142nd APHA Annual Meeting and Exposition

HEALTHOGRAPHY

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Improving a Community-Based Experience for Medical Students

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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
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 (3rd-year students at Einstein)
- Students in pairs at 1 of 8 sites
- Health education in schools, clinic waiting rooms, community based organizations, etc.
Past Einstein students rated the amount of required instruction similarly (mostly) to students nationally.

<table>
<thead>
<tr>
<th>Instruction Appropriate (%)</th>
<th>National</th>
<th>Einstein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community medicine</td>
<td>81.2</td>
<td>78.2</td>
</tr>
<tr>
<td>Role of community health &amp; social service agencies</td>
<td>73.4</td>
<td>71.6</td>
</tr>
<tr>
<td>Culturally appropriate care for diverse populations</td>
<td>83.9</td>
<td>85.9</td>
</tr>
<tr>
<td>Health disparities</td>
<td>82.5</td>
<td>83.5</td>
</tr>
<tr>
<td>Health determinants</td>
<td>82.3</td>
<td>78.2</td>
</tr>
<tr>
<td>Behavioral sciences</td>
<td>89.6</td>
<td>72.4</td>
</tr>
</tbody>
</table>

2013 AAMC Graduation Questionnaire (inadequate, appropriate, or excessive)
**Student Experience**

- Majority of Einstein students who answered were positive.

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to Bronx &amp; Community Project</td>
<td>68.6</td>
<td>Excellent / Very Good / Good</td>
</tr>
<tr>
<td>Bronx Bus Tour</td>
<td>66.1</td>
<td>Excellent / Very Good / Good</td>
</tr>
<tr>
<td>Met Objectives</td>
<td>80.1-88.1</td>
<td>Strongly Agree / Agree</td>
</tr>
<tr>
<td>Influence on future patient interactions</td>
<td>72.6</td>
<td>Positive comment (free text)</td>
</tr>
<tr>
<td>Other comments</td>
<td>34.0</td>
<td>Positive (free text)</td>
</tr>
</tbody>
</table>

2012-2013 internal end of clerkship survey; n=176
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.”

2012-2013 internal end of clerkship survey
“...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%)

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>50</td>
<td>78.1</td>
</tr>
<tr>
<td>Site Advisor</td>
<td>6</td>
<td>9.4</td>
</tr>
<tr>
<td>Faculty</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>Community Member</td>
<td>1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Item</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative teaching / learning w/ peers</td>
<td>75.0</td>
</tr>
<tr>
<td>Achieved objective: effective communication w/ communities</td>
<td>73.4</td>
</tr>
<tr>
<td>Achieved objective: present info about community health problem</td>
<td>76.6</td>
</tr>
<tr>
<td>Working w/ community members</td>
<td>81.3</td>
</tr>
</tbody>
</table>
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

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

<table>
<thead>
<tr>
<th>Item</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>More continuity</td>
<td>90.6</td>
</tr>
<tr>
<td>Access to past materials</td>
<td>89.1</td>
</tr>
<tr>
<td>Long-term intervention</td>
<td>84.4</td>
</tr>
</tbody>
</table>
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
  2. 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).

2) 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

- Understanding the Community
- Collaborative Planning
- Implementing the Intervention
- Evaluating the Intervention
- Sustaining Progress

R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12
Thank You!