



National
Outreach for
Diversity in
Medicine
High School
Mentoring
Toolkit



Section 0

**To prepare:
Read Prior to Event**

NOD in Medicine: Who We Are

The mission of National Outreach for Diversity in Medicine is to inspire, recruit, and retain Underrepresented in Medicine (UIM) youth in medicine. Through pipeline programs, exposure to medicine, and mentorship, we advocate that ethnic minority and disadvantaged youths have the capacity to become physicians. We instill the ambition and confidence in them to pursue a medical degree so that our future consists of more culturally-competent physicians serving medically underserved communities.



Setting up a NOD Event:

1) Identifying Underserved Schools

Ask your...

- 1) Medical school Dean of Students/Student Affairs or Dean of Diversity (if applicable)
- 2) Medical school community outreach director, staff, or students who have coordinated programs/camps for those in your local underserved communities
- 3) Local Area Health Education Center (AHEC) organization
- 4) Local School Board of Education (or go to their website)
- 5) Associated undergraduate institution (if applicable) Director of Admissions/Director of Recruitment and Outreach

2) Contacting the School

Personable is better!

Set up an introductory meeting by calling or E-mailing the school principal or teacher directly, preferably in-person, otherwise, phone meeting.

Caution: Be aware this initial contact may take time as the educational needs of students take priority over outside organizations. Do not take this as a definite lack of interest from the school!

Introduction E-mail or phone call message template:

“Good morning, **Mr./Ms. X**. My name is **John Doe** and I am an **Nth** year medical student at the **Y College/School of Medicine**. On behalf of the National Outreach for Diversity (NOD) in Medicine, our mission is to increase diversity in medicine by outreaching to students underrepresented in medicine. Through a 1-day event, medical students from my school would encourage your students to consider a career in medicine and expose them to hands-on activities like role-playing doctor, posters and models of organs, and high school / college preparation. Our goal is to build and sustain formal mentorship programs between our medical school and local, underserved K-12 schools. I have attached NOD in Medicine’s action statement for your review, and would like to invite your school to participate in this nationwide event with us.”

3) Securing Event Details...

1. Gather what the student demographic is like by asking the faculty/staff at your selected school
2. **Date and time:** 1 hour minimum ideally, but to carry out hands-on activities (see age-appropriate slides) in addition to discussions with the students, 2 hours would be needed
3. Confirm **grade level and class size**: depending on how many students volunteer from your school, **at least 2 different** grade levels is ideal
4. Work with administration/staff on **appropriate grade level activities** that potentially align with what students may be learning in class (e.g. time management skills in their advisory period or organ systems in their biology class)

4) Day of Event Logistics

1. **Confirm with the NOD team (slide 31) about the environmental survey and post-program evaluation:** the NOD research team will have pieces already developed for you to use on-site.
2. **Be Prepared!** Have photocopies and supplies ready before you leave school
3. **Transportation:** public transit or private vehicle? Consider asking your student organization faculty adviser if they want to participate by carpooling with medical students - building relationships with the youth and you!
4. **Be energetic!** The students' energy and enthusiasm can build off your team.

Teaching Tips

1. **Fail to prepare and prepare to fail:** talk with the teacher beforehand about the class and their personality/engagement level
 - a. Have your plans and talking points ready if you transition between activities
 - b. Know the # of copies you will need or amount of supplies to be ready for that class
2. **Enthusiasm** is contagious!
3. As you only have a small amount of time, **rely on activities and medical student stories** about their paths to medicine as engagement (rather than PPTs or white board talks)

For ANAMS Pipeline Programs...

- NOD programming does not have to be separate from your current pipeline work such as with NACHP (Native American Center for Health Professions): We work with prospective and current students to serve as a central location for opportunities of support, mentorship, and professional development to enhance our pathways of Native health professional students, and keep students connected to Native health issues
- Any questions about connecting NOD with existing work (or general questions about pipeline work) can be directed to the ANAMS President at cassandra.rendon@gmail.com

**Next slide = Start of
actual presentation**

Section 1

Schedule of Day's Event

Agenda Example

1. Introduction to NOD + Mission and Vision (5 minutes)
2. Motivational discussion - Why we need more ethnic minority physicians in medicine? (15 minutes)
 - a. Careers in medicine
 - b. What students can do to become physicians
3. Mentoring activities (30 minutes)

Section 2

Careers in Medicine

Why Become a Doctor?



- Heal PEOPLE and help PEOPLE
- Illnesses affects everyone
- Have opportunity to help others get physiologically and mentally better
- Can have positive impact on the lives of others
- Career dedicated to service
- Understand medicine (diseases) and underlying health problems

Doctors as Patient-Care Clinicians

1. Anesthesiology - manages medications while in surgery
2. Dermatology - deals with the skin
3. Emergency Medicine - sees you in the ER
4. Family Medicine
5. Hematology/Oncology - works with cancer patients
6. Internal Medicine
7. Neurology - injuries to the brain, spinal cord, and nerves
8. OB/GYN - delivers babies and reproductive organs
9. Pathology - interprets diseases of the tissues and body fluids
10. Pediatrics - sees kids
11. Psychiatry - sees patients with mental health conditions
12. Radiology - interprets imaging like a chest x-ray
13. Surgery - operates on patients



Photo cred: <http://i2.cdn.turner.com/cnnnext/dam/assets/130523124034-dr-q-profile-horizontal-large-gallery.jpg>

<http://footage.framepool.com/shotimg/qf/604694113-chest-radiograf-radiology-forecasting-radiologist.jpg>

What else can doctors do?

1. Academic medicine
2. Community medicine - Rural or Urban
3. Entrepreneurship
4. Health care policy
5. Hospital
6. Hospital administration
7. Law
8. Medical Journalism
9. Research
10. Solo or group practice



Photo cred: <http://medcitynews.com/wp-content/uploads/Gawande-Colbert.png>

http://www.claconnect.com/uploadedImages/Images/Health_care/Hospital-Staff-Meeting-with-Doctors-and-Administration.jpg

<http://thumbs.dreamstime.com/z/asian-woman-doctor-scientist-using-microscope-laboratory-indian-female-medical-scientific-researcher-her-her-33532867.jpg>

Section 3

What YOU Can Do
(to Become a
Doctor)

Road Map to Becoming a Doctor

- High School = High School Diploma (4 years)
- College = Bachelor's Degree (4 years)
- Medical School = Medical Doctorate Degree (4 years)
- Residency Training = Licensed Physician (3-7 years)
- Attending Physician = Treats Patients (a lifetime)

1. STEP 1 = GRADUATE HIGH SCHOOL, DO WELL IN YOUR CLASSES

2. Caring for patients = Privilege and BIG responsibility

3. The educational pathway is long to ensure that you will be ready to treat and care for patients by the time you graduate medical school and finish residency training

High School Students

- Community engagement and leadership
- What are YOU passionate about?
- Start a student organization
- Mobilize those around you in support of cause
- Organize events centered around your cause
- Examples
 - Raise health awareness through seminars and guest speakers
 - Beach cleanup event
 - Orchestra/Band charity concert
 - Plant gardening day



Photo cred: <https://www.youtube.com/watch?v=TVYvkG8qOBE>

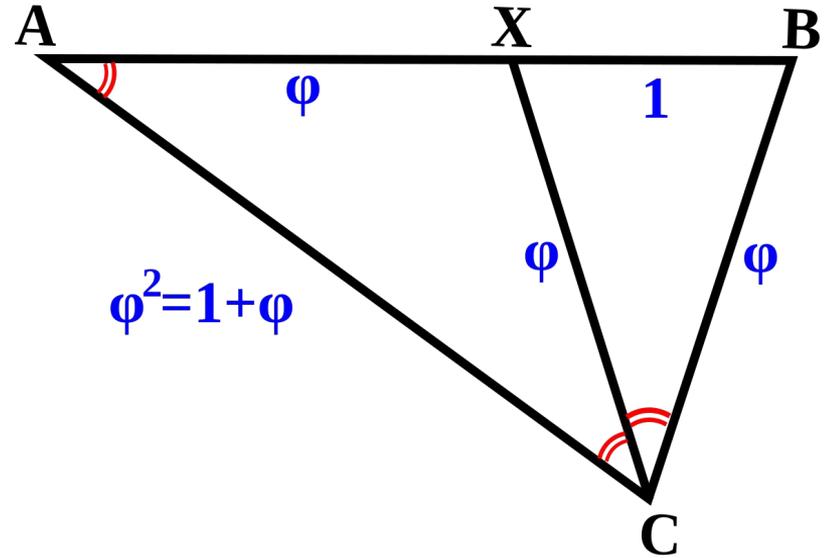
Clinical Exposure

- Hospital Volunteering
- Community Clinic Internship
- Shadow Physicians
- International Medical Volunteering Trips
- Community Health Screening Events
- Health Education Seminars



How Is What I'm Doing Now Important?

- English → patient records, communication with patients and medical team
- Math → understand correct dosages, interpret laboratory results
- Sciences (Biology and Chemistry) → understand how the body works, how medications improve health, and when to use which medications
- Foreign Language → communicate with patients from different backgrounds, understand medical terminology



Take Away Point!



- **What you are learning now serves as the building blocks for your future!**
 - What you learn in high school serves as the foundation for your college education
 - What you learn in college builds the foundation for the medical education you will use as a doctor

Can I Even Afford to Become a Doctor?

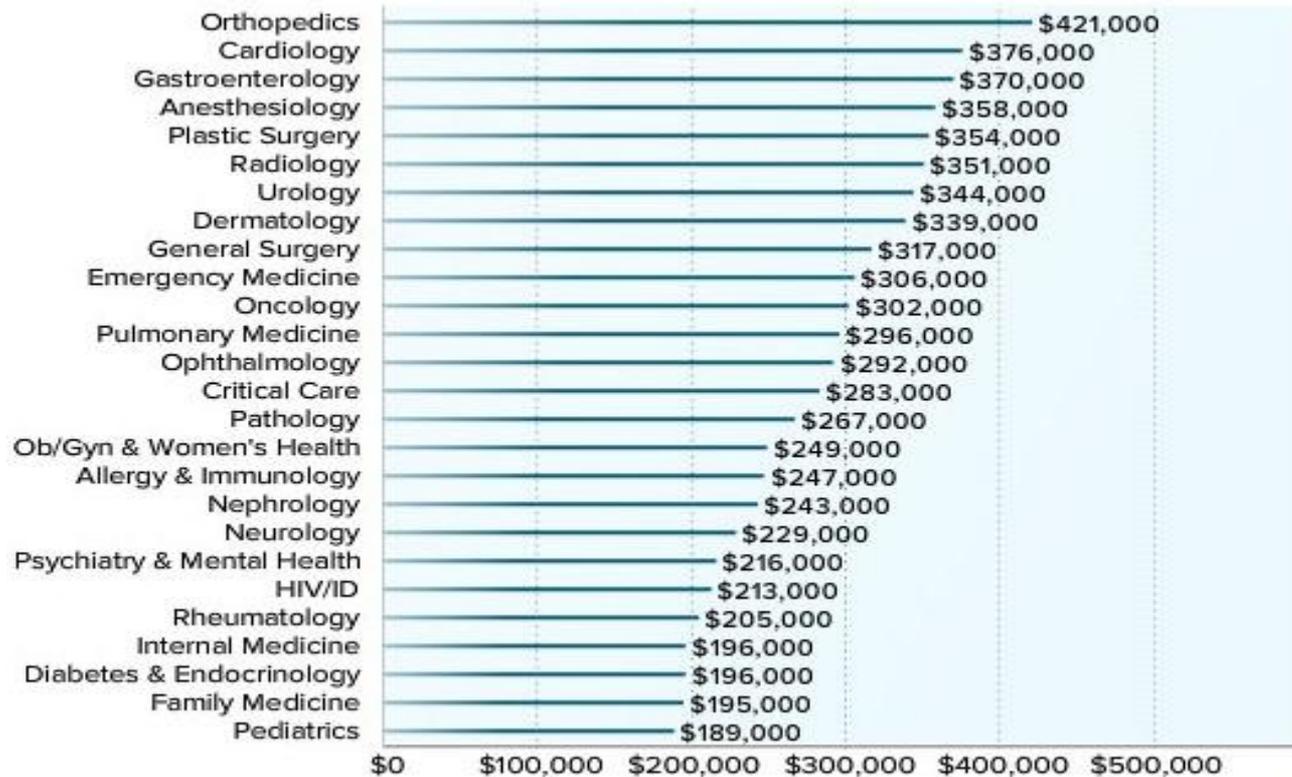
- Financial aid
 - Government assistance is available based on household income
 - Tuition waivers at community colleges
 - State colleges may cover tuition, school supplies, and living expenses
- Scholarships/Grants
 - Money for doing well in school, being the first in your family to go to college, if you play sports, etc...
- Personal or Federal Loans
 - You can apply for loans to cover tuition as well as living expenses
 - You do not have to start paying back loans until you begin your career

Financing a Career in Medicine

- College tuition and expenses may be expensive
 - But financial aid will provide a financial package of grants, scholarships, and loans to help you pay for college
 - A college degree will allow you to have a higher paying job and flexibility to pursue master's degrees
- Medical School is expensive
 - But your salary as a physician will enable you to pay off your educational loans



How Much Do Doctors Make?



Importance of Mentorship



- College Mentorship - Connect with student organization on local college campus to develop relationship
- Medical Student Mentorship - US!
- Physician Mentorship - Contact physicians in your local community

Photo cred: David Geffen School of Medicine at UCLA PRiME % 2018

Section 4

Closing

Questions? We would love to hear from you!

How to reach us:

- Signing up! goo.gl/PHG416
- Email: NODinMedicine@gmail.com
- Website: <http://nodinmedicine.strikingly.com/>



OR your organization's national pre-medical board member

- ★ AMSA: eaf@amsa.org
- ★ ANAMS: anams1975@gmail.com
- ★ APAMSA: premed@apamsa.org
- ★ LMSA: mentoring@lmsa.net
- ★ SOMA:
healthdisparities@studentdo.org

Section 5

Mentoring Activities

Examples of Mentoring Activities

- Motivational interviewing - discussions
- Photos of physicians of color
- Careers in medicine
- Rotations - play doctor
- Anatomy/neuroanatomy Lab
- Banana suture workshop
- Blood pressure/CPR workshops
- Patient history
- College application
- Resume workshop
- Mock interviews for college
- Leadership workshop

How to Take Blood Pressure

- Bring blood pressure cuff and stethoscope
- Briefly explain concepts of blood pressure (systole vs. diastole)
- Demonstrate on one student
- Have another student listen to stethoscope
- Explain how blood pressure can be used in medicine (hypertension, blood flow, etc.)

How to Take a Patient History

SOAP Note - Subjective, Objective, Assessment, Plan → Determine Chief Complaint

Teach students SOAP method

Pick one student as sample patient

Have another student be physician → Guide student through patient interview using SOAP Note

Repeat with different students

If have large group, can have multiple students act as an entire family of patients

Patient Exam

- Run through scenarios of patients with specific diseases
- Chief complaints, patient exam, diagnosis, treatment plan
- How physicians can differentiate between different symptoms to arrive at diagnosis (ex. Shortness of breath can be caused by a variety of diseases)
- Example diseases and conditions
 - Asthma
 - Diabetes
 - Flu
 - Stomach Flu

Daily Life of a Medical Student

- Overview of daily schedule of medical student
 - Lecture
 - Small Group Activities/Problem Based Learning
 - Lab (Anatomy)
 - Volunteer Clinic/Shadowing
- Q&A session

Resume Workshop

Sample Resume

Purpose of resume - summarize strengths and fit for internship/application/program

Objective - specific for purpose

Education History, Community Service, Leadership, Internships, Honors + Awards,
Special Skills (speak languages, MS word/excel/powerpoint, etc.)

Make sample resume with student

College Applications

- Personal statement - what do you want admissions to know about you, what is YOUR story
 - Get feedback from a lot of different people
- Activities - demonstrate leadership and passion through activities
 - Length of commitment, depth of experiences, quality over quantity
 - Demonstrate how you've explore your career path of interest through volunteering and internship programs
 - Summer enrichment programs for high school students (National Youth Leadership Forum, COSMOS, College high school pipeline programs)
- Academics - GPA and SAT scores
 - AP classes and academic coursework

Mock Interviews

- Form circles - divide students into equal numbers per mentor
- Ask each student one question and have them answer
- Question list:
 - What do physicians do?
 - Qualities and characteristics of a physician?
 - Differences between physician, nurse, medical assistant roles?
 - Why medicine?
 - How do you handle stress?