



DISSERTATION POLICIES AND GUIDELINES

PH.D. PROGRAM IN HEALTH SYSTEMS AND SERVICES RESEARCH

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

Updated December 13, 2013

The dissertation for the UAMS Health Systems Research PhD Program must be the product of a theory-informed, empirical research study conducted by the PhD candidate that uses health services research methodology to address an important health policy, health services, or public health issue. Dissertations in health systems research are expected to address empirical questions involving the organization, financing, delivery, and/or impact of health-related services, programs, policies, and interventions. Purely etiological studies of disease or behavior generally fall outside the scope of a health systems research dissertation, unless the research findings have clear and compelling implications for health systems and services that are well developed by the student. The dissertation should be written in a scholarly style, including thorough literature reviews and development of relevant theoretical frameworks, and it must include detailed descriptions of research designs, analytic methods, measurement strategies and data. The dissertation research may include analysis of existing, secondary data and/or analysis of primary data collected by the candidate.

The dissertation must be the product of valid scientific research designed to produce *new* and *significant*, generalizable knowledge about an important issue in health policy, health services, or public health. Students are expected to employ rigorous research designs and analytic methodologies that are generally accepted to be valid, state-of-the-art scientific approaches in health services research. The dissertation research should be significant in that it is expected to produce evidence that supports causal inferences about a phenomenon of interest or that makes significant contributions to the progression of evidence in support of such inferences. Research that is purely formative or descriptive in nature may not be judged as significant unless the phenomenon of interest and/or the methods being tested are extraordinary in their novelty and innovation. Moreover, the dissertation research must produce evidence that generalizes to settings and populations beyond those directly observed in the investigation, recognizing that there are necessary trade-offs among internal and external validity imposed by logistical and ethical constraints in all empirical research projects. The dissertation committee will be the ultimate judge of the significance, internal and external validity of the dissertation research.

The dissertation also must be innovative, in the sense that an existing methodology is being applied in a new way or to a new question or problem area, or in the sense that a methodology is extended or modified in a significant way. Heavily theoretical dissertations must still include empirical testing and a substantial demonstration of their applicability to a real-world, contemporary issue in health policy, health services or public health, and this application should be the major focus of one or more papers or chapters. By virtue of being innovative, the dissertation should produce *new* knowledge in that it resolves gaps, uncertainties, or controversies in the existing empirical and/or theoretical body of knowledge. All dissertations must conform to the policies established by the UAMS Graduate School. The dissertation can take either of two formats, a three-paper format or a monograph format.

Three Paper Format

The first format consists of three publishable, empirical research papers relating to a health policy, health services, or public health issue. The papers are typically related, either by their substantive content or by their methodology, but this is not a requirement. It is recommended that at least two of the three papers be related, either by content or methodology, but this is left to the discretion of the student's dissertation committee.

While publish-ability is a necessary condition for the acceptability of the dissertation, the fact that a paper has been published in a peer-reviewed publication does not necessarily make it acceptable for the dissertation. Each paper must be an empirical research paper that includes a valid research design, valid data, and appropriate analytic methods of sufficient rigor as deemed by the student's dissertation committee. Review articles, research design articles, and purely theoretical or conceptual articles generally will not count toward one the three required dissertation papers. Material such as literature reviews, theoretical frameworks, detailed description of analytic methods and data—which may be excluded from published versions of papers due to page constraints—must be included in the dissertation, possibly as appendices or as separate background papers.

On occasion, one or more of the papers may have been published prior to submission of the dissertation, and the published version may be included in the dissertation in lieu of a typescript. However, none of the papers may have been published prior to the student's matriculation into the program, and the majority of the work on the dissertation must be completed after matriculation. The dissertation must include an overview summarizing the papers. It must also contain material that describes, in non-technical terms, the implications of the papers' findings for the real world of health policy, management and practice, as well as directions for future research that are suggested by the papers' findings and/or limitations. This material may be incorporated into the individual papers (e.g., in discussion sections), or in a separate concluding section of the dissertation.

Monograph Format

The second format alternative is a traditional monograph-style dissertation. Such a dissertation must either (a) contain at least three units of empirical research which are independently publishable (which may be organized as chapters) or (b) be suitable for subsequent publication in book form. The rules and recommendations described above for the three-paper format, regarding prior publication, dissertation summary, and concluding sections, apply to a traditional dissertation as well.

Co-authorship

Co-authored dissertation papers or chapters are permitted. Order of authorship should follow the conventions found in health services research journals such as *Health Services Research*, *Medical Care*, or *Health Affairs*. The student must qualify as first author for journals where first authorship indicates primary responsibility for the paper. Faculty members and students are cautioned that a faculty advisor should be a co-author only if he or she contributes substantially to the development of the research design, measurement and data collection, and/or analytical methodology for the paper or chapter. If the faculty member is primarily responsible for the research design, data and methodology, then the paper probably does not qualify as independent work by the student. If the faculty member has developed the methodology in a previous or concurrent research study, then it is expected that the student will apply the methodology independently to a novel problem under investigation. If the faculty member has developed the measurement strategy and collected the data under a previous or concurrent research study, then it is expected that the student will apply a novel and independent analytic methodology to the problem under investigation.

Key Content

Regardless of which of the two formats is chosen, the dissertation must include several key elements of content:

- (1) A clear description of the problem under investigation, the empirical research questions of interest, and why these questions are relevant and important from a health policy, health care management, or public health perspective.
- (2) A thorough and comprehensive review(s) of the existing theoretical and empirical literature related to the problem and research questions of interest. The review must make clear what is known about the problem already, what is not yet known, and what are remaining areas of uncertainty or controversy. In doing so, the review must make clear how the dissertation research will contribute new knowledge to the existing body of literature.
- (3) Development of a theoretical framework(s) based on relevant social, behavioral, and/or biomedical theories that guides the investigation, elucidates hypotheses to be tested, and justifies the research design and analytic methodologies used.
- (4) Description of the research design and analytic methods used in the investigation, the hypotheses to be tested, and the measurement strategies and data used.
- (5) Description of the key results from all analyses and hypothesis testing.
- (6) Interpretation of the findings and discussion of the implications of the research for health policy, health management, clinical or public health practice, and future research. This discussion should also include an assessment of the limitations of the research and their implications for how results should be interpreted and used in the research, policy, and practice communities. The dissertation should translate and apply research findings as clearly and concretely as possible in the form of considerations, recommendations, scenarios and options for the full range of health system stakeholders likely to share in the benefits and/or costs of the phenomena studied, including policy-makers, clinicians and providers, health care and public health administrators, payors, patients, and the public at large.

Dissertation Process

Doctoral candidates will be required to complete a minimum of 18 hours of dissertation research under the guidance of a Doctoral Dissertation Committee of faculty. The Committee must include at least five faculty members—including at least three active Health Policy and Management faculty members—all of whom must have UAMS Graduate School standing. The Committee must be chaired by an active Health Policy and Management faculty member with Graduate School standing. Chairs with adjunct or secondary appointments in the Department of Health Policy and Management require approval by the Director of the Health Systems and Services Research doctoral program. The Committee can be appointed at any time after the student has progressed to candidacy. At the time of appointment, notification of the committee membership must be forwarded to the Graduate School Office. With a program's submission of an outside member form and C.V. to the Graduate School office, and approval of the UAMS Graduate Council, one person who is not a UAMS Graduate Faculty member may serve as a required committee member but not as chair.

As part of the dissertation research process, candidates must first successfully develop and defend a written proposal of their dissertation research, and subsequently develop and defend the written documentation of their completed dissertation research. The dissertation must represent valid,

independent research conducted by the candidate that makes a significant contribution to health policy, health system management and practice, and/or health system research methodology. The dissertation research may include analysis of existing, secondary data and/or analysis of primary data collected by the candidate. Acceptance of the dissertation proposal will require approval by all members of the Doctoral Dissertation Committee after the candidate's oral defense of the proposal. Dissertation research proposals must then be reviewed and approved by the UAMS Institutional Review Board before candidates begin their research. Acceptance of the dissertation and award of the Ph.D. will require approval by at least 80% of the Doctoral Dissertation Committee after the candidate's oral, public defense of the dissertation. Ph.D. candidates must register for at least one credit hour of dissertation for each semester and one credit hour of dissertation for each summer session until the degree is awarded.