Project HOPE:
Homelessness in Osteopathic Pre-doctoral Education

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“We are more alike, my friends, than we are unalike.”

-Maya Angelou
In 2010, Nova Southeastern University’s College of Osteopathic Medicine (NSU-COM) was awarded 5-year Pre-doctoral Primary Care Training grant from the Health Resources Administration (HRSA) of the U.S. Department of Health and Human Services.

Project HOPE – Homelessness in Pre-doctoral Osteopathic Education - responds to a curricular deficit in the education of medical students toward the health care needs of those experiencing homelessness.

Challenges have yielded great insights into ways to integrate a focus on special populations within health education curricula.
Project HOPE

https://www.youtube.com/watch?v=e51rQ2lFgzs
Project Goals

- Provide a primary care curriculum for medical students that focuses on the homeless, ensuring patient safety and minimizing medical error.

- Improve the attitudes and knowledge that students have with regard to people who experience homelessness.

- These goals are enmeshed.

- Expand student experiences in primary health care to the homeless in a required rural/urban underserved primary care clerkship.

- Provide a template for a curriculum that can be used by both osteopathic and allopathic medical schools that can be used to plan, develop, implement, and evaluate primary care health services for homeless populations.
The Case for Primary Care Training in HCH

- An aging health care for the homeless (HCH) workforce; high burnout, health profession shortage area.

- Fewer young physicians entering primary care.

- Adverse attitudes of medical providers contribute to reduced quality and access to care for those experiencing homelessness and most likely stem from training that did not adequately prepare students and physicians to sensitivities in working with this population.

- Similar indications exist with other special populations.

- No exposure = no interest / limited skill set = lack of efficacy.
The Curriculum: An Overview
Curricular Overview

YEAR ONE
- **Humanism & Health**: (3 hours)
- **Foundations and Applications of Clinical Reasoning I**: (2 hours)
  Case presentation focused upon homelessness and health.
- **Community Service-Learning**: (4 hours)
  4 hours of direct/indirect community service that is specific to individuals experiencing homelessness

YEAR TWO
- **Principles of Clinical Medicine II**: (3 hours)
  Homeless-specific specialized patient exam

YEAR THREE
- **Internal Medicine I**: (8 hours)
  Web-based module, incorporated into 3 month Internal Medicine Rotation

YEAR FOUR
- **Medical Informatics**: (8 hours)
  Online health information technology focused on homelessness.
- **Rural / Underserved 2 month core placement and / or 1 month selective placement**:
  Students will conduct intake in concert with preceptor / facility to determine housing status by federal definition of homelessness. Rural / Underserved log includes data on number of homeless-specific encounters per month and will complete post test to determine correlational data on experience, affect, and knowledge.

- **28 total hours to date; expansion is ongoing**
US and THEM

- It can be difficult for people to relate to others that they feel are different from them.

- The curriculum that has been developed focuses on an array of HCH themes: chronic and infectious disease, motivational interviewing, EHR, care coordination, trauma-informed care, etc.

- Most importantly, students are introduced to the population by demystifying perceptions of the homeless through mass media and consumer engagement.

- We are more alike than dissimilar.
Homelessness is an Experience, NOT a Condition.
The Economy as a Patient

- When a patient gets sick, the whole body is engaged. A severe abscess only in a hand will cause a rise in body temperature, heartbeat, etc...

- The world economy behaves in exactly the same way.

- In a patient or in a world economy, everything is interconnected, and all parts display some evidence of what is happening anywhere in the patient or on the globe.

https://www.youtube.com/watch?v=hwWGzQ_FUtQ
While circumstances can vary, the main reason people experience homelessness is because they cannot find housing they can afford.

It is the scarcity of affordable housing in the United States, particularly in more urban areas where homelessness is more prevalent, that is behind their inability to acquire or maintain housing.

Sheltered housing for mothers with children will only house boys under 12 years of age.

No pets.
Homeless Man Who Refused To Leave His Dog During Below-Zero Temperatures Gets Shelter For Pup
Mental Health

Among the countries in the Organization for Economic Cooperation and Development (OECD), the United States ranks 1st in health care spending but 25th in spending on social services.

These are not two unrelated statistics: high spending on the former may result from low spending on the latter.

Behavior health is critical when addressing HCH; our curriculum reflects this integration.
Homes, not Handcuffs

- In 2005, Utah figured out that the annual cost of E.R. visits and jail stays for homeless people was about $16,670 per person, compared to $11,000 to provide each homeless person with an apartment and a social worker.

- The state began giving away apartments, with no strings attached. Each participant in Utah’s Housing First program also gets a caseworker to help them become self-sufficient, but they keep the apartment even if they fail.

- Utah has NOT expanded Medicaid.

- By 2013, Utah had reduced homelessness by 78%, and is on track to end homelessness by 2015.
Expansion of Medicaid

- 24 states expanded Medicaid in 2014 for eligible adults with incomes under $15,000 (approximately.)

- Lack of consistency by State = further lack of trust.

- There is an inherent concern that expanded coverage for all will mean even less services and more challenging access.

- Health care professionals are working with an increased patient base, including those experiencing homelessness.
Medical conditions such as depression, diabetes, hypertension, and heart disease are common, in addition to injury and physical ailments from unstable living arrangements.

Acute problems such as infectious disease and injury are difficult to heal when there is no place to rest and recuperate.

On average, homeless adults have 8 to 9 concurrent medical illnesses.
Broward County: Close to Home(less)

- The 2014 Point-in-Time (PIT) count (required for the HUD Continuum of Care funding) took place in Broward County, Florida, on January 21, 2014 - there were 8,056 homeless individuals captured by this PIT count; this number does not include the number of hidden homeless.

- Fort Lauderdale and Broward County have opposing views on the issue of homelessness – confusing for all.

- While the economy is better, housing costs have skyrocketed while wages have not increased.
2014 HOURS AT MINIMUM WAGE NEEDED TO AFFORD RENT

In no state can a minimum wage worker afford a two-bedroom rental unit at Fair Market Rent, working a standard 40-hour work week, without paying more than 30% of their income.

2014, National Low Income Housing Coalition
Gloria:

“You asked once how I survive on $721 a month. It's not easy- they gave us an $11 raise. They then lowered my food stamps $18. The whole system needs to be re-done. And it needs someone or a committee to over-look the whole process.”
Homelessness may arise from physical or mental disability that brings on poverty, but once someone becomes homeless, poverty and deprivation reinforce each other in a vicious circle.
Insights

- How many wear corrective lenses?
Is this man employable?
Is this man employable?
Interprofessionalism in the 21st Century:

**Team Works!!! Teams Work!!!**

- nursing
- social work
- public health
- physicians
- public policy
- dentistry
- behavioral health
- addiction counseling
- physician assistants

Health & Housing
Community Collaborations

- Community-based participatory approach
- Continuous partner and consumer input
- Student volunteer opportunities
- Interprofessional education and practice
Community-Based Participatory Approach

- Develop partnerships with stakeholders committed to serving the homeless:
  - Homeless Outreach Organizations
  - Federally Qualified Health Centers
  - Law Enforcement
  - Social Service Agencies
- Participation in monthly Consumer Advisory Board meetings to address challenges and solutions pertaining to homelessness
Continuous Partner and Consumer Input

- Developing a curriculum that addresses the real needs and concerns of homeless consumers requires support from key stakeholders
  - On site evaluation at FQHC’s and social service organizations
  - BSO- 90 hour Homelessness Outreach Training Curriculum
  - Focus Groups among homeless consumers, NSU medical students, project HOPE team members, and law enforcement officers.
  - Consumer-led discussions on campus with students
Student Volunteer Opportunities

- Student-Led Donation Drive
  - Collection points located throughout campus
  - Pet Food Drive
  - Development of Homeless-Specific Volunteer Resource Guide

- Point-In-Time Count:
  - Participation in Committee meetings
  - On site campus training

*57 NSU participants increased the 2015 volunteer rate by 70%
Interprofessional Education and Practice

- Integrated curriculum
- Engagement across all health professions
- Interprofessional outreach = enhanced perspective
- Thinking outside the box (disaster and emergency preparedness)
Challenges & Opportunities
Preceptors

- The HCH setting is already taxed by the inherent health demands of those experiencing homelessness.

- Supervision of medical student trainees is often seen as contributing to a further straining of limited resources.

- The Project HOPE goal was to place ¼ of our 240 medical student class in HCH settings, with a ration of 1 preceptor to 2 students.

- Selective student practicum Placement in HCH settings.
The Hidden Homeless: An Apparent Challenge

- Many who are transient in their housing and are not “on the streets” do not self-identify as homeless.

- Due to issues at intake, funding policy and procedure - many clinics / clinicians do not track patients experiencing homelessness.

- Language is important in assessment of housing and in its related continuum of care.

- Thus, a need to broaden perspective and raise awareness.
Definition of Homelessness

A homeless individual is defined in section 330(h)(4)(A) as "an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing." A homeless person is an individual without permanent housing who may live on the streets; stay in a shelter, mission, single room occupancy facilities, abandoned building or vehicle; or in any other unstable or non-permanent situation."

[Section 330 of the Public Health Service Act (42 U.S.C., 254b)]
Tracking Exposure: A Way to Integrate

- Tracking of housing status, irrespective of service point provides a service to the student, preceptor, and even to the clinic.

- Along with the need to broaden perspectives, we have broadened our approach to tracking to include all practicum sites during third year and fourth year rotations.

- Our model asks students to track the housing status of every patient. Students are provided with cue cards.

- The concept is easy to replicate, and can be tailored for any minority or vulnerable or special population group.
Tracking

- Shift of focus to track housing status across an array of service settings.

- Correlate health and housing, exposure, experience, and attitude.


Federal definition of homelessness (below):

*A homeless individual is defined in section 330(h)(4)(A) as “an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is resident in transitional housing.” A homeless person is an individual without permanent housing who may live on the streets; stay in a shelter, mission, single room occupancy facilities, abandoned building or vehicle; or in any other unstable or non-permanent situation. [Section 330 of the Public Health Service act 942 U.S.C., 254b]*

Based on the federal definition of homelessness, please utilize the questions below to assess your patient’s housing status:

- Have you lived in the same place for the past 30 days?
- Have you lived in the same place for the past 90 days

If you are unsure of your patients housing status after asking the questions above, please feel free to utilize any of the complementary questions below to gain further information and insight:

- Do you have a permanent home?
- Do you get all of your personal mail sent to your current residence?
- If you are living in a non-permanent residence, where and with whom have you been living?
- Do you pay money towards expenses where you are living?
- Do you know where you will be living in the next six months?
To identify the implications of housing status on the provision of medical care to individuals experiencing homelessness.

To analyze how medical professionals can use a simple tool to identify the “hidden homeless” in order to develop treatment plans that will result in better patient outcomes for individuals experiencing homelessness.

To describe the reasons that capturing data systematically may help to quantify the number of people who are unstably housed and assist in advocacy initiatives.
Methods: Rotation Logs

- Cross-sectional study to capture “hidden homeless,” using the federal definition of homelessness.

- Third and fourth year NSU medical students asked each patient at intake 3 questions regarding the location the individual slept:
  - Where did you sleep last night?
  - Have you lived in the same place for the past 30 days?
  - Have you lived in the same place for the past 60 days?
Methods: Additional Questions

- Complementary questions provided to sensitively probe for confirmation, if needed:
  - Do you have a permanent home (a place of your own, a house, apartment, or room)?
  - Do you get all of your personal mail sent to your current residence?
  - If you are living in a non-permanent residence, where and with whom have you been living?
  - Do you pay money towards expenses where you are living?
  - Do you know where you will be living in the next six months?
Project Implementation Timeline: March 2012 – April 2015

- **2/2012** 10 open-ended questions paper monthly log in rural/underserved medicine

- **7/2012** Identical monthly log expanded to all clinical rotations for 3rd and 4th year

- **5/2013** 4 close-ended questions paper monthly log implemented in all rotations

- **10/2013** 1 (Yes/No) question integrated into electronic format as part of required report recorded for each individual patient seen

**Data Collection Sites:** Ambulatory care practices and hospitals/clinics nation-wide
Data from 11,264 self-report logs were completed. Research staff coded the data and performed data entry in Excel. Data was exported into SPSS for descriptive analysis.

The average percent of homeless seen was 6% across all rotation sites.

Top areas:
- Psychiatry
- Emergency medicine
- Rural/ underserved medicine.
<table>
<thead>
<tr>
<th>Rotation</th>
<th>Patients seen</th>
<th>Homeless</th>
<th>% homeless</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry</td>
<td>20,250</td>
<td>3,588</td>
<td>18%</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>39,889</td>
<td>5,282</td>
<td>13%</td>
</tr>
<tr>
<td>Rural/Underserved Medicine</td>
<td>49,476</td>
<td>4,879</td>
<td>10%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>96,119</td>
<td>5,275</td>
<td>5%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>95,804</td>
<td>4,505</td>
<td>5%</td>
</tr>
<tr>
<td>Surgery</td>
<td>59,755</td>
<td>2,405</td>
<td>4%</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>29,767</td>
<td>514</td>
<td>2%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>35,969</td>
<td>834</td>
<td>2%</td>
</tr>
<tr>
<td>Pediatrics--Hospital</td>
<td>31,258</td>
<td>699</td>
<td>2%</td>
</tr>
<tr>
<td>Pediatrics--Ambulatory</td>
<td>44,148</td>
<td>475</td>
<td>1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>13,925</td>
<td>763</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>527,156</strong></td>
<td><strong>29,300</strong></td>
<td><strong>6%</strong></td>
</tr>
</tbody>
</table>
Rotation Log Study Limitations

- Self-reporting of information

- Student’s willingness to complete a non-mandatory paper-based tool, before electronic log implemented in October 2014

- Change in data collection instrument over three year period

- Acceptance by preceptors and clinic staff based at rotation sites throughout the country of the usefulness of tracking housing status in order to better understand their patient population and relevant care plans.
Opportunities

There are inherent challenges in changing rotation protocol within graduate medical education; this model does not require modification of current operations for medical schools.

This is therefore an opportunity for other health profession programs to replicate this intake mechanism.
Opportunities

- Students and faculty have reported their surprise when assessing for housing status in hospital and clinic settings where they do not anticipate to see patients experience homelessness.

- This data can be meaningful for the preceptor / clinic to better understand their patient population, care plans, etc.

- This data can inform other pre-doctoral training initiatives focused upon other special populations.
Student’s Attitudes and Experience Towards the Homeless

Assessment Tool:

Health Professional Attitudes and Experience Towards the Homeless Inventory (Buck et al., 2005)

- **Written Survey** is distributed to all first year medical students and graduating fourth year medical students.

- **Pre-test**: Collected before class in fall term.

- **Post-test**: Collected in winter term following didactic lecture by faculty that focuses on homelessness and personal small-group discussion with Speakers who are individuals who have experienced homelessness.
Health Professional’s Attitude & Experience Toward the Homeless Inventory

Dr. David Buck, 2005
Augmentation of the Health Professional’s Attitude & Experience Toward the Homeless Inventory

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>20) I have noticed homelessness in my community or other communities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21) Friends, family members, and/or I have experienced homelessness.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>22) I have participated in community service events with those who experience homelessness (i.e. soup kitchens, shelter visits, Make A Difference Day, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23) I have provided direct care to those who experience homelessness (i.e. health fairs / health care, social services, law enforcement, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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Pilot Study of First Year Medical Students

Written Survey distributed to all first year medical students

Pre-test: Fall 2014

Post-test: Spring 2015, immediately after lecture and personal interaction with homeless individuals
Results: Pre-test and Post-test Comparison of 1st Year Medical Students Pilot Study

Medical students:

- Are more likely to believe that homeless people are victims of circumstance and that healthcare dollars should be directed toward serving the poor and homeless. *

- Increased their belief that doctors should address the physical and social problems of the homeless and see the value of learning about the lives of homeless patients. *

- Became less cynical and less inclined to believe that homeless people are lazy. *

*Statistical significance p. 05
Data Collection of HPAETHI Attitude Survey

Pre-test: Fall of first year
Post-test: Spring of fourth year

- 2011 - 2014 1st Year Total = 868
- 2012 and 2014 4th Year Total = 395

Spring 2015 Comparison Group of the Same Students
Results:

<table>
<thead>
<tr>
<th>HPAETHI Attitude Questions Comparison of Mean and Percent Responses First Year (2011-2014) and Fourth Year Medical Students (2012 &amp; 2014)</th>
<th>1st Year (Agree/Strongly Agree (n=868))</th>
<th>4th Year (Agree/Strongly Agree (n=395))</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean and % Agree/Strongly agree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless people are victims of circumstance.</td>
<td>3.4 46%</td>
<td>3.4 47%</td>
</tr>
<tr>
<td>Homeless people have the right to basic health care.</td>
<td>4.2 86%</td>
<td>4.1 84%</td>
</tr>
<tr>
<td>Homelessness is a major problem in our society. *</td>
<td>4.0 78%</td>
<td>4.1* 84%</td>
</tr>
<tr>
<td>Health-care dollars should be directed toward serving the poor and homeless. *</td>
<td>3.3 48%</td>
<td>3.5* 55%</td>
</tr>
</tbody>
</table>

*Independent sample t-test

Source: HPAETHI Attitude Survey of First Year and Fourth Year Medical Students, Nova Southeastern University College of Osteopathic Medicine, 2015
Trends in Medical Students’ Attitudes (2014)

- We discovered that 84% graduating medical students believe that homelessness is a major problem in our society, while 78% of the first year students held that perception.

- In terms of whether healthcare dollars should be directed toward serving the poor and homeless, this belief is held by 55% of graduating students and 48% of first year students.

- Current student perceptions correlate with improved quality of health care to underserved populations, with 86% of first year medical students and 84% graduating students agreeing that homeless people have the right to basic health care.
According to 41% of graduating students, they have provided direct care to those experiencing homelessness through health fairs, social services activities, etc. while 20% of the first year students responded that they have participated in similar activities.
Sean
Lessons Learned and Future Plans
Lessons Learned

- Finding **common ground** with faculty; providing subject matter expertise.
- Ensuring COMLEX & other testing competencies are addressed.
- **NOT** reinventing the wheel.
- Fuse special population focus into existing courses such as specialized patient exams, clinical reasoning, etc.
- They may be “special” but are still part of the “population.”
Lessons Learned

- Need to sensitize faculty and clinical preceptors, not just medical students.

- Pre-clinical gains in education as well as changes in attitude change once in the clinical setting.

- HCH residency opportunities would attract more student engagement.

- Students need to be made aware of the NHSC loan repayment program and other benefits to working with underserved populations.
Lessons Learned

- Engaging Consumers at every step.
- Building community-based partnerships and establishing trust.
- Giving back to community partners (i.e. resource).
- Meeting consumers where they are at.
- Meeting students where they are at.
- Using social media and current events to engage students.
- Flexibility and patience.
Partnerships have made student clerkship experiences a success.

A contract with Camillus Health Concern in Miami, FL has facilitated for augmented 3rd and 4th year medical student rotations through offsetting additional preceptor time (3-5 students per month).

Orange Blossom Health Care for the Homeless in Orlando, FL, has generously accepted 1-2 students per month in 4th year rotations.

NHCHC has helped us to create partnerships nationally.
Project Highlights

- NHCHC has helped us place students in HCH nationally.

- Toward dissemination, we have had 25+ total oral presentations / posters related to Project HOPE at national and international conferences including AACOM, APHA.

- Work on a “How-To” Manual is in progress; a project video that captures the perspectives of homeless health consumers is in production.

- Grant efforts to sustain the project have not been successful to this point; most RFPs currently look to service provision and housing, not education.

- Curriculum has already been inculcated and will continue.
Resources

- At minimum:
  - ½ FTE administrative project coordinator
  - ½ FTW executive project director
  - ½ FTE project evaluator
  - 1 FTE project director

- Travel & conferences
- Stipends for consumers
- Support staff
  - Budgeting, grant reporting, administrative support.
- Faculty support
  - Project team helps to provide content and subject-matter expertise to develop curricular content with faculty.
Brandt

https://www.youtube.com/watch?v=hldYb6wqfqk
A Special Thank You...

- Health Resources and Services Administration
- The National Health Care for the Homeless Council
- Camillus Health Concern
- Orange Blossom Health Care for the Homeless
- Broward Co. Task Force For Ending Homelessness
- Broward Partnership for the Homeless
- Broward County Sherriff’s Office
- Countless consumers!!
Questions?

http://medicine.nova.edu/ori/project-hope.html

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