LIVE HUMBLE

Quality Enhancement Plan

March 30-April 2, 2020 SACSCOC • Onsite Reaffirmation Visit

EVMS
Eastern Virginia Medical School

Table of Contents

Glossary

Notation	Description
CEC	**Clerkship Education Committee -** oversight of third year medical student clinical experience
CEL	**Community-Engaged Learning -** service-learning for medical schools.
CFC	**CareForward Curriculum** – new EVMS undergraduate medical curriculum implemented in 2016
CME	**Continuing Medical Education** – ongoing education for physicians
CS	**Clinical Skills**
CSA	**Clinical Skills Assessment**
EVMS	**Eastern Virginia Medical School**
FAPD	**Faculty Affairs and Professional Development**
GPA	**Grade Point Average**
H&P	**History and Physical Exam** – documentation of information obtained from a patient
HSS	**Health Systems Science** – the science of healthcare delivery
LGM	**Longitudinal Generalist Mentorship** – early clinical exposure for medical students
M1	**First Year Medical Student**
M2	**Second Year Medical Student**
M3	**Third Year Medical Student**
M4	**Fourth Year Medical Student**
MCAT	**Medical College Admissions Test**
MCQ	**Multiple Choice Question**
MD	**Doctor of Medicine**
MDC	**Module Directors Committee** – group of faculty who deliver the first and second-year undergraduate medical curriculum
MEC	**Medical Education Committee** – group ultimately responsible for undergraduate medical curriculum
OSCE	**Objective Structured Clinical Examinations** – structured assessment of clinical performance of students
PCC	**Pre-Clerkship Curriculum Committee** – oversight of first and second-year undergraduate medical curriculum
QEP	**Quality Enhancement Plan**
SP	**Standardized Patient** – trained individual who acts as a patient in a simulated clinical encounter
SPIE	**Strategic Planning and Institutional Effectiveness**
TIPS	**Transition in Practice Series** – short educational experiences preparing students for the next phase of training
UME	**Undergraduate Medical Education** – the first four years of medical training
VF	**Virtual Families** – simulated clinical cases embedded in family and community context

I. Executive Summary

Eastern Virginia Medical School (EVMS) selected cultural humility as the Quality Enhancement Plan (QEP) focus for five key reasons: it is central to the EVMS 2019 health equity and inclusion strategic plan and to the EVMS vision; there is heightened awareness in the institution around cultural humility; it was the students' most often cited QEP preference; and it will prepare future healthcare professionals for an increasingly diverse world of practice. This topic emerged after approximately 30 meetings involving over 200 students, faculty and staff at EVMS.

After identification of the topic, an operational definition of cultural humility was developed by the QEP Curriculum subcommittee, based on an extensive literature review and alignment with institutional values. Working closely with the QEP Assessment Team, the subcommittees articulated learning objectives and key assessments. If successful, students will:

- Define cultural humility and structural inequity and describe the dynamics of each;
- Describe the skills associated with cultural humility and structural inequity in interpersonal and clinical settings;
- Choose to execute this three-part process in clinical encounters: a.) self-assess their own thoughts and behavior, b.) be sensitive to the other's values, beliefs, and priorities, and c.) identify and execute effective strategies to diminish potential power differentials; and
- Value cultural humility.

The EVMS QEP aims to achieve student learning outcomes, initially in the Doctor of Medicine (MD) program and expanding to the health professions programs over time, by building upon and improving current aspects of the EVMS curriculum and integrating additional activities and assessments. In 2016, EVMS implemented a new four-year undergraduate medical education (UME) curriculum, the CareForward Curriculum (CFC), transitioning from discipline-based to an organ system-based approach. This curriculum, which includes two years of pre-clinical and two subsequent years of clinical experience, highlights concepts related to high value care, care of older adults and multiple chronic conditions, wellness, and community-engaged learning.

Across the four-year UME curriculum, students will engage in activities to build knowledge, awareness of self and others, and professionally appropriate skill sets related to cultural humility. Activities include: Module Zero (M1), Transition in Practice Series (M3, M4), Clinical Skills (M1 – M4), Community – Engaged Learning (M1 – M4), Virtual Family Clinical Cases, Video Scenarios, Patient Panels, Clinical Experiences. QEP assessments, as described in the narrative, are identified as direct or indirect measures, pre-measures or progress measures, formative or summative measures, and key program assessment measures.

The QEP organizational structure and staffing is supported by individuals directly involved with curriculum design and integration within the existing MD program. Successful implementation of the Live Humble QEP initiatives over the five year implementation phase is supported by investment of necessary resources. The approved budget of $1,200,000 was created in partnership with key administrators and QEP leaders. This budget addresses QEP program design, development, implementation, publicity, analysis, and evaluation tasks.

The primary goal of this QEP is to improve students' knowledge, skills, and values in cultural humility and structural inequity. This, in turn, will improve quality of care, particularly for those who have been stigmatized (Tervalon & Murray-Garcia, 1998).

II. Identification of Topic

Eastern Virginia Medical School (EVMS) selected cultural humility as the Quality Enhancement Plan (QEP) focus for five key reasons:

- It is central to the EVMS 2019 strategic plan focused on health equity and inclusion;
- It is central to the EVMS vision;
- There is heightened awareness in the school community around cultural humility;
- It was the students' most often cited QEP preference; and
- It will prepare future healthcare professionals for an increasingly diverse world of practice in healthcare.

Central to the EVMS 2019 Strategic Plan Focused on Health Equity and Inclusion. In 2019, EVMS began work on a strategic plan to advance health equity, diversity, and inclusion in a manner that impacts the EVMS campus and the community. The strategic plan, *Advancing Health Equity and Inclusion for Community and Academic Impact*, consists of five planning areas. The Live Humble QEP supports the overall strategic plan and is a key tactic in achieving the first strategic priority: *provide enriched training and assessment for access and success* (Appendix A).

Central to the EVMS Vision. The EVMS school vision, posted on every entry door is: "Eastern Virginia Medical School will be recognized as the most community-oriented school of medicine and health professions in the United States." As an academic community, EVMS believes in this vision. And, this vision guided the identification of the QEP topic. It is often asked, "What would it mean for EVMS graduates to be the most community-oriented physicians or health care professionals in our country?" Part of what it means is being able to effectively care for people who present widely divergent values, health beliefs, and priorities. Having a deep paradigm and practical skills related to cultural humility is a perfect fit for who EVMS strives to be. It fits the vision.

Heightened Awareness in the School Community. Awareness of the importance of cultural humility rose in response to a February 2019 incident in which racist photos surfaced from the 1984 EVMS student yearbook pages of our most notable alumnus, the current Governor of Virginia. While EVMS cannot change the events of the past, the events can be used as a reminder of the critical need to work toward diversity, health equity, and inclusion.

Most Cited QEP Preference by Students. Early in the process, students across the institution were surveyed (Appendix B). A subsequent student town hall was held to discuss the QEP and gather student ideas for topics. Students provided their top three ideas for the QEP topic on index cards, and the most frequently cited practical idea was "cultural humility." Full results of the survey and student town hall are available upon request.

Preparation of Future Healthcare Professionals. This training will equip learners to effectively practice in a rapidly diversifying world of healthcare.

QEP Focus on Doctor of Medicine Program. The Live Humble QEP will initially focus on the EVMS Doctor of Medicine Program, the largest program at EVMS, and will subsequently expand to the EVMS School of Health Professions over time.

Baseline Data and Analysis of the Entering Performance Gap

To gain a focused understanding of the baseline for cultural humility, background data was examined using an internally-developed *EVMS Cultural Humility Institutional Survey* (Appendix C), and through the administration of a knowledge pretest (Appendix D). The *EVMS Cultural Humility Institutional Survey* asked students, staff, and faculty to provide their observations and perceptions about the current state of cultural humility at EVMS, asking questions pointed directly at the performance objectives from the QEP. This survey also incorporated items from the *Cultural Humility Scale* (Hook, Davids, Owen, Worthington, & Utsey, 2013), providing a snapshot measure of student, staff, and faculty experience with each other in this area. In addition, first year medical students were given a four-item short answer pre-test that helped provide a baseline for student knowledge related to cultural humility, its application in clinical encounters, and structural inequity.

In conjunction with the 2019 strategic planning initiative focused on health equity and inclusion, several sets of baseline data were collected, including focus group, survey, and narrative data. These data serve to frame the general issues around cultural humility, but were not sufficiently specific to provide a sound baseline. These data are synthesized in the Background Data section below.

Cultural Humility Baseline: The Entering Knowledge and Skills Gap. Cultural humility, as operationally defined for the EVMS 2020 QEP is shown at right. To determine a baseline in student knowledge of cultural humility, the application of cultural humility in a clinical encounter, the definition of structural inequity, and examples of structural inequity, first-year medical students were given a short-answer pretest with four items:

1. Define cultural humility.
2. How would you apply cultural humility in a clinical encounter?
3. Define structural inequity.
4. Give an example of structural inequity.

> Cultural humility is a continuous process of self-awareness of and reflection on one's own values and biases while cultivating a sensitivity and openness to cultural identity, with the intention of honoring the beliefs, customs, values, and experiences of all people.
>
> EVMS QEP Curriculum Team

The test was scored using the rubric attached as Appendix D.

Baseline knowledge data. The knowledge objectives encompassed in this QEP initiative are more complex than citing the simple definitions of cultural humility and structural inequity. And, the skills involved in effectively conducting a culturally humble clinical encounter are more involved than having the students simply name the four key tasks. Students' current ability to define the main topics or describe tasks involved in the skill performance provides a solid baseline.

> Structural inequity is a persistent, unfair, and avoidable condition in which one category of people is treated as inferior or unequal to other categories of people.
>
> (Dani & de Haan, 2008)

On the pretest described above, many of the students provided a cursory definition of cultural humility from memory: 84% of the students tested correctly stated that "honoring or respecting others" was part of cultural humility, but only 41.7% mentioned self-assessment as part of the definition. Similarly, with respect to the skill of applying cultural humility in a clinical encounter, 87.5% of the students mentioned the importance of being sensitive to the other, but few mentioned the importance of continuous self-assessment (10.4%), identifying potential sources of power differentials (2.1%), or using strategies to reduce power differentials (25%). Appendix E presents the aggregate data from the knowledge pretest.

Baseline skills data. It is a basic premise: one cannot choose to do what one does not know how to do. Therefore, by demonstrating a lack of knowledge regarding the elements of conducting a clinical encounter in a uniquely culturally humble way, it is fair to say that most students cannot perform the skill. It is possible that some students with prior medical experience may be able to perform the skill but are unable to explicitly describe the required tasks.

The entering knowledge and skills gaps. Figure 1 represents the data from the pretest keyed to the overall average knowledge performance in the four item areas. Assuming a target performance criteria of 80%, the gap in current student knowledge and optimal knowledge levels was large, particularly in defining cultural humility (gap between baseline and criteria is 18%) and in naming the tasks in applying it in a clinical encounter (gap between baseline and criteria is 54%). Student definitions of structural equity nearly approached criteria levels, and many of the students provided excellent examples of structural inequity. The substantial gap reflected in the skill of applying cultural humility in a clinical encounter, suggests that students cannot reliably describe the tasks involved in the skill performance, and most, therefore, cannot perform the skill.

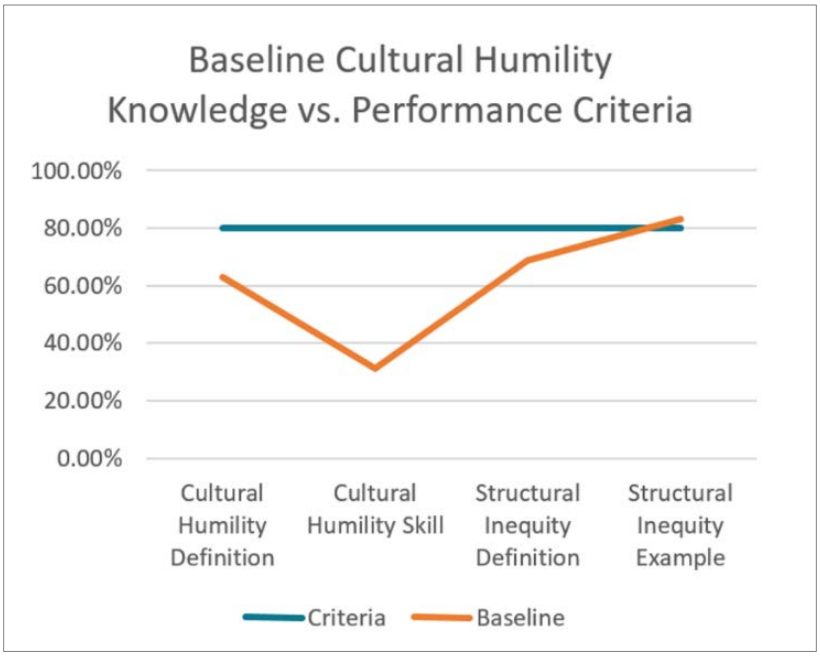


Figure 1. Basic cultural humility knowledge vs. performance criteria.

Cultural Humility Baseline: Entering Perceptions, Faculty and Staff Training Needs, and Snapshot Environmental Picture. Baseline perceptions and observations regarding starting performance with cultural humility were measured using a locally developed 29-item survey (α=.83, n=678). The survey included three subscales: confidence in defining cultural humility terms (α=.77), cultural humility experience at EVMS (α=.71), and cultural humility assessment (α=.87). The survey was administered to faculty, staff, and students, and survey items were designed to elicit perceptions and six-month observations of cultural humility as currently experienced at EVMS and defined by the QEP objectives. It also measured student, staff, and faculty perceptions of their current knowledge of cultural humility and related terms. The survey provides direct baseline data for student, staff, and faculty awareness of the concept of cultural humility, as well as perceptions about the current exercise of cultural humility at the school. This latter information is helpful for identifying faculty and staff training needs, as well as

describing a baseline for the learning environment for cultural humility. See Appendix F for aggregate data from this instrument.

Figure 2 is a representative snapshot of the data from this survey. This graph illustrates the perspectives and observations of the key participant groups in the survey. Here, to better see the baseline, negative response percentages (the percentage of participants who chose one of the two most negative response options for each survey item) present a picture of the current state of perceived or observed cultural humility. Interestingly, these data indicate that students were most critical of other students in the area of cultural humility.

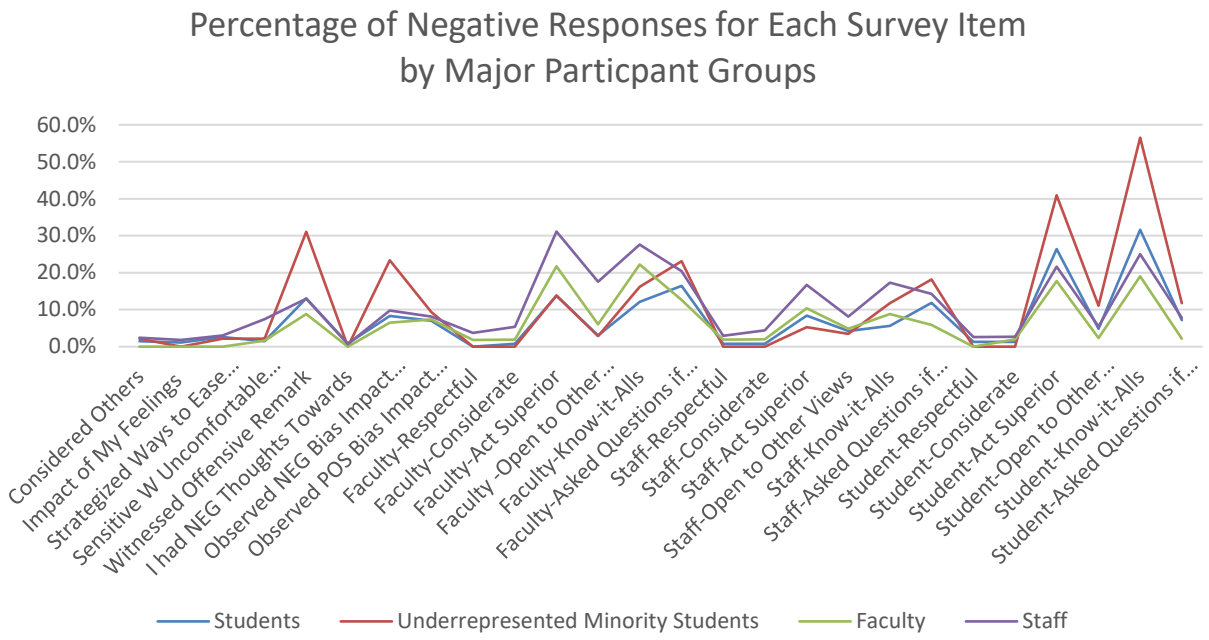


Figure 2. A quality baseline for cultural humility. Negative response percentage by participant groups for each survey item. See the survey (Appendix C) for details of the items.

EVMS Cultural Humility Institutional Survey: Narrative Responses. To add meaning to the more concrete data collected in the *EVMS Cultural Humility Institutional Survey*, an open-ended narrative response was included at the end of the survey. Comments are representative of the population sample and provide an overview of the prevailing themes. Of the 678 survey respondents (248 MD students), 98 individuals left comments about their experience with cultural humility at EVMS. Comments were grouped into the following categories:

Categories	Example Comment
Positive: highlights the strengths of EVMS culture; no issues or opportunities for improvement reported	"I have had nothing but very positive interactions with faculty and staff at EVMS."
Balanced: highlights strengths and opportunities for improvement (e.g. training)	"Definitely a work in progress, but some good efforts have been made to encourage conversation on campus. The faculty and staff seem generally on board, but I'm still seeing resistance and dismissive-ness from my peers…."
Negative: mostly focused on problematic interactions with EVMS community members; reports instance of disrespect/bias	"It's happened more than once where a group of white med students or residents will be hanging out in the lounge and commenting on certain, primarily African-American, patients' names. Things like that name is amazing/awesome or why would someone name your kid that?"

Approximately one-third of the comments were positive, with no issues or concerns noted, and many individuals expressed pride in being a member of EVMS and the culture of the school. Several individuals also expressed positive sentiments towards diversity training that is provided to EVMS medical students:

> "I think EVMS does a good job of educating students on cross-cultural competency regarding other races, ethnicities, and socioeconomic status. Instructors also do great at reminding students of social determinants of health, as well as how to be more sensitive to hidden issues like illiteracy."

At the same time, there were comments about how training could be improved and needs to be expanded to all members of the EVMS community. Some of the negative comments referenced bullying, body shaming, bias, cultural insensitivity, reports of entitlement, lack of comradery, and mistreatment. Negative reports accounted for approximately 25% of the comments.

One quotation sums up the results of the survey well, "I think there is a positive striving force to…have more cultural humility but is sometimes not practiced. Theory and reality [are] very different." A successful QEP project would entail seeing a smaller proportion of comments in the "negative" category and seeing theory become practice.

Background Data. Due to the efforts of the EVMS health equity and inclusion strategic planning initiative, several sets of data support the baseline of cultural humility. Upon analysis, they provided background perspectives but did not contain data that directly pointed to the Live Humble QEP objectives. These data sets informed early thinking and will be useful as the design and development phase of QEP elements matures. Background data included questions from the American Association of Medical Colleges (AAMC) Medical School Graduate Questionnaire (GQ), focused on cultural competence, the Independent Student Analysis (ISA), a student-developed survey created as part of the 2020 Liaison Committee on Medical Education (LCME) accreditation process addressed issues including

cultural humility. Finally, focus group and survey response data was generated from the most recent strategic plan.

Conclusions based on the Baseline Data. Taking all these observations and data as a whole, the following conclusions are offered:

1. Medical students do not have a basic grasp of cultural humility. However, they appear to value the general concept as evidenced by their support of cultural humility as the QEP topic.
2. Medical students do not know the skill elements of conducting a culturally humble clinical encounter. There may be some implicit skill capacity among students with prior medical experience, but it is fair to say that the skill would not be demonstrated by most.
3. Based on survey data, participants observed behaviors contrary to cultural humility at all levels of the school community.
4. In keeping with the literature, underrepresented minority students and staff are more aware of issues with cultural humility than their colleagues.
5. Students were much more critical of each other in cultural humility than of staff or faculty.
6. Faculty and staff are not comfortable with defining cultural humility or its application.

Aligning the QEP with Institutional Mission and Priorities

Cultural Humility is in Perfect Alignment with Strategic Plan. In choosing cultural humility as the QEP focus, the QEP did not merely align with our EVMS 2019 strategic plan, *Advancing Health Equity and Inclusion for Community and Academic Impact*, it was central to it. The first strategic priority in this plan is, "provide enriched training and assessment for access and success." The Live Humble QEP is the chief strategy in accomplishing this strategic objective.

Cultural Humility is an Important Practical Component of the EVMS Vision. The EVMS school vision, posted on every entry door is: "Eastern Virginia Medical School will be recognized as the most community-oriented school of medicine and health professions in the United States." As an academic community, EVMS believes in this vision. In a diverse region in a rapidly diversifying country, an important part of what it means to be community-oriented is being able to effectively care for people who present widely divergent values, health beliefs, and priorities. EVMS students are trained to be culturally humble so that they may be effective community-oriented healthcare professionals in fulfillment of this vision.

III. Broad-Based Support

The QEP Executive Committee met in the summer of 2018 to discuss how to gather campus-wide input and support for the 2020 QEP. This committee began organizing a QEP-focused retreat for the early fall of 2018, aimed at generating faculty, staff, and student topic ideas for the QEP. An email invitation to present proposal ideas was sent to the campus community in September 2018, and on October 19, 2018 a retreat was held that included about 75 faculty, staff, and students. Five ideas were presented and discussed, and preferences were measured by a multi-voting procedure. In addition to the retreat, QEP topics were solicited through a campus-wide survey (Appendix B).

At this point, there was no clear consensus on the preferred QEP topic. Simultaneously, three potential topics were being actively discussed: Interprofessionalism, Ultrasound Skills, and Community-Engaged Learning.

On February 18, 2019, a QEP Student Town Hall was held to discuss the QEP and gather student ideas for topics. Students provided their top three ideas for the QEP topic on index cards, and the most frequently cited practical idea was "cultural humility."

The QEP Advisory Group was formed on April 17, 2019, composed of representatives and students from across campus. This group discussed many ideas for the QEP and conducted a weighted vote in which members prioritized their first, second, and third choices. That effort resulted in a list that included Professional Identity Formation, Community-Engaged Learning, and Ultrasound Skills. Yet, there was not sufficient consensus for the QEP Advisory Committee to conclusively determine a QEP topic. For a short period after this April meeting, it appeared that the Ultrasound Skills Curriculum was the top choice, and initial efforts were started in that direction. However, the QEP Advisory Committee as a group determined that there was not sufficient support for the idea, and efforts were halted.

In May of 2019, EVMS kicked off a strategic planning process around health equity and inclusion, resulting in the, *Advancing Health Equity and Inclusion for Community and Academic Impact* strategic plan (Appendix A), which began to influence QEP topic identification discussions.

QEP Meetings

Campus-Wide Retreat	10/19/18
QEP Executive Team	11/13/18
	12/21/18
	3/21/19
	6/17/19
	8/9/19
CME Committee Meeting	11/27/18
Student Town Hall	2/18/19
QEP Advisory Committee	4/17/19
	6/24/19
	10/9/19
	12/3/19
QEP Implementation Team	5/28/19
	7/2/19
	10/16/19
	12/19/19
	1/7/20
	1/13/20
QEP Subcommittees	8/21/19
	11/6/19
	11/21/19
	11/25/19
	11/26/19
	12/13/19
EVMS Board of Visitors	12/10/19
EVMS Faculty Senate	12/16/19
EVMS Senior Management	1/7/20

On June 24, 2019, the QEP Advisory Committee, guided by the ongoing strategic planning process and the interest in cultural humility indicated by students in the February 2019 QEP Student Town Hall meeting, identified cultural humility as the EVMS QEP topic.

Once the topic of cultural humility was identified, members of the Executive Committee presented to and received approval from the following groups:

- EVMS Faculty
- EVMS Faculty Senate

- EVMS Executive Leadership
- EVMS Board of Visitors

EVMS selected cultural humility as the QEP focus for five important reasons: it is central to EVMS's 2019 strategic plan, it is foundational to EVMS's vision, there is heightened awareness in the school community around this topic, it was students' most often cited QEP preference, and it is central to the development of healthcare professionals prepared to practice in an increasingly diverse world of patient-centered healthcare.

Appendix G presents the rosters for the Live Humble committees and subcommittees. These committees are comprised of members from across the institution.

IV. Desired Student Learning Outcomes

After identifying the topic as cultural humility, the first task was to operationally define cultural humility. The literature review provides a detailed account of this process. The QEP Curriculum Team developed the operational definition of cultural humility and working with the QEP Assessment Team, articulated learning objectives. A curriculum audit was performed and identified opportunities for improvement in the current curriculum (Appendix H). The learning objectives and associated enabling objectives are included as Appendix I.

Student Learning Outcomes

1. By spring of M2 year students will demonstrate knowledge of the key definitions, principles and practices of cultural humility as measured by short-answer instruments, prompted reflections, and multiple choice assessments. (Target performance criteria: 95% of students will meet 80% accuracy standard.)
2. By spring of M2 year students will demonstrate knowledge of prevalent structural inequities as measured by short-answer instruments, prompted reflections, and multiple choice assessments. (Target performance criteria: 95% of students will meet 80% accuracy standard.)
3. By the end of M3 year students will effectively apply skills in self-assessment, sensitivity and respect for others, and implementing strategies to reduce power differentials as measured by standardized patient encounter clinical skill assessments and community-engaged learning peer evaluation. (Target performance criteria: 85% of students will successfully perform the cultural humility elements on the OSCE.)
4. By spring of M4 year students will demonstrate a value for cultural humility as measured by the M4 required reflection on cultural humility. (Target performance Criteria: 90% of students either “agree” or “strongly agree” on M3 and M4 reflection prompts.)
5. By spring of M4 year students will pass the clinical skills assessment with cultural humility dimensions administered during the Transition in Practice Series (TIPS) program. (Target performance criteria: 90% of students will successfully perform the cultural humility elements on the OSCE.)

The QEP Logic Model

The QEP logic model (Appendix J) guides institutional efforts in analysis, design, development, implementation, and execution of this initiative. This model is meant to be a quick-glance summary of the types of resources, activities, inputs and outputs required to accomplish the intended outcomes of this QEP.

V. Resources

EVMS is investing new and sufficient resources to implement the Live Humble QEP as part of EVMS's newest strategic plan. The EVMS Board of Visitors approved the projected budget of $1,200,000 that was created in partnership with key administrators and QEP leaders (minutes available upon request). This budget addresses QEP program analysis, development, design, implementation, publicity, and evaluation.

	Description	AY 2020-2021	AY 2021-2022	AY 2022-2023	AY 2023-2024	AY 2024-2025	TOTAL
1	QEP Co-Directors • Dr. Mazzurco • Dr. Robison	77,415	120,166	122,089	124,051	126,052	569,773
2	Staff Development/Conferences/Travel	15,000	15,000	15,000	15,000	15,000	75,000
3	Student Interns	12,000	12,000	12,000	12,000	-	48,000
4	Faculty Effort	18,800	18,800	18,800	18,800	18,800	94,000
5	Contractual/Evaluator	5,000	-	-	18,000	-	23,000
6	Standardized Patients	10,000	12,000	16,000	16,000	16,000	70,000
7	Simulation	65,000	-	-	-	-	65,000
8	Materials Development	80,000	50,000	40,000	-	-	170,000
9	QEP Publicity	30,000	-	-	10,000	-	40,000
10	QEP Meetings/Retreats/Supplies	10,000	8,000	2,000	1,000	1,000	22,000
11	Supplies/Equipment	18,000	1,000	1,000	2,000	1,000	23,000
12	**Total Budget**	341,215	236,966	216,851	216,851	177,852	1,199,773

Annotated Expenses

1. **QEP Co-Directors.** The QEP Co-Directors are individuals who are deeply involved in teaching and instructional design and will provide assessment, and faculty development leadership. Lauren Mazzurco, DO is the Director of Case-Based Learning and Don Robison, PhD is the Director of Community-Engaged Learning and is an instructional designer.
2. **Staff Development, Conferences, and Travel.** Supports QEP team travel to SACSCOC conferences twice a year.
3. **Student Interns.** Supports two student interns each semester for the first four years of the project. Interns will provide administrative support to the Co-Directors.
4. **Faculty Effort.** Additional faculty effort will be required particularly in clinical skills training revision and conducting assessments.
5. **Contractual and Evaluator.** Support for external consulting on the QEP Proposal, QEP Five-Year Impact Report, and other unique contracting requirements.
6. **Standardized Patients.** Standardized Patients will be used in both the instructional and assessment activities associated with cultural humility.
7. **Simulation.** Design of a web-based interactive practice tool and/or other automated tools.
8. **Materials Development.** Supports the design and development of several videos, publishing of print-based media, and programming of some interactive experiences.
9. **QEP Publicity.** Creation and printing of materials to help promote awareness of the project, and provide general dissemination of the QEP principles.
10. **QEP Meetings, Retreats, and Supplies.** Costs of faculty, staff, and student meetings related to the QEP.
11. **Supplies and Equipment.** Supports cost of equipment and other supplies.
12. **Total Budget.** The total budget for the QEP is $1,200,000.

VI. Assessment

The primary goal of this QEP is to improve our students' knowledge, skills, and values in cultural humility and structural inequity. This, in turn, will improve quality of care, particularly for those who have been stigmatized (Tervalon & Murray-Garcia, 1998). Table 1 presents the instruments that will be used in all QEP assessments and describes when each instrument will be used, whether it is a direct or indirect measure, a pre-measure or progress measure, a formative or summative measure, and if it is a key program assessment measure.

Outcome Measures. The knowledge, skills and attitudes required of cultural humility have been identified. If successful, our students will:

1. By spring of M2 year students will demonstrate knowledge of the key definitions, principles and practices of cultural humility as measured by short-answer instruments, prompted reflections, and multiple choice assessments. (Target performance criteria: 95% of students will meet 80% accuracy standard.)
2. By spring of M2 year students will demonstrate knowledge of prevalent structural inequities as measured by short-answer instruments, prompted reflections, and multiple choice assessments. (Target performance criteria: 95% of students will meet 80% accuracy standard.)
3. By the end of M3 year students will effectively apply skills in self-assessment, sensitivity and respect for others, and implementing strategies to reduce power differentials as measured by standardized patient encounter clinical skill assessments, and community-engaged learning peer evaluation. (Target performance criteria: 85% of students will successfully perform the cultural humility elements on the OSCE.)
4. By spring of M4 year students will demonstrate a value for cultural humility as measured by the M4 required reflection on cultural humility. (Target performance Criteria: 90% of students either "agree" or "strongly agree" on M3 and M4 reflection prompts.)
5. By spring of M4 year students will pass the clinical skills assessment with cultural humility dimensions administered during the Transition in Practice Series (TIPS) program. (Target performance criteria: 90% of students will successfully perform the cultural humility elements on the OSCE.)

Kirkpatrick's Four Levels of Evaluation. As assessments are identified in Table 1, the Kirkpatrick level of evaluation is specified. The Kirkpatrick model of evaluating the effectiveness of instruction (Kirkpatrick & Kirkpatrick, 2007) focuses on four levels of evaluation: Level 1 is learner reaction (how learners felt about the instruction), Level 2 is measuring learning (how learners performed on assessments), Level 3 is an evaluation of behavior (how learners performed differently as a result of the instruction), and Level 4 is evaluating the larger institutional effect of the instruction (how the instruction impacted broad institutional outcomes).

Table 1. Measures used in the EVMS Cultural Humility QEP

Instrument	Direct or Indirect	Pre-Measure	Progress Measure	Administer	Key Outcome(s) Measured[1]
Short-answer definition and clinical application of cultural humility [Kirkpatrick Level 2]	Direct	✓	✓★	• August M1 Year • March M2 Year	1
Short-answer definition and example of structural inequity [Kirkpatrick Level 2]	Direct	✓	✓★	• August M1 Year • March M2 Year	2
Cultural Humility Institutional Survey [Kirkpatrick Level 1, 3]	Indirect	✓	✓ ✓★	• January M1 Year • June M3 Year • April M4 Year	4
Community-Engaged Learning Peer Evaluation [Kirkpatrick Level 3]	Direct	✓	✓	• January M1 Year • March M2 Year	3
Required Reflections [Kirkpatrick Level 1, 2]	Direct		✓ ✓ ✓★ ✓★	• March M1 Year • March M2 Year • June M3 Year • April M4 Year	4
MCQ Assessments [Kirkpatrick Level 2]	Direct		✓ ✓	• M1 Year (Various) • M2 Year (Various)	1,2,3
Objective Structured Clinical Examination (with Cultural Humility Dimension) [Kirkpatrick Level 2]	Direct		✓ ✓ ✓★	• January M1 Year • September M2 Year • April M4 Year	3,5
Clerkship History and Physical Assessment [Kirkpatrick Level 3]	Indirect		✓	• Internal Medicine Clerkship	5
Heart, Lung, Kidney Module Self-Directed Learning Project [Kirkpatrick Level 2]	Direct		✓	• March M2 Year	5
Unified Clinical Preceptor Evaluation (Item #14) [Kirkpatrick Level 3]	Direct		✓	• By June M3 Year	4,5
Postgraduate Survey Items [Kirkpatrick Level 3]	Direct		★	• One year after graduation	4

★ Measures identified with a star are key program effectiveness measures.

[1] Outcome numbers listed on previous page

Description of Measures

Assessing knowledge, skills, and values. The logic of this assessment plan is that students may value cultural humility in practice, but that one cannot choose to do what one does not know to do, or know how to do. Therefore, knowledge acquisition (knowing to do), and skill development (knowing how to do), will be assessed before assessing whether or not students value it.

Student Learning Measures

[Direct] Definition and clinical application of cultural humility (Short-Answer). A 2-item pre- and post-measure of cultural humility foundational knowledge will be administered during Module Zero and during spring of M2 year. Students will complete a short-answer ungraded pretest that asks two questions: a.) "Define cultural humility" and b.) "How would you apply it in a clinical encounter" (see Rubric Appendix D). The progression of this performance will be used to assess individual student progress and evaluate program effectiveness. [Summative]

[Direct] Definition and example of structural inequity (Short-Answer). A 2-item pre- and post-measure of structural equity foundational knowledge will be administered during Module Zero and spring of M2 year. Students will complete a short-answer ungraded test that asks two questions: a.) "Define structural inequity" and b.) "Provide an example of structural inequity" (see Rubric Appendix D). The progression of this performance will be used to assess individual student progress and evaluate program effectiveness. [Summative]

[Direct] Required Reflections. As part of curriculum each year, students will complete one required reflection. This reflection will measure student knowledge relating to the reflection prompt for that year and will be assessed for demonstrated student valuing of the concepts. These reflections will *not* be graded, but feedback will be provided to students. [Formative, Summative]

The Reflection Prompts

- M1 Year Reflection Prompt: Briefly define cultural humility. How could it be used positively in your community-engaged learning context?
- M2 Year: Briefly define structural inequity. Do you see it with your community-engaged learning served population?
- M3 Year Reflection Prompt A: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "Structural inequity is a significant challenge in medical care." Please defend your answer. (see Rubric Appendix K)
- M3 Year Reflection Prompt B: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "As a physician, I have an obligation to notice structural inequities and work with others to address them." Please defend your answer. (see Rubric Appendix K)
- M4 Year Reflection Prompt: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "Cultural humility is important in clinical encounters." Defend your answer. (see Rubric Appendix K)

[Direct] Community-Engaged Learning Peer Evaluation. As part of Community-Engaged Learning students provide peer feedback to the members of their small service team. Prior to participating in this exercise, students receive training in providing constructive and positive feedback. These student service teams are comprised of between six and ten students. The peer evaluations incorporate the same *Cultural Humility Assessment Scale* items (see Hook et al., 2013) used in the *EVMS Cultural Humility Institutional Survey* (Appendix C). Hook et al., (2013) observed α=.93 for this scale (EVMS observed α=.87, n=678). The original *Cultural Humility Assessment Scale* content validity was confirmed by expert counselors, and construct validity was established by factor analysis (mean factor loading, 84) (Hook et al., 2013). The cultural humility evaluation items for the peer evaluation are presented in Figure 3. In this instance, students will be providing feedback on how the evaluated student interacted with the served audience and how the evaluated student interacted with other students. All peer evaluations are screened by community-engaged learning staff and faculty to ensure potentially hurtful comments are not passed, and then feedback is aggregated before being provided to the student. The data representing the progression from M1 year to spring M2 year will be used to assess individual student progress and evaluate program effectiveness. [Formative]

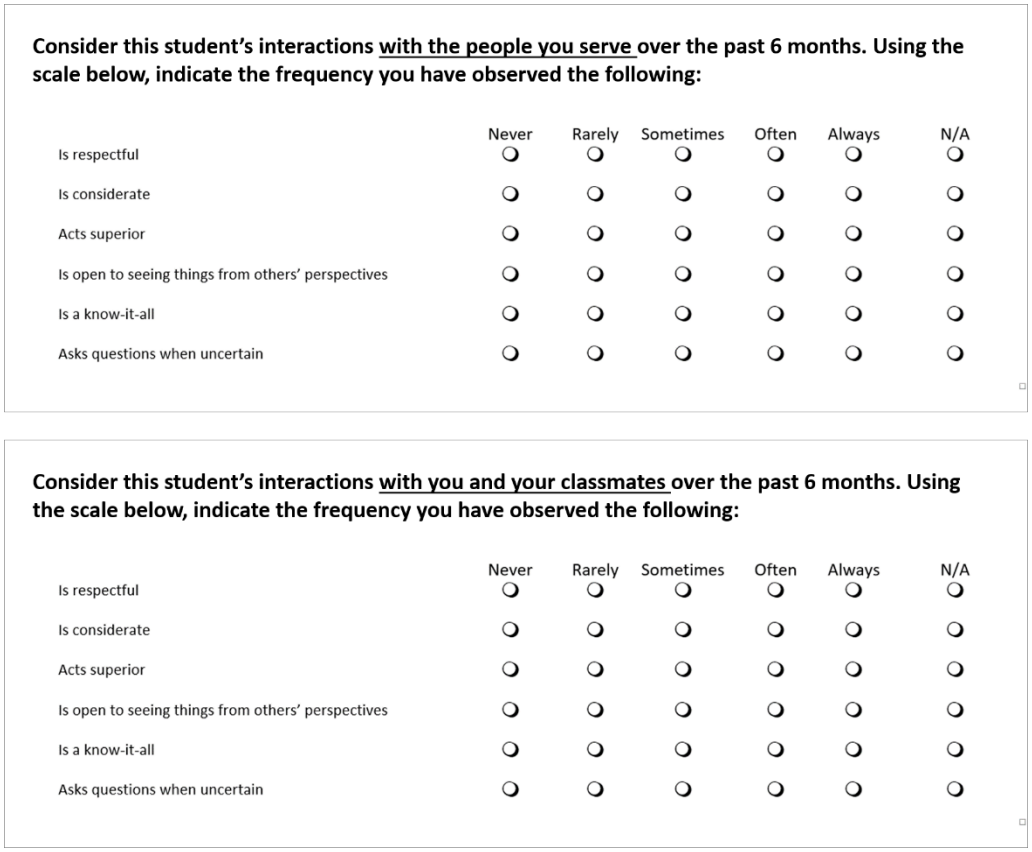


Figure 3. Cultural Humility Assessment items used in Community-Engaged Learning Peer Evaluation.

[Direct] Objective Structured Clinical Examination (OSCE) with Cultural Humility Dimension. The three-part skill of a.) constant self-assessment and critique, b.) sensitivity to the other's values, priorities, and beliefs, and c.) employing strategies to mitigate power differentials will be assessed in OSCEs that include tailored cultural humility evaluation criteria. These data will be used to assess student culturally humble clinical encounter skills. [Formative, Summative]

[Indirect] Clerkship History and Physical Assessment. During the Internal Medicine Clerkship rotation, student history and physical health record entries will be assessed and feedback provided regarding record entries that are sensitive to the patient's values and identity. These data will be used to assess student culturally responsive recording skills. [Formative, Summative]

[Direct] Multiple Choice Questions. Multiple choice questions will be used to assess student ability to recognize, discriminate, or respond to various scenarios and will be used in both formative and summative assessment contexts. These data will be used to assess the effectiveness of the instructional design for knowledge-centered objectives for this project. [Formative, Summative]

Project-Level Key Effectiveness Measures

The key summative measures for progress in this project are derived from the measures identified in Table 1. These will include, as described above:

- [Direct] Definition of cultural humility and example of clinical application
- [Direct] Definition of structural inequity and example (Short-Answer)
- [Indirect] EVMS Cultural Humility Institutional Survey
- [Direct] Required Reflections for M3 and M4 Year

- [Direct] Objective Structured Clinical Examination (OSCE) with Cultural Humility Dimension
- [Direct] Postgraduate cultural humility survey items

Process for Assessing Student Learning

The assessment plan includes assignment of responsibility for the data that supports the assessment, and also the office responsible for monitoring that data. The QEP Co-Directors in conjunction with the QEP Assessment subcommittee are responsible for the data plan and execution, as well as data analysis and overall assessment of learning relating to this QEP. Student learning assessment data will be collected in the process of course level instruction and student performance data will generally be stored in the course Blackboard site, the institution's learning management system. The data from student learning assessments will be maintained by the Director for Assessment.

The QEP Assessment and Executive Committees will meet quarterly to analyze the progress to attainment of outcome goals (see "Outcome Measures" on page 15) and assess data as outlined below.

Table 2. QEP Learning Data Locations and Responsibilities

Instrument	Data Location	Responsible
Short-answer definition and clinical application of cultural humility	QEP Co-Directors	QEP Co-Directors
Short-answer definition and example of structural inequity	QEP Co-Directors	QEP Co-Directors
EVMS Cultural Humility Institutional Survey	QEP Staff Office	QEP Co-Directors
Community-Engaged Learning Peer Evaluation	Community-Engaged Learning Offices	Community-Engaged Learning Staff
Required Reflections	EVMS Blackboard	Community-Engaged Learning Staff, Health Systems Sciences Staff
MCQ Assessments	EVMS Blackboard	Community-Engaged Learning Staff, Health Systems Sciences Staff
Objective Structured Clinical Examination (with Cultural Humility Dimension)	Clinical Skills Records	Clinical Skills Faculty
Clerkship History and Physical Assessment	Department Records	Internal Medicine Faculty
Unified Clinical Preceptor Evaluation (Item #14)	EVMS eValue	Medical Education Office of Evaluation
Postgraduate Survey Items	Medical Education Office of Evaluation	Medical Education Office of Evaluation

VII. Literature Review and Best Practices

Defining Cultural Competence as a Framing Concept

The most widely used construct for describing a professional's ability to effectively engage people from diverse cultures is "cultural competence." The main idea with cultural competence is that a person or organization can develop a level of knowledge, skills, and congruent behaviors that enables effective work in cross-cultural contexts. This perspective has led to the development of many helpful references regarding how cultural health beliefs may impact care. And, these resources are incredibly valuable. The cultural competence paradigm has been the foundation of several effective training programs. The entering assumption with cultural competence is that there are a finite set of principles or skills that can make one 'literate' in a culture (Tervalon & Murray-Garcia, 1998).

Cultural Humility versus Cultural Competence

Cultural humility on the other hand, while not novel, is still an emerging concept. It is proposed as a practical and more sensitive alternative to cultural competence for interacting with people of different cultures. The underlying assumption with cultural competence is that there is a discrete set of knowledge and skills that may be mastered to allow one to effectively interact with diverse cultures (Tervalon & Murray-Garcia, 1998). This is a difficult assumption to accept given that there are as many as 7,111 different linguistic/cultural groups in the world (Summer Institute of Linguistics, 2020). The assumption becomes more difficult still if one takes the view that health beliefs and values vary widely within these larger people groups based on unique person-important identity factors like gender, age, income, education, sexual orientation, ability and faith, to name a few (Kumas-Tan, Beagan, Loppie, MacLeod, & Frank, 2007). Cultural humility is proposed as a more practical paradigm because it does not presume to develop a finite skillset that may be mastered. Instead, it is a continuous process of self-reflection, self-assessment and sensitivity that requires humility as individuals engage with people of other cultures (Tervalon & Murray-Garcia, 1998). It is characterized by lifelong learning and openness. Therefore, as cultural competence may be seen as a series of generalized stereotypes to be mastered, cultural humility focuses on humility in action and perspective (Tsai, 2016).

Interestingly, while there is a difference in emphasis between cultural humility and competence, in practice, the approaches borrow heavily from each other. There are foundational knowledge elements required for cultural humility echoing the cultural competence perspective, and most cultural competence instructional programs emphasize the importance of continuous learning, an emphasis in cultural humility (Campinha-Bacote, 1999). Therefore, since there is significant overlap in the paradigms, this review of evidence and best practice will draw from both the cultural humility and cultural competence literature.

Operationalizing the Definition of Cultural Humility for EVMS

One of the first challenges after recognizing both the demonstrated need and strategic importance of cultural humility to EVMS, was defining it operationally. Both our Curriculum and Assessment Committees took on the task of reviewing the literature and grappling with meaning. Led by Tervalon and Murray-Garcia's (1998) original conception of the construct, we developed a preliminary definition, but found it too vague to form a viable foundation for the Live Humble QEP. The AAMC's Tool for Assessing Cultural Competence Training (TACCT) (American Association of Medical Colleges, 2019; Boker et al., 2009) provided an example for our team that allowed us to develop a more detailed and behaviorally-specific definition of cultural humility that includes not only values but a three-part skill that includes a.) continuously assessing one's personal behavior and biases, b.) continuously and sensitively attending to the values, beliefs, and priorities of the other, and c.) developing and enacting strategies for mitigating any potential power differentials.

The EVMS team defined cultural humility:
Cultural humility is a continuous process of self-awareness of and reflection on one's own values, biases, and behavior while cultivating a sensitivity and openness to cultural identity, with the intention of honoring the beliefs, customs, values, and experiences of all people.

This includes:

- Continuous self-assessment and reflection
- Sensitivity and respect to individual beliefs, customs, values, and experiences (person-important identity)
- Identifying potential power differentials
- Using intentional strategies to reduce potential power differentials
- Recognizing and addressing systemic barriers to equity

The fundamental link between cultural humility and structural inequity. If cultural humility is focused on self-reflection, sensitivity to the other, and the skill of mitigating relational power differentials; it is also closely related to the structural inequities that lie at the root of stigmas that drive the power differentials. Cultural humility and structural inequity are different facets of the same phenomenon. They are so closely related that Metzl and Hansen (2014) proposed a structural competence curriculum that emphasizes the recognition of structural inequities and cultural humility.

Five Best-Practice Approaches for Teaching Cultural Humility and Cultural Competence

As contemporary societies become increasingly diverse, it is imperative that physicians have the ability to effectively and positively interact with people very different from themselves. As a consequence, there are many emerging models for teaching cultural humility and cultural competence. The approaches are widely divergent offering different assumptions, priorities, and recommended practices. Further, efficacy representations are inconsistent, making it difficult to compare one approach to another. Fortunately, the different model approaches describe activities in ways that translate directly to generative learning or interpersonal skills learning strategies, and there is extensive efficacy research in these areas. Therefore, we present an overview of five best-practice instructional approaches to cultural humility and cultural competence, and then synthesize the instructional strategies employed in each best-practice. After presenting the component strategies, the evidence supporting the key strategies will be offered. The five best-practice approaches are:

- The Cultural Humility Model: (Tervalon & Murray-Garcia,1998)
- The 'Acquire, Apply, and Activate Framework (Constantinou, Papgeorigiou, Samoutis, & McCrorie, 2018)
- The Cultural Competence Process Model (Campinha-Bacote,1999)
- The Structural Humility Framework (Metzl & Hansen, 2014)
- The Bridging the Gap Framework (Juarez, Marvel, Brezinski, Glazner, Towbin, & Lawton, 2006)

Cultural Humility Model
The most influential approach for teaching cultural humility was developed by Tervalon and Murray-Garcia (1998) who coined the term, "cultural humility." They first made the case for using the cultural humility paradigm over the cultural competence paradigm for teaching students how to effectively interact with people of diverse cultures. Here, cultural humility is presented as a lifelong commitment to self-evaluation and critique, sensitivity to the other, and redressing power imbalances in the patient-physician dynamic. The goal is the development of mutually beneficial and non-paternalistic clinical and advocacy partnerships. The elements of the model include:

Patient-focused interviewing and care. Patient-focused interviewing and care is advocated in this approach, using a less authoritative style that signals that the practitioner values the patient's agenda is a skill that is at the center of this approach (Tervalon & Murray-Garcia, 1998). Advocated in this approach in 1998, this patient-focused set of values and practices has been incorporated in the contemporary notion of person centered care (Van Royen et al., 2010), taught as the standard of care at EVMS.

Community oriented perspectives and advocacy. This approach places a premium on training student physicians in community sites, and emphasizes the importance of population-based health promotion. Further, medical students must be trained in advocacy, in this is best accomplished in community settings (Tervalon & Murray-Garcia, 1998).

Institutional consistency. Tervalon and Murray-Garcia (1998) also emphasize the importance of cultural humility in the institution. The same processes expected to affect change in physician trainees should concurrently operate within the institution attempting to facilitate the change. This includes self-reflection and self-assessment with faculty and staff. It includes consciously attempting to make the faculty inclusive of people from different cultural, racial, ethnic, and sexual orientation backgrounds. This ethos of support for diversity is a necessary prerequisite to effective practice (Kenny, Mann, & MacLeod, 2003).

The 'Acquire, Apply, and Activate' Framework

Constantinou, Papgeorigiou, Samoutis, and McCrorie (2018) advocate an approach to teaching cultural humility they refer to as "Acquire, Apply, and Activate." Their framework is based in both situated learning theory and constructivism and was heavily influenced by Miller's clinical competence pyramid (see Miller, 1990). The model is depicted as a pyramid with both height and depth. Figure 4 presents a synthesized representation of the Constantiou et al. model with a typical visualization of the Miller clinical competence pyramid. This is presented as an integrated model that takes learners from foundational knowledge, through contextualizing and applying that knowledge in realistic cases, to activating the knowledge, skills, and values in authentic performance environments. The learners progress through the phases of the model over the course of the years of medical school.

This model is flexible regarding instructional methods, like Miller's (1990) pyramid model, because it focuses on performance outcomes rather than methods. Because of this flexibility, the authors present the model as appropriate for programs of varying length. Learning could be assessed using typical assessment methods: knowledge would be assessed through single best-answer questions or short-answer questions, and application of knowledge by essays, reflections or case reports; and activation of knowledge by clinical skills assessments and clinical assessments (Constantinou et al., 2018).

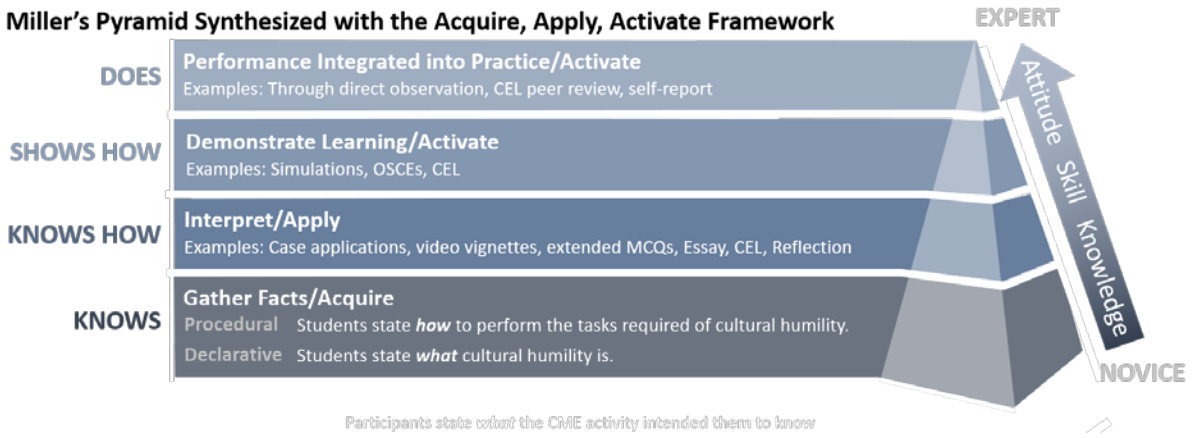


Figure 4. Presenting performance elements of Constantiou et al's cultural competence training framework in the Miller clinical competence model. Adapted from Constantiou (2018) and Miller (1990).

Cultural Competence Process Model

Campinha-Bacote (1999) advocates a five part approach in training cultural competence that is similar to the acquire, apply, activate model but focuses on process as opposed to outcomes. The approach proposes teaching cultural awareness, knowledge, and skills, which is similar to the former framework. In addition, the model incorporates personal cultural encounters, and then emphasizes cultural desire—the motivational component of the approach. The goal of this motivational element is to create a sense of "anguish" or "injustice" on the learners' part, energizing the learner to want to become involved in the self-assessment required in humility, but also energizing the humility required to restore a sense of human value to a situation that may be laden with stigma. In this framework, this motivation is also a prerequisite to individuals choosing to become involved in correcting the structural inequities that are the foundation for power differentials.

Campinha-Bacote (1999) asserts that any enduring engagement by students requires this unique motivation and that it is based in clear and accurate information about inequitable conditions. Practically, this translates into creating environments in which students may discover information about inequities and outcomes in an objective setting.

Structural Humility Framework

Langdon describes a "language of work" that defines professional expertise (Langdon, 1999). In Langdon's paradigm, professional expertise is encapsulated in the language professionals routinely use. This specialized language of work allows for deeper and more efficient communication. Metzl and Hansen (2014) describe a similar need for structural competence. For students to engage actively and effectively with cultural humility, they need to develop a unique language suited for disciplinary and interdisciplinary understandings of structure as they are relevant in clinical and community settings. Their approach focuses on training students to recognize structures that shape clinical interactions, use a unique language of structure, observe and imagine structural interventions, and develop structural humility. For students to effectively grasp the structures of inequity, and to formulate workable solutions to current challenges, it is essential that students learn a new vocabulary uniquely suited for describing the structures of inequity and their potential solutions (Metzl & Hansen, 2014).

The reported application of this model focused in undergraduate public health studies, and so there are missing elements for a medical school curriculum. The approach has students delving deep into the structural systems that underlie health outcomes. The curriculum involves many more specific topics related to structural inequities than the other models. One designed case-oriented activity has students

discovering structural inequities and then together imagining and designing alternative structures that will yield better outcomes (Metzl & Hansen, 2014).

Bridging the Gap Framework

This approach centers on residency training focusing on cultural humility (Juarez, Marvel, Brezinski, Glazner, Towbin, and Lawton, 2006). The three-day program had students participate in a variety of activities designed to expand perspective and motivate students to incorporate culturally humble practices in their routines. The activities included panel discussions with diverse communities (e.g., LGBTQ Panel and an Elderly Panel), the intentional use of the humanities for teaching sensitivity and self-reflection, book discussions, videos, simulated patient experiences, and patient interviewing. Student satisfaction with the discrete elements of the program was very high. Residents demonstrated significant improvement in three main areas after participating in this program: they were more likely to include patients in agenda-setting (Z=3.187, *P*=.001), to solicit patient perceptions related to their illness (Z=-2.240, *P*=.025), and to involve patients in decision making (Z=-6.293, *P*=<.001).

Generative and Interpersonal Skills Learning Strategies in the Models

The literature is replete with descriptions of approaches to teaching cultural humility and cultural competence. The different approaches are generally multi-dimensional, employing different instructional strategies. Efficacy measures for the different approaches are inconsistent, making evaluation of the approaches challenging. However, each of the approaches can be described in terms of the generative and interpersonal skills learning strategies espoused, and these strategies have been extensively evaluated for efficacy. Table 3 identifies specific generative and interpersonal skill learning strategies advocated by each model instructional approach. The remainder of this literature review will describe the efficacy evidence for each strategy explicitly advocated by the model approaches. To refresh context, five best-practice models were analyzed:

- The Cultural Humility Model: (Tervalon & Murray-Garcia,1998)
- The ‘Acquire, Apply, and Activate Framework (Constantinou, Papgeorigiou, Samoutis, & McCrorie, 2018)
- The Cultural Competence Process Model (Campinha-Bacote,1999)
- The Structural Humility Framework (Metzl & Hansen, 2014)
- The Bridging the Gap Framework (Juarez, Marvel, Brezinski, Glazner, Towbin, & Lawton, 2006)

Table 3. The generative and interpersonal skills learning strategies explicitly advocated by five model cultural humility/cultural competence instructional approaches. Generative strategies for teaching facts, concepts and procedures are shared by the five model approaches and are not addressed in this table.

	Models				
	Cultural Humility[1]	Acquire, Apply, Activate[2]	Process of Cultural Competence[3]	Structural Humility[4]	Bridging the Gap[5]
Generative Strategies					
Imagining	●			●	
Self-Testing	●				
Self-Explaining	●	●		●	●
Mental Rehearsal	●	●			●
Summarizing/Analogies	●		●	●	●
Interpersonal Skills and Affective Strategies					
Role/Behavior Models	●				●
Proximity/Situated Learning		●	●		

Model Approaches for Teaching Cultural Humility or Competence
[1]**Cultural Humility:** Tervalon and Murray-Garcia (1998)
[2]**Acquire, Apply, Activate:** Constantinou, Papgeorigiou, Samoutis, and McCrorie (2018)
[3]**Process of Cultural Competence:** Campinha-Bacote (1999)
[4]**Structural Humility:** Metzl and Hansen (2014)
[5]**Bridging the Gap:** Juarez, Marvel, Brezinski, Glazner, Towbin, and Lawton (2006)

Efficacy of Generative Learning Strategies used in the Five Models

Generative learning strategies. Learning can be summarized as the learner's act of constructing meaning from new information by cognitively reorganizing and integrating it into existing knowledge, it is a generative and active process (Wittrock, 1974). The research base supporting the efficacy of generative learning strategies is extensive (see Grabowski, 2003). Key generative strategies proposed by the model instructional approaches are presented with a brief review of the evidence supporting their efficacy.

Learning by imagining. Here, learners create mental images that depict the content of a lesson. For example, students might be asked to imagine the feelings of participants in a racially-oriented incident from the perspectives of both sides. In a study with undergraduate college science students (Leopold & Mayer, 2015), an experimental group received pre-training about how to mentally construct an image of the content of each paragraph they read. A control group simply read the same text. The imagining group outperformed the control group yielding large effect sizes (exp.1 d=1.30; exp 2 d=0.86). Metzl and Hansen (2014) believe this student-imagining process is critical in developing cultural humility, making the imagining of structural solutions to discovered inequities a routine for students.

Learning by self-testing. Self-testing is also called testing effect. Self-testing activates and helps the learner retrieve relevant knowledge. The idea is that a self-test or quick-test is given by the learner or by the instructor in the course of instruction, on the spot. One widely used method for accomplishing this is the use of student polling systems to get immediate responses in the course of a lecture. Self-testing—whether formal or informal—turns what could be a passive lecture experience into an active one, from a generative learning perspective. Research on testing effect is extensive (see for example Rawson, 2015; Roediger & Karpicke, 2006), and experimental results are characterized by large effect sizes.

Learning by self-explanation. Self-explanation means that the learner is translating and explaining the meaning of learning materials even as they are exposed to them. Often it is described as learner self-talk as the learner progresses through material or a lecture continues. It is most often used in science contexts, but is prescribed in contexts that may include complex reasoning or relationships (Morrison, Ross, Kalman, & Kemp, 2016). In a correlational study, college students were directed to think aloud as they studied a physics lesson (Chi, Bassok, Lewis, Reimann, & Glaser, 1989). Students who generated more self-explanations performed better on a problem-solving test than students who generated fewer explanations. Then Chi et al. (1994) asked eighth graders to study a text about the circulatory system, directing some to self-explain and others to read the material twice. The self-explain group outperformed the students who read the material twice. Wylie and Chi (2014) reviewed the extensive literature documenting the efficacy of this strategy.

Learning by mental rehearsal. Perhaps the most foundational generative learning strategy is mental rehearsal. This can involve actions as simple as repeating the spelling of a word or phone number to later recall it (Hung, Jonassen, & Liu, 2008), or it can be as complex as an Olympic skier rehearsing the turns of a slalom course and the movements that will be required. In both cases, whether the task is simple or complex, mental rehearsal has been shown to significantly improve subsequent performance. In novel neural research, Stanford researchers (Vyas et al., 2018) used a brain-machine interface and measured the effects of covert and overt rehearsal with monkeys on moving a computer cursor to both physical and cognitive performance. The control group simply moved the cursor in a directed way, and the experimental group was led to mentally rehearse the movement prior to performance. In both contexts, the performance was more accurate when the subject rehearsed the performance mentally. Jonassen (2012), in discussing why mental practice is effective opined that the ability to simulate the future enhances performance because it allows the individual to generate and evaluate alternatives, choosing the one believed to be best.

Learning by summarizing. Summarizing is the conscious act of identifying the key points in a lesson even as it is being experienced. An example could be capturing the main points in handwritten notes as a lecture proceeds. Theoretically, this cognitive act of processing, translating, and then evaluating the key points deeply engages learners (Grabowski, 2003). Writing summaries not only helps learners recall content, research indicates that it also provides learners with metacognitive benefits, helping them assess their level of comprehension (Anderson & Thiede, 2008).

Efficacy of Interpersonal Skills Learning Strategies used in the Five Models

Interpersonal skills and attitude learning strategies. Interpersonal skills focus on the development of communication and self-monitoring skills. Performance for these skills is either recall or application (Morrison et al., 2016). In some ways, then, the generative strategies are similar to the ones used for recall or application. Based on Bandura's (1977) research, a four-step strategy for instruction for interpersonal skills is recommended (as presented by Morrison et al., 2016):

1. The interpersonal skill model is presented to the learner. This can be a live demonstration, a video, or role-play scenario.
2. Help the learner develop verbal or imaginal models for the behavior.
3. Guide the learners in mental rehearsal of the skill (i.e. covert practice).
4. Provide opportunities for the students to perform the skills through either role-play or interactive programs.

Feedback may be provided two ways: first, the instructor could provide after-action feedback where the instructor discusses the individual's performance. Or second, the student may watch a video of someone else's performance (Morrison et al., 2016), as either an exemplar or case study.

Role and behavioral models. Role models in medical education have long been portrayed as a valuable means for teaching or demonstrating values, ethics, or difficult interpersonal skills, but defining what roles and what models should be used to accomplish these objectives has been unclear (Kenny et al., 2003). The traditional approaches can be described as somewhat monolithic, that is, that modeling itself has virtue and can be applied efficaciously in many contexts. But, it is likely best to look at modeling as a multidimensional challenge, models can be seen as having different types of value in different contexts. For example, if the learning objective is ethical, optimal models would be both virtuous (possessing a high moral character) and demonstrate a commitment to moral commitment. Goals and objectives for an ethics curriculum, then, would be somewhat unique to the subject (Kenny et al., 2003). If, on the other hand, the learning objective were attitudinal, or related to the development of a value (e.g., "tolerance"), research would indicate that a near peer model would be most effective (Bandura, 1977).

The context of the modeling is important. This idea that the context of the modeling dictates the type of modeling is reinforced in a recent mixed method study of influences of near-peers and clinician led small group instruction (Bishop, Rae, Thomas, & Tombs, 2019). Researchers had undergraduate medical students participate in small group instruction on different topics, then surveyed the participants regarding their experiences. There was not a significant difference overall for preference, but participants indicated that the clinicians were more trusted for practice-oriented information, and that the junior-clinicians (the near-peer models) were more trusted for practical advice. The type of information desired by participants dictated who they would approach for advice.

The power of proximity. Proximity—the degree to which learners perceive themselves to be associated with or geographically near another—has a powerful impact on the degrees to which individuals will empathize with others. In the wake of the Boston Marathon Bombing of 2013, researchers analyzed 180 million geocoded tweets (Lin & Margolin, 2014). They found that the closer geographically the tweet author to Boston, the more likely the tweet would communicate empathy. Similarly, they found that people with connections to Boston were much more likely to express empathy than others. With a tragedy of that magnitude, in which the entire country was aware of the factual details, these findings support the thesis that proximity has emotional power, particularly if empathy is a learning objective. In a classic complement to these observations, Caplow and Foreman (1950) demonstrated that within a sociologically homogenous community friendship is determined in large part by physical distance. In other words, the closer the proximity, the closer the friend. The application of this principle to cultural humility training, as advocated by both Tervalon and Murray-Garcia (1998) and Campinha-Bacote (1999), is that students of cultural humility must encounter people from other cultures. There must be some sense of proximity to the "other" for the discipline of humility to activate.

VIII. Implementation Plan

The EVMS QEP aims to achieve student learning outcomes by building upon and improving current aspects of our curriculum as well as integrating additional activities and assessments.

In 2016, EVMS implemented a new four-year undergraduate medical education (UME) curriculum, the CareForward Curriculum (CFC) transitioning from discipline-based to an organ system-based curriculum which includes two years of pre-clinical studies and two subsequent years of clinical experience. Included in the new curriculum were key longitudinal threads, including: high value care, care of older adults and those with multiple chronic conditions, wellness and community-engaged learning. This transition allowed for intentional focus on training future physicians to provide team-based person-centered, high value care in the context of the EVMS institutional mission to become the most community-oriented medical school in the country. Over the past four years, increasing awareness of these topics by both students and faculty have contributed to enhancements in the curriculum and opportunities to engage students in becoming change agents in transforming medical education. It was no surprise, then, when the EVMS community identified the QEP topic of cultural humility to enhance the student learning and preparation for their role as future physicians.

The Live Humble QEP will also include professional development of faculty and staff, development of training modules for relevant stakeholders and ongoing assessments and program evaluation. Guided by the EVMS unified competency objectives, as well as a curriculum audit (Appendix H) and a focused needs assessment, key areas of curricular focus on cultural humility were identified that will allow for infusion both horizontally and vertically across the four-year UME curriculum.

Actions to be Implemented

Over the course of the four-year curriculum, students will engage in several types of activities to build knowledge, awareness of self and others, and professionally appropriate skill sets related to cultural humility.

Curricular components for enhancement

Module Zero (M1)

Module Zero, which will occur during the first-year class orientation, will serve as the initial phase of introduction and engagement with the cultural humility curriculum. Capitalizing the primacy learning effect, the goal of Module Zero is to leverage student curiosity and excitement about their role as a future physician. “Pre-curriculum” surveys and knowledge assessment will occur. Classroom time will include an overview of the topic, definitions and framing of the curriculum by the instructors. Through discussion-based activities, learners will develop trust and rapport among themselves and with the instructors. Building upon prior experience, learners will be asked to reflect on and gain new knowledge of cultural humility and explore the “why” to ground importance of this topic in both their personal and professional identity formation. A physician panel of individuals felt to represent the EVMS ideal demonstration of cultural humility will provide context for professional identity formation. At the end of the module, the students will have a foundational, shared understanding of the definitions, framework and expectations going forward about the curriculum.

Transition in Practice Series (M3, M4)

The Transition in Practice Series (TIPS) is required for medical students at important transition points in their training; specifically the transition to clinical clerkship year (M3) and the transition to residency. Two of the aims of this series are to: “alleviate student anxiety regarding personal

and professional topics encountered at transition points" as well as, "offer an integrated, interactive, and interprofessional learning experience." During these sessions, learners will be asked to build upon clinical application and demonstration of skill sets related to cultural humility, which, when possible, will be explicitly linked to professional identity formation. Sessions utilize peer- and near-peer facilitation of discussions for context and assessment.

Clinical Skills Curriculum (M1 – M4)
Using standardized patient encounters and simulations and facilitated clinical skills small groups, learners will demonstrate skill acquisition, demonstration and self-reflection of bidirectional impact of interpersonal interactions. Additionally, learners will develop professionally appropriate strategies and skills to address exploration of person-important identity with others, bias, and power imbalances in clinical interactions. Feedback will be provided via 360^0 evaluations (faculty, peers/staff, SPs) for learner reflection.

Community – Engaged Learning (M1 – M4)
Community-engaged learning (CEL) is a four-year required course in which medical students serve in the local community in one of 20 sustained service initiatives (examples include Street Health, Medical Spanish, and Bystander CPR). Students attend a fair during the first week of medical school, talk with veteran students, and then choose the initiative in which they will serve the rest of medical school. There are uniform learning experiences that all students experience, and then each service initiative offers unique served populations and experiences. Students already serve in close proximity to community members (advocated by several of the best practice examples), already reflect on the social determinants of health, develop systems representations of their served community, and submit a Capstone Research Project at the end of the M4 year. Changes to CEL as a result of the Live Humble QEP will include cultural humility and structural inequity instruction and reflections pointed at these concepts. The peer-review evaluation will be revised to assess cultural humility.

Anticipated educational modalities

These learning modalities will serve to provide case and clinical context to frame self-awareness, self-reflection, and inter-relational skill sets.

Virtual Family Clinical Cases
Traditionally, UME has utilized case vignettes and virtual or online patient cases to provide consistent didactic learning experiences across the curriculum. With this in mind, EVMS developed longitudinal clinical cases embedded in five virtual families to provide relational family and community context to the patient case being discussed by the students over across the curriculum. Providing this context allows for natural integration of concepts such as health system interactions, chronic disease prevention and management, high value care, care of the elderly, social determinants of health, and wellness. Given the relational and self-awareness components of the QEP topic of cultural humility, EVMS plans to integrate and highlight these concepts within the virtual family clinical cases in the M1-M4 years to provide context to small and large group discussions.

Video Scenarios
In collaboration with the Sentara Center for Simulation and Immersive Learning at EVMS and Director of Clinical Skills, approximately ten brief clinical vignette video scenarios will be created to be used across the curriculum and in professional development. These videos, aligned with the learning objectives and outcomes, provide the foundation for discussion among learners. Additionally, learners will have opportunity to explore others' perspectives and development of

skill sets around addressing professionally appropriate behaviors and communication related to bias and stereotyping in addition to self-awareness of these aspects of interactions.

Patient Panels
Patient panels and patient interaction with small and large groups across the curriculum is intended to provide real-time context to knowledge and skill acquisition. This is an effective strategy to introduce the proximity that can influence changing the narrative around interactions and supporting cultural humility awareness.

Clinical Experiences
During third and fourth year clinical rotations, the learning will be asked to use a patient-centered history and physical exam format to elicit and document person-important identity of patients in the context of clinical care. These clinical experiences both with patients and within the healthcare team will allow for reflection on the value of cultural humility in patient encounters and the health care system, impact on inequities, and addressing bias in interactions.

The Use of Narrative and Story
A dedicated *EVMS Reader* will be developed that will include stories—some local—to provide narrative and emotional impact. Chapters pertaining to cultural humility and structural inequity will also be added to the existing *Community-Engaged Learning White Book*, thus providing a permanent reference for much of this unique material. The *Community-Engaged Learning White Book* is distributed to each student on the first day of medical school and used as a reference for all four years.

QEP Scale-Up Process

Over the five-year timeline, a scaling up process that will allow for continuity, both through the year and building across years, of activities and assessments appropriate to the level of learner is anticipated. The 2016 curriculum reform highlighted the importance of an iterative approach and inclusion of stakeholders in building and enhancing new curriculum is key to the transparency and success of the project.

In general, the processes, materials, and experiences will be built out for the medical school cohort that starts in August 2020 so that by the time they graduate, they will have experienced the entire planned enhancement. The only exceptions to this will be the video and interactive media that may take extended time to develop. And, of course, continuous evaluation of the interventions may lead to currently unplanned development.

Academic Year	MD Class Year	Total Students
2020 – 2021	M1 – Class of 2024	150
2021 – 2022	M1 – Class of 2025 M2 – Class of 2024	300
2022 – 2023	M1 – Class of 2026 M2 – Class of 2025 M3 – Class of 2024	450
2023 – 2024	M1 – Class of 2027 M2 – Class of 2026 M3 – Class of 2025 M4 – Class of 2024	600
2024 – 2025	M1 – Class of 2028 M2 – Class of 2027 M3 – Class of 2026 M4 – Class of 2025	600

Instructional Team and Key Collaborators

QEP Instructional Team. The QEP Instructional Team will be responsible for delivery of key curricular instruction related to the QEP learning objectives. The team will include the Associate Dean for Student Affairs, Associate Dean for Clinical Education, Director for Community – Engaged Learning (Co-Director, QEP), Director for Case-Based Learning (Co-Director, QEP), Director for Clinical Skills and the Director of Assessment.

The QEP Co-Directors will collaborate closely with the QEP Instructional Team to determine the most appropriate timing and delivery of content and assessments across the curriculum. Given that our goal is to enhance the curriculum by fully integrating this content, it will be critical for this team to leverage the instructors' curricular expertise to draw on opportunities to create valuable experiences for our learners to engage and grow personally and professionally. The QEP Co-Directors will actively participate in the post-module review process to ensure integration, activities, resources and assessments are appropriate and relevant.

Curricular content and deployment will be reviewed routinely with relevant curricular committees including the Pre-clerkship Curriculum Committee (PCC), the Module Directors Committee (MDC), and Clerkship Education Committee (CEC). The Medical Education Committee (MEC) provides ultimate oversight and approval for undergraduate medical curriculum.

Throughout all stages of QEP development and implementation, the QEP Instructional Team will receive support from the QEP Staff team which also includes our curriculum coordinators. Routine meetings with the QEP Staff Team will help ensure smooth integration across the modules. The QEP Instructional Team will also receive support from the QEP Advisory Committee and subcommittees to systematically review and track progress across the QEP project.

Similarly, support and collaboration across the institution may occur when and where appropriate to provide activities that intentionally align with broader institutional strategic planning efforts (guest and expert speakers, community based initiatives, etc.).

Module Directors. Module directors organize and administer the module-based curriculum during the initial two-year pre-clinical period in the EVMS UME program. Engaging them as key stakeholders in decisions about timing and appropriate pedagogically-sound instruction methods will be critical to the success of implementation and delivery of activities related to the QEP.

Course Directors. Course Directors lead courses that span the four-year UME curriculum and include wellness and career advising. Collaborations will be essential to plan for intentional redundancies in the curriculum where cultural humility objectives align or intersect with professional identity formation, wellness and self-care, and career development.

Clerkship Directors. Clerkship Directors are responsible for administration and oversight of the third year UME clinical experience which includes structured rotations in internal medicine, family medicine, obstetrics and gynecology, surgery, psychiatry and pediatrics. Collaboration with these individuals and their faculty preceptors will be essential to ensure transparency among clerkship faculty about cultural humility training, level of knowledge, awareness and skill sets for rotating learners within the clerkships, assessment methods, and investment in supporting the "hidden curriculum" associated with the learning environment as it relates to cultural humility.

Department Chairs. Department Chairs provide organizational oversight to both clinical and basic science faculty. Their investment to support professional development of faculty will be necessary to reinforce the learning environment for the student experiences across the curriculum.

Faculty Participation/Recruitment

Although there are a number of faculty interested in integrating content and activities into their module or course, there is a need for intentional integration and purposeful redundancy across the curriculum. Thus, over the course of the QEP implementation, we will be working with department chairs and academic leadership to identify additional faculty members who have demonstrated commitment and interest in development of cultural humility at our institution. In conjunction with Office of Faculty Affairs and Professional Development, ongoing development of faculty members' awareness and demonstration of cultural humility will further support the aims of this project.

Faculty Development

A comprehensive faculty development plan, overseen by Faculty Affairs and Professional Development, will use evidence-based strategies to align with the needs and goals of the QEP. By using a targeted needs assessment survey from the recent strategic planning initiative, *Advancing Health, Equity and Inclusion for Community and Academic Impact* in addition to the *EVMS Cultural Humility Institutional Survey,* the multifactorial approach will connect with faculty on both an individual and institutional level.

The plan will include establishing common language and best practice of instruction and assessment among faculty through faculty development workshops, Objective Structured Teaching Exercises (OSTE), professional development bytes (brief educational videos and learning modules), and peer observation of teaching with feedback. Where applicable, visiting expert speakers will augment both student and faculty learning and engagement. We will leverage our already established Educational Grand Rounds, Annual Education Symposium and EVMS Educational Scholarship Day to provide additional learning opportunities for faculty to engage with QEP related content and skills. Similarly, faculty will be asked to devise an action plan for how the activities in which they participate will influence or inform their interactions in the classroom and in the clinical setting with our learners.

A portfolio, starting with a baseline reflection on their own values, beliefs and teaching practices, will be implemented for faculty to track personal and professional growth over time. Expectations regarding faculty role in the learning environment as it relates to the QEP will be established during New Faculty Orientation.

IX. Timeline

The timeline below represents planned deployment of the proposed activities and assessments of the QEP. Given the iterative nature of curriculum design and deployment, this timeline may be adjusted to account for evaluation, feedback and opportunities for including or rearranging activities over the five-year period of the QEP to ensure successful integration. Aligning assessments along with programmatic evaluation at the intervals indicated in the timeline below, allow us to continually reassess and adapt to successfully meet our goals and learning outcomes over the course of the project. Maintaining this timeline allows for updating key stakeholders on a bi-annual basis and anticipate needs in order to meet upcoming year milestones. The QEP Staff Team will use this timeline to track adjustments in the curriculum and assessments to inform the QEP Impact Report at the five-year mark.

AY 2020 – 2021

	Time Period	**Development & Administration**	**Curricular Assessments**	**Professional Development**
Year 1	Fall 2020	QEP Launch – QEP Instructional Team, Curriculum and Assessment teams continue to meet M1 – Module Zero deployed M1 – Deploy integrated didactic and case-specific foundational content into clinical cases Begin development of clinical vignette videos	M1 Module Zero Pre–curriculum assessment (M1s) M1 – MCQs on relevant weekly quizzes	QEP Instructional Team training (begins summer 2020) QEP introduction via Departmental meetings
	Winter/Spring 2021	M1 – Introduction to use of reflection – Wellness, LGM and Community – Engaged Learning (CEL) Courses Ongoing development of clinical vignette videos	M1 Reflection activities M1 – MCQs on relevant weekly quizzes M1 – CEL Peer Evaluation MEC Program Evaluation	
	Summer 2021	Finalize initial clinical vignette videos and associated learning guides for use	Formative review of program implementation process, logistics, evaluations to inform year 2	QEP Instructional Team training on video vignettes Identification and training of QEP pre-clinical curriculum faculty “champions” on clinical vignette videos and small group facilitation

AY 2021 – 2022

	Time Period	Development & Administration	Curricular Assessments	Professional Development
Year 2	Fall 2021	M1 – Curriculum as described above M2 - Integrate didactic, case-specific content, and video vignettes into clinical application sessions M2 – Self-Directed Learning (SDL) Project Ongoing development of clinical vignette videos and associated learning guides for use	M1 Module Zero Pre–curriculum assessment (M1s) M1/M2 – MCQs on relevant weekly quizzes M2 – Assessment Rubric for SDL	Clerkship Directors training on cultural humility and methods of integration into clerkships
	Winter/Spring 2022	M1 – Curriculum as described above M1 – Clinical Skills SP Encounter M2 – Integrate didactic, case-specific content, and video vignettes into clinical application sessions Development of EVMS Reader	M1 – QEP Institutional Survey, clinical case-associated reflections, MCQs on weekly quizzes M2 – QEP Institutional Survey, required reflection, knowledge assessment and MCQs M1/M2 Community – Engaged Learning Peer Evaluation	Training for Clerkship faculty, residents/fellows in preparation for use of Unified Clinical Preceptor Evaluation
	Summer 2022	M3 TIPS Course – instruction on integrated reflection; clinical video vignette review/discussion	M3 – Required reflections for video vignettes Formative review and assessment of impact of integration in M1/M2 curriculum, make adjustment for upcoming academic year	Training for Clerkship faculty, residents/fellows in preparation for use of Unified Clinical Preceptor Evaluation

AY 2022 – 2023

	Time Period	Development & Administration	Curricular Assessments	Professional Development
Year 3	Fall 2022	M1 – Module Zero M1/M2 curriculum as described above M3 – CFC Day Clerkship case application	M1 /M2 assessments as described above M3 – Required reflection, clerkship H&P assessments	Training for additional pre-clerkship and clerkship faculty as needed
	Winter/Spring 2023	M1/M2 Case application discussion M3 – CFC Day Clerkship case/video vignette discussions Development of additional materials/resources	M1 – QEP Institutional Survey, clinical case-associated reflections, MCQs on weekly quizzes, reflections M2 – QEP Institutional Survey, required reflection, knowledge assessment an MCQs M3 – QEP Institutional Survey	Training for additional pre-clerkship and clerkship faculty as needed
	Summer 2023	M3 – TIPS Course	Formative review and assessment of impact of integration in M1/M2 /M3 curriculum, make adjustment for upcoming academic year	Training for additional pre-clerkship and clerkship faculty as needed

AY 2023 – 2024

	Time Period	Development & Administration	Curricular Assessments	Professional Development
Year 4	Fall 2023	M1 – M3 Curriculum administered	M1 – M3 Assessment as above Clinical Skills Rubric and reflection	Training for additional pre-clerkship and clerkship faculty as needed
	Winter/Spring 2024	M1 – M3 Curriculum administered M4 TIPS – SP Encounter; Video Vignette small group discussions M4 – CEL Capstone Projects	M1 – M3 Assessment as above M4 QEP Institutional Survey M4 – Capstone required reflection	Training for additional pre-clerkship and clerkship faculty as needed
	Summer 2024	M3 TIPS Course	Formative review and assessment of impact of integration in M1/M2/M3/M4 curriculum, make adjustment for upcoming academic year	Training for additional pre-clerkship and clerkship faculty as needed

AY 2024 – 2025

	Time Period	Development & Administration	Curricular Assessments	Professional Development
Year 5	Fall 2024	M1 – M4 Curriculum administered	M1 – M4 Assessments	Training for additional pre-clerkship and clerkship faculty as needed
	Winter/Spring 2025	M1 – M4 Curriculum administered	M1 – M4 Assessments, Institutional Survey	
	Summer 2025	Rough draft of 5-yr Impact Report due (Final report due Spring 2026)	Formative review and assessment of impact of integration in M1/M2/M3/M4 curriculum, make adjustment for upcoming academic year	

X. Organizational Structure

The QEP organizational structure and staffing is supported by individuals directly associated with curriculum design and integration within the existing MD program curriculum at Eastern Virginia Medical School. This structure will provide central oversight for the various components of the QEP to ensure a high quality, intentionally integrated curriculum that achieves our stated learning outcomes. This section will describe the specific QEP roles and personnel adjustments required to establish and maintain this team.

QEP Staffing

QEP Executive Leader. Vice Provost for Faculty Affairs and Institutional Effectiveness provides institutional oversight and guidance for the QEP process.

QEP Executive Committee. This committee is comprised of academic leadership members including the Vice Dean for Academic Affairs, Vice Provost for Faculty Affairs and Institutional Effectiveness, the Vice President for Diversity and Inclusion, Director of Institutional Effectiveness and Strategic Planning, the Co-Directors for the QEP and QEP Project Manager. This committee will meet quarterly to review progress, identify gaps and barriers, allocate resources, and provide updates to senior management and MEC. This committee will oversee success of the QEP at EVMS.

QEP Directors. The QEP Co-Directors coordinate and oversee all components and activities that make up the QEP. These positions are held by Lauren Mazzurco DO, FACOI and Don Robison PhD, CPT whose faculty and teaching responsibilities are strongly aligned with this role. In collaboration with the administration, faculty, staff and learners, the QEP Co-Directors are responsible for ensuring successful development, integration and assessment of the QEP Project at Eastern Virginia Medical School.

The Co-Directors work closely with relevant stakeholders to ensure alignment with both the institutional mission and expectations of the QEP as articulated in the *SACSCOC Guidelines*. Under their leadership, the QEP Advisory Committee and subcommittees determine relevant pedagogy, assessment, policy and faculty development needs. Similarly, the Co-Directors provide oversight of critical marketing, communication, documentation and reporting practices in concordance with standards to ensure success of the QEP project at EVMS. The Co-Directors report directly to the Vice Dean for Academic Affairs and Vice Provost for Faculty Affairs and Professional Development. Reporting lines also include Vice President and Dean of the School of Health Professions.

QEP Advisory Committee. The QEP Advisory Committee, chaired by the QEP Co-Directors, is comprised of faculty, staff and students from across the institution. The advisory committee was instrumental in selecting the QEP topic and will review and provide feedback on relevant assessment, program evaluation, resource allocation, and iterative modifications over the five-year project. They will be updated bi-annually along with the MEC by QEP Co-Directors or other members of the Executive Committee. All QEP subcommittees are determined and overseen by this committee.

Director of Institutional Effectiveness and Strategic Planning. Oversees institutional processes and outcomes related to aligning the QEP with institutional strategic priorities.

QEP Assessment and Program Evaluation. These roles are intended to lead evidence-supported development of assessment and evaluation structure, organization of data and relevant reports for QEP implementation and learning activities. The Director for Assessment has taken on the role of assessment specialist and the Associate Dean for Educational Assessment and Evaluation will oversee program evaluation.

QEP Faculty Development. The Co-Directors will collaborate with Faculty Affairs and Professional Development to identify, design and implement relevant faculty development opportunities for faculty related to the QEP. The Director of Professional Development provides oversight for educational research and scholarship that result from activities related to the QEP.

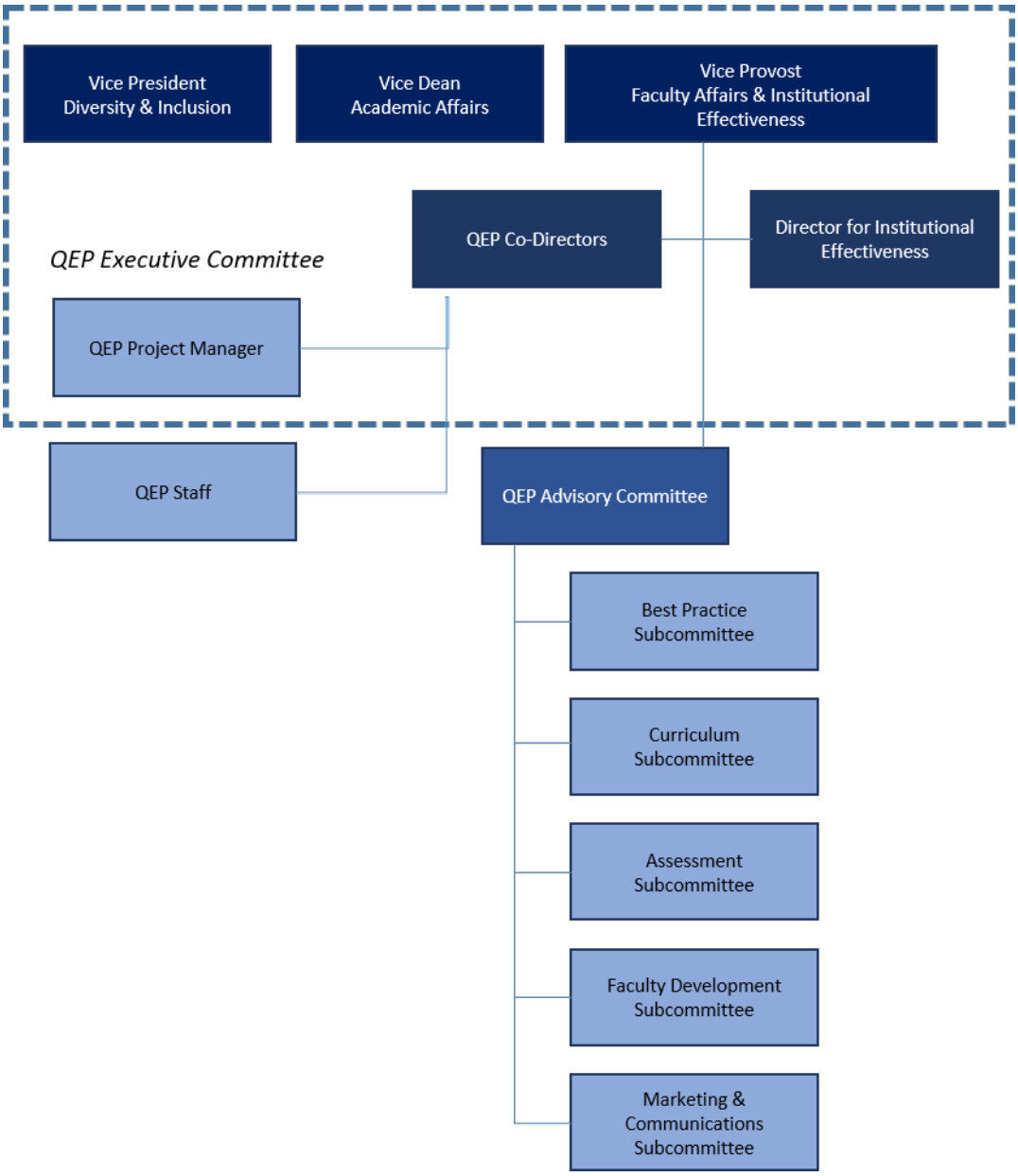
QEP Subcommittees. Five QEP subcommittees were identified. Additional subcommittees may be needed on an ad hoc basis over the course of development and implementation of the QEP. *Subcommittees focus on the identified areas and include student representation.*

Best Practices
Curriculum
Assessment
Faculty Development
Marketing and Communications

Student Interns. Student interns, overseen by the QEP Project Manager, will be responsible for supporting the implementation of the Live Humble QEP by:

Scheduling meetings/events
Tracking relevant budget expenses, resources
Prepping spreadsheets/supporting documents
Meeting minutes
Event planning/correspondence
Other logistical duties as assigned

Live Humble QEP Organizational Structure



XI. Appendices

Appendix A: EVMS *Advancing Health Equity and Inclusion for Community and Academic Impact* Strategic Plan Overview
Appendix B: Campus-Wide QEP Topic Survey
Appendix C: *EVMS Cultural Humility Institutional Survey*
Appendix D: QEP Knowledge Test Rubric
Appendix E: QEP Knowledge Test Aggregate Data
Appendix F: *EVMS Cultural Humility Institutional Survey* Aggregate Data
Appendix G: Live Humble QEP Committee and Subcommittee Rosters
Appendix H: EVMS UME Curriculum Audit
Appendix I: EVMS QEP Cultural Humility Curriculum Objectives and Enabling Objectives
Appendix J: QEP Logic Model
Appendix K: Rubrics for Required Cultural Humility Reflections

Appendix A – EVMS Advancing Health Equity and Inclusion for Community and Academic Impact Strategic Plan Overview

INTRODUCTION

Purpose

In 2019, Eastern Virginia Medical School undertook the creation of a Strategic Plan to advance health equity, diversity and inclusion in a manner that impacts our campus and our interaction with the community.

Our intention was to develop the capacity to intentionally and reflectively come together as a campus community to identify opportunities to foster greater diversity, equity and inclusion (DEI) in our core mission areas. We created a road map to strategically guide our efforts to ensure that EVMS continues to be a unique academic environment where diversity, equity and inclusion in healthcare are the driving forces to achieve our mission and advance our community.

Process

Richard V. Homan, MD, President and Provost of EVMS and Dean of the School of Medicine, launched the planning process in April 2019. More than 100 faculty, staff, residents and students attended the first strategic-plan retreat in May 2019.

During the planning process, five working groups recommended key initiatives to advance diversity, equity and inclusion in education, research, clinical care, community engagement and administration. An Advisory Committee organized the recommendations into strategic priorities and then coordinated with Co-Chairs of the working groups to review and prioritize the recommendations.

Strategic Priorities

The Strategic Plan for Advancing Health Equity and Inclusion for Community and Academic Impact, which will be implemented from FY 2020 through FY 2024, consists of five strategic priorities:

- Provide Enriched Training and Assessment for Access and Success
- Foster and Maintain a Diverse Workforce and Learner Population
- Strengthen Community Engagement and Health Equity
- Enhance Health Equity Research and Clinical Services Delivery
- Benchmark for Excellence

The objectives, strategies, metrics, investments and timelines for achieving each priority are outlined in detail within this report.

Appendix B – Campus-wide QEP Topic Survey

Qualtrics Survey – Quality Enhancement Plan

Purpose: Solicit ideas on QEP from EVMS student, faculty & staff

Open Date: TBD

Close Date: Six weeks after open

Eastern Virginia Medical School will undergo a comprehensive reaccreditation process by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) in 2020. In preparation, EVMS Academic Affairs and EVMS Office of Strategic Planning and Institutional Effectiveness (OSPIE) are soliciting ideas for a Quality Enhancement Plan (QEP). The QEP should reflect EVMS' commitment to enhance overall quality and effectiveness by focusing on an issue that EVMS considers important to improving student learning outcomes and/or student success.

We invite you to share your ideas for a Quality Enhancement Project in the spaces below.

Please describe your QEP topic. Include a title if one has been chosen.

INSERT COMMENTS

Please provide evidence (in your opinion) of how this topic will improve student learning.

INSERT COMMENTS

Please provide justification for why EVMS should invest in this project.

INSERT COMMENTS

Please select your role at EVMS: (FACULTY, STAFF, RESIDENT, STUDENT)

Name (optional):

INSERT COMMENTS

EVMS Email (optional):

INSERT COMMENTS

Thank you for your input. If you have any questions or additional comments, please contact:

Appendix C – EVMS Cultural Humility Institutional Survey

This survey is designed to explore your familiarity with and perceptions of cultural humility at Eastern Virginia Medical School (EVMS) as a necessary baseline for curricular quality improvement as it relates to the Quality Enhancement Plan (QEP) implementation in the undergraduate medical education (MD) program. The information you provide in this survey will be used for the sole purpose of curriculum development for the QEP, ***independent* of institutional efforts in this area**. Where and when appropriate, this information may be aligned and inform other strategic planning efforts.

The survey will take approximately 10 minutes to complete. Your responses are completely anonymous. The data obtained through this survey will not be reported on an individual basis. Data will be reported in aggregate and used to improve program quality as it relates to the Quality Enhancement Plan(QEP) curriculum integration. Please feel free to contact Dr. Lauren Mazzurco or Dr. Don Robison if you have any questions regarding the QEP or the survey.

What is your age?
18-24 years old
25-34 years old
35-44 years old
45-54 years old
55-64 years old
65+

Which of the following best describes your race/ethnicity?
American Indian or Alaska Native
Asian
Black or African American
Hispanic or Latino
Native Hawaiian or Other Pacific Islander
White
I prefer not to answer

What best describes your gender?
Female
Male
Prefer to self-describe :_____
Prefer not to answer

Please select the school or EVMS area you are affiliated with (select all that apply):
Eastern Virginia Medical Center
Non-Academic Unit (e.g. Student Affairs, Faculty Affairs, Human Resources)
School of Health Professions
School of Medicine

Please indicate your role in the EVMS community (select all that apply):
Administration
Basic Science Faculty

Appendix C – EVMS Cultural Humility Institutional Survey

Clinical Faculty
Faculty-Other
Staff
Student
Other:_____

Please indicate your familiarity with the following terms:

	I've never heard of this before	I've heard of this term before, but am not sure what it means	I've heard of this term before and know what it means	I've heard this term before and can explain it to someone else
Cultural Competence	❍	❍	❍	❍
Cultural Humility	❍	❍	❍	❍
Person-Important Identity	❍	❍	❍	❍

Within the past 6 months:

	Never	Rarely	Sometimes	Often	Always
I considered how other's personal thoughts and feelings influenced an interaction.	❍	❍	❍	❍	❍
I considered how my personal thoughts and feelings influenced the interaction with others.	❍	❍	❍	❍	❍
I reflected on the communication strategies I use with others.	❍	❍	❍	❍	❍
I was able to manage my discomfort when discussing difficult or uncomfortable topics (e.g. sexual history, substance abuse).	❍	❍	❍	❍	❍

Within the past 6 months:

	Never	Rarely	Sometimes	Often	Always
I heard others make offensive remarks based on an aspect of another person's characteristics (e.g. sexual orientation, race, age, weight, substance abuse, religion).	❍	❍	❍	❍	❍
I experienced **NEGATIVE** thoughts or feelings towards others because of their personal characteristics (e.g. sexual orientation, race, age, weight, substance abuse, religion).	❍	❍	❍	❍	❍
I experienced **POSITIVE** thoughts or feelings towards others because of their personal characteristics (e.g. sexual orientation, race, age, weight, substance abuse, religion).	❍	❍	❍	❍	❍
I observed bias **NEGATIVELY** impact clinical care.	❍	❍	❍	❍	❍
I observed bias **POSITIVELY** impact clinical care.	❍	❍	❍	❍	❍

Appendix C – EVMS Cultural Humility Institutional Survey

Consider your interactions with <u>EVMS Faculty</u> over the past 6 months. Using the scale below, indicate the extent to which you agree or disagree with the following statements:

	Never	Rarely	Sometimes	Often	Always	N/A
Are respectful	❍	❍	❍	❍	❍	❍
Are considerate	❍	❍	❍	❍	❍	❍
Act superior	❍	❍	❍	❍	❍	❍
Are open to seeing things from others' perspectives	❍	❍	❍	❍	❍	❍
Are know-it-alls	❍	❍	❍	❍	❍	❍
Ask questions when they are uncertain	❍	❍	❍	❍	❍	❍

Consider your interactions with <u>EVMS Staff</u> over the past 6 months. Using the scale below, indicate the extent to which you agree or disagree with the following statements:

	Never	Rarely	Sometimes	Often	Always	N/A
Are respectful	❍	❍	❍	❍	❍	❍
Are considerate	❍	❍	❍	❍	❍	❍
Act superior	❍	❍	❍	❍	❍	❍
Are open to seeing things from others' perspectives	❍	❍	❍	❍	❍	❍
Are know-it-alls	❍	❍	❍	❍	❍	❍
Ask questions when they are uncertain	❍	❍	❍	❍	❍	❍

Consider your interactions with <u>EVMS Students</u> over the past 6 months. Using the scale below, indicate the extent to which you agree or disagree with the following statements:

	Never	Rarely	Sometimes	Often	Always	N/A
Are respectful	❍	❍	❍	❍	❍	❍
Are considerate	❍	❍	❍	❍	❍	❍
Act superior	❍	❍	❍	❍	❍	❍
Are open to seeing things from others' perspectives	❍	❍	❍	❍	❍	❍
Are know-it-alls	❍	❍	❍	❍	❍	❍
Ask questions when they are uncertain	❍	❍	❍	❍	❍	❍

Please provide any additional comments about your experience with cultural humility at EVMS.

Appendix D – QEP Knowledge Test Rubric

Live Humble QEP Baseline Knowledge Test: Cultural Humility and Structural Inequity
Administered to MD2023 Class 1-8-20

For each test, score each of the four sections separately. The tests are anonymous. Place the point score for each section in the scoring database by student.

Define Cultural Humility (3 points max)

1 point for each…

1. Mentioned self-assessment or self-critique (could be self-bias or values)
2. Mentioned a goal of honoring or respecting others
3. Mention of specifically the other's values, beliefs, customs, experiences

Apply in Clinical Setting (4 points max)

1 point for each…

1. Mentioned Continuous self-assessment
2. Mentioned sensitivity to other's beliefs, values, customs, experiences, preferences
3. Described some version of identifying sources of power differentials
4. Mentioned using strategies to reduce power differentials.

Define Structural Inequity (3 points max)

1 point for each…

1. Mentioned words to the effect of 'outcomes are not equal'
2. The differences in outcomes are avoidable
3. Said words to the effect that societal, system, or cultural norms sustain the inequity

Give Example of Structural Inequity (3 points max)

1 point for each…

1. The example is a reasonable example of structural inequity
2. Outcomes of example would likely be unequal.
3. The differences in outcomes would likely be caused by societal or systemic factors.

Appendix E – QEP Knowledge Test Aggregate Data

First Year Student Knowledge Pretest Descriptive Data (n = 144)

Pretest Item	Elements (Yes/No) 1 Point for each "yes"	Total Points	%Total
Item 1: Define Cultural Humility			
	Mentioned self-assessment or self-critique	60	41.7%
	Mentioned a goal of honoring or respecting others	121	84.0%
	Specifically referred to values, beliefs, customs, experiences, preferences	91	63.1%
	TOTAL FOR ITEM	272/432	62.9%
Item 2: How would you apply cultural humility in a clinical encounter?			
	Mentioned Continuous self-assessment	15	10.4%
	Mentioned sensitivity to other's beliefs, values, customs, experiences, preferences	126	87.5%
	Described some version of identifying sources of power differentials	3	2.1%
	Mentioned using strategies to reduce power differentials	36	25%
	TOTAL FOR ITEM	180/576	31.3%
Item 3: Define Structural Inequity			
	Mentioned words to the effect of 'outcomes are not equal'	129	89.6%
	Mentioned differences in outcomes are avoidable	62	43.1%
	Said words to the effect that societal, system, or cultural norms sustain the inequity	106	73.6%
	TOTAL FOR ITEM	297/432	68.8%
Item 4: Give an example of a structural inequity.			
	The example is a reasonable example of a structural inequity	120	83.3%
	Outcomes from the example would likely be unequal	120	83.3%
	The differences in outcomes would likely be caused by societal or systemic factors	120	83.3%
	TOTAL FOR ITEM	360/432	83.3%

Appendix F – EVMS Cultural Humility Institutional Survey Aggregate Data

EVMS Cultural Humility Survey Aggregate Data
(Likert Scale: "5"="Always", "1"="Never"; Negative survey items were reverse-coded for analysis)

	Overall		MD Students		Underrepresented Minority MD Students		Faculty		Staff	
Survey Item	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Considered Others	4.24	0.72	4.24	0.67	4.26	0.74	4.40	0.62	4.23	0.79
Considered how my feel	4.25	0.70	4.20	0.67	4.20	0.65	4.38	0.61	4.27	0.77
Strategized	4.09	0.77	3.95	0.77	4.04	0.79	4.33	0.61	4.13	0.86
Uncomfortable Topics	4.17	0.83	4.18	0.74	4.07	0.77	4.35	0.75	4.03	1.03
Witnessed Offensive Remark[1]	4.14	0.97	4.04	0.98	3.55	1.21	4.18	0.87	4.21	1.06
I exp NEG thoughts towards…[1]	4.51	0.55	4.48	0.57	4.59	0.50	4.51	0.50	4.58	0.58
Observed Bias NEG Imp Care…[1]	4.38	0.92	4.32	0.87	4.03	1.22	4.42	0.92	4.44	1.03
Observed Bias POS Imp Care…[1]	4.46	0.93	4.44	0.84	4.34	0.90	4.38	0.93	4.59	0.95
Faculty - Respectful	4.49	0.59	4.56	0.50	4.59	0.50	4.44	0.60	4.48	0.69
Faculty - Considerate	4.42	0.63	4.44	0.54	4.51	0.51	4.47	0.61	4.42	0.76
Faculty - Act Superior[1]	3.81	1.18	4.01	0.96	4.03	0.94	3.81	1.17	3.61	1.45
Faculty - Open to Other	4.07	0.78	4.19	0.58	4.06	0.48	4.10	0.67	3.98	1.05
Faculty – Know-it-Alls[1]	3.88	1.09	4.05	0.91	3.89	0.94	3.79	1.15	3.71	1.30
Faculty - Asked Questions	3.88	0.99	3.86	0.95	3.73	1.04	3.99	0.95	3.85	1.14
Staff-Respectful	4.44	0.62	4.55	0.57	4.63	0.49	4.39	0.64	4.40	0.72
Staff-Considerate	4.39	0.63	4.49	0.55	4.51	0.51	4.40	0.65	4.33	0.77
Staff-Act Superior[1]	4.12	0.96	4.29	0.88	4.34	0.75	4.07	0.91	3.91	1.18
Staff-Open to Other	4.14	0.71	4.19	0.69	4.17	0.60	4.15	0.70	4.09	0.80
Staff-Know-it-Alls[1]	4.16	0.93	4.35	0.75	4.24	0.96	4.18	0.90	3.89	1.19
Staff-Asked Questions	4.02	0.85	4.03	0.89	4.09	1.11	4.08	0.66	4.01	1.00
Student-Respectful	4.31	0.63	4.22	0.50	4.23	0.43	4.43	0.50	4.44	0.68
Student-Considerate	4.28	0.65	4.21	0.50	4.19	0.40	4.37	0.60	4.41	0.72
Student-Act Superior[1]	3.85	1.17	3.61	1.15	3.23	1.31	4.05	1.13	3.96	1.23
Student-Open to Other	4.15	0.70	4.15	0.65	4.07	0.87	4.29	0.59	4.17	0.79
Student- Know-it-alls[1]	3.68	1.22	3.38	1.22	2.74	1.29	3.85	1.09	3.80	1.32
Student-Asked Questions	4.14	0.76	4.13	0.76	4.03	0.87	4.22	0.55	4.14	0.96

[1]These items were reverse-coded for analysis

Some Key Differences Between Groups (Kruskall Wallis H-Tests)

Group Comparison by Survey Item (Group X with Group Y)	Chi-Square χ^2	df	Mean Rank Group X	Mean Rank Group Y	p-value	N	Effect Size
(X)Underrep Minority Students w/ (Y)White and Asian Students "Students asked questions when uncertain."	7.103	1	47.78	68.16	**.008***	128	.24
(X)Underrep Minority Women w/ (Y)White and Asian Women "I observed patients receive preferential treatment as a result of bias…"	4.031	1	31.50	45.08	**.046***	85	.22
(X)Underrep Minority Staff w/ (Y)White and Asian Staff "In last 6 months students were considerate."	5.139	1	29	79	**.023***	108	.22
(X)Underrep Minority Staff w/ (Y)White and Asian Staff "In last 6 months students were respectful."	4.208	1	29	82	**.040***	111	.19
(X)Students with (Y)Faculty "In last 6 months students were respectful."	10.975	1	156.09	186.53	**.001***	330	.18
(X)Students with (Y)Faculty "In last 6 months students were considerate."	8.562	1	154.81	181.16	**.003***	325	.16

***Significant, p<.05**

Appendix G – Live Humble QEP Committee and Subcommittee Rosters

Advisory Committee Members

Name	Department
Katherine Black	Medical Education student
Tammy Chrisman	Business Affairs staff
Joel Clingenpeel, MD	Remediation faculty
Jessica Corder	Medical Education student
Clinton Crews, MPH	Surgical Assistant staff
Ronald Flenner, MD	Academic Affairs faculty
Lisa Fore-Arcand, PhD	Psychiatry and Behavioral Sciences faculty
Maryanne Gathambo, MPH	Community-Engaged Learning staff
Mekbib Gemeda	Diversity and Inclusion staff
Padideh Ghorbani	Medical Education student
Virginia Hilton	Marketing and Communications staff
Brooke Hooper, MD	Clinical Education faculty
Mily Kannarkat, MD	Academic Affairs faculty
Julie Kerry, PhD	Curriculum Committee and Basic Sciences faculty rep
Allison Knight, PhD	Student Affairs faculty
Lauren Mazzurco, DO QEP Co-Chair	Glennan Center for Geriatrics/QEP Co-Chair
Angela Michalak	Pathology student
Sudarshan Mohan	Medical Education student
Elza Mylona, PhD, MBA QEP Executive Lead	Faculty Affairs and Professional Development faculty
Serina Neumann, PhD	Wellness Officer faculty
Nesha Niezreck	Medical Education student
Molly O'Keefe, PhD	Strategic Planning and Institutional Effectiveness staff
April Pace, MLS	Library staff
Jason Pham	Medical Education student
Tamara Poulson	Development and Alumni Relations staff
Don Robison, PhD QEP Co-Chair	Community-Engaged Learning/QEP Co-Chair
Stephen Richard	Strategic Planning and Institutional Effectiveness staff rep
Michelle Rogers-Johnson, PhD	Assessment staff
Tamanna Sahni	Medical Education student
Zachary Smith	Physician Assistant student
Julie Stoner, PhD QEP Project Manager	Medical Education staff
Margaret Stufflebeem	Physician Assistant student
Jennifer Styron	Simulation and Immersive Learning staff
Paul Weissburg, PhD	Assessment and Evaluation staff

QEP Subcommittees

Best Practices	
Katherine Black	Medical Education student
Maryanne Gathambo, MPH	Community-Engaged Learning staff
Allison Knight, PhD	Student Affairs faculty
April Pace, MLS	Library staff
Curriculum	
Brooke Hooper, MD	Clinical Education faculty
Mily Kannarkat, MD	Academic Affairs faculty
Julie Kerry, PhD	Curriculum Committee and Basic Sciences faculty
Sudarshan Mohan	Medical Education student
Nesha Niezrecki	Medical Education student
Tamanna Shani	Medical Education student
Assessment	
Julie Kerry, PhD	Curriculum Committee and Basic Sciences faculty
Sudarshan Mohan	Medical Education student
Molly O'Keefe, PhD	Strategic Planning and Institutional Effectiveness
Stephen Richard	Strategic Planning and Institutional Effectiveness
Michelle Rogers-Johnson, PhD	Assessment staff
Tamanna Shani	Medical Education student
Zachary Smith	Medical Education student
Paul Weissburg, PhD	Assessment and Evaluation staff
Faculty Development	
Joel Clingenpeel, MD	Remediation faculty
Lisa Fore-Arcand, PhD	Psychiatry and Behavioral Sciences faculty
Elza Mylona, PhD, MBA	Faculty Affairs and Professional Development
Serina Neumann, PhD	Wellness Officer faculty
Jason Pham	Medical Education student
Margaret Stufflebeem	Physician Assistant student
Jennifer Sytron	Simulation and Immersive Learning staff

Subcommittee Members (Continued)

Marketing and Communication	
Tammy Chrisman	Business Affairs staff representative
Jessica Corder	Medical Education student representative
Clinton Crews, MPH	Surgical Assistant staff representative
Padideh Ghorbani	Medical Education student representative
Virginia Hilton	Marketing and Communications staff representative
Angela Michalak	Pathology student representative
Tamara Poulson	Development and Alumni Relations staff representative

QEP Student Advisory Team Members		Grad Year
Padideh Ghorbani	School of Medicine	2021
Sudarsham Mohan	School of Medicine	2022
Nesha Niezreck	School of Medicine	2020
Tamanna Sahni	School of Medicine	2022
Jessica Corder	School of Medicine	2021
Katherine Black	School of Medicine	2022
Jason Pham	School of Medicine	2022
Angela Michalak	School of Health Professions (Pathology)	2020
Zachary Smith	School of Health Professions (Physician Assistant)	2021
Margaret Stufflebeem	School of Health Professions (Physician Assistant)	2021

Appendix H – EVMS UME Curriculum Audit (Cultural Humility Elements in the Current Curriculum)

KEY

Present/No Assess | Present/Light Assess | Present & Assess | Not Presented

Objective	FS	ANAT	GMD	SMB	GI	HLK	HRH	BMB	MS	WELL	HSS	CEL	CS	FAM		INT	OBG	PED	PSY	SUR
1. Define Cultural Humility, Person-Important Identity, and Relational Power Imbalance [EVMS UCOs 1.4, 4.1, 4.2]																				
Given a reflection prompt, define cultural humility and provide examples												Present/No Assess								
Given vignettes, identify potential elements of person-important identity.											Present & Assess									
Given vignettes, identify potential sources of relational power imbalance.											Present/Light Assess									
2. Demonstrate self-awareness, and awareness and respect for person-important identity. [EVMS UCOs 4.1, 4.2, 5.1]																				
Self-Awareness																				
Use reflective practices in patient care.											Present & Assess									
Identify effective strategies for self-evaluation in cross-cultural contexts.																				
Given an attitude survey, value self-evaluation, critique, and action planning in cross-cultural interactions.																				
Given a reflection prompt, reflect on own beliefs.										Present/No Assess	Present/Light Assess	Present/Light Assess		Present & Assess						
Given a reflection prompt, identify self-tendencies to bias towards patients.										Present/No Assess	Present/Light Assess			Present & Assess						
Given a reflection prompt, identify self-tendencies to bias towards others.										Present/No Assess	Present/Light Assess			Present & Assess						
Recognize and manage personal bias																				
Given clinical vignettes, identify physician bias and stereotyping.											Present & Assess									
Recognize impact of bias as evaluated by a small group facilitator.																				
Demonstrate strategies for decreasing impact of own personal cultural background or bias.																				
Discuss the effects of physician bias on patient care.											Present/Light Assess			Present & Assess						
List ways to address personal bias.											Present & Assess			Present & Assess						
Given a reflection prompt, discuss potential ways to address bias demonstrated by others.											Present/No Assess			Present & Assess						
Other-awareness and respect																				
Given a clinical scenarios, describe how person-important identity relates to health.											Present/No Assess									
Given clinical scenarios, identify methods for eliciting the patient's health traditions and beliefs.																				
Ask questions that elicit other's preferences and beliefs																				
Listen nonjudgmentally to health beliefs																				

Key for Column Headers: FS = Foundational Science Module, ANAT = Anatomy Module, GMD = General Mechanisms of Disease Module, SMB = Skin, Muscle, Bone Module, GI = Gastrointestinal Module, HLK = Heart, Lung, Kidney Module, HRH = Human Reproduction and Hormones Module, BMB = Brain, Mind, Behavior Module, MS = Multisystem Disorders Module, WELL = Wellness Course, HSS = Health Systems Science Thread, CEL = Community-Engaged Learning, CS = Clinical Skills Thread, FAM = Family Medicine Clerkship, INT = Internal Medicine Clerkship, OBG = OB-Gynecology Clerkship, PED = Pediatrics Clerkship, PSY = Psychiatric Clerkship, SUR = Surgery Clerkship

Appendix H – EVMS UME Curriculum Audit (Cultural Humility Elements in the Current Curriculum)

KEY

Present/No Assess | Present/Light Assess | Present & Assess | Not Presented

Objective	FS	ANAT	GMD	SMB	GI	HLK	HRH	BMB	MS	WELL	HSS	CEL	CS	FAM		INT	OBG	PED	PSY	SUR
Recognize contextual person-important identity issues														Present & Assess						
Exhibit supportive behavior when discussing cultural matters.																				
Respect the other's cultural beliefs.																				
3. Identify and effectively manage relational power imbalances. [EVMS UCOs 4.1, 4.2, 5.1]																				
Given professional and informal vignettes, identify potential power imbalances. ("professional" = inter-professional or clinical)											Present/No Assess			Present & Assess						
Given clinical and interpersonal vignettes, identify strategies for alleviating power imbalances.											Present/No Assess									
Demonstrate strategies for alleviating an imbalance of power.																				
4. Interact with others with humility. [EVMS UCOs 4.1, 4.2]																				
Given professional and informal contexts, demonstrate the process of continuous self-evaluation, self-critique, power-imbalance assessment, and power-imbalance mitigation.										Present/No Assess										
5. Value cultural humility. [EVMS UCO 5.1]																				
Value cultural humility in health care.																				
Discuss the benefits and challenges of cultural diversity in health care.											Present/No Assess									
6. Recognize and address health disparities. [EVMS UCOs 6.2]																				
Given a reflection prompt, identify and discuss key areas of inequities.											Present & Assess	Present & Assess								
Gather and use data such as Robert Woods Johnson surveillance data.											Present/No Assess	Present & Assess								
Identify and analyze health patterns using reliable available data sources.											Present & Assess	Present & Assess								
Identify structural inequity												Present/No Assess								
Identify social determinants of health											Present & Assess	Present & Assess								
Discuss how social determinants of health affect health and health outcomes.											Present & Assess	Present & Assess								
Identify the 'social gradient of health'												Present/No Assess								
Value eliminating inequities.																				
Given a reflection prompt, describe how physician's actions can impact health inequities.																				
Given a reflection prompt, describe the historical and enduring effects of structural inequity.												Present/No Assess								

Key for Column Headers: FS = Foundational Science Module, ANAT = Anatomy Module, GMD = General Mechanisms of Disease Module, SMB = Skin, Muscle, Bone Module, GI = Gastrointestinal Module, HLK = Heart, Lung, Kidney Module, HRH = Human Reproduction and Hormones Module, BMB = Brain, Mind, Behavior Module, MS = Multisystem Disorders Module, WELL = Wellness Course, HSS = Health Systems Science Thread, CEL = Community-Engaged Learning, CS = Clinical Skills Thread, FAM = Family Medicine Clerkship, INT = Internal Medicine Clerkship, OBG = OB-Gynecology Clerkship, PED = Pediatrics Clerkship, PSY = Psychiatric Clerkship, SUR = Surgery Clerkship

Appendix H – EVMS UME Curriculum Audit (Cultural Humility Elements in the Current Curriculum)

KEY

Present/No Assess | Present/Light Assess | Present & Assess | Not Presented

Objective	FS	ANAT	GMD	SMB	GI	HLK	HRH	BMB	MS	WELL	HSS	CEL	CS	FAM		INT	OBG	PED	PSY	SUR
Given vignettes, recognize inequities amenable to intervention.											Present/No Assess									
Given a reflection prompt, discuss barriers to eliminating health inequities.																				
7. Provide culturally responsive care. [EVMS UCOs 4.1, 4.2, 5.1, 6.2]																				
Describe systemic and patient-physician considerations related to cross-cultural care.																				
Recognize and manage uncertainty constructively.											Present & Assess									
Elicit culture, social, and medical history.														Present & Assess	Present & Assess	Present & Assess	Present & Assess	Present & Assess		
Given a reflection prompt, state reasons why continuity of care is uniquely important in cross-cultural contexts.														Present & Assess						
Given a reflection prompt, articulate strategies for surmounting continuity of care barriers in cross-cultural contexts.														Present & Assess						
Describe the importance of linguistic competency in maintaining standards of care.																				
Recognize when a medical interpreter is necessary.																				
Demonstrate competent integration of medical interpreter in the clinical encounter.																				

Key for Column Headers: FS = Foundational Science Module, ANAT = Anatomy Module, GMD = General Mechanisms of Disease Module, SMB = Skin, Muscle, Bone Module, GI = Gastrointestinal Module, HLK = Heart, Lung, Kidney Module, HRH = Human Reproduction and Hormones Module, BMB = Brain, Mind, Behavior Module, MS = Multisystem Disorders Module, WELL = Wellness Course, HSS = Health Systems Science Thread, CEL = Community-Engaged Learning, CS = Clinical Skills Thread, FAM = Family Medicine Clerkship, INT = Internal Medicine Clerkship, OBG = OB-Gynecology Clerkship, PED = Pediatrics Clerkship, PSY = Psychiatric Clerkship, SUR = Surgery Clerkship

Appendix I – QEP Cultural Humility Curriculum Objectives and Enabling Objectives

Objective	Objective Type	Level in the New Bloom's Taxonomy	Proposed General Instructional Strategies
1. Define Cultural Humility, Person-Important Identity, and Relational Power Imbalance [EVMS UCOs 1.4, 4.1, 4.2]			
Given a reflection prompt, define cultural humility and provide examples	Cognitive	Comprehension	Pre-read, Cultural Humility Intro Session in Module 0, Reflections
Given vignettes, identify potential elements of person-important identity.	Cognitive	Recall	Pre-read, Cultural Humility Intro Session in Module 0, Reflections
Given vignettes, identify potential sources of relational power imbalance.	Cognitive	Comprehension	Pre-read, Cultural Humility Intro Session in Module 0, Reflections
2. Demonstrate self-awareness, and awareness and respect for person-important identity. [EVMS UCOs 4.1, 4.2, 5.1]			
Self-Awareness			
Use reflective practices in patient care.	Affective	Organizing	Narrative, Practice, Didactic
Identify effective strategies for self-evaluation in cross-cultural contexts.	Cognitive	Recall	Overlapping with wellness. Either revised didactic/new didactic
Given an attitude survey, value self-evaluation, critique, and action planning in cross-cultural interactions.	Affective	Valuing	?
Given a reflection prompt, reflect on own beliefs.	Affective	Organizing	Wellness, CEL, HSS similar to current approaches.
Given a reflection prompt, identify self-tendencies to bias towards patients.	Affective	Organizing	HSS Didactic, Case interaction
Given a reflection prompt, identify self-tendencies to bias towards others.	Affective	Organizing	HSS Didactic, Case interaction
Recognize and manage personal bias			
Given clinical vignettes, identify physician bias and stereotyping.	Cognitive	Analysis	HSS Didactic, Case interaction MCQ
Recognize impact of bias as evaluated by a small group facilitator.	Cognitive	Evaluation	Faculty Facilitated Small Group
Demonstrate strategies for decreasing impact of own personal cultural background or bias.	Affective	Characterizing by a value	Video Vignettes, HSS Didactic, M# TIPS, CFC Days, Case interaction, CEL Reflection
Discuss the effects of physician bias on patient care.	Cognitive	Analysis	Video Vignettes, HSS Didactic, Actual Case Reviews, M3
List ways to address personal bias.	Cognitive	Evaluation	HSS Didactic, Actual Case Reviews, M3
Given a reflection prompt, discuss potential ways to address bias demonstrated by others.	Cognitive	Evaluation	HSS Didactic, stop-and-reflect (scantron)
Other-awareness and respect			
Given a clinical scenarios, describe how person-important identity relates to health.	Cognitive	Evaluation	HSS and CEL Didactic, Case interactions, Standardized Patient, Small Group
Given clinical scenarios, identify methods for eliciting the patient's health traditions and beliefs.	Cognitive	Analysis	Video Demonstration/Example, Clinical Skills Didactic, Live clinical coordination, Standardized Patient Encounter
Ask questions that elicit other's preferences and beliefs	Cognitive	Application	Clinical Skills Didactic, Live clinical coordination, Standardized Patient Encounter
Listen nonjudgmentally to health beliefs	Affective	Characterizing by a value	Clinical Skills Didactic, Live clinical coordination, Standardized Patient Encounter 360 Degree Feedback using CCCI & other tools.

Appendix I – QEP Cultural Humility Curriculum Objectives and Enabling Objectives

Objective	Objective Type	Level in the New Bloom's Taxonomy	Proposed General Instructional Strategies
Recognize contextual person-important identity issues	Cognitive	Analysis	Clinical Skills Didactic, Video Demonstration, 360 Degree Feedback, CCCI, Standardized Patient, Clerkship CCCI
Exhibit supportive behavior when discussing cultural matters.	Cognitive	Application	Clinical Skills Didactic, Video Demonstration, 360 Degree Feedback, CCCI, Standardized Patient, Clerkship CCCI, Peer Evaluation
Respect the other's cultural beliefs.	Affective	Characterizing by a value	*White Book* Section, Video, Interactive, Serious Game, Peer Evaluation
3. Identify and effectively manage relational power imbalances. [EVMS UCOs 4.1, 4.2, 5.1]			
Given professional and informal vignettes, identify potential power imbalances. ("professional" = inter-professional or clinical)	Cognitive	Comprehension	Didactic Session on Power Imbalance, Video Demonstration/Vignettes, Perhaps existing video series, consider cinematic examples.
Given clinical and interpersonal vignettes, identify strategies for alleviating power imbalances.	Cognitive	Analysis	Didactic Session on Power Imbalance, Video Demonstration/Vignettes, Perhaps existing video series, consider cinematic examples.
Demonstrate strategies for alleviating an imbalance of power.	Cognitive	Synthesis	Didactic Session on Power Imbalance, Video Demonstration/Vignettes, Perhaps existing video series, consider cinematic examples.
4. Interact with others with humility. [EVMS UCOs 4.1, 4.2]			
Given professional and informal contexts, demonstrate the process of continuous self-evaluation, self-critique, power-imbalance assessment, and power-imbalance mitigation.	Affective	Characterizing by a value	Cultural Humility Intro Session in Module 0 introduces overall idea, Clinical Skills Didactic, CSA for evaluation, 360 Degree Evaluation
5. Value cultural humility. [EVMS UCO 5.1]			
Value cultural humility in health care.	Affective	Valuing	Cultural Humility Intro Session in Module 0, Cinematic Examples, Patient Panel, M3 CFC Small Groups, Panel of Physicians, Non-Examples (Video?), Patient Story
Discuss the benefits and challenges of cultural diversity in health care.	Affective	Valuing	Cultural Humility Intro Session in Module 0, Cinematic Examples, Patient Panel, M3 CFC Small Groups, Panel of Physicians, Non-Examples (Video?), Patient Story, White Book thread.
6. Recognize and address health disparities. [EVMS UCOs 6.2]			
Given a reflection prompt, identify and discuss key areas of inequities.	Cognitive	Analysis	Video/Readings?, Didactic, Graded Reflection, Project-based learning
Gather and use data such as Robert Woods Johnson surveillance data.	Cognitive	Analysis	EBM Didactic, CEL Project, Capstone, Health Map
Identify and analyze health patterns using reliable available data sources.			EBM Didactic, CEL Project, Capstone, Health Map
Identify structural inequity	Cognitive	Comprehension	Introduce briefly in Cultural Humility Intro Session in Module 0, Didactic-Norfolk's Racial History, Case interactions

Appendix I – QEP Cultural Humility Curriculum Objectives and Enabling Objectives

Objective	Objective Type	Level in the New Bloom's Taxonomy	Proposed General Instructional Strategies
Identify social determinants of health	Cognitive	Recall	Introduce briefly in Cultural Humility Intro Session in Module 0+
Discuss how social determinants of health affect health and health outcomes.	Cognitive	Application	Introduce briefly in Cultural Humility Intro Session in Module 0, White Book, Graded Reflection, MCQ
Identify the 'social gradient of health'	Cognitive	Recall	White Book, Reflection
Value eliminating inequities.	Affective	Valuing	Norfolk's Racial History, Video? Readings?
Given a reflection prompt, describe how physician's actions can impact health inequities.	Cognitive	Comprehension	Cultural Humility Intro Session in Module 0,
Given a reflection prompt, describe the historical and enduring effects of structural inequity.	Cognitive	Comprehension	Norfolk's Racial History, Readings, Video?
Given vignettes, recognize inequities amenable to intervention.	Cognitive	Evaluation	HSS Systems Thinking, Problem-based Learning, Flipped Active Learning… Pehraps "Wicked Problems"
Given a reflection prompt, discuss barriers to eliminating health inequities.	Cognitive	Evaluation	Didactic, small group
7. Provide culturally responsive care. [EVMS UCOs 4.1, 4.2, 5.1, 6.2]			
Describe systemic and patient-physician considerations related to cross-cultural care.	Cognitive	Analysis	Clinical Skills Didactic, Clerkships, Clinical Reasoning,
Recognize and manage uncertainty constructively.	Cognitive	Evaluation	Clinical Skills Didactic, Clerkships, Clinical Reasoning, CSA
Elicit culture, social, and medical history.	Cognitive	Application	Clinical Skills Didactic, Clerkships, Clinical Reasoning,
Given a reflection prompt, state reasons why continuity of care is uniquely important in cross-cultural contexts.	Affective	Organizing	Clinical Skills Didactic, Relationship Building, HSS, GMD, CEL
Given a reflection prompt, articulate strategies for surmounting continuity of care barriers in cross-cultural contexts.	Cognitive	Evaluation	Clinical Skills Didactic, Relationship Building, HSS, GMD, CEL
Describe the importance of linguistic competency in maintaining standards of care.	Cognitive	Evaluation	Clinical Skills Didactic, CSA
Recognize when a medical interpreter is necessary.	Cognitive	Application	Job-Aid, (In new "Readings" book?)
Demonstrate competent integration of medical interpreter in the clinical encounter.	Cognitive	Application	Simulated Patient Encounter (M3?)

Appendix J – QEP Logic Model

Quality Enhancement Plan – Logic Model January 2020

Resources	Activities	Outputs	Short-term Outcomes	Long-term Outcomes	Impact
In order to accomplish described activities, the following is required:	*To address our defined problem, we will accomplish the following activities*	*Once accomplished, activities will produce:*	*If activities are successful, the following changes will be observed in the first two years of the project:*	*If activities are successful, the following changes will be observed in 3—4 years:*	*If accomplished, activities will contribute to the following changes:*

• **EVMS Faculty**
• **MD Program Students**
• **EVMS administrators**
• **QEP Instructional Team**
• **EVMS Learning Management System**
• **Sentara Center for Simulation and Immersive Learning**
• **Standardized Patients**
• **QEP Staff**
• **Professional Development Staff**
• **QEP Budget**
	• Develop and launch QEP
	  • Develop clear student learning outcomes
	  • Develop and implement integrated curriculum approaches
	• Develop recruitment plan for ongoing faculty involvement/ participation
	• Develop and conduct ongoing faculty development opportunities
	• Develop a comprehensive program evaluation plan
		• Student learning outcomes
		  • Define cultural humility and structural inequity, and describe the dynamics of each
		  • Describe the skills associated with cultural humility and structural inequity in interpersonal and clinical settings
		  • Choose to execute this three-part process in clinical encounters: a.) self-assess their own thoughts and behavior, b.) be sensitive to the other's values, beliefs and priorities, and c.) identify and execute effective strategies to diminish potential power differentials
		  • Value cultural humility
		• Assessment instruments and technology
			• Students will demonstrate knowledge of the key definitions, principles and practices of cultural humility
			• Students will demonstrate knowledge of key definitions, principles and practices of structural inequity
				• Students will effectively apply skills in self-assessment, sensitivity, and respect for others, and implement strategies to reduce power differentials
				• Students will demonstrate a value for cultural humility
				• Students will demonstrate key cultural humility skills in clinical and simulated encounters
					• After graduation, learners will self-report gains in specific cultural humility knowledge and skills.
					• After graduation, learners will self-report value of cultural humility in their clinical practice

M3 Required Prompt: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "As a physician, I have an obligation to notice structural inequities and work with others to address them." Please defend your answer.

	Not Reported	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Stated a position	Did not respond to prompt	Did not state a position	Stated a position	Clearly stated position in a way that demonstrates respect for their future profession and the patients they will serve
Defended Stated Position	Did not provide a reason for stated position	Reasoning did not cohere with stated position	Reasoning cohered with stated position	Reasoning cohered with stated position and demonstrated critical thinking (examined the strengths and limitations of one's position)

M3 Required Prompt: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "Structural inequity is a significant challenge in medical care." Please defend your answer.

	Not Reported	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Stated a position	Did not respond to prompt	Did not state a position	Stated a position	Clearly stated position in a way that demonstrates respect for their future profession and the patients they will serve
Defended Stated Position	Did not provide a reason for stated position	Reasoning did not cohere with stated position	Reasoning cohered with stated position	Reasoning cohered with stated position and demonstrated critical thinking (examined the strengths and limitations of one's position)

M4 Required Reflection Prompt: Do you Strongly Agree, Agree, Are Neutral, Disagree or Strongly Disagree with this statement: "Cultural humility is important in clinical encounters." Please defend your answer.

	Not Reported	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Stated a position	Did not respond to prompt	Did not state a position	Stated a position	Clearly stated position in a way that demonstrates respect for their future profession and the patients they will serve
Defended Stated Position	Did not provide a reason for stated position	Reasoning did not cohere with stated position	Reasoning cohered with stated position	Reasoning cohered with stated position and demonstrated critical thinking (examined the strengths and limitations of one's position)

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