

Program-Level Assessment: Annual Report

Program Name (no acronyms): Health Sciences Department: Clinical Health Sciences

Degree or Certificate Level: **B.S.** College/School: **Doisy College of Health Sciences**

Date (Month/Year): August 2023 Assessment Contact: Teresa Neal

In what year was the data upon which this report is based collected? AY 2022 - 2023

In what year was the program's assessment plan most recently reviewed/updated? AY 2021 - 2022

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? Yes, the Health Information Management Concentration within Health Sciences is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.): **CAHIIM accreditation** requires that the curriculum addresses 33 curricular competencies at the required Bloom's level of taxonomy. The CAHIIM accreditation complements the Program-Level Assessment.

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

Program Learning Outcome (PLO) #1

Students will communicate effectively to express issues in healthcare.

Program Learning Outcome (PLO) #2

Students will implement healthcare management tools to utilize project management techniques.

Program Learning Outcome (PLO) #3

Students will demonstrate effective team skills when collaborating on healthcare projects.

Program Learning Outcome (PLO) #4

Students will use research to defend conclusions related to healthcare issues.

Program Learning Outcome (PLO) #5

Students will exhibit ethical behaviors related to health sciences that are rooted in Jesuit values.

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, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques. HSCI 2100 Healthcare Management: Team Project Charter

To assess PLO #2, HSCI 2100 Healthcare Management students in Spring 2023 completed a Project Management tool called a Project Charter, as described in Appendix A.

HSCI 2100 Healthcare Management is only offered in person and on the Saint Louis campus. Students in this course include Health Sciences, Health Sciences – Health Information Management Concentration, Nuclear Medicine Technology, Magnetic Resonance Imaging, and Radiation Therapy majors.

There were 98 students enrolled in the course. The students were placed into 24 teams. Each team was comprised of between 1 and 5 students. Working as a team, the students prepared a Project Charter for their team project. To do this, the teams devised the project title, a description of their team project, the project objectives, the scope of the project, the project deliverables, a Gantt Chart, a team communication plan, the team member roles, responsibilities of the team members, project assumptions, risks, and limitations.

HSCI 4700 Quality Management Performance Improvement

Students in HSCI 4700 Quality Management and Performance Improvement were given an assignment to assess PLO #2. The class is only offered in seat and on the Saint Louis campus. Students in this course include Health Sciences, Health Sciences – Health Information Management Concentration, Nuclear Medicine Technology, Magnetic Resonance Imaging, and Radiation Therapy majors. There were a total of 84 students enrolled in this course.

After discussing the project management tool in class, students were assigned a Gantt Chart assignment. The assignment aimed to familiarize students with the project management tool. The assignment consisted of a simplified hospital construction project in which students had to create a Gantt Chart in Excel with the information provided. See Appendix B.

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

To assess PLO #4, HSCI 3700 Health Sciences, Health Sciences – Health Information Management Concentration, Nuclear Medicine, and Radiation Therapy majors in Fall 2022 completed a research proposal as described in Appendix C. This course was taught in two sections, and both included honors students. There were 48 students enrolled in Section 01. These students were grouped into 12 teams. There were 33 students enrolled in Section 02. These students were grouped into 10 teams. The teams were comprised of between 1 and 4 members. Teams develop a research question and then propose a research proposal to answer the question.

The course was taught in-seat apart from Friday R labs taught online.

The research proposal artifacts included a team contract, progress report, final report, oral defense, peer reviews, and team assessments.

The final research proposal components included all components of the progress report but in greater detail: The study's title that reflects the team's research question. A table of contents was included in every progress and final report. The abstract includes an overview of the study. The introduction to the study included a short paragraph introducing the research. This section also includes the research question and hypotheses, the study's purpose, and the study's design and overview. The review of the literature chapter begins with an overview of the literature, followed by previous studies, and ends with a summary of the previous studies. The methodology includes an overview of the study, the study design proposed, the population and sample, data collection, data analysis plan, ethical considerations, any bias that may occur, assumptions made, and the study's limitations. The references section included all literature and resources used to write the research proposal. *The instructor grades the final report based on a rubric. The rubric is included in Appendix C.*

The research proposal oral defense included a PowerPoint presentation of the final research proposal, and the presentation was recorded. The PowerPoint presentation includes a title slide, abstract, table of contents

(or agenda), chapter 1 introduction to the study, chapter 2 overview of the literature review, chapter 3 methodology slides, and a reference slide. *The instructor grades the oral defense based on a rubric. The rubric is included in Appendix C.*

HSCI 4700 Quality Management Performance Improvement

To assess PLO #4, HSCI 4700 Quality Management and Performance Improvement students in Spring 2023 completed a Lean: Quality of Care and Patient Satisfaction assignment. The class is only offered in seat on the Saint Louis campus. Students in this course include Health Sciences, Health Sciences – Health Information Management Concentration, Nuclear Medicine Technology, Magnetic Resonance Imaging, and Radiation Therapy majors. There were a total of 84 students in this course.

After introducing Lean Management and how patient satisfaction affects the quality of care in class, students were given a case study for evaluation. The case discussed wait times in a vascular interventional radiology (VIR) department and how it interrelates to quality of care. Students were instructed to analyze the scenario using the DMAIC (define, measure, analyze, improve, and control) and show their analysis for each step to illustrate how the problem can be enhanced to improve patient satisfaction.

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).

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques.

HSCI 2100 Healthcare Management: Team Project Charter

The course instructor evaluated each Team's Project Charter using the assessment rubric. The student teams scoring 45/50 points or higher were identified as achieving at least the "knowledge/comprehension" ranking as described using the PLO rubric. See Appendix A.

HSCI 4700 Quality Management Performance Improvement

The course instructor evaluated each Gantt Chart assignment using the assessment rubric. The course instructor identified students earning a score of 12 to 13/15 were identified as achieving the "application/analysis" ranking. Students earning a score of 14/15 or higher were identified as achieving the "synthesis/evaluation" ranking as described using the PLO rubric. See Appendix B.

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

The course instructor evaluated each Team's research proposal using the assessment rubric. The course instructor identified students earning a score of 85 points as achieving at least the "application/analysis" ranking. Students earning a score of 86 or higher were identified as achieving the "synthesis/evaluation" ranking using the PLO rubric. See Appendix C.

HSCI 4700 Quality Management Performance Improvement

The course instructor evaluated student case study analyses using the assessment rubric. The course instructor identified students earning a score of 8/10 were identified as achieving the "application/analysis" ranking. Students earning a scoare of 9/10 or higher were identified as achieving the "synthesis/evaluation" ranking using the PLO rubric. See Appendix D.

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)?

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques. HSCI 2100 Healthcare Management: Team Project Charter

Each Project Charter developed by the 24 teams was assessed. 100% of the teams received a ranking of "Knowledge," indicating comprehension of how the Project Charter is prepared and utilized as a tool in project management.

HSCI 4700 Quality Management Performance Improvement

Each Gantt Chart assignment was assessed. Using the PLO assessment rubric, 81 students (96%) in the class received a "Synthesis" ranking, indicating an ability to evaluate how Gantt Charts are constructed and utilized as a project management tool. There were 3 students (4%) that received an "Application" ranking, indicating that they were at the level where they could only demonstrate the utilization of the Gantt chart as a project management tool but had not progressed to the level of evaluation. The course instructor

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

The 22 teams across both sections' assignments were assessed based on the program learning outcomes. The peer reviews and team assessment received a ranking of "Knowledge/Comprehension," with 98% of teams indicating the ability to explain and justify their assessment of their peers and their team. 95% of teams received a ranking of "Synthesis/Evaluation," indicating the ability to draw conclusions and to defend these conclusions on the Progress Report, Final Research Proposal, and Oral Defense. 100% of teams received a "Knowledge/Comprehension" ranking, indicating comprehension of how the Team Contract serves as a charter to team organization.

HSCI 4700 Quality Management Performance Improvement

Each assignment was assessed. Using the PLO assessment rubric, 82 students (98%) in the class received a "Synthesis" ranking, indicating the ability to evaluate how patient satisfaction scores affect healthcare and analyze ways to improve patient scores. There were 2 students (2%) that received an "Application" ranking, indicating that they were at the level where they could only demonstrate the processes involved with the research related to healthcare issues but had not progressed to the level of evaluation.

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques. HSCI 2100 Healthcare Management: Team Project Charter

Based on the Project Charter assignment evaluation analysis, it was apparent that 100% of the student teams understood the Project Charter's composition, purpose, and use in Project Management. While we are pleased that 100% of the student teams achieved the ranking of knowledge/comprehension, the course instructor and Health Sciences faculty questioned whether or not the individual students understood how to utilize the Project Charter and expressed a goal to deepen the individual student's knowledge/comprehension.

The target was met for this artifact. After digging in deeper, the course instructor, the Health Sciences Program Director, the Health Information Management Concentration Program Director, and the Health

Sciences faculty determined the need to evaluate and potentially modify the assignment to increase the rigor and the PLO assessment rubric to enable a more granular analysis in future years.

HSCI 4700 Quality Management Performance Improvement

Based on the Gantt Chart assignment evaluation analysis, it was apparent that students could utilize Gantt Charts effectively as a project management tool. While we are pleased that 96% of students earned the ranking of Synthesis/Evaluation, the course instructor and Health Sciences faculty would like to revise the assignment to deepen student understanding of the application and value of Gantt Charts.

The target was met for this artifact. After digging in deeper, the course instructor, the Health Sciences Program Director, the Health Information Management Concentration Program Director, and the Health Sciences faculty determined the need to evaluate and potentially modify the assignment to increase the rigor and the PLO assessment rubric to enable a more granular analysis in future years to be better able to determine what needs to be done to help the students achieve the assignment outcome and meet the target ranking.

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

Based on the peer reviews and team assessment evaluation analysis, 98% of students understand these assignments' purpose in accountability to themselves and others in their teams. The Progress Report, Final Report, and Oral Defense evaluation analysis of 95% indicate that students can analyze and draw conclusions based on the processes involved in research as they relate to healthcare. The Team Contract evaluation analysis of 100% suggests that students can identify teamwork as essential to the processes engaged in research related to healthcare issues. While we are pleased with the assessment, the course instructor and Health Sciences faculty would like to evaluate the assignment and PLO assessment rubric to deepen the student's knowledge and understanding of a research proposal.

The target was met for this artifact. After digging in deeper, the course instructor, the Health Sciences Program Director, the Health Information Management Concentration Program Director, and the Health Sciences faculty determined the need to evaluate and potentially modify the assignment to increase the rigor and the PLO assessment rubric to enable a more granular analysis in future years to be better able to determine what needs to be done to help the students achieve the assignment outcome and meet the target ranking.

HSCI 4700 Quality Management Performance Improvement

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The target was met for this artifact. After digging in deeper, the course instructor, the Health Sciences Program Director, the Health Information Management Concentration Program Director, and the Health Sciences faculty determined the need to evaluate and potentially modify the assignment to increase the rigor and the PLO assessment rubric to enable a more granular analysis in future years to be better able to determine what needs to be done to help the students achieve the assignment outcome and meet the target ranking.

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

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

Discussions between the Health Sciences Program Director, the Health Information Management Concentration Program Director, and the Health Sciences faculty were had during the data collection and analysis of all PLOs and the associated data and interpretation. The Health Sciences faculty reviewed and discussed the report before submission of the annual report.

The Health Sciences faculty worked together to adjust the Health Sciences assessment plan based on insight gained through the PLO artifact evaluation analysis. Specifically, the course instructors discussed with the Health Sciences Program Director, the Health Information Management Concentration Director, and the Health Sciences faculty and recommended the following:

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques. HSCI 2100 Healthcare Management: Team Project Charter

In preparation for the 2023 – 2024 semester, the course instructor presented and discussed the student team assessment rankings with the Health Sciences Program Director and faculty. The course instructor, health sciences faculty, Health Sciences Program Director, and Health Information Management Program Director proposed modifying PLO #2, the Project Charter assignment, and PLO rubric.

HSCI 4700 Quality Management Performance Improvement

In preparation for the 2023 – 2024 academic year, the course instructor presented and discussed the Gantt Chart assessment with the Health Sciences Program Director and faculty to determine if it is the best assignment to align with the Program Learning Outcome #2. The course instructor, health sciences faculty, Health Sciences Program Director, and Health Information Management Program Director proposed modifying PLO #2 and replacing Gantt Chart assignment with a different assignment from a different course.

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

The course instructor presented and discussed the final program learning outcome rankings for PLO #4. The course instructor and program faculty are pleased with the assessment findings. The course instructor, health sciences faculty, Health Sciences Program Director, and Health Information Management Program Director proposed modifying PLO #4. The assignment artifact will still be used, but in a different PLO. The PLO rubric will be modified, and the course instructor will submit this course to the Core in the areas of "collaborative inquiry" and "writing intensive."

HSCI 4700 Quality Management Performance Improvement

In preparation for the 2023 – 2024 academic year, the course instructor discussed if additional questions to the assignment would deepen student understanding. The course instructor, health sciences faculty, Health Sciences Program Director, and Health Information Management Program Director proposed modifying PLO #4 and replacing the case study assignment with a different assignment from a different course.

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

Changes to the Assessment Plan

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

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

The following explains how the course instructor, with support from the Health Sciences Program Director, Health Information Management Concentration Program Director, and Health Sciences faculty, will modify the assignments aligned to the PLOs assessed during this academic year.

PLO # 2 – Students will implement healthcare management tools to utilize project management techniques. HSCI 2100 Healthcare Management: Team Project Charter

PLO#2 will be modified, and the corresponding Project Charter assignment in HSCI 2100 Healthcare Management will be reevaluated to determine if it is a good artifact to assess PLO #2.

HSCI 4700 Quality Management Performance Improvement

PLO#2 will be modified, and the Gantt Chart assignment in HSCI 4700 Quality Management and Process Improvement will be reevaluated to determine if it is a good artifact to assess PLO #2.

PLO #4 - Students will use research to defend conclusions related to healthcare issues.

HSCI 3700 Research Methods

PLO#4 will be modified and the Team Research Proposal in HSCI 3700 Research Method will be reevaluated to determine if it is a good artifact to assess PLO #4

However, HSCI 3700 will be submitted to the Core for consideration and if approved, the Team Research Proposal assignment will be modified to meet the Core requirements in the areas of "collaborative inquiry" and "writing intensive".

HSCI 4700 Quality Management Performance Improvement

PLO#4 will be modified and the Case Study in HSCI 4700 Quality Management and Performance Improvement will be reevaluated to determine if it is a good artifact to assess PLO #4

In addition to these assignment modifications, the Health Sciences Program Director and the Health Information Management Concentration Program Director will initiate the use of an assessment outcomes tracking tool to aid in analysis from year to year.

If no changes are being made, please explain why.

7. Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes

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

This set of artifacts was assessed last during the COVID-19 pandemic. These classes were 100% online, the level of communication seemed less than was needed, and the student-to-teacher ratio was high. The program was merging with another program, and the lack of faculty was being addressed. Because of these changes, it was decided not to implement new changes even though the assessment results were not on target.

B. How has the change/have these changes identified in 7A been assessed?

These courses have returned to an in-person format, and with the addition of more faculty, the student-to-teacher ratio is lower. The artifacts in these courses were assessed using the same PLO assessment rubrics.

C. What were the findings of the assessment?

Our findings are that the students performed at the desired target level when the course returned to the inperson format and with a lower student-to-teacher ratio.

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

The Health Sciences faculty have learned much about the differences between an online and in-person classroom and the value of team teaching. We will use this experience and knowledge to inform our plans and decisions to further develop these courses in the future.

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

Appendix A.

HSCI 2100 - Project Charter

	Team Identification
Team Number	
Team Member 1:	Team Member 3:
Team Member 2:	Team Member 4:
Team Member 5:	
Pro	oject Title and Description
Project Title	
Project Description	
	Project Objective
Describe the changes that will occur or what w	vill be accomplished as a result of the project.

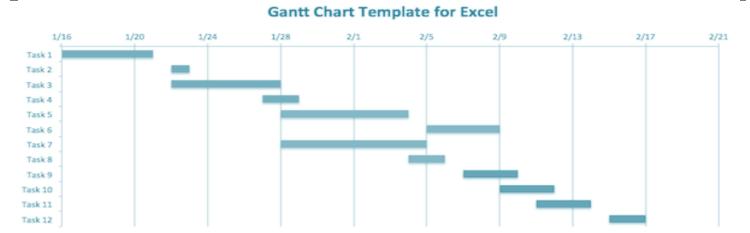
Scope of the Project

Define the boundaries of the project. This can include both what is "in scope" and what is "out of scope."

Project Deliverables

Describe what work products will be created or generated within the project's scope and as a result of the project. These can be both tangible and intangible. These can also be at the various phases of the project.

Gantt Chart*



*This is an example of a Gantt Chart. You will design your own Gantt Chart as you deem fit for your team's responsibilities. Please create your own Gantt Chart that includes all tasks and the duration of tasks perceived necessary at this time to complete the project.

Team Communication Plan

Describe the Team Communication Plan, including the elements:

• Day, time, and place for regular team meetings.

- Preferred method of communication (e.g., email, cellphone, etc.).
- Expected level of contact with other team members.

Roles and Responsibilities of Team Members

Describe the roles and responsibilities of project team members, followed by names and contact information for those filling the positions.

Sponsor: Provides overall direction on the project. Responsibilities include the approval of the project charter and plan; confirming the project's goals and objectives; keeping abreast of major project activities; making decisions on escalated issues; and assisting in resolving roadblocks.

Name	Role or position	
Project Manager: Leads in the planning and development of the project; manages the project to scope. Responsibilities		
include: developing the project plan; identifying project deliverables; identifying risks and developing a risk management		

Project Manager: Leads in the planning and development of the project; manages the project to scope. Responsibilities include: developing the project plan; identifying project deliverables; identifying risks and developing a risk management plan; directing the project resources (team members); scope control and change management; overseeing quality assurance of the project management process; maintaining all documentation, including the project plan; report and forecast project status; resolve conflicts within the project or between cross-functional teams; ensure that the project's product meets the business objectives; and communicate project status to stakeholders.

Name	Role or position

Team Member: Works toward the deliverables of the project. Responsibilities include: understanding the work to be completed; completing research, data gathering, analysis, and documentation as outlined in the project plan; informing the project manager of issues, scope changes, and risk and quality concerns; proactively communicating status; and managing expectations.

Name	Role or Position

Customer: The person or department requesting the deliverable. Responsibilities include partner with the sponsor or project manager to create the Project Charter; partnering with the project manager to manage the project, including the timeline, work plan, testing, resources, training, and documentation of procedures; working with the project team to identify the technical approach to be used and the deliverables to be furnished at the completion of the project; provide a clear definition of the business objective; sign-off on project deliverables; take ownership of the developed process.

Name	Role or position

Subject Matter Expert: Provides expertise on a specific subject. Responsibilities include maintaining up-to-date experience and knowledge on the subject matter and providing advice on what is critical to the performance of a project task and what is nice to know.

Name	Role or position
All team members	

Assumptions: List and describe the assumptions made to charter this project. Please note that all assumptions must be validated to ensure that the project stays on schedule and on budget. Risks: Identify the risks and the strategies to mitigate them. Limitations: Identify the limitations of the project.		
Sustainability		
What is the sustainability of the project objective?		
References		

Assumptions, Risk, and Limitations

(At least one paragraph for each topic – three sentences per paragraph)

Project Charter Rubric

	Beginner	Developing	Accomplished	Advanced
	1	2	4	5
Team	Did not follow instructions fully. Did not		Almost all the instructions were followed, but some	Followed all instructions that included the team
Identification	include team number,		elements (team number	number and team
	team member names,		and team member names,	member names. Project
Project Title	project title, and project		project title, or project	title and project
and Description	description. It was not		description) were	description Free of
	free of typographical and other errors.		excluded. Some typographical and other	typographical and other errors.
(5 points)	other errors.		errors.	CITOIS.
	Beginner	Developing	Accomplished	Advanced
	1	2	4	5
	Did not follow	Did not completely follow	Followed most of the	Followed all instructions
Project	instructions fully. Did not	instructions. The project	instructions. The project	that included a well-
Objective	include the project objective and was not	objectives were vague or were not free of	objectives were minimally vague or were not free of	developed project objective and were free of
_	free of typographical and	typographical and other	typographical and other	typographical and other
(5 points)	other errors.	errors.	errors.	errors.
	Beginner	Developing	Accomplished	Advanced
	1	2	4	5
	Did not follow	Did not completely follow	Followed most of the	Followed all instructions
	instructions fully. Did not	instructions. The project	instructions. The project	that included well-
Project Scope	include the project scope and was not free of	scope was very vague or was not free of	scope was minimally vague or was not free of	developed project scope and free of typographical
(5 points)	typographical and other	typographical and other	typographical and other	and other errors.
	errors.	errors.	errors.	
	Beginner	Developing	Accomplished	Advanced
	1	2	4	5
	D: 1 . C II			
1	Did not follow	Did not completely follow	Followed most of the	Followed all instructions
Project	instructions fully. Did not	instructions. The project	instructions. The project	that included well-
Project	instructions fully. Did not include project	instructions. The project deliverables were very	instructions. The project deliverables were	that included well- developed project
Deliverables	instructions fully. Did not	instructions. The project	instructions. The project deliverables were minimally vague or were	that included well-
=	instructions fully. Did not include project deliverables and was not	instructions. The project deliverables were very vague or were not free of	instructions. The project deliverables were	that included well- developed project deliverables and were free
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and	instructions. The project deliverables were very vague or were not free of typographical and other	instructions. The project deliverables were minimally vague or were not free of typographical	that included well- developed project deliverables and were free of typographical and other
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and other errors.	instructions. The project deliverables were very vague or were not free of typographical and other errors.	instructions. The project deliverables were minimally vague or were not free of typographical and other errors.	that included well- developed project deliverables and were free of typographical and other errors.
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and other errors. Beginner 1 Did not follow	instructions. The project deliverables were very vague or were not free of typographical and other errors. Developing 2 Did not completely follow	instructions. The project deliverables were minimally vague or were not free of typographical and other errors. Accomplished 4 Followed most of the	that included well- developed project deliverables and were free of typographical and other errors. Advanced 5 Followed all instructions
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and other errors. Beginner 1 Did not follow instructions fully. Did not	instructions. The project deliverables were very vague or were not free of typographical and other errors. Developing 2 Did not completely follow instructions. More than	instructions. The project deliverables were minimally vague or were not free of typographical and other errors. Accomplished 4 Followed most of the instructions. More than	that included well- developed project deliverables and were free of typographical and other errors. Advanced 5 Followed all instructions thoroughly. Included dates
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and other errors. Beginner 1 Did not follow instructions fully. Did not include dates and	instructions. The project deliverables were very vague or were not free of typographical and other errors. Developing 2 Did not completely follow instructions. More than two but less than three	instructions. The project deliverables were minimally vague or were not free of typographical and other errors. Accomplished 4 Followed most of the instructions. More than three but less than four	that included well- developed project deliverables and were free of typographical and other errors. Advanced 5 Followed all instructions thoroughly. Included dates and duration with all tasks
Deliverables	instructions fully. Did not include project deliverables and was not free of typographical and other errors. Beginner 1 Did not follow instructions fully. Did not	instructions. The project deliverables were very vague or were not free of typographical and other errors. Developing 2 Did not completely follow instructions. More than	instructions. The project deliverables were minimally vague or were not free of typographical and other errors. Accomplished 4 Followed most of the instructions. More than	that included well- developed project deliverables and were free of typographical and other errors. Advanced 5 Followed all instructions thoroughly. Included dates and duration with all tasks perceived necessary at
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Roles and Responsibilities of Team	communication, and the expected level of communication with other team members, and not free of typographical or other errors. Beginner 1 Did not follow instructions fully. Did not include the sponsor, project manager, team members, customer, and subject matter expert, and not free of	communication, expected level of communication with other team members, and not free of typographical or other errors. Developing 2 Did not completely follow instructions. Failed to include many elements such as sponsor, project manager, team members, customer, and subject	method of communication, and the expected level of communication with other team members, and mostly free of typographical or other errors. Accomplished 4 Followed most of the instructions but some of the elements, sponsor, project manager, team members, customer, and subject matter expert,	expected level of communication with other team members and free of typographical or other errors. Advanced 5 Followed all instructions that included sponsor, project manager, team members, customer, and subject matter expert, and free of typographical or other errors.
Members (5 points)	and not free of typographical or other errors.	matter expert, and not free of typographical or other errors were excluded.	and mostly free of typographical or other errors were excluded.	other errors.
	Beginner 1	Developing 2	Accomplished 4	Advanced 5
Assumptions, Risks, and Limitations (5 points)	Did not follow instructions fully. Did not include assumptions, risks, limitations, and not free of typographical or other errors.	Did not completely follow instructions. Failed to include some elements of assumptions, risks, and limitations, and not free of typographical or other errors. Less than three sentences.	Followed most of the instructions, but some of the elements of assumptions, risks, or limitations were excluded. Mostly free of typographical or other errors. More than three but less than six sentences.	Followed all instructions, including assumptions, risks, and limitations, and free of typographical or other errors.
	Beginner 1	Developing 2	Accomplished	Advanced 5
Sustainability (5 points)	Did not follow instructions fully. Did not include sustainability and was not free of typographical and other errors.	Did not completely follow instructions. The sustainability narrative is vague (less than two sentences) or is not free of typographical and other errors.	Followed most of the instructions. The sustainability narrative is vague (more than two but less than four sentences) or is not free of typographical and other errors.	Followed all instructions that included a well-developed sustainability narrative and free of typographical and other errors.
	Beginner 1	Developing 2	Accomplished 4	Advanced 5
References (5 points)	Did not follow instructions fully. Did not include sources and is free of typographical and other errors.	Did not completely follow instructions. Many elements did not include sources and were not free of typographical and other errors.	Followed most of the instructions, but some of them were excluded.	Followed all instructions that included sources and were free of typographical and other errors.

PLO #2 Artifact Rubric

Program in Health Sciences (HSCI)			
Program Learning Outcome (PLO #2): Students will implement healthcare management tools to utilize project management techniques.			
Knowledge/Comprehension** Application/Analysis** Synthesis/Evaluation**			
Identifies healthcare project management tools to utilize project management	Demonstrate the utilization of healthcare project management tools	Appraise the utilization of healthcare project management tools	

Appendix B.

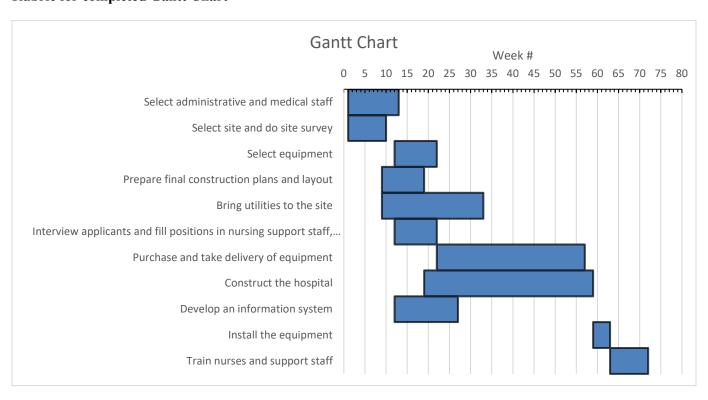
A Gantt Chart is a project management tool that illustrates work completed over a period of time in relation to the overall project timeline. This tool shows is used to visually show the various activities involved in the project, when each activity begins and ends, how long the activity is projected to take, where activities overlap and by how much, and the start and end date for the entire project.

There is software available for large project management projects. Excel can be used to construct Gantt Charts for smaller projects.

Below is an example of a simplified hospital construction project. Create a Gantt Chart for the project using Excel. Submit the completed Excel sheet in Canvas.

Activity	Description	Predecessors	Duration in weeks
Α	Select administrative and medical staff	None	12
В	Select site and do site survey	None	9
С	Select equipment	Α	10
D	Prepare final construction plans and layout	В	10
E	Bring utilities to site	В	24
F	Interview applicants and fill positions in nursing support staff, maintenance, and security	A	10
G	Purchase and take delivery of equipment	С	35
Н	Construct the hospital	D	40
1	Develop an information system	А	15
J	Install equipment	E, G, H	4
K	Train nurses and support staff	F, I, J	9

Rubric for completed Gantt Chart



PLO #2 Artifact Rubric

Program in Health Sciences (HSCI)			
Program Learning Outcome (PLO #2): Students will implement healthcare management tools to utilize project management techniques.			
Knowledge/Comprehension** Application/Analysis** Synthesis/Evaluation**			
Identifies healthcare project management tools to utilize project management	Demonstrate the utilization of healthcare project management tools	Appraise the utilization of healthcare project management tools	

Appendix C

HSCI 3700 Research Methods Team Contract, Peer Review and Team Assessment

TEAM CONTRACT

Guidelines for Writing Team Contract

To prepare you for teamwork in the business world, you will be assigned a team for the semester. Your team will work together to complete the collaborative projects this semester.

Rationale

According to concepts from Organizational Behavior, there are five stages of team development: forming, storming, norming, performing, and adjourning. During the <u>forming</u> stage, teams tend to communicate in indirect polite ways rather than more directly. The <u>storming</u> stage, characterized by conflict, can be productive, but may consume excessive amounts of time and energy. In this stage, it is important to listen well for differing expectations. Next, during the <u>norming</u> stage, teams formulate roles and standards, increasing trust and communication. This norming stage is characterized by agreement on procedures, reduction in role ambiguity, and increased "we-ness" or unity. These developments generally are precursors to the <u>performing</u> stage, during which teams achieve their goals, are highly task oriented, and focus on performance and production. When the task has been completed, the team adjourns.

To accelerate a team's development, a team contract is generated to establish procedures and roles to move the team more quickly into the performing stage. This process of generating a team contract can help jump-start a group's collaborative efforts by immediately focusing the team members on a definite task. The group members must communicate and negotiate to identify the quality of work they all wish to achieve, and the level of group participation and individual accountability they all feel comfortable with.

Successful team performance depends on personal individual accountability. In a team environment, individuals are usually effectively motivated to maximize their own rewards and minimize their own costs. However, conflicts can arise when individualistic motives or behaviors disrupt team-oriented goals. For example, conflict can stem from an unequal division of resources. When team members believe they are receiving too little for what they are giving, they sometimes reduce their effort and turn in work of lower quality. Such "free riding" occurs most frequently when individual contributions are combined into a single product or performance, and individual effort is perceived as unequal. At this point, some individual team members may take on extra responsibilities while other team members may reduce their own efforts or withdraw from the team completely. These behaviors may engender anger, frustration, or isolation—resulting in a dysfunctional team and poor quality of work. However, with a well-formulated team contract, such obstacles can usually be avoided.

Team Contract Assignment

Your team contract template is divided into three major sections:

- 1. establishing team procedures
- 2. identifying expectations
- 3. specifying the consequences for failing to follow these procedures and fulfill these expectations.

Since the basic purpose of this team contract is to accelerate your team's development, to increase individual accountability for team tasks, and to reduce the possibility for team conflict, make your contract as specific as possible: (a) specify each task as detailed as possible, (b) specify each step in a procedure or process as detailed as possible, (c) specify the exact person(s) responsible for each specific task, and (d) specify the exact time and exact place for completion or submission of each task. The more specifically you describe your team expectations, roles, and procedures, the greater chance you have for a successful team experience.

Use the Team Contract template to discuss and finalize your team roles, procedures, and standards. Complete, sign, and upload a **copy** to Canvas at the end of class.

Once your team contract has been developed, your team is ready to begin work on collaborative assignments. However, you may soon find that your team is not working as well as you had hoped. This is normal but needs to be attended to immediately. Perhaps your team is simply not following the established contract procedures or roles as strictly as you should be, or perhaps you need to change some of the procedures or roles as outlined in your contract. Call a team meeting immediately to discuss and resolve the challenges your team is facing; do not delay. Seek guidance from your instructor to resolve any conflicts so that you will have the most positive team experience possible.

TEAM CONTRACT

Team # ____

- 1. Day, time, and place for regular **team meetings**:
- 2. Preferred method of **communication** (e.g., email, cell phone, wired phone, Blackboard Discussion Board, face-to-face, in a certain class) in order to inform each other of team meetings, announcement, updates, reminders, problems:
- 3. **Decision-making policy** (by consensus? by majority vote?):
- 4. Method for setting and following meeting **agendas** (Who will set each agenda? When? How will team members be notified/reminded? Who will be responsible for the team following the agenda during a team meeting? What will be done to keep the team on track during a meeting?):
- 5. Method of **record keeping** (Who will be responsible for recording & disseminating minutes? How & when will the minutes be disseminated? Where will all agendas & minutes be kept?):

Team Expectations		· ·
I leam Evnectations		
I Calli Expectations		
•		

Work Quality

- 1. **Project standards** (What is a realistic level of quality for team presentations, collaborative writing, individual research, preparation of drafts, peer reviews, etc.?):
- 2. Strategies to fulfill these standards:

Team Participation

- 1. Strategies to ensure cooperation and equal distribution of tasks:
- 2. Strategies for encouraging/including ideas from <u>all</u> team members (team maintenance):
- 3. Strategies for keeping on task (task maintenance):
- 4. Preferences for leadership (informal, formal, individual, shared):

Personal Accountability

1. Expected individual attendance, punctuality, and participation at all team meetings:

3.	Expected level of communication with other team members:
4.	Expected level of commitment to team decisions and tasks.
	Consequences for Failing to Follow Procedures and Fulfill Expectations
1.	Describe, as a group, you would handle infractions of any of the obligations of this team contract:
2.	Describe what your team will do if the infractions continue:
**	*****************
b) c)	I participated in formulating the standards, roles, and procedures as stated in this contract. I understand that I am obligated to abide by these terms and conditions. I understand that if I do not abide by these terms and conditions, I will suffer the consequences as stated in this contract. Provide an electronic signature.
1)	date
2)	date
3)	date
4)	date

2. Expected level of responsibility for fulfilling team assignments, timelines, and deadlines:

PEER REVIEW

Instructions: Use this form to evaluate the merits of each team member. This will be handed in individually to maintain the confidentiality of the assessment. Use the following likert scale to determine the level of participation of each team member.

Rarely/never = 1, Occasionally/sometimes = 2, All/most of the time = 3

Team Member	Did fair share of work	Was cooperative/ did agreed upon task	Contributed to ideas/ planning	Was available for communi- cation	Was positive and helpful	Contributed to overall project success	Total

The "Project Total" referred to in the grading rubric indicates the score that the overall project has earned. The peer evaluation determines the final grade of each team member. When evaluating your team member, be honest. The following is the breakdown of how the score of the peer evaluation affects your project grade.

Peer Evaluation Average	Point Equivalent of Project Grade
18-16 points	100%
15-13 points	90%
12-10 points	80%
9-7 points	70%
6-4 points	60%
< 4 points	40%

Examples:

- Peer evaluation score is 18 points, project grade = 100, therefore your project grade = 100%.
- Peer evaluation score is 15 points, project grade = 100, therefore your project grade is 90% (100*.90).
- Peer evaluation score is 12 points, project grade = 100, therefore your project grade is 80% (100*.80).
- Peer evaluation score is 9 points, project grade = 100, therefore your project grade is 70% (100*.70).

TEAM ASSESSMENT

TEAM NUMBER ____

For the following statements, I rank my team on a scale of 1-5											
	1 (strong	ly disag	ree)	(strongly	agree) 5						
Our meetings were productive and organized.	1	2	3	4	5						
People are contributing equitably in the meetings.	1	2	3	4	5						
Everyone has contributed equitably to proposal work.	1	2	3	4	5						
4, The proposal was always on schedule.	1	2	3	4	5						
5. We are dealt with conflict effectively.	1	2	3	4	5						
6. My ideas and input were appropriately considered.	1	2	3	4	5						
7. I am satisfied with the final proposal.	1	2	3	4	5						
8. I was comfortable with my team setting.	1	2	3	4	5						

Please complete the following statements. 9. The best thing about our team was	
10. One of the challenges for our team was	
11. Do we need to change this form in any way to better serve our	urposes?

Adapted from: Fast Foundation for Project Management – Team Process Assessment #1

Reference The Fast Forward MBA in Project Management

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Filename: Team Process Assessment

PLO #4 Artifact Rubric

Program in Health Sciences (HSCI)		
Program Learning Outcome (PLO #4):	Students will use research to defen	d conclusions related to healthcare
issues.		
Knowledge/Comprehension**	Application/Analysis**	Synthesis/Evaluation**
Identifies the processes involved with research related to healthcare issues	Demonstrates the processes involved with research related to healthcare issues	Defends the processes involved with research related to healthcare issues

Appendix D

Lean Assignment

Quality of Care and Patient Satisfaction

Instructions:

Read the case below and answer the questions that follow. You will have to research to answer some of the questions. Responses should thoroughly answer the question asked. Cite sources appropriately. Submit your answers in a Word document to Canvas.

CASE

Patient satisfaction scores in the vascular interventional radiology (VIR) department were low, especially related to wait times in registration and for tests/treatments, with low scores for intentions to recommend (i.e., likelihood that the patient will recommend you to others). There are no consistent procedures for scheduling patients, and procedures are overbooked. The patients are scheduled by the hospital and staff schedulers on a first available time slot process and given an appointment without type or length of procedure and its effect on staffing. Services provided by the VIR department include patient check-ups from previous procedures, consultations, outpatient procedures, treatments, radiology services and other services. Stakeholders include the VIR department patients, healthcare professionals (nurses are accountable for their unit patient satisfaction scores), and staff. Another important stakeholder is the community. (The reputation of your institution is measured by the community.)

Registration wait time is defined as the time a patient arrives at registration on the day of procedure to the time registration is complete. The patient is defined as the patient having a procedure in the VIR department during the project timeline. Patient satisfaction is defined as the patient's rating of their experience regarding wait time in registration, test, and treatment area and over all experience (likelihood to recommend) – spoiler alert – these variables are measured by the project goals (you will need this information for the first question as it relates to 'define'). An assumption is made that students understand that procedures are performed by healthcare professionals that include physicians, nurses, nurse practitioners, physician assistants, radiation technicians, and other healthcare professionals.

A quality improvement project is created to improve processes that would decrease wait times and increase patient satisfaction in the VIR department.

- 1. Use the DMAIC (define, measure, analyze, improve and control) as your framework and show your analysis for each step to illustrate how the problem can be improved to increase patient satisfaction.
- 2. As part of its "triple aim" the Institute for Health Care Improvement describes patient experience of care as including both care quality and patient satisfaction, suggesting that these features are interrelated. Explain why patient satisfaction scores are so important in health care overall.
- 3. Specifically discuss how patient satisfaction scores impact reimbursement as part of a Hospital Value-Based Purchasing program.
- 4. Does a low patient satisfaction score mean that poor quality of care was provided? If not, provide an example of a situation where a low score may be given and explain why that may not indicate that poor quality of care was provided.
- 5. Can you think of any concerns that measuring patient satisfaction result in? Explain in detail.

¹Institute for Healthcare Improvement. The IHI triple aim. http://www.ihi.org/Engage/Initiatives/TripleAim/pages/default.aspx. Accessed April 7, 2015

Adapted from: Godley, M. & Jenkins, J.B. (2018). Decreasing wait times and increasing patient satisfaction, a lean six-sigma approach.

Appendix D Rubric

CASE

Patient satisfaction scores in the vascular interventional radiology (VIR) department were low, especially related to wait times in registration and for tests/treatments, with low scores for intentions to recommend (i.e., likelihood that the patient will recommend you to others). There are no consistent procedures for scheduling patients, and procedures are overbooked. The patients are scheduled by the hospital and staff schedulers on a first available time slot process and given an appointment without type or length of procedure and its effect on staffing. Services provided by the VIR department include patient check-ups from previous procedures, consultations, outpatient procedures, treatments, radiology services and other services. Stakeholders include the VIR department patients, healthcare professionals (nurses are accountable for their unit patient satisfaction scores), and staff. Another important stakeholder is the community. (The reputation of your institution is measured by the community.) Registration wait time is defined as the time a patient arrives at registration on the day of procedure to the time registration is complete. The patient is defined as the patient having a procedure in the VIR department during the project timeline. Patient satisfaction is defined as the patient's rating of their experience regarding wait time in registration, test, and treatment area and over all experience (likelihood to recommend) – spoiler alert – these variables are measured by the project goals (you will need this information for the first question as it relates to 'define'). An assumption is made that students understand that procedures are performed by healthcare professionals that include physicians, nurses, nurse practitioners, physician assistants, radiation technicians, and other healthcare professionals.

A quality improvement project is created to improve processes that would decrease wait times and increase patient satisfaction in the VIR department.

- 6. Use the DMAIC (define, measure, analyze, improve and control) as your framework.
 - a. Define Form a multi-disciplinary project team that includes the following possible stakeholders: Nurse assistant director, pre-procedure RN, cardiovascular technician, physician office manager and scheduler and hospital schedulers and supervisor. Ideally, the team should be led by a sig-sigma black belt. Develop a project charter and timeline to establish goals. The primary metric is waiting time and increasing patient satisfaction.
 - b. Measure
 Start collecting data. Develop a process map or flowchart that illustrates current processes beginning when the patient checks in, next with time the patient leaves the prep area to go to the procedure room and ending when the patient checks out. The scheduler will provide a report of the top 5 procedures (per physician) performed along with average procedure times. A manual log will be kept by the charge nurse in the prep-recovery area that records the time patient arrives and the time patient left for the procedure. A Patient Satisfaction Survey the Hospital Consumer Assessment of Healthcare Providers (HCAHP) will be used to measure patient satisfaction. The HCAHPS is used because it is a tool that has been validated for validity and reliability of data collected. The survey includes questions that relate to (1) waiting time in registration; (2) test and treatment and (3) likelihood of recommending.
 - c. Analyze
 Conduct a FMEA (failure mode and effect analysis) to identify possible process failures and determine variables and recommendations for improvement. Analyze and review the results from the data collected. The results should be displayed using a statistical process control chart.
 - d. Improve

Based on the findings of the survey, brainstorm solutions for primary failures. Propose process changes and training before implementation. Implement changes.

- e. Control

 During this phase, monitor the processes to ensure changes are maintained. Any variations or improvement processes are identified with the potential for redesign.
- 7. Why is patient satisfaction important in healthcare?

Patient satisfaction is important for hospitals to remain competitive and for nurse leaders who are held accountable for their unit patient satisfaction scores. As part of its "triple aim', the Institute for Health Care Improvement describes patient experience of care as including both care quality and patient satisfaction, suggesting these features are interrelated. Clinicians want patients to have positive experiences of care. It allows clinicians to think more broadly about outcomes that matter to both them and patients.

A significant portion of revenue is related to volume, which includes new and repeat visits. HCAHPS survey results are publicly available, and patients often make medical decisions based on reputation and word of mouth. Thus, patient satisfaction surveys matter.

Additionally, there is evidence suggesting that "the frequency with which physicians are sued is related in part to patients' satisfaction with interpersonal aspects of medical care".

8. Specifically discuss how patient satisfaction scores impact reimbursement as part of a Hospital Value-Based Purchasing program.

Hospitals are being rewarded or penalized through both financial incentives and public disclosure based on patient experience scores. There are a variety of survey instruments used to measure patient satisfaction in both hospital and clinical settings, including the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys. The results are posted on the CMS "Hospital Compare" website. This survey instrument is the most studied to date.

Now, as part of the ACA's Hospital-Based Purchasing Program, CMS is withholding 1% of Medicare payments – 30% of which is tied to HCAHPS scores – to fund incentives of the program. The proportion of payouts being withheld from hospitals is projected to increase over time.

9. Does a low patient satisfaction score mean that poor quality of care was provided? If not, provide an example of a situation where a low score may be given and explain why that may not indicate that poor quality of care was provided.

Patients may report low scores for pain management. Just because a patient experiences pain does not mean that quality of care was not provided.

High satisfaction scores are not consistently correlated with traditional outcomes and safety indicators. Higher scores may be associated with higher costs of care. Costs may be further increased by the implementation of the surveys themselves, which can increase imaging studies and prescriptions. Accurate assessment of quality requires a multidimensional approach that includes specific measures for each domain.

10. Can you think of any concerns that measuring patient satisfaction result in? Explain in detail.

There may be situations when high-value care is at odds with patient satisfaction. The Choosing Wise initiative, for example, describes a number of commonly used procedures and services that could be considered low-value, such as early imaging for back pain or antibiotics for URI's. Given the increasing regulations and decreasing time that physicians spend with patients, it may be time consuming to explain to a patient why these should be withheld.

There may also be unintended consequences for underserved and vulnerable populations. Safety net hospitals typically score lower on patient satisfaction scores than their counterparts. Quality reporting can also widen racial and clinical disparities in care, making the situation worse than it already is.

There is also concern about the validity and implementation of patient experience and surveys. They are based on

patient's expectations of care as opposed to objective measures of experience. Patient perceptions may not correlate with technical quality.

https://journalofethics.ama-assn.org/article/patient-satisfaction-reporting-and-its-implications-patient-care/2015-07

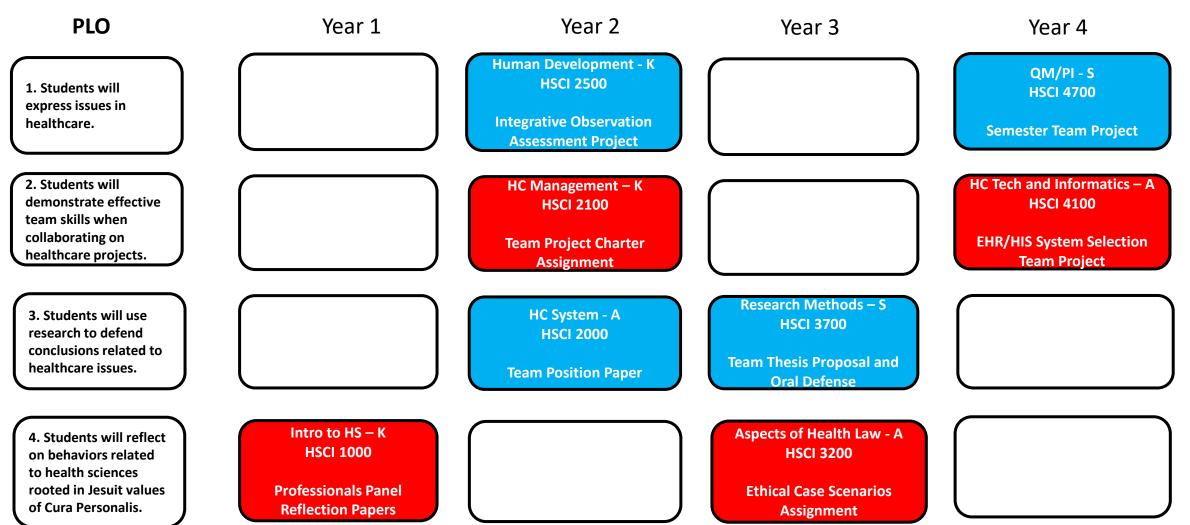
https://journals.lww.com/jbjsjournal/Abstract/2016/10050/Measuring_Quality_of_Care_with_Patient.14.aspx

Adapted from: Godley, M. & Jenkins, J.B. (2018). Decreasing wait times and increasing patient satisfaction, a lean six-sigma approach.

PLO #4 Artifact Rubric

Program in Health Sciences (HSCI)		
Program Learning Outcome (PLO #4):	Students will use research to defen	d conclusions related to healthcare
issues.		
Knowledge/Comprehension**	Application/Analysis**	Synthesis/Evaluation**
 Identifies the processes involved with research related to healthcare issues 	Demonstrates the processes involved with research related to healthcare issues	Defends the processes involved with research related to healthcare issues

Curriculum Map for Program in Health Sciences



Taxonomy: K = Knowledge/Comprehension; A = Application/Analysis; S = Synthesis/Evaluation

Doisy College of Health Sciences Saint Louis University Academic Program Assessment Plan 2023-2024

Academic Degree Program	Program in Health Sciences (HSCI)
Academic Department	Clinical Health Sciences (CHS)

				Assessment Methods	Use	of Assessment Dat	ta
PLO#	Program Learning Outcome (PLO)	Assessment Mapping/Tool(s)		Program Target	Assessment Data Collection & Initial Data Analysis/Person(s) Responsible	Data Analysis / Action Plan to address changes in pedagogy, curriculum design, and/or assessment work	Timeline (any 12-month period is acceptable.)
PLO #1	Students will express issues in healthcare.	-1- HSCI 2500 Human Development: Integrative Observation Assessment Project	D	-1- An average of 85% of students will achieve a ranking of "Knowledge/Comprehension" or higher using the corresponding PLO assessment rubric.	-1- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator	An annual program assessment report is created each year using data collected on the corresponding artifacts to provide details regarding the outcomes. This	Every academic year that ends in an odd number

	-2- HSCI 4700 QM/PI: Semester Team Project	D	-2- An average of 85% of students will achieve a ranking of "Synthesis/Evaluation"	-2- Data Collection/Course Instructor	data will assist in detecting areas where changes	Every academic year that ends in an odd number
			using the corresponding PLO assessment rubric.	Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator	in assessment or pedagogy may be appropriate. If program targets are unmet, the program faculty and/or course instructor will identify ways to enhance the students' understanding	
					of the program learning outcome. These changes will be evaluated during the next review cycle.	
					The HSCI Annual Assessment Report will be reviewed and compared to the previous year to assess the impact of prior changes.	
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PLO #2	Students will demonstrate effective team skills when collaborating on healthcare projects	-1- HSCI 2100 Healthcare Management: Team Project Charter Assignment	D	-1- An average of 85% of students will achieve a ranking of "Knowledge/Comprehension" or higher using the corresponding PLO assessment rubric.	-1- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator	Same as PLO#1	Every academic year that ends in an even number
		-2- HSCI 4100 Healthcare Technology & Informatics/ EHR System Selection Training Team Project	D	-2- An average of 85% of students will achieve a ranking of "Application/Analysis" or higher using the corresponding PLO assessment rubric.	-2- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator		Every academic year that ends in an even number
PLO #3	Students will use research to defend conclusions related to healthcare issues	-1- HSCI 2000 Healthcare Systems: Team Position Paper	D	-1- An average of 85% of students will achieve a ranking of "Application/Analysis" or higher using the corresponding PLO assessment rubric.	-1- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator	Same as PLO#1	Every academic year that ends in an odd number

		-2- HSCI 3700 Research Methods: Team Thesis Proposal and Oral Defense	D	-2- An average of 85% of students will achieve a ranking of "Synthesis/Evaluation" level using the corresponding PLO assessment rubric.	-2- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator		Every academic year that ends in an odd number
PLO #4	Students will reflect on behaviors related to health sciences that are rooted in Jesuit values	-1- HSCI 1000 Intro to Health Sciences: Professional Panel Reflection Papers	D	-1- An average of 85% of students will achieve a ranking of "Knowledge/Comprehension" or higher using the corresponding PLO assessment rubric.	-1- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator	Same as PLO#1	Every academic year that ends in an even number
		-2- HSCI 3200 Aspects of Health Law: Ethical Case Scenarios Assignment	D	-2- An average of 85% of students will achieve a ranking of "Application/Analysis" or higher using the corresponding PLO assessment rubric.	-2- Data Collection/Course Instructor Initial Data Analysis/HSCI Program Director and PLO Assessment Coordinator		Every academic year that ends in an even number

Summary of changes as of October 2023

- PLO #1:
 - o Changed the wording of PLO #1.
 - o Removed the assessment at the application/analysis level.
 - Changed the assessment artifacts and the courses aligned with the assessment artifacts at both levels of assessment.
- PLO #2
 - Changed the wording of PLO #2.
 - o Changed the assessment artifact and the courses aligned with the assessment artifact at the second level of assessment.
- PLO #3
 - o Previous version of PLO #3 was incorporated into PLO #2.
 - New PLO #3 is now the previous version of PLO #4
 - Changed the assessment artifacts and the courses aligned with the assessment artifacts at both levels of assessment.
- PLO #4
 - New PLO #4 is now the previous version of PLO #5
 - o Removed the assessment at the Synthesis/Evaluation level.
 - o Changed the assessment artifacts in the courses at both levels of assessment.

**IMPORTANT NOTES: The ratings, identified by the column headings below, are of increasing complexity moving across the table (from left to right).

Program in Health Sciences (HSCI)					
Program Learning Outcome (PLO #1): Students will be able to express issues in healthcare.					
Knowledge/Comprehension**	Application/Analysis**	Synthesis/Evaluation**			
Able to discuss issues in healthcare.	Able to recognize trends and identify patterns with issues in healthcare.	Able to evaluate outcomes of issues in healthcare.			

**IMPORTANT NOTES: The ratings, identified by the column headings below, are of increasing complexity moving across the table (from left to right).

Program in Health Sciences (HSCI)				
Program Learning Outcome (PLO #2): Students will demonstrate effective team skills when collaborating on healthcare projects. Knowledge/Comprehension** Application/Analysis** Synthesis/Evaluation**				
Able to identify effective team skills when collaborating on healthcare projects.	Ability to apply effective team skills when collaborating on healthcare projects.	Ability to evaluate effective team skills when collaborating on healthcare projects.		

**IMPORTANT NOTES: The ratings, identified by the column headings below, are of increasing complexity moving across the table (from left to right).

Program in Health Sciences (HSCI)				
Program Learning Outcome (PLO #3): Students will use research to defend conclusions related to healthcare issues.				
Knowledge/Comprehension**	Application/Analysis**	Synthesis/Evaluation**		
Able to identify the processes involved with research related to healthcare issues.	Able to demonstrate the processes involved with research related to healthcare issues.	Able to defend the processes involved with research related to healthcare issues.		

**IMPORTANT NOTES: The ratings, identified by the column headings below, are of increasing complexity moving across the table (from left to right).

Program in Health Sciences (HSCI)					
Program Learning Outcome (PLO #4): Students will reflect on healthcare professional behaviors related to health sciences rooted in the Jesuit values of Cura Personalis. Knowledge/Comprehension** Application/Analysis** Synthesis/Evaluation**					
Able to define healthcare professional behaviors related to health sciences rooted in the Jesuit values of Cura Personalis.	Able to analyze principles of healthcare professional behavior related to health sciences rooted in the Jesuit values of Cura Personalis.	Able to evaluate healthcare professional behaviors related to health sciences rooted in the Jesuit values of Cura Personalis.			