### 142nd APHA Annual Meeting and Exposition

**HEALTHOGRAPHY** 

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## Improving a Community-Based Experience for Medical Students

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#### **Presenter Disclosures**

William B. Jordan, MD, MPH

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Disclosure of any discussion in the presentation of "off-label" (unapproved) use of substances/products:

None to disclose





#### **Learning Objective**

Analyze the strengths and areas for improvement in the current community project experience within the family medicine clerkship at Albert Einstein College of Medicine.





#### **BACKGROUND**





#### Vision

The Family Medicine faculty believes that all physicians, regardless of specialty choice, have a responsibility to contribute to improving the health of the communities in which they live and work.





#### History (1993-2014)

- Expose students to health literacy, community health problem analysis & intervention development, and physician's role in community health
- ♦ 6 afternoons of 4-week family medicine clerkship (3<sup>rd</sup>-year students at Einstein)
- Students in pairs at 1 of 8 sites
- Health education in schools, clinic waiting rooms, community based organizations, etc.





#### **Community Health Instruction**

◆ Past Einstein students rated the amount of required instruction similarly (mostly) to students nationally

Instruction Appropriate (%)	National	Einstein
Community medicine	81.2	78.2
Role of community health & social service agencies	73.4	71.6
Culturally appropriate care for diverse populations	83.9	85.9
Health disparities	82.5	83.5
Health determinants	82.3	78.2
Behavioral sciences	89.6	72.4





#### **Student Experience**

♦ Majority of Einstein students who answered were positive

Item	%	Rating
Intro to Bronx & Community Project	68.6	Excellent / Very Good / Good
Bronx Bus Tour	66.1	Excellent / Very Good / Good
Met Objectives	80.1-88.1	Strongly Agree / Agree
Influence on future patient interactions	72.6	Positive comment (free text)
Other comments	34.0	Positive (free text)





#### **Student Comments**

- ◆ "Loved working with the residents of Horizon [juvenile detention]. When we had time to speak with the kids, I really felt that I was making a difference. I am still shocked at how much influence a physician can have by the nature of the position."
- "I'd rather have been doing clinical work and learning how to be a doctor than doing nutrition work and learning to be a nutritionist."
- ◆ "These interventions felt fake. Most of the projects could not make a meaningful difference in 3-4 sessions."





#### **Student Comments**

"...thinking about establishing continuity over the course of the year. For instance, the first group to rotate through that specific site could do a survey and run focus groups to assess the needs of the community. Then the **next group** could **pilot** a few approaches... The next could write a curriculum for the groups to come, and the following groups could teach... And the last one could evaluate, reassess for the following year of students, who can repeat the...cycle and improve on the past year."





#### **METHODS**





#### **Needs Assessment**

- IRB approved
- Students, community project site advisors, faculty
- Cross-sectional
- Mixed-methods approach
  - Anonymous semi-structured online survey
  - Four group sessions to explore survey results





#### **Continuous Program Evaluation**

#### End of clerkship student surveys (~5 years)

- Every month
- Compiled every 6 months
- Student perception of
  - Meeting objectives
  - Quality of sessions
- Starting 2013-2014, added items to compare pre- & post-restructuring
  - Quality of supervision
  - Graduate questionnaire items





#### **RESULTS: NEEDS ASSESSMENT**





#### **Participants**

♦ 64 survey participants out of 284 (response rate: 22.5%)

Stakeholder	n		%
Student		50	78.1
Site Advisor		6	9.4
Faculty		4	6.3
Community Member		1	1.6

Group sessions: 5 students, 6 site advisors,8 faculty, 3 community members





#### **Strengths**

Item	% Positive
Collaborative teaching / learning w/ peers	75.0
Achieved objective: effective communication w/ communities	73.4
Achieved objective: present info about community health problem	76.6
Working w/ community members	81.3





#### **Assets**

- Perception of benefit to community
  - By site advisors
  - Student opinion mixed
- Community relation-building
- **♦** Student
  - Exposure to community
  - Appreciation of particular populations
  - Understanding of social determinants
  - Promoted skills working with underserved





#### Weaknesses

Item	% Positive
Complement clinical work	50.8
Training in prevention	49.2
Orientation	50.0
Bus tour	42.6
COPC worksheet	31.3
Self-reflection worksheet	18.8
Meeting w/ site advisor	52.1
Meeting w/ director	50.0
Meeting w/ faculty	48.9
Time frame	35.4





#### **Challenges**

#### Student-perceived

- Brief time at site for each student
- Lack of continuity across rotations
- Lack of measurable impact
- Inadequacy of site supervision ("non-faculty" development)

#### Community-perceived

Inadequate student preparation for community work (skills: health literacy, cultural competency, etc.)





#### **Suggestions**

Item	% Positive
More continuity	90.6
Access to past materials	89.1
Long-term intervention	84.4





#### Summary

Students and site advisors agreed:

- short time frame, lack of continuity, and inadequate supervision limit scope of learning
   effectiveness
- projects can contribute to
  - understanding the needs of diverse populations
  - supporting health in local communities





#### **CONCLUSIONS**





#### **Conclusions**

- Community projects are valued by medical students, community partners, and faculty
- Based on needs assessment modifications include:
  - 1. Enhanced supervision
  - 2. Longitudinal structure
- Restructuring community health interventions with a cyclical structure to:
  - 1. Better prepare students to work collaboratively with community-based organizations and their populations
  - Provide enhanced instruction around communication with the community, and analysis of community health problems and interventions





#### **Learning Objectives Revision**

- Objectives streamlined based on survey / groups
- Refocus with more relevance to clinical practice
  - 1) Communicate effectively with people from diverse backgrounds (e.g., patients, families, health professionals, advocates, community partners, agencies, and the public).
  - Apply analytic methods (e.g., needs assessment, evaluation development, evaluation implementation, data synthesis) to address a health problem at the community or population health levels.
  - 3) Make use of community assets and resources with the aim of improving the health of individuals, families, and communities.
  - 4) Discuss the role of socioeconomic, environmental, cultural, and other population-level determinants of health on the health status and health care of individuals, families, and populations.





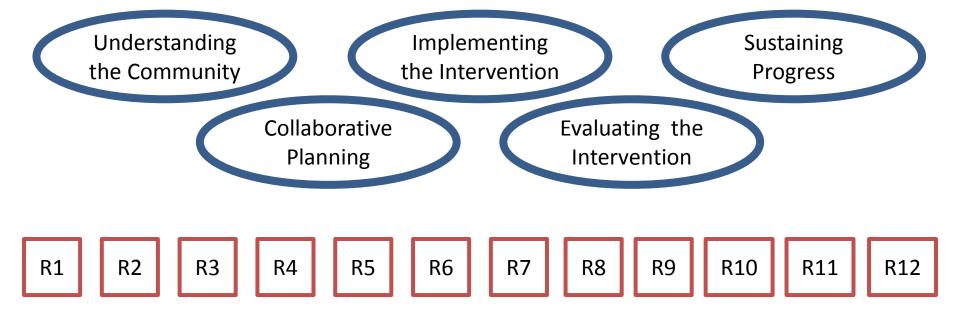
#### Project Revision (2014-2015)

- ♦ Fewer projects (4), larger teams (3-5 students)
- ♦ Longitudinal structure
- ♦ Initial orientation w/ self-reflection
  - Briefer lecture
  - ♦ Tour includes all sites
  - ♦ Project overview w/ more time focused on phase / hand-off
- Enhanced streamlined supervision
  - Site advisor orientation & weekly check-in meetings
  - ♦ Director of Community Health Outreach bi-monthly meetings
- Wrap-up: focus on self-reflection
- Evaluation: site (re: meetings), clerkship (re: hand-off)





#### **Longitudinal Structure**







# Thank



