

Program Assessment: *Annual Report*

Program(s): B.S. Health Management

Department: N/A – Undergraduate Public Health Programs

College/School: College for Public Health and Social Justice

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1. Which program student learning outcomes were assessed in this annual assessment cycle?

Following the assessment plan, program LOs 1-3 were assessed in AY2017-2018.

LO1: Describe the impact of social, cultural, economic, financial, and political factors on health care organizations.

LO2: Demonstrate problem solving skills.

LO3: Understand and explain the application of relevant information technology, including databases, in health care.

Additionally, all program LOs (1-10) were assessed indirectly on the graduation exit survey.

2. What data/artifacts of student learning were collected for each assessed outcome? Were Madrid student artifacts included?

LO1 was assessed using data from several classes as follows:

- HMP1300 – Midterm and final exam questions
- HMP4200 – Homework assignments, midterm exam questions, case studies
- HMP4500 – Midterm and final exam questions

LO2 was assessed using data from several classes as follows:

- HMP1300 – Midterm and final exam questions
- HMP2500 – Discussion board question
- HMP4200 – Homework assignments, midterm exam questions, case studies
- HMP4500 – Midterm and final exam questions

LO3 was assessed using data from several classes as follows:

- HMP1300 – Midterm and final exam questions
- HMP4500 – Midterm and final exam questions

LOs1-10: Graduation exit survey self-report on achievement of LOs using a 5-point Likert Scale

Madrid artifacts were not included in the assessment; the focus is largely on upper-level coursework, and with the exception of HMP1300, no other HMP courses are offered in Madrid.

3. How did you analyze the assessment data? What was the process? Who was involved?

NOTE: If you used rubrics as part of your analysis, please include them in an appendix.

The faculty teaching each course from which data were gathered (see Q2) conducted the first level of assessment (e.g. graded exam questions/homework assignments, reviewed case studies/discussion board responses). The process used by the course instructors is explained below. Data were provided to the Program Director, who reviewed findings in aggregate and identified patterns, strengths, and gaps.

LO1: The instructor for HMP1300 and HMP4500 identified a sample of exam questions that mapped to LO1

(Appendix A) and calculated the percentage of students that responded to each question correctly. The HMP4200 instructor identified exam questions, case studies, and homework assignments that related to LO1; the instructor then calculated an achievement percentile for the combination of assignments (total points earned / total possible points * 100) and determined learning outcome achievement as none/limited, beginning, intermediate, and advanced based on rubric using the calculated percentile (Appendix A).

LO2: The instructor for HMP1300 and HMP4500 identified relevant exam questions (Appendix B) and used the same process as for LO1. The HMP2500 instructor identified a discussion question that mapped to LO2 and determined learning outcome achievement based on a rubric (Appendix B) that considered the student's ability to reflect on background reading; use authoritative sources to substantiate the response; and add discussion to the course. The instructor for HMP4200 used the same process as for LO1 (Appendix B).

LO3: The instructor for HMP1300 and HMP4500 identified relevant exam questions (Appendix C) and used the same process as for LO1.

LO1-10: The **graduation exit survey** was administered in April/May 2018. Students reported their perceived achievement of LOs 1-10 on a scale of 1 (very uncomfortable) to 5 (very comfortable) (Appendix D). A GA analyzed the data for average score on each LO. Our goal was that the average perceived level of achievement reported by students would be 4.0 or higher (comfortable/very comfortable).

4. What did you learn from the data? Summarize the major findings of your analysis for each assessed outcome.

NOTE: If necessary, include any tables, charts, or graphs in an appendix.

A review of assessment data for LO1-3 indicated that the majority of students generally demonstrated achievement of each LO. There was some evidence that several concepts tested in advanced coursework demonstrated a lack of achievement of part of an LO (e.g. <80% students answered a particular question correctly), suggesting a possible need to review how these concepts are introduced/learned in early-level courses. However, because in these situations a single exam question was used to assess understanding of a concept represented by an LO, it isn't clear if that there is a deficiency in understanding the concept, or if the concept was understood when assessed in multiple ways. Additionally, as data were gathered from introductory, intermediate, and advanced courses, there are likely unique groups of students in each class; thus, it is not possible to draw conclusions about trends in achievement for a specific group of students from the start to end of the program. Lastly, the data reported by faculty largely focused on grades earned for assignments, which reflects more than the assessment of a particular LO3; this latter observation will lead to some assessment process changes for 2018-2019 (see Q5).

LO1: Overall, there was a high level of achievement of LO1 as evidenced by the percentage of students who responded correctly to exam questions and by the achievement percentage earned across relevant assignments. However, there was variation in the degree of achievement, specifically as evidenced by HMP4200, a course typically taken by junior and senior students. Specifically:

- Evaluation of HMP1300 exam questions found that each question was correctly answered by >80% of students, with most questions answered correctly by 90-100% of students. While nearly 100% students correctly answered questions that queried terms and basic concepts, a lower percentage (83%) correctly answered a question that required consideration of multiple concepts (e.g. economic, system, legal). However, this finding is to be expected in an introductory level course that focuses on teaching basic terms/concepts, setting a foundation for application in higher level courses.
- Evaluation of the HMP4200 LO1 "achievement percentile" found that the majority of students (77%, n=37) were at advanced levels of achievement; only 6.25% (n=3 of 48) failed to demonstrate LO1 achievement.
- Evaluation of HMP4500 exam questions found that each question was correctly answered by >80% of students. However, a lower portion of students (85%) understood approaches to assessing multiple factors related to management of healthcare organizations vs. knowledge/application of single factors.

LO2: Overall, students demonstrated a solid foundation for LO2 achievement through exam questions in introductory coursework (HMP1300). When illustrating problem solving skills via discussion (HMP2500), just over half of students demonstrated LO2 achievement. As coursework advanced, students demonstrated LO2 achievement via exam questions (HMP4500). However, as students went beyond exams and demonstrated problem solving skills through homework problems and case studies (HMP4200), just over half demonstrated advanced LO2

achievement; nearly 25% were at beginning levels and 6% failed to demonstrate LO2 achievement.

- Evaluation of HMP1300 exam questions found that each question was correctly answered by >80% of students, with most questions at >90% correct response.
- Evaluation of HMP2500 discussion board data demonstrated that 58% of students (n=23) achieved LO2 and 43% (n=17) did not achieve LO2. This may indicate challenges in either articulating explanations or a gap in foundational knowledge needed to articulate explanations. However, as this is an early-stage course, it is expected that students will still be building these skills and knowledge.
- Evaluation of the HMP4200 LO2 “achievement percentile” found that the just over half of students (60%, n=29) were at advanced levels of achievement; 10% (n=5) were at intermediate levels of achievement; 23% (n=11) were at beginning levels of achievement; and 6.25% of students (n=3 of 48) failed to demonstrate achievement. The substantial portion at beginning levels of achievement may indicate a lack of foundational knowledge (limiting the ability to apply concepts/skills) for some students; however, as this course has pre-requisites offered outside the College, it is not possible to look at how achievement in those pre-requisite courses (beyond grades) may affect LO2 achievement in HMP4200.
- Evaluation of HMP4500 exam questions found that all but one question was correctly answered by >80% of students, with most at 100% correct response. There was one question in which only 67% of students responded correctly; this question tested a definition (rather application of a concept), which suggests that the term/concept may need to be defined and emphasized more in an earlier level course (given that HMP4500 a senior-level course).

LO3: Overall, students demonstrated a high level of achievement of LO3 in both foundational and advanced coursework (HMP1300, HMP4500 respectively) as assessed via exam questions. Specifically:

- Evaluation of HMP1300 exam questions found that each question was correctly answered by >93% of students. Consistent with an introductory level course, these questions tested knowledge of definitions and concepts, setting the foundation for application in later coursework.
- Evaluation of HMP4500 exam questions found that all questions but one were answered correctly by >90% of students. One question was only answered correctly by 67% of students; this question tested knowledge of a definition (rather than application of a concept), which suggests that the concept may need to be defined and emphasized more in an earlier level course (given that HMP 4500 is a senior-level course).

Graduation exit survey results: Upon reflecting on their BS-Health Management experience, graduating seniors reported that they agreed/strongly agreed that they felt comfortable with achievement of all program LOs (Appendix D). Although an indirect method of assessment, it is valuable to see that graduating seniors have confidence in their abilities and that their perceptions are generally consistent with the direct measures reported above.

5. How did your analysis inform meaningful change? How did you *use the analyzed data to make or implement recommendations for change* in pedagogy, curriculum design, or your assessment plan?

As this is the first year the Health Management major had program LOs and the first year assessment was done, findings will be reviewed for trends as data collection continues in the future. Thus, at this time, no changes are being made in pedagogy due to limited data. However, changes in curriculum design were made (separate from the assessment process), and changes are anticipated in the assessment process moving forward, as described below.

Changes in Curriculum Design: Although not based on AY2017-2018 LO assessment, three curricular changes were made for AY2018-2019 due to review of course content (ACCT2200 as a pre-requisite for HMP4200) and relevance of core courses to the major and program LOs (BST3100, EPI4000). Specifically:

1. The statistics requirement was moved from Core to Required Major Coursework and BST-3100 (Applied Biostatistics I) is now required. Previously, students selected from one of several statistics courses (i.e., OPM2700, PSY2050, MATH1300, STAT1300, BST3100). However, BST3100 is a relatively new CPHSJ-offered course that presents statistical concepts and skills within a public health framework, relevant to the health management major. Additionally, as a CPHSJ-offered course, BST3100 can be mapped to BSHM LOs (something not possible with a course offered outside of the College).
2. The epidemiology requirement was moved from Natural Sciences Core to Required Major Coursework and

EPI4000 (Foundations of Epidemiology) is now required. Not only is Epidemiology not a natural science, but it provides a foundation for data collection and surveillance relevant to Health Management, within the context of both practice and research. Previously, students selected a course from one of two options (ORES2300 or EPI4000). However, as a relatively new CPHSJ-offered course, EPI4000 can be mapped to BSHM LOs (something not possible with a course offered outside of the College) and thus is now required.

3. ACCT2220 was removed from the Core. Previously, this course was a pre-requisite for HMP4200, a required major course. However, upon review of HMP4200 content, it was determined that ACCT2220 is not needed in order for students to be successful in HMP4200.

Assessment Plan Changes: Assessment is a time-intensive process, particularly for larger classes and for classes taught by adjunct faculty. As faculty time/resources are limited, and as a number of BS-Health Management courses are taught by adjunct faculty, the Undergraduate Public Health Programs will explore dedicating an existing Graduate Assistant (GA) in AY2018-2019 to support program assessment. For example, under supervision from the Program Director and in collaboration with course instructors, the GA can develop an Excel spreadsheet for each class in which assessment data will be collected, with selected exam question results or LO assessment findings abstracted from assignment rubrics for each student; data can be collected/compiled at pre-determined points in the semester/year rather than having faculty submit results to the Program at the conclusion of the academic year. The more detailed level of exam data that can be recorded in this manner will allow for the Program Director to review portions of correct responses to individual questions that reflect LOs as well as aggregate data from multiple questions that reflect different components of a given LO; this approach was suggested by Kathleen Thatcher, University Assessment Coordinator, in a recent conversation with the Program Director.

Additionally, the Program Director will work with the Department Chair and the new adjunct faculty member teaching the senior “capstone” course to discuss assessment data that can be pulled from student artifacts as the adjunct plans the course. Similarly, the Program Director will meet with faculty to discuss creating specific rubrics to look at LO achievement rather than use the total score earned on an assignment/case study/exam (as currently done in many courses).

6. Did you follow up (“close the loop”) on past assessment work? If so, what did you learn? *(For example, has that curriculum change you made two years ago manifested in improved student learning today, as evidenced in your recent assessment data and analysis?)*

As the BSHM Program Learning Outcomes were developed in AY2016-2017, they were first assessed in 2017-2018. Thus, there was no opportunity to “close the loop” on past assessment work. However, the feedback from the University review of the 2017 Assessment Report was received in May 2018. After reviewing the feedback, the Program Director engaged in a lengthy conversation with Kathleen Thatcher, University Assessment Coordinator, to discuss ways to address some of the feedback received.

University feedback on the AY2016-2017 Assessment Report noted that the LOs are largely difficult to distinguish from a general management degree (as compared to health management); the LOs ask for several levels of learning; there are too many LOs (10 vs. the 4-5 generally recommended by the University), which may create more of a “to-do” list than set broader aims for the major. As a result, the Program Director talked with the Department Chair and Curriculum Director about revisiting the number and components of the LOs, as well as the need to make them more specific to the health management major. In conjunction with the Department and Program Director, the Curriculum Director will work with the on revisions to address some of these concerns during AY 2017-2018.

There was a concern from University reviewers that “embedded exam questions may not be able to adequately capture higher level learning such as application/analyze.” Efforts will be made to utilize exam questions that ask students to apply and/or analyze concepts and information as part of AY 2018-2019 assessment. Additionally, there were some challenges with instructor coverage for the senior capstone course (HMP4600) in AY 2017-2018 that prevented assessment data collection; however, as mentioned above, the Program Director will meet with the Department Chair and new adjunct teaching to plan for assessment of LOs in HMP4600 in AY 2018-2019.

Finally, as requested by University reviewers, a map of LOs to required major courses was requested and is included with this current report.

Lastly, one important lesson learned during this first year of assessment was the time-intensive nature of assessment. This resulted in a need to revisit the assessment process for AY2018-2019 (see Q5 above).

IMPORTANT: Please submit any revised/updated assessment plans to the University Assessment Coordinator along with this report.

There was a typo on the Assessment Plan submitted in 2017; the plan indicated that LOs 1-3 would be assessed in 2017-2018, 2018-2019, and 2019-2020. The plan has been revised to indicate the following schedule:

- *2017-2018 – LOs 1, 2, and 3*
- *2018-2019 – LOs 4, 5, and 6*
- *2019-2020 – LOs 7, 8, 9, and 10*

Thus, a revised plan reflecting these corrections is being submitted with this report.

Appendix A:
Exam Questions and Rubrics from HMP1300, HMP4200, and HMP4500 Used to Assess LO1

BS-HM LO1: Describe the impact of social, cultural, economic, financial, and political factors on health care organizations.

HMP1300 Exam Questions

- **Midterm exam Q1:** Which of the following features/aspects are associated with EMTALA:
 - a. Triage
 - b. Patient dumping
 - c. Charity care
 - d. Federally qualified health centers (FQHCs)
 - e. All of the above
- **Midterm exam Q2:** The “graying” of the U.S. population as it relates to healthcare means that
 - a. We are becoming healthier as a nation because older people are now exercising more.
 - b. Although our population is older, healthcare costs are reduced because we are healthier as we age
 - c. The U.S. will be confronted with more chronic health issues because as we age, more chronic health conditions develop. This will result in more stress on the U.S. healthcare system.
 - d. None of the above.
- **Midterm exam Q3:** Which of the following factors rarely impacts the utilization of healthcare services by the residents of a community?
 - a. Social
 - b. Culture
 - c. Economic
 - d. Financial
 - e. Political
 - f. None of the above
- **Final exam Q1:** Due to the increasing number of malpractice claims that are filed by patients against their providers, recommendations for system reform has been suggested including:
 - a. Alternative dispute resolution which is a process to resolve these types of claims outside the judicial system.
 - b. Neo-no-fault insurance programs which encourages out of court settlements.
 - c. Placing limits on the \$ awards for noneconomic damages.
 - d. None of the above
- **Final exam Q2:** Which statement is correct about the Emergency Medical Treatment and Active Labor Act (EMTALA)?
 - a. It is enforced by the Centers for Disease Control and Prevention.
 - b. It is enforced by the U.S. Public Health Service.
 - c. This Act was passed as part of the Hill Burton Act.
 - d. This Act is also called the “anti-patient dumping” act because it prevents hospitals from not treating patients in need of emergency care.
- **Final exam Q3:** Social responsibility focuses on:
 - a. Government and nongovernmental organizational attempts to address inequities and disparities in access to and the provision of services that may exist among certain population groups.
 - b. The economic status of healthcare organizations to ensure they help consumers.
 - c. The social relationship that exists between the consumer and the physician.
 - d. None of the above are suitable answers.

Appendix A (cont'd):
Exam Questions and Rubrics from HMP1300, HMP4200, and HMP4500 Used to Assess LO1

BS-HM LO1: Describe the impact of social, cultural, economic, financial, and political factors on health care organizations.

HMP4200 Components and Rubric

Percentile of achievement = (total points earned / possible points) * 100

% = (HW#1 + HW#2 + HW#3 + HW#4 + HW#5 + Case Study#1 + Case Study#2 + Case Study#3 + Midterm)/650 * 100

- 0 to <80% = no/limited competency (N)
- 80% to <85% = beginning competency (B)
- 85% to <93% = intermediate competency (I)
- 93% to 100% = advanced competency (A)

HMP4500 Exam Questions

- **Midterm exam Q1:** Bound rationality refers to the tenets imposed on decision making by costs, human abilities, technology and physical constraints such as floor plans that are difficult to alter. (T/F)
- **Midterm exam Q2:** The Pay Off Table shows the expected pay offs for each alternative under various assumptions related to the cause(s) of the problem or the circumstance(s) creating the opportunity. T/F
- **Midterm exam Q3:** Team building across departments is an indirect benefit gained from appointing the right members to serve on a Value Stream Mapping team. T/F
- **Final exam Q1:** It is important that hospitals routinely reallocate staff based on patient acuity. T/F
- **Final exam Q2:** Bounded rationality refers to the tenets imposed on decision making by costs, human abilities, technology, and physical constraints such as floor plans that are difficult to alter. T/F
- **Final exam Q3:** Multiple software programs exist to measure and document varying acuity levels among patients receiving acute care. In general the two types are referred to as factor analysis and prototype analysis. T/F

Appendix B:
Questions and Rubrics from HMP1300, HMP2500, HMP4200, and HMP4500 Used to Assess LO2

BS-HM LO2: Demonstrate problem solving skills.

HMP1300 Exam Questions

- **Midterm exam Q1:** Many health care initiatives are evaluated using the Iron Triangle—a concept that focuses on the balance of three factors—quality, cost and accessibility to healthcare. T/F
- **Midterm exam Q2:** Social regulation focuses on:
 - a. Government and nongovernment actions within healthcare that address gaps in services resulting for an economic system based on fee for service.
 - b. The economic status of healthcare organizations to ensure they maintain viability.
 - c. The social relationship that exists between the patient and the physician.
 - d. None of the above.
- **Midterm exam Q3:** Urgent/emergent care centers were established in the 1970s-present day because:
 - a. They provided an opportunity for healthcare consumers who need after-hours medical care but the situation is not life threatening.
 - b. They established an opportunity to provide alternative care treatment such as yoga and alternative vitamin therapy.
 - c. They provided an opportunity for healthcare consumers to make appointments to receive ongoing care in their neighborhood.
 - d. All of these statements are true.
- **Final exam Q1:** The determinants of health include external factors within the immediate environment of an individual that may indirectly influence the rates to be charged by insurance companies. T/F
- **Final exam Q2:** Managed care refers to the cost management of health care services utilization by controlling who the consumer sees and how much the service costs. T/F
- **Final exam Q3:** Which of the following are cost control measures of managed care organizations (MCO's)?
 - a. Restrictions on provider choices.
 - b. Establishing a gate keeper or primary care provider as the coordinator of their patient's services.
 - c. Utilization review.
 - d. All of the above statements are true.

HMP2500 Component and Rubric

- **Discussion Board Question:** Should physicians be allowed to smoke recreational marijuana in states where it is legal to do so?

Discussion Board Rubric

Points	Criteria
4	The comment is original, relevant, demonstrates that you read and reflected upon the assigned material (or your colleague's point of view in the case of a response), and is well written. Four point comments add substantial discussion to the course and stimulate additional thought about the issue. Authority for sources considered beyond the reading is provided.
3	The comment lacks at least one of the above qualities but is above average in quality. A three point comment makes a significant contribution to our understanding of the issue being discussed.
2	The comment lacks two or three of the required qualities. Comments which are based solely upon personal opinion or personal experience without reference to assigned readings and other authoritative sources often fall within this category.
1	The comment fails to demonstrate analysis and/or reflection on assigned readings and/or posts of colleagues. However, one point comments may provide important class participation and contribute to a collegial atmosphere.
0	The comment adds no value to the discussion.

Appendix B (cont'd):
Questions and Rubrics from HMP1300, HMP2500, HMP4200, and HMP4500 Used to Assess LO2

BS-HM LO2: Demonstrate problem solving skills.

HMP4200 Components and Rubric:

Percentile of achievement = (total points earned / possible points) * 100

% = (HW#1 + HW#2 + HW#3 + HW#4 + HW#5 + Case Study#1 + Case Study#2 + Case Study#3 + Case Study#4 + Midterm)/750 * 100

- 0 to <80% = no/limited competency (N)
- 80% to <85% = beginning competency (B)
- 85% to <93% = intermediate competency (I)
- 93% to 100% = advanced competency (A)

HMP4500 Exam Questions

- **Midterm exam Q1:** Two advantages of Value Stream Mapping are that it can be done quickly and to a large extent is an automated process. T/F
- **Midterm exam Q2:** The Japanese word “muda” is a term that is used to describe human activity that utilizes resources and creates no value for the patient or the program/process. T/F
- **Midterm exam Q3:** A Single-Line and Single-Phase queing system is more efficient that a Single-Line and Multiple- Phase queing system
 - a. Always
 - b. Most of the time
 - c. Very seldom
 - d. Never
- **Final exam Q1:** What are some of the patterns you look for in a control chart:
 - a. Points outside the control limits, upward or downward trends, points near the control limits
 - b. Attributes, samples, points
 - c. DMAIC, Lean, Six Sigma
 - d. Upper control limit, grand mean, range
- **Final exam Q2:** Which of the following is not a detractor from efficiency.
 - a. Employee morale
 - b. Patient acuity
 - c. Variability in census
 - d. Employee turnover
 - e. None of the above
- **Final exam Q3:** Workload management is a term used to describe:
 - a. Staffing, scheduling and reallocation of resources in order to achieve efficiency and effectiveness.
 - b. The development of an approach to consistently achieve exceptional employee satisfaction.
 - c. Working with materials management to achieve the lowest price for supplies used in providing patient care.
 - d. All of the above

Appendix C: Questions and Rubrics from HMP1300, and HMP4500 Used to Assess LO3

BS-HM LO3: Understand and explain the application of relevant information technology, including databases, in health care.

HMP1300 Exam Questions

- **Midterm exam Q1:** The implementation of an electronic health record and the associated data base will enable health care providers and public health officials to share information about a patient's health history and status in a more efficient and effective manner. T/F
- **Midterm exam Q2:** Surveillance systems are used to collect data on the incidence and prevalence of disease and type injuries and thus manage disease outbreaks and more generally the prevalence of disease. T/F
- **Midterm exam Q3:** John Snow's approach to define "environment" in his classic epidemiology study was developing and analyzing a data base based on collecting survey data from individuals displaying a common set of symptoms. T/F
- **Final exam Q1:** Bundled payments and Diagnostic Related Groups (DRG's) are reimbursement methodologies which were introduced as part of Obamacare - PPACA. T/F
- **Final exam Q2:** Self-funded or self-insurance programs are health insurance programs that are implemented and controlled by the company itself. They retain all of the risk in providing health insurance to their employees by paying any claims from their employees. Typically both the employee and employer pay into the fund in the form of premiums T/F
- **Final exam Q3:** According to the National Institute of Mental Health, the following is an accurate statement regarding certain population subgroups and mental health issues:
 - a. One in ten children may suffer from persistent feelings of sadness.
 - b. Pseudo dementias are most common among women of child bearing age.
 - c. It is very easy to diagnose children with mental health disorders because they are yet to become aware of the stigma that may be associated with mental illness.

HMP4500 Exam Questions

- **Midterm exam Q1:** Performance metrics are unrelated to the development of process maps, current state maps and future state maps. T/F
- **Midterm exam Q2:** The inability in absolute amounts to know the outcome of certain "states of nature" is referred to as sub-optimization. T/F
- **Midterm exam Q3:** Using historical costs is the preferred method of determining benchmarks to be used in developing performance standards/metrics. T/F
- **Final exam Q1:** Check sheets, 1 of the 7 quality control tools recommended by Ishikawa, are structured forms used by teams to assign accountability and monitor team performance including the meeting of deadlines. T/F
- **Final exam Q2:** When interpreting an R chart a widening of the points from left to right can mean:
 - a. The R chart is incorrect and must be re-sampled
 - b. Statistically the number of samples is too small
 - c. The process is in control
 - d. The average range of the sample points is increasing and the process is becoming out of control
- **Final exam Q3:** When using a control chart you are primarily looking for what type (s) of variation (s):
 - a. Natural variation
 - b. Assigned variation
 - c. All of the above
 - d. None of the above

**Appendix D:
Graduation Exit Survey Results for Program Learning Outcomes 1-10**

Context: A total of 25 Health Management majors submitted a graduation exist survey, but only 20 (80%) answered the LO1-7 and LO9-10 questions; 19 students (76%) answered the LO8 question.

Response Options:

5 = Very comfortable

4 = Somewhat comfortable

3 = Neither comfortable nor uncomfortable

2 = Somewhat uncomfortable

1 = Very uncomfortable

Program Learning Outcome #	How comfortable do you feel with your ability to....	Average
1	Describe the impact of social, cultural, economic, financial, and political factors on health care organizations	4.6
2	Demonstrate problem solving skills	4.7
3	Understand and explain the application of relevant information technology, including databases, in health care	4.35
4	Distinguish between and use quantitative and qualitative data analysis methods	4.45
5	Understand the importance of and demonstrate the ability to work with others to achieve organizational goals	4.65
6	Apply the principles and core functions of management and decision theory	4.6
	Identify and articulate the diverse values and needs of relevant stakeholders	4.5
8	Develop, organize, and express ideas and information clearly	4.79
9	Describe motivational strategies that elicit desired behaviors and inspire others toward a shared vision	4.55
10	Identify and use appropriate communication strategies based on audience characteristics and communication goals	4.75