

# Impact of a Longitudinal Community Health Elective on Medical Students: Program Review

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## Introduction

Providing adequate access to healthcare for medically underserved areas/populations (MUA/Ps) is one of the greatest challenges in public health today.<sup>1</sup>

- MUA/Ps are defined as having too few physicians, high poverty rates, a large elderly population, and a high infant mortality rate.<sup>2</sup>

In order to address this issue, a **long-term, multifaceted approach** is required with buy-in from both the public and private sectors.

The **OU Community Health Alliance (OUCHA)** developed two longitudinal Community Health (CH) electives that allow medical students to volunteer in local MUA/Ps during the first 3 years of medical school in an effort to **develop a greater understanding of MUA/Ps, cultivate an interest in Primary Care (PC) early on in training, and strengthen a desire to serve MUA/Ps long-term.**

## Curriculum

### CH I - 2 Week Equivalent

- 8 Community Involvement Hours
- 12 Health Education Hours
- 60 Clinic Hours\*
- Reflection Essay

### CH II - 4 Week Equivalent

- Completion of CH I requirements
- An additional 20 Clinic Hours\*

\*Hour requirement reduced to accommodate for COVID-19

## Community and Student Led Initiatives

- 15 free and charitable clinics** in Oklahoma City partner with OUCHA to allow medical students to volunteer.
- One of these clinics is a **free, student-led, interdisciplinary clinic.**
- Students also volunteer in **associated pharmacy dispensaries, food pantries, community centers, and more.**



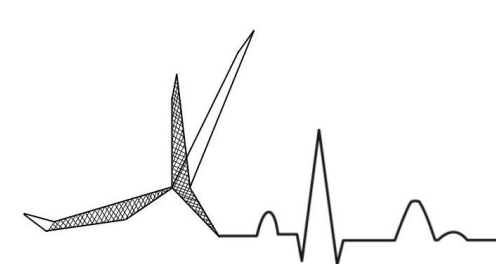
Workshops that educate students about MUA/Ps



A partnership with OU's Trauma Dept. to deliver bleed-control training



An annual 5K that benefits OUCHA partner clinics



A student organized conference about barriers in healthcare



Health fairs to educate at-risk elementary students

OUCHA also approves service opportunities hosted by organizations to fulfill credit hour criteria. For the academic year 2018-2019, OUCHA approved 112 student-led events eligible for credit hours.

## Methods

**Research Participants:** Class of 2021 University of Oklahoma College of Medicine medical students that completed CH I or CH I & II (n=43).

**Data Collection:** In their 4<sup>th</sup> year of medical school, students completed a survey assessing the impact of the experience across 8 metrics using a **five-point Likert Scale** (Strongly Disagree to Strongly Agree). In the survey, students also reported which student led OUCHA programs they volunteered with during medical school. (Table 1)

**Eight Metrics:** **Empathy, Impact & Transformation, Unique Education, Patient Challenges, Physician Challenges, Interest in Working with MUA/Ps in the Future, Interest in Volunteering in a Charitable Clinic in the Future, and Interest in PC.** (Table 2) Students were also asked to describe their experience completing the CH electives in **one word.** (Figure 1)

## Results

**Figure 1 (Right).** This "word cloud" shows the words medical students (n=31) used to describe their experience completing the CH electives. "Eye-opening" was the most common answer, followed by "Rewarding" and "Impactful".

**Table 1 (Bottom left).** Student involvement with OUCHA programs.

**Table 2 (Bottom right).** A five-point Likert Scale (Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree) was used to assess the impact of the CH electives on medical students across eight metrics. The percentages shown were calculated by combining the number of students that Strongly Agree or Agree with a statement.



Table 1	OUCHA Program	% of students that volunteered
		86%
		49%
		37%
		28%
		19%

Table 2	The experiences I had while completing the CH electives...	% Strongly Agree or Agree
	...increased my empathy for MUA/Ps	100%
	...were impactful and transformative	98%
	...were unique to CH I and II and not found elsewhere in the clinical curriculum	86%
	...increased my understanding of challenges facing MUA/Ps	95%
	...increased my understanding of challenges facing physicians working with MUA/Ps	88%
	...increased my interest in working with MUA/Ps in the future	86%
	...increased my interest in volunteering with a free clinic in the future	91%
	...increased my interest in PC	54%

## Connections

In 2014, the **University of California San Diego School of Medicine (UCSD SOM)** evaluated the effect that volunteering in free clinics had on medical students. They found that students had...

- An **increased understanding of the challenges facing individuals suffering from homelessness and underserved minority families.**<sup>3</sup>
- Improved attitudes towards MUA/Ps.**<sup>3</sup> (attitudes ≈ empathy)
- An **increased interest in working with MUA/Ps in the future and increased interest in PC.**<sup>3</sup>

In 2017, the **Sidney Kimmel Medical College** and **University of Central Florida College of Medicine** both conducted similar studies to UCSD SOM, and their results support the findings listed above.<sup>4,5</sup>

## Conclusion

While there are **limitations** to this "program/curriculum review" and a follow-up study with a **pre-survey is required**, there are some noteworthy observations that can be identified for further investigation.

**OUCHA's longitudinal CH electives could serve as an innovative and education-based strategy to...**

- Increase or maintain medical student empathy during training.**
- Increase medical student understanding of challenges facing MUA/Ps and the physicians that work with them.**
- Increase medical student interest in working with MUA/Ps in the future and PC.**

A reduced percentage of students reported increased interest in PC when compared to the other survey metrics. In 2021, 48% of applicants matched into PC nationally and 62% of OUCOM MS4s matched into PC.<sup>6</sup>

The longitudinal CH electives are unique when compared to other medical schools' curricula and have potential to **serve as a model for other programs around the country.**

## Acknowledgments & References

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