Master of Health Sciences
WESTERN CAROLINA UNIVERSITY
College of Health & Human Sciences
School of Health Sciences

Academic Program Review
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Reflections from the process: Assembling this program review was challenging due to the complexity of a program composed of four disciplines structured in an integrated multidisciplinary format. In addition, delivery of the program is through both online and residential formats. While each discipline has a unique focus of study and requirements of the professions represented, the program frequently revisits the relevance of student outcomes and curriculum to support their accomplishment. Due to this complexity, the MHS faculty constantly revisits the interrelationships of curriculum, admission processes, and how best to align the program’s mission to the evolving mission and strategies of the SHS, CHHS and WCU.

This review was also easy because of the need to revisit the activities represented within these standards on a regular basis. You cannot be a director of this complex a program without reviewing and discussing aspects of its structures, admissions and processes at least monthly. The expertise/perspectives of the faculty, the focus on intentional – not reactive – strategic planning, and the collegial and collaborative environment make it an enjoyable – even if challenging process – to strengthen integration among the disciplines; strengthen the research/curriculum component and continuously improve the program, the student outcomes, and provide leadership in the provision of high quality healthcare and health services delivery professionals.

Summary of key findings: The MHS program’s mission is to offer quality graduate education to practicing and aspiring health professionals in four disciplines: three online concentrations (health education, health management, emergency medical care); a residential concentration in nutrition; and a residential Dietetic Internship (DI) program. That mission requires the development of educators, managers and leaders, who can think critically, communicate, innovate, advocate and perform effectively in our dynamic health care delivery and health policy decision-making environment.

The MHS faculty team consists of three full-time MHS faculty and the Dietetic Internship (DI) director. Weekly meetings and incident-based retreats provide the venues for program planning activities. These weekly meetings are open to all MHS faculty, including part-time and adjunct members. The team’s ongoing discussions of strategic directions and goals bring in as much as possible all MHS faculty, SHS and CHHS leadership, alumni, students and stakeholders. As a result, we believe that our efforts result in ongoing, systemic planning that is highly inclusive of all parties and reflective of the University’s strategic priorities, such as our plan of ‘controlled growth’ in order to apply data-driven decision making to enrollment projections and maintenance of a quality educational experience.

The MHS Program provides and continually evaluates the cross-disciplinary curriculum that emphasizes multidisciplinary interaction and quality student learning outcomes. The MHS Program now includes three online concentrations, health management, health education, emergency medical care (added in 2008) the residential concentration in nutrition, and the separately accredited residential Dietetic
Internship (DI) program. Development, innovation, and evaluation of curriculum to improve student learning has focused on three areas: (1) innovating a program structure to benefit student interactions across multiple health disciplines; (2) strengthening the research component; and (3) continuous internal improvement.

The MHS program has an exceptional cadre of full-time, part-time and adjunct faculty dedicated to excellence in teaching, successful student learning and supporting alumni professional and/or continued graduate education goals. In addition, the program makes appropriate use of enhancements to faculty resources such as technology, evaluation tools, processes to resolve student concerns and the Boyer Model of scholarship and teaching.

The MHS program has continued to attract gradually increasing numbers of applicants to WCU. Over time, a larger applicant pool should increase the quality of students, raise the level of student performance, and enrich the academic experience. MHS is experiencing a period of balanced growth as anticipated with three of the concentrations moving to online delivery as well as the impact of continuing economic factors. Consistent with the program’s commitment to high quality graduate education and ‘controlled growth’, enrollment caps for all concentrations and scoring matrices were implemented in fall 2013 as one strategy to recruit the best applicants; while seeking to offer graduate education to a diverse cadre of health care and health services delivery professionals.

The MHS program practices a collaborative and consensus-based model of decision-making. It is one of six programs within the SHS, and the only graduate program. Three full-time MHS faculty and the DI director meet weekly to discuss the status and business of the program. These meetings are led by the Program Director, Marianne Hollis, who regularly updates the SHS director. All adjunct faculty members are invited to attend any of the weekly meetings and are encouraged to contribute their thoughts or experiences. Due to the close relationship with the SHS undergraduate programs, program directors for each of these programs are routinely consulted on issues where their students or faculty could provide important and useful feedback.

The MHS program has adequate resources to meet its goals and objectives. However, the dynamic nature of finite resources in any academic institution is a challenge to program faculty, staff and leadership. And finally, with a focus for MHS faculty on teaching and learning activities, tough choices must be made among increasing administrative duties, faculty research agendas and the central mission of the University, ‘teaching and learning’. 
Response to Program Review Standards

Master of Health Sciences (MHS) Program

Significance and Scope of the Program

Standard 1: The purpose of the program reflects and supports the mission and strategic vision of Western Carolina University and the mission of its School and/or College. Western Carolina University (WCU) is a public regional institution of higher education whose mission is to create learning opportunities that incorporate teaching, research, service and engagement (through on-campus, off-campus, online and international experiences). The strategic vision of WCU is reflected in its Core Values and Guiding Principles, those fundamental beliefs that guide programs to align their missions and strategic plans to those of WCU. Accordingly, WCU seeks to create a community of scholarship that supports and complements its mission by the commitment of its faculty to teaching, research, service and other creative activities that enhance the intellectual growth and experience of its students. In terms of graduate education, the WCU Quality Enhancement Plan (QEP) encourages aligning student learning outcomes with the overarching goal of the QEP: “students will synthesize knowledge and skills from their academic and co-curricular experiences to become intentional participants in their own learning”.

In keeping with those WCU priorities, the College of Health and Human Sciences (CHHS) and the School of Health Sciences (SHS) seek to focus on educational excellence and professional preparation for students in a variety of healthcare related disciplines and their promotion of engaged, life-long learning and scholarship by scholarly and collaborative faculty in a dynamic learning community. In particular, the Masters of Health Sciences (MHS) program is guided by the vision of the CHHS to provide, build, and nurture collaborative relationships among university faculty, students, private, non-profit and government agencies in applied research and inter-professional practice settings that benefit the western North Carolina region.

The MHS program’s mission is to offer quality graduate education to practicing and aspiring health professionals in four disciplines: three online concentrations (health education, health management, emergency medical care); a residential concentration in nutrition; and a residential Dietetic Internship (DI) program. That mission requires the development of educators, managers and leaders, who can think critically, communicate, innovate, advocate and perform effectively in our dynamic health care delivery and health policy decision-making environment. The MHS program aligns with the missions of WCU and related entities as evidenced by its commitment to excellence in scholarship; collaboration with students and multiple disciplines in curriculum improvement; innovation in program delivery; partnering with students in research and community service; responsiveness to the educational needs of students and employers; and commitment to eliminate process, tuition structure or geographical barriers to the educational process to educate leaders in the health professions of the region and beyond. The MHS program’s key partner in doing so is the WCU Graduate School whose mission is to ensure quality graduate education and active scholarship by the provision of services, resources and innovative leadership supporting graduate education, research and community development. We strongly appreciate the degree to which the WCU Graduate School advocates for our students, faculty, programs and research activities in collaboration with faculty, students, staff and the region.
**Strengths:** There are seven program strengths: (1) an experienced teaching faculty that is committed to excellence in student outcomes and program improvement; (2) a web of supportive and collaborative relationships within the CHHS and SHS; (3) a student population that represents diverse health care disciplines primarily from North Carolina, South Carolina, Tennessee and Georgia; (4) intentional program flexibility that supports the design of meaningful and appropriate programs of study for students; (5) a focus on excellent research skills fostering public dissemination, application in the workplace, enhancing the synthesis of the curriculum and improving health care and health services delivery; (6) program responsiveness to the expressed needs/feedback of students, prospective students and graduates to deliver innovative program curriculum and delivery quality; and (7) a robust use of online learning course management systems and audio/visual conferencing strategies that assist professionals to achieve their educational goals.

**Challenges:** There are three challenges for the program: (1) **faculty issues:** the immediate need to address the workload impact related to increase in the number of 1:1 student research projects; as well as the increased administrative duties for faculty due to decentralization of administration; (2) **support staff issues:** the decrease in graduate assistant positions due to our DL designation as well as the shortage of administrative support staff overall; and (3) **strategic decision-making issues:** primarily balancing the need for program growth, continued and improved education quality along with the need to review/update metrics for applicants and the activation of MHS Advisory Group. (Related items - Appendix 1)

**Standard 2:** The program engages in ongoing, systematic planning that is reflective of the University’s strategic priorities. The MHS faculty team consists of three MHS faculty and the Dietetic Internship (DI) director. Weekly meetings and incident-based retreats provide the venues for program planning activities. The weekly meetings employ Go-to-Meeting (GTM) video conferencing to allow distance participation and sessions are often recorded to allow asynchronous viewing; these weekly meetings are open to all MHS faculty, including part-time and adjunct members. The team’s ongoing discussions of strategic directions and goals bring in as much as possible all MHS faculty, SHS and CHHS leadership, alumni, students and stakeholders. As a result, we believe that our efforts result in ongoing, systemic planning that is highly inclusive of all parties and reflective of the University’s strategic priorities, such as our plan of ‘controlled growth’ in order to apply data-driven decision making to enrollment projections and maintenance of a quality educational experience.

The MHS program’s current strategic planning focuses on four of the initiatives of the WCU 20/20 Plan, specifically in **Strategic Direction #1 - “fulfill the educational needs of state and region”**. While Strategic Directions #2, 3 and 6 have applicability to the MHS program, our team chose to focus on specific initiatives within the first strategic direction.

**Initiative 1.1.3:** *Position WCU as a preferred provider of graduate programs in the greater Asheville-Hendersonville area in fulfillment of its historic commitment to this vital part of the Western North Carolina region.* MHS was the only graduate program in health sciences serving the western NC region when it began 1992. Since that time, competition has increased due to a growth in the number of health sciences graduate programs particularly online.
proprietary providers. States bordering NC also now offer in-state tuition or academic common market status to applicants living in the western NC counties. In 2013, a private NC college began a public health program based in Asheville. MHS has responded to these challenges to maintaining our position as the preferred provider in several ways. We became an online program in 2012 for health education, health management and emergency medical care. We maintained tuition and fees well below the private/proprietary competition. In addition, we continually adjusted our program to meet market needs such as offering one of the few EMC graduate programs in the US. As a result, MHS received a ‘Best Buy’ designation for online Master’s programs from GetEducated.com in 2013, one of only 4 among WCU’s 39 graduate degree and 12 certificate programs.

As a result of our efforts, the MHS program is a powerful contributor to WCU’s efforts to be the preferred provider for graduate education in the region. We ranked as one of the WCU graduate programs with the most admissions for the last 4 years. Based upon years of in-field recruiting MHS students, reviewing marketing research, and talking with students about their school decision-making process, the director of the MHS program is firmly convinced that the program is in fact also the preferred provider for better qualified prospective students not only in the Asheville-Hendersonville area but in the western North Carolina region.

To be competitive, MHS admits students in fall, spring and summer semesters. Fall admissions to MHS have averaged 30 per year over the last 3 years. Since receiving the Distance Learning (DL) designation in 2012, spring admissions range has increased to between 10 and 12 each year. Summer admissions have increased due to 3 factors: (1) health management concentration courses were added, made possible by available faculty; (2) applicant need/desire to begin ‘early’ or ‘just take one course’ and (3) an increase in the DI supervised practice hours from 960 to 1200 requiring a July start. The 2014 combined summer and fall admissions were 35. Spring 2015 admissions are 11.

**Initiative 1.1.6: Identify and develop integrated, cross-disciplinary centers of study and outreach, where appropriate based on the curricular focus areas.** The MHS program is a cross-disciplinary center of study and outreach with four curricular focus areas: (1) Clinical nutrition Current use planning for the new CHHS clinic area will support graduate nutrition students (including dietetic interns) working with other professionals in a patient-centered setting to providing direct care under supervision to people in need in the region. (2) Community change for health education, health management, and emergency medical care. Students are encouraged to and take advantage of opportunities to bring about significant changes in community health care and health services organizations. (3) External Engagement and service for dietetic interns Meaningful external engagement and service are ensured for interns during their 1200 supervised practice hours to hospitals, health departments, medical clinics, school systems and nonprofit agencies in western North Carolina. (4) Research for all students. Required research projects give MHS students the opportunity to interact with community leaders on specific, data based projects – bringing the student experience and new knowledge together with the needs of organizations in the community. All students benefit from these projects; integrating results or processes in their work setting or using the processes of research on new or different workplace issues. One powerful example includes a cost containment project resulting in a long-term care facility changing its Medicare billing from contract to ‘in-house’, saving the organization over one million dollars. The student was promoted from senior billing clerk to CFO of the organization.
Initiative 1.1.7: *Increase the total number of WCU graduates by 25% by 2020 to meet the regional need for an educated workforce.* Labor statistics (e.g., Gallop, Department of Labor, professional organizations) clearly reflect the need for increased health professionals in each of the MHS concentrations within the decade 2012-2022. Each of these projections is larger than the average for all other occupations. For example, employment of health educators is expected to grow by 21%. Medical and health services managers’ job growth is projected at 23%. Employment of paramedics and EMS professionals with advanced degrees is expected to grow 23% during the same period. Increases in dietitians and nutritionists employment are estimated to rise by 21%. The American Dietetic Association estimates a short-fall of 18,000 full-time credentialed dietetic practitioners by 2020. The MHS program has exceeded the goal set by Initiative 1.1.7 over the last 5 years. During the prior review (2008), the total number of MHS graduates was 37. As of 2014, 103 students have graduated with an MHS degree since 2009. Time to graduation has also decreased from 4-6 years to between 18 months to 2+ years during the last 5 years.

Initiative 1.6.1: *Develop data-driven admission strategies that balance the University’s aim to increase the academic profile of entering students; serve the educational role of access as a regional comprehensive university.* The MHS program is committed to a data-driven method of assessment of applicants and maintenance of high academic standards while providing wide-based access to its graduate program concentrations. This goal is accomplished by critically examining current and projected enrollment figures, the scope of the discipline in various market regions, geographic location of potential students and the unique features of each concentration’s curriculum. These activities are central to successfully aligning with the strategic directions of WCU and CHHS.

The MHS program has experienced sustained growth over the last five years due to a number of factors. The most important factor driving those increases is the conversion of the MHS program to a distance learning format. The second most important factor, in our opinion, is the increased demand for master’s level preparation. Finally, there is some net increase due to economic downturns and job market insecurity but the initial surge following the 2007 crash has subsided. MHS integrates these factors into its strategic planning process and their impact on the program mission.

Prior to 2012, the expected admission process was to admit students who met the admission criteria – focusing on generating student credit hours (SCH). This practice implied that as SCH increased, it provided data-driven justification for additional faculty to support increasing numbers of students. The MHS application for the distance learning (DL) designation, also recommended by the last program review, was initiated in 2009. Also in 2009, economic forces began driving enrollment to an all-time high in 2010.

The full-time student percentage increased from an historical average of 4% to approximately 45% between 2009-2010 increased demands for full-time course loads. In addition, an increased number of DI students remained at WCU to finish their MHS degree in Nutrition; a curriculum redesign made it possible for them to take MHS core courses during their DI program, becoming full-time students. Continued economic volatility since 2009 produced a leveling of enrollment due to shifting employment stability/availability, financial and family responsibilities of students (e.g., move from full-time to part-time status), as well as potential applicants delaying their entry until the sought-for Distance Learning (DL) designation was approved. Those individuals were for the most part working professionals on long shift schedules, mature students with part/full-time caregiving responsibilities, and
undergraduates planning moves to other states but who wanted to pursue their graduate education at WCU in the MHS program.

A watershed moment came in 2012 when the MHS faculty team was strengthened from 2 full-time MHS faculty to 3 full-time MHS faculty and the DI program director. Strategic and data-driven decision-making was one of the first lengthy discussions of this group – and focused initially on admission standards, processes and faculty ratios. We had applied for a Distance Learning (DL) designation for health education, health management, and emergency medical call was approved by UNC-GA in 2011, becoming effective fall 2012. In preparation for this change, we sought to develop a plan for ‘controlled growth’ that would maintain program quality while staying within budget constraints. The distance concentrations experienced steady growth with increased applications. The residential concentration (Nutrition) and the residential Dietetic Internship (DI) program attracted increased numbers of qualified applicants. (Note that the DI program is limited by its accreditation standards of 12 full-time and 1 part-time students.) The MHS faculty in consultation with the SHS director and other SHS faculty and leadership in the Graduate School instituted enrollment ‘caps’ for each of the 4 concentrations other than DI beginning with the fall 2013 admission cycle. Caps were initially based on current student enrollment, students approaching graduation in fall 2013 and faculty resources available for advising and research project direction.

Metrics were developed by the faculty to review/rank applicants (uGPA, GRE verbal and GRE analytical writing). Admission recommendations to the Graduate School dean are equal to or only 1 or 2 applicants over the number needed to fill the concentration cap (to allow for those who decline the offer of admission). This admissions strategy has moved MHS from a program focused solely on SCHI generation to a more competitive process among applicants. The use of metrics and a competitive process has resulted in an increase in number of applicants denied (6) or wait-listed (17) since fall 2013. Wait-listed applicants can request the Graduate School move their application to the next admission cycle. Please note that all Nutrition applicants were wait-listed during the 2013-2014 admission cycle to effect attrition to a manageable number based on loss of faculty in that concentration.

A formal review of the cap and metric system over the last 2 years is planned after the fall 2015 admission cycle. Other metrics questions to consider as part of that review include: Is there value in waiving the GRE requirement if the uGPA is X, based on analysis of benchmark data from similar programs? What weight should be given to work experience? How should the written essay be assessed? Are applicant recommendations useful in decision-making? Is our standard for uGPA appropriate? Following the changes in processes above, class sizes in core courses range from 23-36 and in concentration courses from 20-35. Is this the ‘new normal’? The program’s multidisciplinary curriculum redesign structure, designed to cross-pollinate courses across concentrations, was able to meet this need, albeit with larger class sizes; or creating additional sections. The MHS faculty continues to discuss strategic and data-managed ways to innovate while maintaining the quality balance supporting the 20/20 plan as a well-respected and sought-after graduate program. (Related Items - Appendix 2)

**Standard 3:** The program provides and evaluates a high quality curriculum that emphasizes student learning as its primary purpose. The MHS Program provides and continually evaluates the cross-disciplinary curriculum that
emphasizes multidisciplinary interaction and quality student learning outcomes. The MHS Program now includes three online concentrations, health management, health education, emergency medical care (added in 2008) the residential concentration in nutrition, and the separately accredited residential Dietetic Internship (DI) program. Development, innovation, and evaluation of curriculum to improve student learning has focused on three areas: (1) innovating a program structure to benefit student interactions across multiple health disciplines; (2) strengthening the research component; and (3) continuous internal improvement.

**Strengthening Integration among Disciplines** Building on its multidisciplinary potential, the MHS curriculum was reengineered during 2007 to eliminate a ‘stove pipes’ structure of program concentrations using a quality improvement process. Concentration coordinators met with the MHS program director and assessed how to meet multiple objectives: (1) enhance the multidisciplinary structure of the degree program and (2) assess which courses from each of the other concentrations would be most appropriate as electives within a given concentration. The revised program plan draft was also presented to student groups for additional feedback. The redesign was met with enthusiastic response. Another outcome of this collaborative process was the design and approval of the new emergency medical care concentration.

All MHS students are now required to complete three core courses (MHS 510, 670 and 675) and to successfully design, conduct, analyze and present a Research Project (MHS 698) or Thesis (MHS 699). The current curriculum design provides for a matrix of courses that cross-pollinates to each MHS concentration by use of a suggested list of elective options. Students in consultation with their advisor select five concentration courses from a list provided for that concentration. Three electives were originally required – these courses were chosen from the suggested courses from other MHS concentrations. An advisor-approved elective is also an option. This mechanism supports flexibility in the design of the student’s program of study.

In 2011, a CHHS curriculum evaluation mandate to improve efficiencies, eliminate duplication and positively impact time to graduation data resulted in a decrease of program hours from a total of 36 credit hours to 33 credit hours. This change, effective fall 2011, resulted in a decrease of the required elective courses from three to two. Course sequencing changes during this process also resulted in cross-listing 3 pairs of courses in the health management and emergency medical care concentrations. These courses had similar underlying principles and objectives. These changes improved efficiency of program offerings, assured full course enrollment, adjusted faculty resources and provided student access to needed courses. Today a part-time graduate student taking a minimum of 6 credit hours/semester (including summer) can complete the program in 6-7 semesters. A full-time student taking 9 credit hours/semester (including summer) can complete the program in as little as 4-5 semesters based on course sequencing.

All MHS core courses offer two sections each year; as of spring 2015, the research methods course MHS 675 will offer 3 sections. All concentration courses are offered every other year. As student enrollment increases due to the addition of additional MHS concentrations and as a consequence of distance education designation, a goal of the MHS program is to offer all core courses each semester and concentration courses once each academic year. This will be dependent, of course, on creative utilization of current faculty resources.
Strengthening the Research Component  Student research culminates in the analysis, synthesis and evaluation of a research project topic that is applicable, discipline-specific and supports the program mission. Since 2005, each student has been required to complete a research project or thesis. This area discusses the evolution of the three courses that have strengthened our research component. This change impacted faculty who were now expected to direct student research projects one-on-one or be part of thesis committee structures. MHS 675: Research Methodology, a core course, focused primarily on research methods and basic statistical analysis using SPSS. Plans were initiated to develop a separate Biostatistics course to support student research skills. Until that course was developed/approved, MHS 696: Research Seminar was redesigned; including basic biostatistics and as a platform to develop potential research projects.

The primary student outcome in MHS 675: Research Methodology was a completed research proposal using the five chapter model. MHS 670: Biostatistics was approved in 2009; offered in 2008 as a ‘special topics’ course. MHS 696: Research Seminar was moved to the summer session. This provided students with a research ‘sequence’ of courses: MHS 670: Biostatistics (fall) → MHS 675: Research Methods (spring) → MHS 696: Research Seminar [an elective] (summer). Students present their research findings in one of several venues depending on the graduation term: (1) WCU Graduate Research Symposium (spring), (2) MHS Research Day (fall/spring), or (3) in MHS courses using Go-to-Meeting. A small number of students presented at professional conferences and prepared manuscripts to submit for publication in peer-reviewed journals in their disciplines.

Integrating student feedback from course evaluations, faculty input and the increasing number of students interested in pursuing further graduate degrees, the Research Methods course was revised for spring 2014. The course structure moved to a manuscript format, based on review of literature, benchmarking other universities both in and external to the UNC System and in consultation with colleagues. Expectations for academic rigor improve research skills, meeting program requirements. Focus on high quality research writing increases the likelihood of sharing findings in professional presentations and submitting to peer-reviewed journals.

Continuous Internal Improvement  Several internal processes are used to improve the curriculum: student evaluations (formative/summative); faculty peer evaluations; anecdotal student/faculty observations/recommendations; regular discussion among MHS concentration faculty; and most recently all full-time MHS faculty and the DI Director successfully passed the Quality Matters online design course. (WCU has contracted with Quality Matters in order to improve the design, consistency and student-focus of all of our online courses. MHS faculty will begin its next redesign phase using the Quality Matters Rubric in fall 2015.)

Every course offered in the MHS program contains a statement of course objectives that reflect the expected student leaning outcomes of the program. In 2011, the health education concentration began aligning core and concentration course objectives to aid students in meeting the competencies/outcomes required to successfully pass the Certified Health Education Specialist (CHES) exam. This exam is administered through the National Commission for Health Education Credentialing (NCHEC). This national credential in addition to their MHS degree position these graduates to obtain high-level and leadership positions. On entry to the MHS program, all health education students
complete a CHES self-assessment. This is used throughout the program during advising to mark progress and make any course changes needed.

Learning outcomes are reviewed by course faculty, the SHS and CHHS curriculum committees to ensure specific and measurable formats; expressing what students will know or be able to do as a result. Because of the multidisciplinary nature of the MHS curriculum and the close collegial relationships among faculty, a level of open and constructive dialogue ensures consistency among courses and across concentrations. Most of the redesigns of MHS curriculum over its history were the result of integrating the multiple levels of feedback and assessment of the value-added nature of individual and group course assignment and projects. As we often say to our students, “The course you are taking now is better because of the frequent and candid feedback of those who came before you. Teaching is learning twice.” (Related Items - Appendix 3)

Faculty Resources, Teaching, Scholarship & Service

**Standard 4**: The program has sufficient faculty resources to meet its mission and goals. The MHS program has an exceptional cadre of full-time, part-time and adjunct faculty dedicated to excellence in teaching, successful student learning and supporting alumni professional and/or continued graduate education goals. In addition, the program makes appropriate use of enhancements to faculty resources such as technology, evaluation tools, processes to resolve student concerns and the Boyer Model of scholarship and teaching.

**Qualifications** The faculty currently consists of 4 full-time, 4 part-time and 7 adjunct members. Each faculty member has the appropriate terminal degree, credentials and experience (work/service) related to the courses they teach. Adjunct faculty members who teach every other year have teaching credentials re-vetted prior to being offered a contract. Most of the faculty team has been part of the program for over 6 years. The full-time MHS program director has held the position since fall 2006. All faculty members participate to varying degrees in curriculum development, coordination of scheduling, evaluation of course content and learning outcomes. The full-time DI director joined the SHS in summer 2009.

**Work Load** Full-time faculty teach the graduate MHS or DI courses. The DI director teaches one senior level ND course, all of the DI courses, and facilitates practicum placement and preceptor allocation over the required 1200 supervised practice hours. Two full-time and one adjunct faculty are teaching undergraduate courses during the 2014-2015 academic year to assist other SHS programs. Four full-time SHS faculty teach MHS courses for a part of their load. Six of the seven adjunct faculty members teach one course every other year. There are several categories of activities/interactions that support and ensure faculty resources sufficient to meet program needs. These include, but are not limited to: scheduling coordination/consultation, access to instructional resources, formative evaluations, student and peer evaluation, annual faculty evaluation (for full-time faculty), and consultation on student issues.

**Scheduling** The requirements for scheduling a multi-disciplinary such as ours is akin to playing 4-dimensional chess and requires continual evaluation. For example, even the move of one course from one semester to another impacts faculty availability (especially adjunct faculty), faculty workload, student course loads, student advising plan, progress to graduation and the overall balance of program offerings. As a result, consultation with all involved faculty
is essential to provide the balance of offerings according to the curriculum matrix. MHS program meetings also serve as venue for these discussions. Once decisions are made, other steps may be necessary such as confirmation of faculty commitment to teach courses that includes re-vetting of adjunct credentials for those teaching every other year. For example, multiple faculty changes in Nutrition and Dietetics (ND) over the last 2-4 years have necessitated shifting of advising, research project direction workloads and wait-listing applicants for a year. A recent ND hire and a current search holds promise to bring stability to this concentration.

**Technology** Upgrades in technology and learning management system (Blackboard, Go-to-Meeting) require all faculty to keep themselves up to date with the latest tools for student learning. Instructional development consultations are available to faculty through the Coulter Faculty Commons. Adjunct faculty uses these services either online, in person or a combination using audio conferencing (GTM, Skype). Consultation with the program director or concentration coordinator is a time to discuss course content, changes in the discipline, relevant student learning activities/outcomes and any other related issues about a course.

**Evaluation** While a lot of planning takes place prior to a course, some faculty activities occur during the provision of courses. Another service offered by WCU’s instructional designer faculty is a formative evaluation of a particular course. These mid-course evaluations can be done in a classroom or online in a focus group format. Students are assured of their anonymity and all data and feedback is provided to the instructor in the aggregate or categorized by thematic content. These evaluations are extremely valuable and assist the instructor in making important changes during the course. All SHS full-time faculty are required to have one peer evaluation each semester. These evaluations may use a standardized format for classroom observations or an online course assessment tool (OCAT). Peers can be given access to online courses to evaluation design and ease of use issues, plus ‘observe’ a ‘live’ online course session.

Student end-of-course evaluations are required for all courses. The format of the evaluation is based on the format and type of the course (face-to-face; hybrid; online; seminar; independent study). Students are sent a unique link to the evaluation form for each of their course via Catamount Email. All evaluations are anonymous. Summary course data is only sent to the instructor after the grading period ends. There are several levels of review of these evaluations. Faculty are provided with a link to their own course evaluations for review and reflection. Only the SHS director has access to all faculty evaluations. Full-time SHS faculty discusses their course ratings with the SHS director during their annual faculty evaluation each spring. The MHS program director meets with the SHS director to review aggregate data only on any adjunct faculty course evaluation/s.

**Student concerns resolution** Despite skillful course planning and execution, any faculty may experience student issues. For those issues not resolved between the student and faculty, consultation with the program director or concentration coordinator provides confidential discussion and reflection on the issues involved. Such discussions can result in course communication improvements, clarification of student expectations or faculty continuing education actions to name only a few options. Ultimately the goal is to support and encourage faculty to provide the highest quality learning experiences for students.

**Boyer Model** WCU adopted the Boyer Model of four types of scholarship in 2007. Research and scholarship support is provided by the Coulter Faculty Commons. MHS and SHS faculty have produced a sizable volume of
scholarly work; invited presentations, peer-reviewed poster and platform presentations and publications. In addition, the majority of student/faculty publications have come from our newest concentration, emergency medical care. Other student/faculty research in health education has been published in peer-reviewed journals. Faculty are also been engaged in a wide range of service activities at the SHS, CHHS, WCU, community, state, regional and national level within their area of professional expertise. Faculty expertise and service within the profession provide excellent role models for graduate students.

Professional excellence, innovation in course design and student activities fostering creative thinking and problem-solving embody the MHS faculty. A commitment to student learning, collegial collaboration and personal flexibility have helped the faculty work as a team to face changes in the program over the last five years. (Faculty Vitae and Related Items – Appendix 4)

**Standard 5: The program attracts, retains, and graduates high quality students.** The MHS program has continued to attract gradually increasing numbers of applicants to WCU. (Please note that a summary of how we do attract, retain, and graduate high quality students is found above in Standard 2.) Over time, a larger applicant pool should increase the quality of students, raise the level of student performance, and enrich the academic experience. MHS is experiencing a period of balanced growth as anticipated with three of the concentrations moving to online delivery as well as the impact of continuing economic factors. Consistent with the program’s commitment to high quality graduate education and ‘controlled growth’, enrollment caps for all concentrations and scoring matrices were implemented in fall 2013 as one strategy to recruit the best applicants; while seeking to offer graduate education to a diverse cadre of health care and health services delivery professionals. As a result, during WCU’s Program Prioritization process in 2014, MHS was found to ‘meet all standard metrics’ – including but not limited to, enrollment, time to graduation and alignment with strategic initiatives of the University.

Following the admission cycle for fall 2015, the caps and weighted measures used for admission recommendations will be evaluated by all MHS faculty and key SHS faculty. This process will also include evaluation of full-time/part-time mix, graduation rates and whether those wait-listed moved their application to the next admission cycle and were successfully recommended for admission. Despite these changes, the academic strength of students applying to the MHS program has remained consistent. The 5-year average (2009-2014) uGPA for those applying to the MHS program is 3.38 out of 4.0. Average required GRE scores are: 144.6 quantitative, 149 verbal, and 3.62 analytical writing.

The MHS program is promoted in a variety of ways as discussed below in order of their success. In the past, promotion of the MHS Program was mainly word-of-mouth from current students, alumni or faculty network connections in the health care delivery community of the region. Our alumni continue to be a valuable recruitment source for new students. MHS faculty attend education fairs held by the region’s largest health care employer (8000+ employees); an organization ‘rich’ with our alumni.

MHS is on the GradSchools.com listing. Inquiries provide name and mailing addresses. Response letters are mailed to these individuals. MHS is on the UNC-Online network which generates inquiries from potential students.
The program was selected as a “Best Buy” by GetEducated.com in 2013. The logo is displayed on our program website and individuals searching for online programs on the GetEducated.com site are directed to us. Email inquiries are the most numerous form of inquiry about the program. As part of the School of Health Sciences (SHS), MHS has drawn applicants all five of the undergraduate programs. MHS faculty have taught or teach undergraduate courses, giving students a chance to interact and ask questions about the program. Undergraduate program faculty encourages students to explore graduate education with MHS faculty. Interaction with undergraduates also occurs during WCU’s Graduate and Professional School fairs each fall and spring.

Other opportunities to promote MHS and recruit students include: Faculty attendance and presentations at professional conferences; recruitment funding from the Graduate School ($2,200) and the Educational Outreach and Distance Learning department ($2,500). These funds were spent on print ads in professional publications targeting the emergency medical care concentration. This has not proven to be a viable strategy. Taking advantage of widespread technology, a more viable strategy now and in the future is the use of Email promotions via professional organization Email lists, other list-serves and social media, such as LinkedIn®.

The typical MHS Student is a US citizen, white and female. Females outnumber males 2:1 – 2.5:1. Females most often apply to the health education and nutrition concentrations; while health management and emergency medical care attract more males. In the past 5 years, resident alien students have been constant at 2 students per year. There have been a total of 4 non-resident alien students in the last 3 years. Ethnicity other than White is represented by American Indian (7), African American (16) and 1 Asian student in the last 5 years.

Another factor in attracting qualified applicants is the availability of financial assistance options. Financial assistance is available in several forms: Traditional government financial aid programs (min. of 6 credit hrs.); Graduate Assistantships (FT residential students) or study grants (FT/PT, residential or distance). Graduate students in the CHHS have the opportunity to receive the Mission Health Scholarship, A $250,000 commitment from the Mission Hospital Foundation Board in Asheville, NC, over 5 years. These began in the 2011-12 academic year. Four (4) MHS students each year have benefited from this scholarship. The Graduate School advocates and administers the Graduate Assistantships and Study Grants. As of this fall, graduate students can use the online portal ScholarCAT and make one application. The system will review 62 potential scholarships for eligibility – then submit the applicant/student’s application. The MHS program Director is on the Financial Assistance subcommittee of the Graduate Council, which advocates, reviews and advises the Graduate School Dean on assistance needs. One hoped for area of financial assistance, not previously available, would be to graduate students in distance programs. This would directly benefit MHS students.

Advising effectiveness develops rapport, open communication and trust as the backbone of student retention. Advising sheets have been revised to meet curricular changes over the years and new students starting the program can work with their advisor to match their available time and relevant courses to an individualized program of study. Students like to know where they are going but also how they are going to get there. Students move from FT → PT and back again, so determining a percentage of this mix is a dynamic exercise. Student circumstances change, so regular interactions, even outside the advising framework helps to build a sense of connectedness – particularly important with
students in distance concentrations. Multiple means of communicating includes, but is not limited to, emailing advising matrices, appointments in person, by phone or video conferencing (Go-to-Meeting, Skype™) bring students and advisors together. Advising sessions and communications are documented each semester so each student is up-to-date with their progress and any potential setbacks to successful completion of the program.

Each student is required to complete a research project or thesis with a faculty mentor. During MHS 675: Research Methodology, the student develops a draft research proposal. Students enroll in MHS 698: Research Project and, with faculty direction, completes data gathering, data analysis, final project documentation, presentation of research and submission of a manuscript for publication. Students needing additional time to complete their project register for MHS 779: Continuing Research for 1 credit hour. This meets the University requirement that they be enrolled during the semester they graduate. Travel grants from the Graduate School are available to assist students in presenting their research. Also, QEP Travel funds are available research presentations and the WCU name at professional and educational conferences. The student applies for these funds upon completion of their research.

Currently, only the DI program has a required licensure outcome. Soon after successful completion of the DI program, individuals take the Registered Dietitian (RD) exam. The Dietetic Intern graduates have averaged a 90% pass rate over the last four years. Since 2012, six students in health education have successfully passed the CHES exam and added a national credential.

Our graduates are in positions of leadership in schools, community colleges, universities, public health departments, hospitals, non-profits, emergency management, long-term care, rehabilitation and other health care delivery organizations. Since the increased focus on research and publication, 12 graduates (11.6%) have completed, are in or applying to doctoral programs. Over 20 student and student/faculty collaborative peer-reviewed publications have been produced. Several students have presented their research at professional conferences and designed and led pre-conference workshops on research. Other students have received awards for their presentations – one in which all other presenters were physicians. By ‘raising the bar’, expecting and supporting excellence, the MHS program will continue to attract a student population who will make a difference in the health of their communities. (Related Items – Appendix 5)

**Administrative Structure and Operational Resources**

**Standard 6:** The program has an administrative structure that facilitates achievement of program goals and objectives. The MHS program practices a collaborative and consensus-based model of decision-making. It is one of six programs within the SHS, and the only graduate program. Three full-time MHS faculty and the DI director meet weekly to discuss the status and business of the program. These meetings are led by the Program Director, Marianne Hollis, who regularly updates the SHS director. All adjunct faculty members are invited to attend any of the weekly meetings and are encouraged to contribute their thoughts or experiences. Due to the close relationship with the SHS undergraduate programs, program directors for each of these programs are routinely consulted on issues where their students or faculty could provide important and useful feedback.

WCU offers many professional development and training opportunities for faculty and leadership personnel. The MHS faculty takes advantage of those opportunities when appropriate. Most of these opportunities are offered
through WCU’s Coulter Faculty Commons. Each month, upcoming events are announced/reminded through electronic mail sent to all faculty and staff. MHS faculty members take advantage of their programs, consultation services and technology resources in the design, construction and evaluation of courses. This past September, all four MHS full-time faculty took part in the Quality Matters online program for “online course improvement”. Continuing education opportunities locally and in the region are supported by Micro-Grants and funds from the Graduate School and Educational Outreach. The CHHS and the SHS support training and professional development opportunities by appropriation of budget dollars on an annual basis.

The Graduate School holds biannual meetings each semester to update program directors on changes in structure and processes of the Graduate School. These meetings provide program directors process information, as well as a forum to voice concerns and experiences. Program directors also engage in various team building and team problem solving activities throughout the year. A graduate program director’s job description was revised and approved through the University channels in 2014. The Graduate Council initiated the revision and separated the graduate program director’s job description from the undergraduate program director’s job description. The job description and specific duties, preferred qualifications and term of service, release time guidelines, relationships to the department head, and evaluation parameters, which can be incorporated in the program director’s Annual Faculty Evaluation (AFE).

The MHS faculty is actively involved at all levels of University, College, and School level conversation. Each full-time faculty is a member of various committees such as facility usage, Dean Advisory, curriculum development and review, clinical education, TPR Committee (tenure, promotion, and review), and IT usage. In recent years, the MHS faculty has also played a large role in both administrative and faculty employment searches at the College and School levels. This has been greatly beneficial for the program due to the close working relationship the MHS program has with the undergraduate programs. Working so closely together has cultivated a working environment of open communication and collegiality.

All full-time MHS faculty participate in the assessment of program structure and activities; curriculum development and review. There has been extensive faculty involvement in the redesign and on-going revisions of the MHS program since the last review period. The success of the MHS program relies heavily on student and alumni involvement. All WCU students are encouraged to complete the “end of course evaluation” for each class. Student feedback is also elicited through frequent course communication and during the advising process. As the students take an active role in advising, there is no shortage of idea sharing, concern expression, and suggestions for an enhanced learning experience. An MHS Advisory committee is planned to be reconstituted during the spring of 2015. This group would be composed of current students, alumni, employers and other relevant stakeholders for the purpose of sharing information and gaining valuable feedback for the future. A similar plan had been formulated for spring of 2008 but due to the work needed for the distance learning designation and subsequent program growth, committee formation has been delayed. Again, due to the open lines of communications with current students and alumni, the lack of a formal committee has not been detrimental to the program. With that said, it is still a goal for the MHS program to establish a formal forum for student, alumni, and employer feedback. A revised alumni survey was completed and
disseminated in fall 2014; results are pending.

The evaluation of administrators, whether it University, College, or School levels, are done via anonymous online survey. The MHS program director, as well as all other School of Health Sciences faculty, is evaluated with an annual faculty evaluation (AFE) document. This document starts as a self-assessment. Once the faculty member completes the document, it is submitted to the SHS Director for additional information and review. After the Director’s review, a meeting is held with the faculty member to discuss the AFE and create a personal improvement plan and set goals for the next year. The AFE is then sent to the Dean of College of Health and Human Sciences for approval. (Related Items – Appendix 6)

Standard 7: The program has adequate resources to meet its goals and objectives. The MHS program has adequate resources to meet its goals and objectives. However, the dynamic nature of finite resources in any academic institution is a challenge to program faculty, staff and leadership.

As an online program, technology is a critical resource. MHS uses Blackboard (Bb) for all course materials, discussion forums, assignments, group work, calendar, and other interactive tools based on course needs. Go-to-Meeting® is audio/video conferencing software used for both ‘live’ meetings online and for pre-recorded lectures, guest speakers and presentations. This format provides ‘live’ interaction as well as post session review by students unable to attend online due to work, illness or family responsibilities. Discussion forums are set for pre-recorded sessions as a means to ‘continue the conversation’, posting additional insights and follow-up questions to fellow students and the instructor. The MHS-DI residential didactic sessions are held at the Biltmore Park facility in Asheville, NC. Initial DI program activities and orientation take place at CHHS’s premier, state-of-the-art facility on WCU’s Millennial Campus. Practicum materials, assignments and other program items are available to DI students online using Bb.

The Faculty ‘ Sandbox’ is a dedicated area in the Hunter Library that provides consultation, training and support in the use of a myriad of instructional technologies. Online and ‘live’ development courses for Bb are available to assist full-time and adjunct faculty to prepare their courses. The online availability of development consultation services is critical, particularly for adjunct faculty who reside in other parts of the state or country. Adjunct faculty members take advantage of the consulting services also.

The program has extensive academic databases and research resources which can be easily accessed easily through the WCU Library link. Online access to Inter-library loan and the A-B-C Express are additional services provided by Library Services that support MHS students in their research efforts. Our college has a designated research librarian liaison. Ann Hallyburton is a tremendous asset to both faculty and students. She is proactive and responsive to the information needs of all our programs (Research Help and Reference). Her enthusiasm and expertise in the research process make her a regular ‘guest speaker’ in the MHS Research Methodology course. She is also a ‘guest facilitator’ in online discussion sections of several other MHS courses. The director of the WCU Writing Commons is a frequent guest in MHS classes. Students have online access to writing resources and tutor services on an appointment basis. With a strong focus on writing and research, these resources are invaluable to students.
WCU’s Institutional Review Board (IRB) supports the increased emphasis on student research by providing online IRB guidelines, samples and forms. A CHHS faculty is on the IRB, a liaison with CHHS students/faculty for the purpose of initial study review, consultation and class presentations. This university service provides students with up-to-date information on IRB procedures, including the required Collaborative Institutional Training Initiative (CITI) online training of all investigators of human subjects; students and faculty. CITI training is required before investigators can have requests reviewed by the IRB. Research methods also supported by the availability of Qualtrics, survey software for use by faculty and sponsored students following IRB approval. Training on Qualtrics is available online through a series of tutorials.

Access to statistical software is a critical issue for faculty and students. Currently, WCU has a limited number of licenses for the ‘network’ version of Statistical Package for the Social Sciences (SPSS). This is limited to faculty and certain labs. A ‘commuter’ license is available for ‘off campus’ use on an ‘as needed’ basis, for faculty only. With the required research project or thesis, gaining access to analysis software is important. This unduly burdens certain students who are not ‘local’ to the area. One option being explored is a tuition differential assessed to each MHS student to provide an SPSS Graduate Pack with a 4-year license. This timeframe would encompass all but a very, very few of our students.

The MHS program has a Development Fund through the WCU Foundation that is used to support program activities, including but not limited to, defraying travel expenses for student research presentations at state meetings, purchase of software and DI selection committee luncheons. Beginning in January 2015, 2.0 FTEs of administrative support will be available to all seven SHS programs. These assistants have school-wide duties including budget, supply ordering, input of new course schedules, contracts and more. Faculty members do their own clerical work or enlist graduate assistants if available.

With a focus for MHS faculty on teaching and learning activities, tough choices must be made among increasing administrative duties, faculty research agendas and the central mission of the University, ‘teaching and learning’. (Related Items – Appendix 7)