use of existing facilities and equipment beyond the standard requirements already in place; primarily, faculty office space in an existing university facility location.

The central computing resource for the School, the Office of Information Technology (IT), provides students with reliable computing infrastructure, location, and device independence, and critical software tools. Additionally, an enterprise service desk offers support for faculty, staff, and students. Assistance is provided over various channels, including phone, desktop, and FIPS 140-2 compliant remote-control support. Customer satisfaction is monitored and benchmarked against other higher educational institutions and industries.

No additional facilities, infrastructures or laboratory or computer resources will be required.

K. Adequacy of financial resources with documentation

See Appendix D for detailed financial information.

L. Adequacy of provisions for evaluation of program

As part of the program design and approval process, student learning outcomes and assessments have been aligned with the academic goals of the School and approved by the School's Committee on Academic Standards. Student course evaluations, conducted both in the middle and at the end of each term, provide feedback about both courses and faculty. The evaluations include questions addressing the course overall, the instructor and the assessments of learning.

Program level evaluation activities will include an annual assessment of program inputs, processes and outputs to generate a report on program applicants and admitted students, course enrollment, faculty participation, pedagogical innovations and program accomplishments/recognition.

Evaluation of student learning and achievement will focus on the early identification of students' goals/objectives and individualized learning outcomes; students' acquisition of knowledge and skills and the degree to which the program is fostering students' achievement of the degree competencies as demonstrated by each student's electronic learning portfolio. Post-degree professional and academic accomplishments of graduates will also be tracked through Exit and Alumni Surveys that are conducted for all degree programs at the School.

M. Consistency with the State’s minority student achievement goals

Any student meeting the admissions requirements can apply to the MAS program in Population Health Management. The program will work to help all accepted students improve their workplace competitiveness and reach their professional goals, an aim consistent with the State’s minority student achievement goals.

N. Relationship to low productivity programs identified by the Commission

Not applicable

Appendix A

Course List and Descriptions

Introduction to Online Learning (0 credits)

Introduction to Online Learning (IOL) will prepare a student for taking both online and on-campus courses offered through CoursePlus, a course management system at Johns Hopkins University. The course is designed to give students clear examples of the fundamental design principles for courses across schools at the University: time-boxed, cohort-based, and highly collaborative. Attention is focused on learner responsibilities and communication/collaboration strategies in both online and face-to-face courses. While ensuring that an individual computer and network connection is compatible with the tools used in CoursePlus is an important part of the course, the primary focus is on the digital course experience and not on teaching basic computer and Web browsing skills.

Prerequisite: None

550.860 Academic & Research Ethics (0 credits)

Examines academic and research ethics at JHSPH in a series of online interactive modules. Focuses on information about the academic ethics code and responsible conduct of research at the School. Explores issues of academic integrity such as proper ethical conduct and referencing, and discusses violations such as plagiarism and cheating, relative to case studies that illustrate situations faced by students and faculty in the academic setting. Addresses topics that include responsible conduct of research, authorship, data management, data ownership, guidelines for professional conduct, research fraud or scientific misconduct, federal and institutional guidelines related to research using human and animal subjects and ethical issues involving vulnerable subjects in research.

Prerequisite: None

600.701 Introduction to Epidemiology (4 credits)

Introduces principles and methods of epidemiologic investigation of diseases. Illustrates methods by which studies of the distribution and transmission of diseases in populations (including disease outbreaks and epidemics) can contribute to an understanding of etiologic factors and modes of transmission. Covers various study designs, including randomized trials, case-control and cohort studies, as well as risk estimation and causal inference. The course also discusses applications of Epidemiology to solving public health problems, such as identifying sources and strategies for control of disease outbreaks, applying research findings to policy and practice, and program evaluation. Quantitative and analytic methods covered during the course include life tables, disease surveillance, measures of morbidity and mortality, and measures of diagnostic test accuracy.

Prerequisite: None

Essentials of Population Health Management (3 credits)

Population health refers to outcomes for a group of individuals. Acquaints students with key concepts related to maintaining the health and wellness of populations. Examines the importance of determinants of health, including medical care, public health, genetics, personal behaviors and lifestyle, and a broad range of social, environmental, and economic factors. Explores this broad view of the determinants of population health and its impact on organizations that may not think of themselves as being in the business of health, such as housing organizations, employers, schools, and others who make decisions and create environments that can help or hinder good health. Population health management (PHM) has emerged as an important strategy for healthcare providers and payers. This course examines the challenges and opportunities to improving health within and across populations, as well as models of value-driven accountable care.

Prerequisite: None

Value-Based Concepts of Socially-Responsible Leadership (3 credits)

Following the enactment of the Affordable Care Act, health care leaders find themselves and their organizations at the epicenter of a seismic change that is fundamentally altering the paradigm of health care delivery. Students will: Explore the rapidly expanding responsibilities for population health and the roles health systems, patients and community organizations play in the creating a community health care “system,” Explain the concepts of Meta-Leadership and Collective Impact, and Assess and Apply these concepts to the notion of socially-responsible leadership and effectively applied to transforming and leading an enterprise focused on population health.

Prerequisite: None

Accountable Care: Assessing Quality and Effectiveness of Population Health Initiatives (3 credits)

New models for healthcare payment are being designed to support Population Health Management. Under accountable care arrangements, payment shifts from fee-for-service reimbursement to fee-for-value approaches that rewards providers for efficient, effective, and appropriate care. A value-based approach demonstrates improved outcomes for a population under management. This course examines approaches by health plans, employers, and providers to assess and manage the health of defined populations, including disease management programs for high-risk individuals. Students will evaluate population health management initiatives, recognize population health management is more comprehensive than disease management because it includes high- and low-risk individuals, wellness, and self-health management, and discuss approaches to measuring quality and assessing effectiveness of programs including wellness, medical, and healthcare across the continuum, services in the home and community, and risk-based payment models.

Prerequisite: None

Managing Health Across the Continuum: Contemporary Models of Disease Prevention and Care Management (3 credits)

According to the Agency for Healthcare Research and Quality (AHRQ) Health care delivery systems throughout the United States are employing the triple aim (improving the experience of care, improving the health of populations, and reducing per capita costs of health care) as a framework to transform health care delivery. Understanding and effectively managing population health is central to each of the aim's three elements. Care management (CM) has emerged as a leading practice-based strategy for managing the health of populations. AHRQ defines care management as "a promising team-based, patient-centered approach "designed to assist patients and their support systems in managing medical conditions more effectively." It also encompasses those care coordination activities needed to help manage chronic illness." This course examines the concepts and strategies of care management, analyses strategies aimed at primary and secondary prevention, and evaluates models and efforts to expand care management accountability into the community.

Prerequisite: None

Population Health Informatics (3 credits)

Introduces students to concepts, methods, and issues related to the application of health information technology (HIT) to population health. Emphasizes the population health potential of comprehensive electronic health records (EHRs), personal health records (PHRs), mobile health and telemedicine devices; and consumer focused internet-based tools. Covers the uses of HIT to define and identify populations and sub-populations of interest, describe the health status and needs of populations, improve the health of populations, and evaluate services provided to populations. Emphasizes the use of HIT within both local, regional and federal public health agencies and population-based private health care organizations such as integrated delivery systems and health insurance plans. Lessons are mainly U.S. oriented but are also applicable to other high and middle income countries.

Prerequisite: None

The Built Environment: Influences and Challenges to Improving Population Health (3 credits)

Focuses on the increasing recognition that the design of communities can impact human health. Community designs that feature parks, sidewalks, trails, public transit, and connectivity among destinations can encourage physical activity, help prevent obesity and its associated health consequences, and reduce dependence on automobiles whose use contributes to air pollution, motor vehicle crashes, and pedestrian injuries. Increased attention to the health implications of the built environment has led to various innovative solutions, such as mixed-use Smart Growth developments, investments in bicycling and pedestrian infrastructure, and the use of health impact assessments to convey health information to community decision-makers.

Prerequisite: None

Managed Care and Health Insurance: Impact and Challenges for Populations (3 credits)

Presents an overview of major issues related to the design, function, management, regulation, and evaluation of health insurance and managed care plans. Provides a firm foundation in basic concepts pertaining to private and public sector health insurance/benefit plans, both as provided by employers and government agencies such as Medicaid and Medicare. Key topics include population care management techniques, provider payment, organizational integration, quality and accountability, cost-containment, and public policy. Uses outside experts extensively.

Prerequisite: None

Organizing for Public Health: A Systems Approach (2 credits)

Systems thinking, (ST), is a holistic approach to analyzing how components of complex systems interact and adapt. Through systems thinking we can understand how societies organize themselves to achieve collective health goals and how different actors contribute to policy outcomes. The practice of systems thinking includes the ability to integrate multiple perspectives and synthesize them into a framework or model that encompasses the various ways in which a system might react to policy choices.

Provides students with an understanding of how to apply ST in public health. Trains students on the fundamentals of ST theory and offers an opportunity to apply key methods and approaches to health policy and health questions. Prepares students to ask relevant research questions and apply a ST lens to describe, understand, and anticipate complex behavior. Examines how systems models can be critically appraised and communicated with others so public health policy makers can exercise a greater degree of wisdom and insight.

Prerequisite: None

Health Behavior: Improving Health through Health Education/Promotion (3 credits)

Provides students with the knowledge and skills needed to understand individual, community, and organizational behaviors and change processes in cross-cultural and developing countries settings as a foundation for planning appropriate Primary Health Care (PHC) programs. Students learn to outline the contributions of social and behavioral science theory in the planning and implementation of culturally relevant PHC programs; will utilize social and behavioral theories to understand individual, social network, organizational, community, and policy maker health related behaviors; and identify the factors that promote and inhibit community involvement in PHC program development and implementation.

Prerequisite: None

Collective Impact: Developing and Leading Community Partnerships to Improve Population Health (3 credits)

Are you developing organizational capabilities for collaborating outside of the health system and across organizational boundaries? Is your health system positioning itself to be a meaningful participant and leader in building a community-oriented, population health management system? This course describes new leadership skills emphasizing collaboration and partnership across organizational lines essential as the industry moves to accountable care and increased risk-sharing. Identifies the elements necessary to create a culture of collaboration. Following deliberate, evidence-based methods, evaluates components of cultural transformation. Examines strategies related to building infrastructure for collaboration, including application of the Collective Impact Framework.

Prerequisite: None

The Economics of Risk: Value-Based Payment Methods and Incentives (4 credits)

The Patient Protection and Affordable Care Act (PPACA) calls for “a greater quality system that wastes less and encourages efficient and effective care” by accelerating value measurement and Value-Based Reimbursement (VBR) efforts. According to CMS, VBR changes the rules that govern provider reimbursement so that income depends “not just on the provision of a service but also on other factors, such as quality and safety measures, provision of recommended care and avoidance of wasteful care.” VBR, while not entirely new, includes a variety of payment methods designed to establish and align incentives for efficient and effective care, hold providers accountable for adverse clinical events, and adopt transitional strategies to create the right infrastructure for support of VBR. This course examines the influence of payment design on provider and patient behaviors, and applies concepts of behavioral economics to evaluate and propose essential elements of effective payment models and incentives designed to improve health and reduce costs.

Prerequisite: None

High-reliability Health Care: Concepts and Leadership Strategies (3 credits)

Organizations are increasingly becoming dynamic and unstable. This evolution has given rise to greater reliance on teams and increased complexity in terms of team composition, skills required, and degree of risk involved. This course examines the critical importance of effective teamwork and communication in the context of the increasing complicated and diverse models of care delivery. Students will evaluate high-reliability in terms of quality, safety, and organizational performance as it is defined beyond the “walls” of the traditional health system.

Prerequisite: None

Culturally Relevant Primary Health Care (3 credits)

Provides students with the knowledge and skills needed to understand individual, community, and organizational behaviors and change processes in cross-cultural and developing countries settings as a foundation for planning appropriate Primary Health Care (PHC) programs. Students learn to outline the contributions of social and behavioral science theory in the planning and implementation of culturally relevant PHC programs; will utilize social and behavioral theories to understand individual, social network, organizational, community, and policy maker health related behaviors; and identify the factors that promote and inhibit community involvement in PHC program development and implementation.

600.711 Public Health Statistics I (4 credits)

Provides students with a broad overview of Biostatistical methods and concepts used in the public health sciences. Emphasizes the interpretation and conceptual foundations of statistical estimation and inference. Covers summary measures, measures of association, confidence intervals, p-values, and statistical power. The statistical software package R will be introduced in the class and utilized to demonstrate the concepts and methods with data.

Prerequisite: None

602.810 Integrative Activity (4 credits)

This culminating experience will provide students with the opportunity to synthesize lessons learned via the application of concepts and models to a population health management problem or scenario.

Prerequisite: None

Appendix B
Evidence of Compliance with the Principles of Good Practice
(as outlined in COMAR 13B02.03.22C)

(a) Curriculum and instruction

- (i) A distance education program shall be established and overseen by qualified faculty.**

The proposed program will be supported by the School's Center for Teaching and Learning (CTL), which offers an array of evidence-based programs and services that support innovative teaching methods. BSPH faculty experts will lead and support the development of online courses. Several program faculty members are experienced in developing and supporting online learning opportunities. New instructors are required to meet the same qualifications as those teaching in the traditional onsite program.

- (ii) A program's curriculum shall be coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.**

All online courses adhere to CTL's course development process with support from experienced instructional designers. Online coursework follows well-established curriculum development standards, tailoring delivery methods, content, and assessments to learning objectives. As outlined in section L, the electronic portfolio will be used to assess students' achievement of program competencies. Each term the School compares student course evaluations for onsite and online courses; these comparisons consistently yield very similar results.

- (iii) A program shall result in learning outcomes appropriate to the rigor and breadth of the program.**

The program learning outcomes (competencies) are derived with input from professionals within the discipline, the program faculty, program leadership, and other program stakeholders, and are reviewed by the School's Committee on Academic Standards.

- (iv) A program shall provide for appropriate real-time or delayed interaction between faculty and students.**

The proposed MAS in Population Health Management will be delivered via the School's course delivery and management system—CoursePlus. This platform supports both synchronous and asynchronous interaction between faculty and students. Students and faculty may also participate in "real-time" interaction through web-conference office hours, supported by Adobe Connect, and pre-scheduled synchronous LiveTalks.

- (v) **Faculty members in appropriate disciplines in collaboration with other institutional personnel shall participate in the design of courses offered through a distance education program.**

Faculty members are selected based on domain expertise, program-related teaching experience and completion of required course development training. Faculty will be fully supported by CTL experts.

(b) Role and mission

- (i) **A distance education program shall be consistent with the institution's mission.**

Refer to Section A.1 in the main body of the proposal.

- (ii) **Review and approval processes shall ensure the appropriateness of the technology being used to meet a program's objectives.**

All courses offered online are designed in conjunction with CTL and with the support of an instructional designer, multimedia producers, and web specialists. These individuals assist in identifying and recommending the most effective learning technologies for achieving the course learning objectives. The course instructor(s) consults with an instructional designer during the course design process to determine the most effective learning technologies and strategies needed to meet the course learning objectives. The course design goes through multiple reviews by the instructional designer and program directors. Program directors ensure that the course design meets the program's expectations for online courses and that the course learning objectives reflect what the program expects students to achieve after completing the course. The CTL design team continually monitors courses and consults with the instructors to make adjustments, if needed. All new online courses participate in a midterm and end-of-term course evaluation process. Midterm feedback is used to determine if any midterm adjustments are needed and the end-of-term feedback is used to assess whether further course refinements are needed prior to the next time the course is offered.

(c) Faculty support

- (i) **An institution shall provide for training for faculty who teach with the use of technology in a distance education format, including training in the learning management system and the pedagogy of distance education.**

The proposed program will be supported by CTL, which offers a number of opportunities and resources for faculty instructors and teaching assistants to become more familiar with online teaching and best pedagogical practices. In addition to maintaining an extensive catalog of resources on teaching and learning via an online Teaching Toolkit, CTL regularly offers events, workshops, and one-on-one office hours to introduce and provide updates on the latest advances in teaching technology and pedagogy.

- (ii) Principles of best practice for teaching in a distance education format shall be developed and maintained by the faculty.**

Prior to teaching their first courses, all new online instructors are required to participate in training that conveys, among other things, principles of best practices for online education.

- (iii) An institution shall provide faculty support services specifically related to teaching through a distance education format.**

The Bloomberg School, through CTL, maintains an innovative course management system and provides faculty support and training for online education through a staff of more than 30 individuals who specialize in instructional design, audio production, technical writing, web development, production management and quality control.

- (d) An institution shall ensure that appropriate learning resources are available to students including appropriate and adequate library services and resources.**

The Johns Hopkins University library system includes the William H. Welch Medical Library on the East Baltimore campus and the Milton S. Eisenhower Library on the Homewood campus. The Welch Library collects current scholarly information that supports the research and educational needs of the Johns Hopkins Medical Institutions as well as the Bloomberg School. Because the library's emphasis is on providing materials at point of need, the collection is primarily in electronic format. The electronic collection includes more than 7,200 electronic journals, more than 400 databases, and more than 13,000 e-books. The WelDoc Service provides access to materials not in the Hopkins collections. The library offers a variety of instructional services, including classes and online tutorials designed to explain the library resources available for research and scholarship. Students have access to all libraries and library informationists.

- (e) Students and student services**

- (i) A distance education program shall provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

The Bloomberg School maintains numerous web-based resources to inform prospective students on the information they may need as an online student. These resources include the JHSPH website www.jhsph.edu and the [Course Catalog](#). These resources offer detailed programmatic information, academic support services, financial aid, costs, policies, etc. and specific information for online learning. As new online students are admitted and enrolled, they receive timely emails with important information to help them prepare to become an online student. These emails include

information on technical requirements, available academic support services, and a required orientation course (IOL) for new online students.

(ii) Enrolled students shall have reasonable and adequate access to the range of student services to support their distance education activities.

BSPH online students have access to the following academic support services:

Academic advising. Students are assigned an advisor when accepted. Students work individually with the advisor to develop a course of study that meets the requirements of the program and the career goals of the student. The advisor regularly contacts the students to check on progress and answer questions. Courses that deviate from the program plan and have not been approved by an adviser may not count toward degree requirements.

Library services. Students have online access to the William H. Welch Medical Library and the Milton S. Eisenhower Library on the Homewood campus. The interlibrary loan department allows students access to resources at any other university in the nation. The University's library system provides easy access to a wide selection of electronic information resources, including an online catalog, and numerous electronic abstracting and indexing tools. Many of the databases are accessible remotely. Librarians are available to assist students remotely and the library maintains an extensive web site to take visitors through all its services and materials.

Disability Support Services. The Johns Hopkins University is committed to making all academic programs, support services, and facilities accessible to qualified individuals. Students with disabilities who require reasonable accommodations can contact the BSPH Disability Services' Senior Director.

Career Services. The Career Services Office at the Bloomberg School helps students, alumni, faculty, staff, and employers navigate the world of public health jobs.

Johns Hopkins Student Assistance Program. The Johns Hopkins Student Assistance Program (JHSAP) is a professional counseling service that can assist students with managing problems of daily living. Stress, personal problems, family conflict, and life challenges can affect the academic progress of students. JHSAP focuses on problem solving through short-term counseling. Accessing the service is a simple matter of a phone call to arrange an appointment with a counselor. Online students contact the service by phone for consultation and are directed to the appropriate resource or office. JHSAP services are completely confidential. The program operates under State and federal confidentiality legislation and is HIPAA compliant.

Transcript Access. Students may view and print unofficial transcripts at any time. Official transcripts will be mailed to students upon completion of the program; additional official transcripts will be mailed upon request of the student at minimal charge.

Student Login IDs. The University issues each student a Johns Hopkins Enterprise ID (JHED ID) and the School issues a BSPH ID. The JHED ID grants students a JHU email address and secure access to many online services including course registration, bill payment, official grades, library services, and the online learning platform CoursePlus. Students are also issued a BSPH ID that provides access to the School's intranet (My BSPH) where students can locate additional resources including research and administrative tools as well as the School's policy and procedures manual.

(iii) Accepted students shall have the background, knowledge, and technical skills needed to undertake a distance education program.

All accepted online students are required to have met the admission requirements stated for the MAS in Population Health Management. New online students are required to complete the Introduction to Online Learning (IOL) course prior to beginning their first online courses. IOL covers a broad range of topics on how to be a successful online student such as learning expectations for online students and how to participate in online discussions.

(iv) Advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.

All relevant program information is available on the BSPH web site. All recruiting information includes the URL for the BSPH website, which contains information available to prospective and current students. The School's Prospectus and Guidebook are posted online, as are school-wide student handbooks and all program-specific handbooks. The School's website contains links to all student-relevant information including admissions requirements, online application and instructions, online registration, student funding resources and financial aid, and other student support services.

(f) Commitment to Support

(i) Policies for faculty evaluation shall include appropriate consideration of teaching and scholarly activities related to distance education programs.

Faculty who teach online courses are strongly encouraged to participate in one or two professional development opportunities annually to improve their online teaching skills. Teaching online is viewed no differently than teaching onsite for promotion purposes.

- (ii) **An institution shall demonstrate a commitment to ongoing support, both financial and technical, and to continuation of a program for a period sufficient to enable students to complete a degree or certificate.**

BSPH has a commitment to online teaching as demonstrated by the resources of its Center for Teaching and Learning, which provides course development, instructional, and technical support to new and current faculty. See Appendix D for detailed financial information regarding the proposed program.

(g) Evaluation and Assessment

- (i) **An institution shall evaluate a distance education program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

Please see Section L of the main body of the proposal.

- (ii) **An institution shall demonstrate an evidence-based approach to best online teaching practices.**

CTL continually participates in professional development activities to keep abreast of evidence-based approaches to online teaching practices. These online teaching practices are then incorporated into faculty workshops and training sessions.

- (iii) **An institution shall provide for assessment and documentation of student achievement of learning outcomes in a distance education program.**

As part of the online course design process, course assessments are required to be aligned with stated courses learning objectives. The proposed program will incorporate authentic assessments that demonstrate students' application of learned skills. Program faculty have experience with developing individual and collaborative assessments for measuring the acquisition of relevant knowledge and skills through online learning.

**Appendix C
Faculty**

Name	Terminal Degree	Field	Academic Title/Rank	Status	Courses Taught
David Baker	DrPH	Health Policy and Management	Assistant Professor - Adjunct	Part-time	<ul style="list-style-type: none"> • Accountable Care: Assessing Quality and Effectiveness of Population Health Initiatives
Mark Bittle	DrPH	Health Policy and Management	Associate Director, MHA Program; Associate Scientist	Full-time	<ul style="list-style-type: none"> • Value-Based Concepts of Socially-Responsible Leadership • Collective Impact: Developing and Leading Community Partnerships to Improve Population Health
Ashwani Davison	M.D.	Geriatrics & Gerontology	Instructor in Medicine (JHU School of Medicine)	Part-time	<ul style="list-style-type: none"> • Essentials of Population Health Management • Managing Health Across the Continuum: Contemporary Models of Disease Prevention and Care Management
Lilly Engineer	DrPH	Health Policy and Management	Assistant Professor	Full-time	<ul style="list-style-type: none"> • High-Reliability Health Care: Concepts and Leadership Strategies

Eric Ford	PhD	Health Policy and Management	Professor	Full-time	<ul style="list-style-type: none"> • The Built Environment: Influences and Challenges to Improving Population Health
Douglas Hough	PhD	Health Policy and Management	Associate Scientist	Full-time	<ul style="list-style-type: none"> • The Economics of Risk: Value-Based Payment Methods and Incentives
John McGready	PhD	Biostatistics	Associate Scientist	Full-time	<ul style="list-style-type: none"> • Public Health Statistics I
Ian Saldanha	PhD	Epidemiology	Assistant Scientist	Full-time	<ul style="list-style-type: none"> • Introduction to Epidemiology

**Appendix D
Finance Information**

TABLE 1: RESOURCES					
Resource Categories	2017	2018	2019	2020	2021
1. Reallocated Funds	-	-	-	-	-
2. Tuition/Fee Revenue (c + g below)	-	-	-	-	-
a. Number of F/T Students	-	-	-	-	-
b. Annual Tuition/Fee Rate	-	-	-	-	-
c. Total F/T Revenue (a x b)	-	-	-	-	-
d. Number of P/T Students	35	70	70	70	70
e. Credit Hour Rate	\$1015	\$1046	\$1077	\$1110	\$1143
f. Annual Credit Hour Rate	25	25	25	25	25
g. Total P/T Revenue (d x e x f)	\$888,125	\$1,830,500	\$1,884,750	\$1,942,500	\$2,000,205
3. Grants, Contracts & Other External Sources	-	-	-	-	-
4. Other Sources	-	-	-	-	-
TOTAL (Add 1 – 4)	\$888,125	\$1,830,500	\$1,884,750	\$1,942,500	\$2,000,205

TABLE 2: EXPENDITURES:

Expenditure	2017	2018	2019	2020	2021
1. Faculty (b + c below)	\$161,400	\$332,484	\$342,459	\$352,732	\$363,314
a. # FTE	1	2	2	2	2
b. Total Salary	\$120,000	\$247,200	\$254,616	\$262,254	\$270,122
c. Total Benefits	\$41,400	\$85,284	\$87,843	\$90,478	\$93,192
2. Admin. Staff (b + c below)	\$64,713	\$66,654	\$68,654	\$70,713	\$72,836
a. # FTE	.5	.5	.5	.5	.5
b. Total Salary	\$48,114	\$49,557	\$51,044	\$52,575	\$54,153
c. Total Benefits	\$16,599	\$17,097	\$17,610	\$18,138	\$18,683
3. Support Staff (b + c below)	\$94,150	\$96,975	\$99,884	\$102,880	\$105,967
a. # FTE	1	1	1	1	1
b. Total Salary	\$70,000	\$72,100	\$74,263	\$76,491	\$78,786
c. Total Benefits	\$24,150	\$24,875	\$25,621	\$26,389	\$27,181
4. Equipment	-	-	-	-	-
5. Library	-	-	-	-	-
6. New or Renovated Space	-	-	-	-	-
7. Other Expenses	\$521,358	\$819,902	\$837,089	\$855,384	\$873,679
TOTAL (Add 1 – 7)	\$841,621	\$1,316,015	\$1,348,085	\$1,381,709	\$1,415,796