



# Pilot Evaluation of a Competency-Based Community and Population Health Curriculum for Family Medicine Residents

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## Introduction

- The UW Madison Family Medicine Residency Program's Community and Population Health Curriculum is complex and dynamic, encompassing both didactic and community-engaged learning.<sup>1</sup>
- We aim to deliver curriculum that fulfills core competencies defined by ACGME and other thought leaders relevant to training family physicians with the necessary skills, attitudes and knowledge to serve and partner with diverse communities in an evolving healthcare environment.<sup>2,3,4</sup>
- It is thus essential to evaluate if our curriculum aligns with, and effectively teaches, these competencies.

## Methods

- Using first-year resident curriculum as a pilot, we created a lesson plan template to map each teaching "space" (community health rotation weeks and lectures) to intended competencies and learner assessment methods.
- Data was captured via post-didactics surveys (quantitative), and journaling assignments and recorded small group debriefs (qualitative) for mixed methods analysis.
- Inductive and deductive qualitative analysis methods were used to assess journal data for two key questions:
  - What are residents learning during their community health rotation weeks? (inductive analysis)
  - Are residents learning what faculty intend for them to learn? (deductive analysis)
- Post-didactic survey data for each teaching space was summarized.
- Small group debrief qualitative data analysis is forthcoming.

## Qualitative Results

- Qualitative analysis of only the first community health week is displayed
- Deductive analysis shows close alignment of journal responses to intended learning competencies
- Inductive analysis (Table) aligned closely to deductive analysis themes and codes, and demonstrated critical thinking and linking of concepts across learning spaces and clinical experiences

## Example Lesson Plan

**LESSON PLAN**  
Instructors: Jennifer Edgoose, MD, MPH  
Date 7/6/20 and 7/20/20 (in-person)  
Class Title: Health Equity Small Group session

LEARNING OBJECTIVE(S) (for Residents)	ACTIVITY	ACGME/DUKE COMPETENCIES	ASSESSMENT PROCESS
Orientation to small group CH sessions	Individuals to reflect upon how their past experiences and who they are impacts their role as a physician in the community, particularly working with more vulnerable communities	PBLI-3; Level 1 MK-2; Level 4 SBP-3; Level 1	Participation demonstrates understanding/engagement
Become familiar with <i>The Health Equity Curricular Toolkit</i> and use of Canvas	Pre-work on Canvas		Participation demonstrates understanding/engagement
<ul style="list-style-type: none"> <li>Understand the differences between health disparities and health inequities</li> <li>Define biologic weathering</li> </ul>	Whole group discussion of the Introductory (Prerequisite) module of <i>The Health Equity Curricular Toolkit</i> "Possible questions for Group Discussion" questions 1 and 3) <a href="https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/health-equity-toolkit/hops19-introductory-module.pdf">https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/health-equity-toolkit/hops19-introductory-module.pdf</a>	SBP-2; Level 1/PH-1 SBP-2; Level 2/PH-2 SBP-3; Level 1/PH-2 SBP-3; Level 3/PH-1 SBP-3; Level 3/PH-2	Journaling assignment • How do you define health inequities and what did you take away from our discussion?
Learn to apply the Equity and Empowerment Lens	Propose an intervention to the issue found in the article and then apply an E&E Lens to this proposal: The right to vote: A public health hazard April 2020	SBP-3; Level 1 PH-4	Participation demonstrates understanding/engagement
<ul style="list-style-type: none"> <li>Describe an example of a health disparity in your local community?</li> <li>Describe an example of an upstream intervention in your local community?</li> </ul>	<b>Journaling assignment to be answered by Thurs that week on Canvas Discussion</b> Individual work from the Introductory (Prerequisite) module of <i>The Health Equity Curricular Toolkit</i> "Possible questions for Group Discussion" questions 2 and 4) <a href="https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/health-equity-toolkit/hops19-introductory-module.pdf">https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/health-equity-toolkit/hops19-introductory-module.pdf</a>	SBP-2; Level 3/PH-3 SBP-3; Level 1/CT-3 SBP-3; Level 1/PH-4 SBP-3; Level 2/PH-4	Completion of Journaling assignment (see activity)

## Inductive Qualitative Analysis of Journaling

Theme	Theme definition	Codes	Example quote from journal entry
<b>Barriers to equitable healthcare</b>	The various factors residents cited as hindering patients from receiving equitable healthcare	1. Bias 2. Social determinants of health 3. Access 4. Patient mistrust	"I would define health inequities as barriers patients experience that make it harder for them to achieve a state of health in comparison to other groups of patients. These barriers may be lived experiences, background characteristics, health system designs, etc. that impact patients' ability to access care, receive effective care, and pursue health goals."
<b>Upstream interventions</b>	Practices highlighted by residents as ways to increase access to equitable healthcare for underserved communities	1. Community involvement 2. Physician advocacy	"I think the idea of seeing the community come together to build a house, receiving homebuyer education and obtaining a low interest mortgage can help improve people's standard of living, strengthen their bond to the community, and help them divert money towards improving their healthcare status."
<b>Challenging the norm</b>	Instances in which residents questioned harmful, yet ubiquitous stereotypes of communities and identified uncommon solutions to different community health issues	1. Thinking outside the box (solutions-based) 2. Questioning popular health myths/practices	"Inequities are the result of policies that are purposely built into our society to give some groups power while disadvantaging other groups"

## Quantitative Analysis

- Post-didactic surveys highlight resident's desires for:
  - Skill-building activities and resources
  - Exposure to role models in community partnership work
  - Ensuring key terms and themes are explicitly defined
  - Small group learning
  - Promotion of deep thinking and challenging the norm

## Discussion

- This pilot evaluation has already informed improvements to curricular content and pedagogy.
- Findings from qualitative analyses that showed weaker alignment of resident responses to intended learning competencies are being refined.
- The utility of journaling as a means for valuable reflection and evaluation of learners is notable, and a tool we intend to expand.
- The process of intentionally mapping our curriculum to learning competencies has provided a framework that can be used for curriculum development and refinement moving forward.

## Next Steps

- Our curriculum mapping and evaluation approaches, with refinements informed by this pilot, will be expanded to our entire Community and Population Health Curriculum.
- Recognizing the vital role of community partner voice and physician role models in community-centered teaching, our team is performing a parallel qualitative analysis through interviews with these entities to inform best practices for learner and community engagement.

## References

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