

Program-Level Assessment: Annual Report

Program Name (no acronyms): BS in Health Management	Department: Undergraduate Public Health Programs
Degree or Certificate Level: BS	College/School: CPHSJ
Date (Month/Year): Dec 2022	Assessment Contact: Lauren Arnold
In what year was the data upon which this report is based collected? AY2021-2022	
In what year was the program's assessment plan most recently reviewed/updated? 2022	
Is this program accredited by an external program/disciplinary/specialized accrediting organization? Yes - CEPH	

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please list the full, complete learning outcome statements and not just numbers, e.g., Outcomes 1 and 2.)

This assessment cycle focused on Program Learning Outcomes (PLOs) 1, 2, 3, 4 and 5:

PLO1: Describe the impact of social, cultural, economic, financial and political factors on health care organizations

PLO2: Understand and explain the application of relevant information technology, including databases, in health care

PLO3: Understand the importance of and demonstrate the ability to work with and at times motivate others to achieve organizational goals

PLO4: Apply the principles and core functions of management and decision theory

PLO5: Based on audience characteristics develop, organize and express ideas and information clearly

All PLOs were assessed as we are in the process of our CEPH self-study in preparation for our CEPH re-accreditation visit in April 2023.

2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail and identify the course(s) in which they were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

PLO2 was assessed in two courses, HMP1300 (intro course) and HMP4500 (senior level course), using data from exam questions (Appendix A). PLO5 was assessed in EPI4000 via a fact sheet assignment that assessed organization of information/data, written communication, and visual communication; the target audience for this assignment is the general community. These courses are offered in-person course and are only taught on the St. Louis campus.

PLOs1-5 were also assessed on the graduation exit survey.

3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

The faculty teaching HMP1300 and HMP4500 wrote and graded exam questions that were mapped to PLO2 (Appendix A). A sample of these questions were identified and the percentage of students who responded to each question correctly was calculated. Data were aggregated and provided to the Program Director.

The faculty teaching EPI4000 used the following rubric to assess organization of information/data and presentation of information in written and visual formats:

	3 (Excellent)	2 (Good)	1 (Poor)
Organization PLO: BSHM5	Information is extremely well organized/ easy to locate; layout is organized and creative making it easily read/viewed	Information generally organized/easy to locate; layout of some sections is disorganized, making it harder to read/viewed	Information is poorly organized/difficult to locate; layout appears unfinished or disorganized, making it difficult to read/view
Written communication: Understanding epi data CLO: LO4, LO5 PLO: BSPH1, BSPH2, BBST3, BSBST4, BSHM5	Epi data are clearly explained in a way demonstrates substantial understanding and application of terms beyond a rewording of definitions	Epi data are explained in a way that demonstrates basic understanding of terms with some application	Epi data are only presented numerically or written explanations simply restate findings using the terms (e.g. "Incidence is...")
Visual communication: Graph/Table of epi data CLO: LO4 PLO: BSPH1, BSPH2, BBST3, BSBST4, BSHM5	Graphic original, well placed, and substantially enhances text/assists in understanding content	Graphic original, generally well placed, and generally enhances text/ assists in understanding content	Graphic not original, poorly placed, fails to enhance text/assist in understanding content

A sample of students was identified and scores abstracted from their project rubrics. Averages for each of the three domains were calculated. The goal is for an average of "2.0 (good)" in each category.

The Graduation Exit Survey was administered in April/May 2022 and assessed student perception of PLO achievement with the following questions:

How comfortable do you feel about your ability to:

- Describe the impact of social, cultural, economic, financial and political factors on health care organizations
- Understand and explain the application of relevant information technology, including databases, in health care
- Understand the importance of and demonstrate the ability to work with and at times motivate others to achieve organizational goals
- Apply the principles and core functions of management and decision theory
- Based on audience characteristics develop, organize and express ideas and information clearly

Response options were coded as: Very comfortable (5), somewhat comfortable (4), Neither comfortable nor uncomfortable (3), somewhat uncomfortable (2), very uncomfortable (1). Our goal was that the average perceived level of achievement reported by students would be 4.0 or higher (very comfortable/somewhat comfortable).

4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

PLO2:

- Evaluation of HMP1300 exam questions from two sections of the course found that the percentage of students who answered each question correctly ranged from 78.1% to 93.2%. Students performed better on questions that queried basic concepts and terms (89% correct, 93.2% correct). Examination of the question that had a lower portion of correct answers (78.1%) shows that it may have been confusing to students (e.g. it referred to external factors in an internal environment), and as such, the lower response may indicate student confusion over question wording rather than a larger misunderstanding of concepts.
- Evaluation of HMP4500 exam questions found that the percentage of students who answered each question correctly ranged from 68% to 100%. Students performed better on questions that tools and processes (86%, 93%, 100%) with lower performance on a question that queried methodology (68%).
- In general, the trend was for higher achievement of the outcome in the 4000-level class than in the 1000-level course. This is to be expected, as the foundation is laid in the introductory course with ability to continue learning and applying skills as the courses progress.

PLO5: Evaluation of the ability to organize and present information resulted in the following mean scores:

- Organization: 2.75 (out of 3.0)
- Written communication: 2.5 (out of 3.0)
- Visual communication: 2.5 (out of 3.0)
- Based on this assessment, overall, students performed better than the goal of “good” level of achievement, with organization approaching the “excellent” level. This indicates that they are able to take health-related information and present it in an organized way that makes it easy for the target audience to find the information. They are able to explain the information to the target audience in a way that demonstrates an understanding of the information. Additionally, they can visually display data/information in a way that adds to the text.

Graduation Exit Survey/Student Assessment: Graduation exit survey data found that 100% of graduates reported they were somewhat/very comfortable with their level of achievement of each PLO (1-5). The average and median scores for each PLO were:

PLO1: 4.7 mean, 5.0 median (5.0 scale)

PLO2: 4.5 mean, 5.0 median (5.0 scale)

PLO3: 4.9 mean, 5.0 median (5.0 scale)

PLO4: 4.6 mean, 5.0 median (5.0 scale)

PLO5: 5.0 mean, 5.0 median (5.0 scale)

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

From these results, we continue to see that the PLO2 foundation built in the intro class is strengthened by the conclusion of the BSHM curriculum. Additionally, students have a solid ability to organize and express information/ideas to a target audience (PLO5). By graduation, BSHM students report a high level of comfort with all five PLOs, indicating a confidence in their abilities as they apply to graduate school, begin professional training (e.g. medical school, law school), or enter the workforce.

6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss these results and findings from this cycle of assessment?

This information is shared with the Steering Committee; committee members are giving an opportunity to comment and discuss at Steering Committee meetings.

B. How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

Changes to the Curriculum or Pedagogies

- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan

- Student learning outcomes
- Artifacts of student learning
- Evaluation process

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of these findings.

No action at this time.

If no changes are being made, please explain why.

Our College is currently going through the self-study for our CEPH re-accreditation. We do not want to make any changes that will conflict with self-study documents already submitted and do not want to make any curricular changes in general until we have heard from our accreditors and until we know of any curricular changes that might be required due to accreditation feedback.

7. Closing the Loop: Review of Previous Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years as a result of assessment data?

Previously, several major-related "core" courses were removed from the curriculum as the BSHM core was adapted to the new University Core. These were courses that supplement the BSHM curriculum but do not provide a foundation needed to progress with major courses.

B. How has this change/have these changes been assessed?

As the new University core will be implemented in Fall 2022, it will be some time before we are able to see if removal of these courses (e.g. POLS1100) impacts achievement of any of the PLOs.

C. What were the findings of the assessment?

N/A – see above

D. How do you plan to (continue to) use this information moving forward?

As we continue to assess the PLOs, if any show deficiencies that are related to content of removed courses, the curriculum will be evaluated to see how that content can be worked into required major courses.

IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document.

Appendix A: Exam Questions Mapped to PLO2

***Please remove this Appendix before the Assessment Report is published online on University website; publishing these questions online means that they can't be used again for future assessment, as students would be able to see the questions and look up answers, thus compromising integrity of using the questions for future assessment purposes.**

Course	Questions
HMP-1300	The determinants of health include external factors within the external environment of an individual that may indirectly influence the rates to be charged by insurance companies.
	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.
	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 statements are accurate.
HMP-4500	In control charting the nature of the variables of the product or processes that are to be analyzed are continuous in dimension.
	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.
	The 7 QC tools developed by Ishikawa are: a. Check sheets, flowcharts, cause-and-effect diagrams, histograms, Pareto diagrams, scatter diagrams, and control charts b. Statistics, slow processing, cause-and-effect diagrams, histograms, Pareto diagrams, bar graphs, and control charts c. MRP sheets, mean median, mode dispersion, standard deviation diagrams and control charts d. Benchmarking, handovers, change diagrams, histograms, pirate diagrams, tornado diagrams and charts
	Which of the following is the most common methodology used for developing a workload standard/metric that is internally generated: a. Normative use of an industrial engineer b. Normative use of staff and management team c. Historical data trended forward d. Focus group of staff/workers on the unit