

Vital Signs

Healthcare Workforce

DISCUSSION GUIDE

TABLE OF CONTENTS

About This Program	3
How To Use This Guide.....	4
Why Health Care Job Opportunities Are Exploding.....	5
Warm-Up Questions:	7
Segment Themes & Discussion Questions	8
Segment One: "Under Pressure"	8
Segment Two: "Temperature"	10
Segment Three: "Pulse"	12
Segment Four: "Breathing Room"	13
Conclusion: "Vital Signs"	15
Health Care Concerns in the Community.....	16
Ten Things to Know About Health	16
Making a Healthy Sense of Place.....	18
Health Care As A Career	20
Career Choices.....	20
Personal Qualities	21
Academic Preparation	22
Other Careers Related to Health Care	23
Places Where You Can Learn More	23
The People Who Appear In Vital Signs	27
Glossary	28
Credits and Acknowledgments.....	31

ABOUT THIS PROGRAM

Vital Signs is an ongoing partnership between the Detroit-Wayne County Health Authority (DWCHA) and Detroit Public Television (DPTV) to provide information about health care concerns to wider audiences.

The mission of the Detroit-Wayne County Health Authority is to coordinate efforts to meet the health needs of the uninsured and underinsured residents in the City of Detroit and Wayne County by assuring access and improving the health status of all people. Detroit Public Television, meanwhile, seeks to produce and distribute trusted programs that serve community needs and help drive community betterment.

In 2013, discussions between DWCHA, DPTV, and the Michigan State University College of Osteopathic Medicine identified the need to draw community attention to the increasing crisis in staffing positions in the health care industry with qualified individuals. A new episode of *Vital Signs* began to take shape.

DWCHA convened a panel of experts to meet with DPTV and its producers to discuss health care workforce issues in detail and to sketch out stories that could help represent those needs and inspire young people to consider health care as a career path. The panel also had a chance to review the film before it became available to the public and was able to provide input for this discussion guide.

Filming for the program took place early in the year, and the program first aired on Detroit Public Television in June, 2014.



Detroit Public Television



Detroit Wayne County
HEALTH AUTHORITY
It's about access...for all.

MICHIGAN STATE
UNIVERSITY

College of
Osteopathic Medicine



HOW TO USE THIS GUIDE

This discussion guide was designed to be used with the *Vital Signs* Health care Workforce episode produced by Detroit Public Television (DPTV) in collaboration with the Detroit Wayne County Health Authority (DWCHA) in 2014. The program may be viewed online at the following links:

DWHCA Site: www.healthaccess1.com

DPTV: www.dptv.org/vitalsigns

The program is 27 minutes long and may be viewed in a single session, but for purposes of discussion, the program has been broken down into four segments and discussed individually, depending on the need of the audience involved. The discussion guide tracks each of these four segments:

- Under Pressure
- Temperature
- Pulse, and
- Breathing Room.

In addition, this guide includes some introductory information and questions that can be used as a warm-up, as well as information and resource links for additional information for follow-up.

The Discussion Questions are designed to help reinforce themes and information contained in each segment, to spark discussion and deepen understanding of key ideas and concepts, and to reflect on how the group might extend their learning into their own communities to help young people recognize their opportunities in the health care field.

Regardless of topic, a successful screening is one that allows participants to watch purposefully and critically, to reflect upon what they've seen, to consider new information and how it matches or does not match preconceived ideas, and then asks them how what they've seen applies to their own situation.

As the leader, your job is to facilitate participation and keep the discussion focused and flowing – not to lecture. If people feel you are looking for particular opinions, they are less likely to engage. Guide the conversation to people's personal experiences, their concerns, and their ability to make a difference.

If you have questions or would like to provide feedback on this guide or the program, feel free to contact the DPTV or DWCHA contacts below. We'd also like to hear from you about topics you'd recommend for future episodes of *Vital Signs*.

Georgeann Herbert
Senior Vice President
Detroit Public
Television
(248) 305-3725
gherbert@dptv.org

Dennis Archambault
Director of Public Affairs
Detroit Wayne County Health Authority
(313) 871-3751
darchambault@dwcha.org

WHY HEALTH CARE JOB OPPORTUNITIES ARE EXPLODING

In recent years, Michigan has seen health care emerge as the state's largest employment sector. More than 400,000 people in Michigan are working in some aspect of the health care industry.

At the same time, the demand for qualified workers continues to grow. Among the factors driving this growth are the efforts to improve access to health care through the Affordable Care Act, the expansion of Medicaid and community health programs, and the increased emphasis on health care as "wellness" care, rather than just a response to disease or injury. According to the American Medical Association, the Affordable Care Act – "Obamacare" – will provide medical coverage by 2019 to an estimated 32 million Americans who have never had medical coverage before.

Organizations like the Detroit-Wayne County Health Authority and population health centers around the country are charged with making sure even the most challenged parts of our communities receive appropriate health care and education. For many years, people living in poverty have faced tough choices between medical care and their prescriptions, versus food, shelter, or other basic needs. Often, regular medical care has suffered. When people got sick enough, they went to the emergency room – the most expensive kind of care available – but often did not have the resources to maintain their follow-up treatment.

Meanwhile, the United States is undergoing a major demographic shift. The bulge in the population known as the Baby Boomer generation is now made up of people over age 50. The aging of the population is affecting health care workers themselves: many are nearing retirement age, creating a need for new workers to replace them over the next ten to twenty years.

It's important to note that, in addition to aging, the life expectancy of people in America has dramatically improved over the last few decades. When Social Security established a retirement age of 65 in the 1930's, the life expectancy of the average American was 63 years. Thanks to improvements in nutrition, public health, and medical care, the average American can now expect to live until age 78 or later. According to Social Security, people now in their 60's can expect to live well into their 80's.

This longevity is due, in part, to emerging medical treatments and therapies within the health care community. Some of these treatments require specialized technical knowledge, opening new fields of specialization that did not exist even a few years ago. Even so, people over 50 can expect to see their medical needs grow as they age, as the natural processes of aging along with years of lifestyle choices lead to chronic health conditions and increasing physical frailty.

The health care industry is expected to continue its rapid growth well into the future, opening the door for caring people to find fulfilling career paths and opportunities for personal growth.

Michigan Statewide Forecast

Healthcare Practitioner, Technical Occupations, & Support Personnel

Michigan Department of Technology, Management and Budget

http://www.milmi.org/admin/uploadedPublications/711_occ_g29.htm

Expected need by 2018

High demand health care professions in Michigan

Chiropractors	2,110
Dentists, General	5,350
Oral and Maxillofacial Surgeons	230
Orthodontists	180
Dentists, All Other Specialists	180
Dietitians and Nutritionists	2,390
Optometrists	1,600
Pharmacists	9,390
Anesthesiologists	2,130
Family and General Practitioners	6,340
Internists, General	2,050
Obstetricians and Gynecologists	970
Pediatricians, General	900
Psychiatrists	430
Surgeons	1,410
Physicians & Surgeons, All Other	13,880
Physician Assistants	3,960
Podiatrists	470
Registered Nurses	104,860
Audiologists	660
Occupational Therapists	5,290
Physical Therapists	8,850
Radiation Therapists	640
Recreational Therapists	790
Respiratory Therapists	4,640
Speech-Language Pathologists	3,380
Therapists, All Other	2,180
Veterinarians	2,280
Health Diagnose/Treat Practitioners, AO	1,990
Medical/Clinical Laboratory Technologists	6,020
Medical & Clinical Laboratory Technicians	5,010
Dental Hygienists	10,900
Cardiovascular Technologists/Technicians	2,990
Diagnostic Medical Sonographers	1,930



High demand health care professions in Michigan

Nuclear Medicine Technologists	1,340
Radiologic Technologists & Technicians	6,970
Emergency Medical Tech & Paramedics	7,160
Dietetic Technicians	1,250
Pharmacy Technicians	13,260
Psychiatric Technicians	1,020
Respiratory Therapy Technicians	400
Surgical Technologists	3,110
Veterinary Technologists & Technicians	1,760
Licenses Practical & Licensed Vocational Nurses	22,730
Medical Records/Health Info Technicians	5,990
Opticians, Dispensing	2,180
Orthotists and Prosthetists	340
Health Technologists & Technicians, AO	5,250
Occupational Health and Safety Specialist	1,290
Occupational Health and Safety Technician	290
Athletic Trainers	570
Healthcare Practitioner/Tech Workers, AO	3,240
Home Health Aides	47,050
Nursing Aides, Orderlies, & Attendants	58,240
Psychiatric Aides	2,220
Occupational Therapist Assistants	990
Occupational Therapist Aides	280
Physical Therapist Assistants	3,460
Physical Therapist Aides	1,560
Massage Therapists	3,550
Dental Assistants	11,830
Medical Assistants	24,470
Medical Equipment Preparers	1,170
Medical Transcriptionists	3,090
Pharmacy Aides	1,560
Veterinary Assist & Lab Animal Caretakers	3,230
Healthcare Support Workers, All Other	7,360

WARM-UP QUESTIONS:

- Is anyone in this group employed in the health care industry in any way?
- Is anyone considering working in health care? What are you thinking you might do?
- What kinds of health care workers have you had contact with?
- Does anyone recall a health care worker who made a deep impression on you? Why?

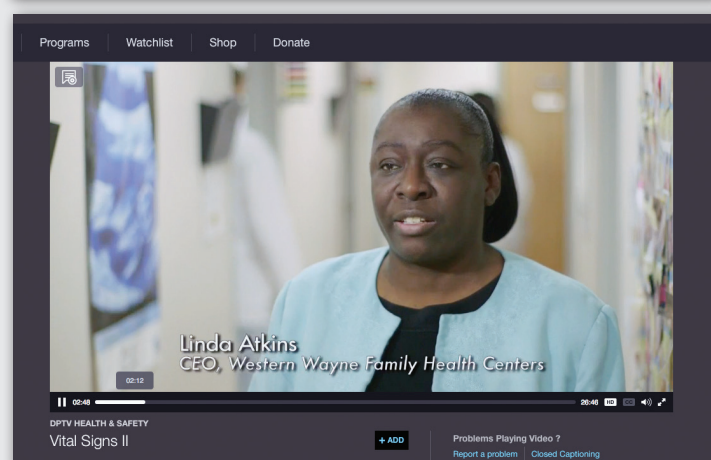
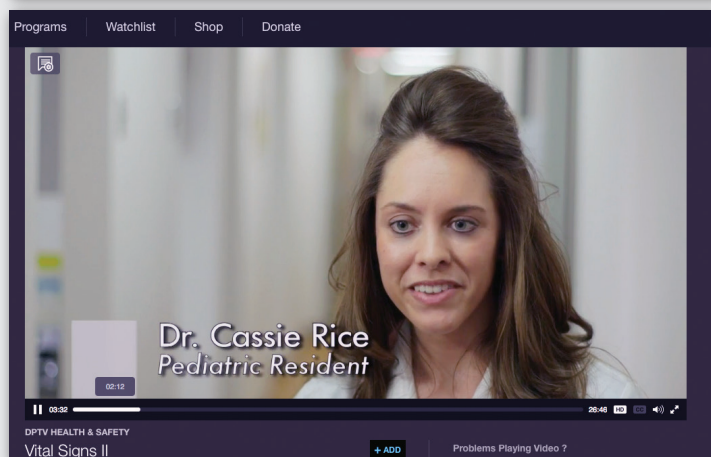
SEGMENT THEMES & DISCUSSION QUESTIONS

SEGMENT ONE: "UNDER PRESSURE"

PHYSICIAN RESIDENCY TRAINING IN A COMMUNITY HEALTH CENTER

Theme: DWCHA is piloting a new residency program for young physicians. Under this program, the doctors work for three years in a Community Health center rather than being trained the traditional way, in a hospital. In this segment, *Vital Signs* explores the benefits of such a program.

- Dr. John Sealey states that doctors are not evenly distributed geographically, and that some people might have to travel miles to see the nearest doctor. How might that affect someone with a medical problem?
- Dr. Cassie Rice, the pediatric resident, talks about having a "sense of mission" and that she "fits in" where there is the most need. Is this true of all doctors? Other people working in health care? Does it take a special sense of "mission" to work in a community health center?
- Linda Atkins, the CEO of Western Wayne Family Health Centers, states that because Dr. Rice is doing her residency in a community health center, she is seeing a variety of diseases and issues not found in hospital settings. Dr. Rice echoes that, saying she won't be surprised by many things she'll see in the future. Based on your own experience, what do you think might be different?
- Dr. Harjit Kohli, the attending pediatrician and Dr. Rice's supervisor, says Dr. Rice is able to build a relationship with children and help them overcome their fear of a doctor because she's the doctor they see regularly. How important is it to see the same doctor regularly? Does it help to build trust to see the same doctor all the time?
- Recent statistics indicate that there is a particular shortage in young doctors choosing to go into what is called "primary care." Primary care physicians are the doctor you are most likely to see first and who will decide if you need to see a specialist like a heart doctor, a skin doctor, or a cancer doctor. Many young medical students are choosing specialties rather than primary care. Why do you think that might be? Does it take a special person to be a primary care physician? Do you think Dr. Rice can be a role model for children, as the video suggests?



- Doctors Sealey and Dr. Kohli express the hope that Dr. Rice and other young doctors like her will want to stay in the community after their training is over; that they'll buy a home in the community and become invested in their neighborhoods. How likely is that outcome? What could the community do to encourage a doctor to stay?
- Dr. Rice is working in a community health center in Western Wayne County. If she was working in a different location, would her experience be the same or different? How? To what degree?
- What do you think of the community clinic setting for training doctors? What would you tell the Detroit Wayne County Health Authority about the program?
- What is your reaction to the idea of being a doctor as a career choice? What would determine whether or not you would pursue the education required to become a D.O. or an M.D.?
- Who else did you see working at the health center? What kinds of jobs were they doing?
- What does the segment make you want to ask or say to your own doctor or health care provider?

Osteopathic
Medicine
vs
Medical Doctor.

What's the
difference?

In the United States, there are two types of physicians who practice medicine. Most physicians hold the Doctor of Medicine degree (M.D.), while osteopathic physicians hold the Doctor of Osteopathic Medicine degree (D.O.).

The differences in the two degrees are mostly historical. Osteopathic medicine was founded in the late 1800's in Kirksville, Missouri, by a medical doctor who recognized that the medical practices of the day often caused more harm than good. He focused on developing a system of medical care that would promote the body's innate ability to heal itself. He called this system "medical osteopathy."

Today, the medical training for an M.D. and D.O. is virtually the same. Individuals holding either an M.D. or a D.O. complete conventional residencies in hospitals and training programs, are licensed in all states, and have rights and responsibilities, such as military service, that are identical. Both are recognized by the American Medical Association as essential for serving the nation's health care needs.

Michigan is a state with a high number of D.O. physicians per capita, thanks to the College of Osteopathic Medicine at Michigan State University. Some studies claim D.O.'s are more likely to go into the primary care specialties of family medicine, general internal medicine, pediatrics, and obstetrics and gynecology.

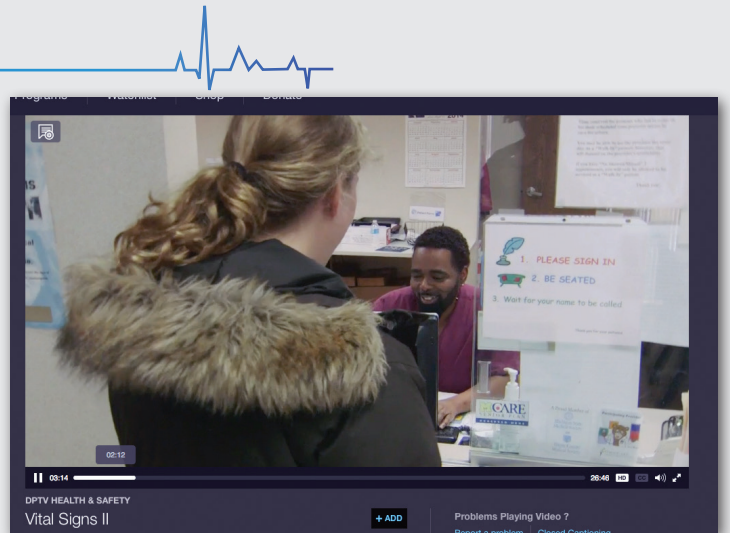
(Stats from the DWCHA program to date – doctors in training, communities served, patients seen, etc – get from Dennis.)

SEGMENT TWO: "TEMPERATURE"

NURSE PRACTITIONERS

Theme: Nurse Practitioners can help fill the gap where there aren't enough primary care physicians to serve the population. In this segment, *Vital Signs* explores how nurse practitioners are making a difference in one Detroit community.

- Early in this segment, Carla Groh states that Nurse Practitioners serve people who are on "waiting lists" or are "forgotten populations." Who or what do you think she is talking about?
- Dr. Groh describes the UDM McAuley Health Center as being both located in the community and "tuned in" to the community. What kinds of things would tell you that the Center is "tuned in" to community needs? How would that make a difference in the lives of their patients? How is the care they provide different from other clinics?
- Nurse Beth Nagle talks about the McAuley Health Center as having "a very nurse-centered way of trying to help." What kinds of things does she mention as being part of her nursing care? How are nurses different from doctors in how they work with patients? Is one better than the other? Should there be a difference?
- Two of the clinic patients talk about the nurse, Tracy Threat, at the McAuley Health Center as being like a "family doctor-mom" because of the emotional and holistic support she provides. Do you see any evidence of that in the video? What would you hope to experience if you visited the clinic?
- Central to this video segment, is the importance of building a relationship and establishing trust between the patient and the health care provider. At one point, a patient refers to this as getting help "from people who know you." What's your reaction to this statement? Have you experienced this in your own life?
- What do you think about nursing as a career? Would you want to be a nurse practitioner?
- What other jobs do you see in the film? Have you ever considered those positions as "health care jobs"?
- What does the segment make you want to ask or say to a nurse or a health care provider you know?



Nurses,
Nurse
Practitioners,
Doctors -
what's the
difference?

WHAT DO THOSE INITIALS MEAN?

Nurses have different levels of training and different state licenses. Each state defines what a nurse or doctor can do, depending on their license. Here's some common abbreviations:

- **Nursing Assistant:** Nursing Assistants provide personal care to patients, helping them dress, making their beds, helping them walk or use the toilet, and making them comfortable. They work under the direction of a registered nurse, and usually must take a test and be registered with the state.
- **LPN:** Licensed Practical Nurses provide bedside care to patients, taking vital signs, observing patients for any reactions to medication. LPN's work under the supervision of a physician or an RN, and can obtain their license after successfully completing a year in a community college or hospital training program.
- **RN:** Registered Nurses have wide ranging knowledge. When providing direct patient care, nurses observe, assess and record symptoms, reactions and progress, which provides the basis for care planning and intervention. They are health educators and advocates for patients, families and communities, and work closely with physicians. Basic training for registered nurses includes a four year college degree.
- **NP:** Nurse Practitioners are Registered Nurses who have up to four years of additional training. They perform comprehensive and focused physical examinations; diagnose and treat common acute illnesses and injuries; provide immunizations; manage high blood pressure, diabetes, depression and other chronic health problems; order and interpret diagnostic tests such as X-rays and EKGs, as well as laboratory tests; prescribe medications and therapies; perform procedures; and educate and counsel patients and their families regarding healthy lifestyles and health care options.

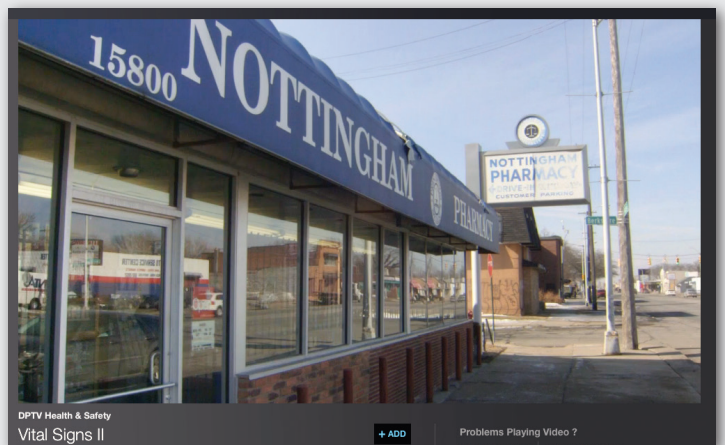


SEGMENT THREE: "PULSE"

THE NEIGHBORHOOD PHARMACIST

Theme: Sometimes, people with a health problem don't go to doctors, but may go to the drug store for something to help. In this segment, *Vital Signs* explores how a pharmacist can play an important role in making sure people get what they need to remain healthy.

- Marilyn Nash-Yazbeck is the owner of Nottingham Pharmacy in Detroit. She says in the video that she sees herself as an adjunct to the physician, helping to steer a patient on the right path to health. She describes what she does is educating her customers to take an active role in their own health care. What is she saying people need to do? How can people take a more active role in their own health care?
- Her customers say Marilyn is a "wonderful asset" and that they can ask her any question. Do you have a similar relationship with your pharmacist? If not, why not? If so, can you think of a time when that person was particularly helpful?
- Later in the program, Marilyn says her rewards coming from knowing she's made a difference. She says she is there to provide help "when you are ready to accept it." What does she mean by that statement? When are you ready to accept help?
- A pharmacy tech working at Nottingham Pharmacy, Maurice Nash, says he has to know something about the body and how drugs work in the body. What sorts of courses might he have taken to learn those things? How much of that can he learn on the job?
- One of the customers who comes to see Marilyn says he has an abscessed tooth, but can't afford to go to the dentist to have it treated just yet. What can you infer from his situation? Does he have alternatives? Have you ever had a situation where you had to delay treatment of a problem because of a financial issue?
- How do the issues of building a relationship and trust in the health care provider play out in this segment?
- Nottingham Pharmacy is a stand-alone, community based pharmacy. That means that in addition to being a pharmacist, Marilyn is also a small business owner. How do you think that may affect her day-to-day work? What kinds of other people might she need in her business to help her?
- How are its services similar to or different from a chain store pharmacy like CVS, Rite-Aid, or Walgreens? What kinds of things are the pharmacy chains doing to be more involved in their neighborhoods?



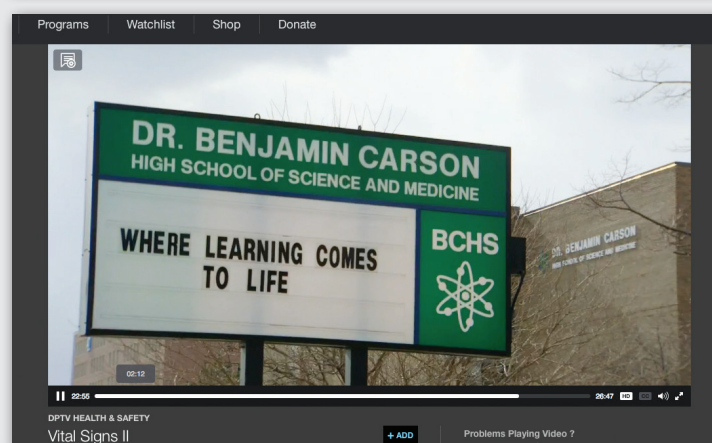
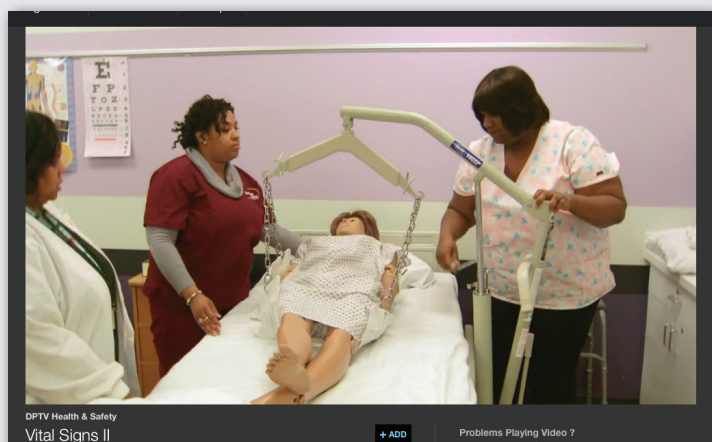
SEGMENT FOUR: "BREATHING ROOM"

TRAINING FOR THE FUTURE

Theme: When you ask them about jobs in health care, most people tend to think of doctors and nurses first. Yet there are literally dozens of other types of jobs in the health care field. Many require far less study to qualify for a position than the highly-trained professions who appear earlier in this video.

At the same time, it's critical for the future of health care that young people be encouraged to explore health care as a possible career path. This segment of *Vital Signs* looks at some of the young people now entering health care and how they are being prepared.

- It's clear that there are a lot of jobs in health care. Doctors and nurses are just the beginning. What are some of the other kinds of jobs in health care have you seen? What kind of work were those people doing?
- Kizzy Carr, an instructor at Dorsey, says the students are training for an entry level position, but aspire to do even more. She says students continue to learn and grow their skills until someday they become a doctor or a nurse. Does this approach appeal to you? Why?
- At the Dorsey School, the instructors say one of the things they focus on are "soft skills" – how to relate to patients, work as a team, and so on. What kind of skills are important here? What personality traits might a person need?
- One of the Dorsey students, Angela Ware, lists a number of reasons why she thinks Dorsey is a good school. What are the things she mentions? Why do you think they are important?
- Dr. Sealey mentors a group of students at Ben Carson High School in Detroit, which seeks to attract students who are interested in medicine. Were you surprised at what he thinks is important for these students to know?
- Dr. Sealey says African-American men are a scarce commodity in health care. He's clearly concerned about having a diverse workforce in medicine. What is needed in the community to help encourage more people from different backgrounds and cultures to enter health care?



Who is Ben Carson?

Benjamin Solomon "Ben" Carson was born in Detroit in 1951. He attended Southwestern High School in Southwest Detroit and graduated from Yale University, where he majored in premed with a minor in psychology. He received his M.D. from the University of Michigan Medical School.

Dr. Carson was a professor of neurosurgery, oncology, plastic surgery, and pediatrics, and he was the director of pediatric neurosurgery at Johns Hopkins Hospital. In 1987 Carson became the first neurosurgeon to successfully separate conjoined twins who had been joined at the back of the head. The 50-member surgical team, led by Carson, worked for 22 hours. At the end, the twins were successfully separated and can now survive independently.

A successful author and columnist, Dr. Carson retired from active medical practice in 2013 and frequently speaks out on political issues.

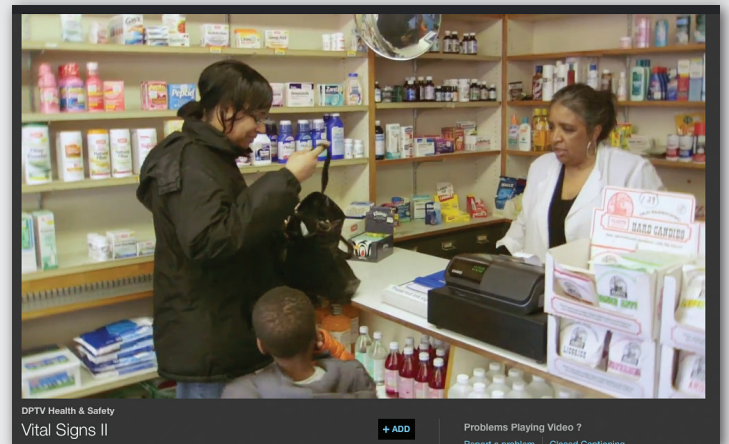


CONCLUSION: “VITAL SIGNS”

The theme of this entire episode of *Vital Signs* was to demonstrate the need for more workers in the health care industry and to highlight some alternative career paths for young people to consider. The program cannot possibly cover all of the different types of jobs in health care. To explore more options, please check out the resources later in this guide.

At the same time, there are some common themes in *Vital Signs* that apply to almost any job in the health care industry. The questions that follow are designed to pull some of those themes together.

- What did you see or learn from this program that changed what you thought about jobs in health care?
- What kinds of personality traits, personal characteristics, or skills seem necessary to succeed in the health care field? Are they innate? Or can they be learned?
- What sorts of classes do you need to take in order to succeed in the health care field?
- Even after you’ve graduated, there’s still a lot of training and learning that takes place once people begin to work in health care. A lot of the learning is “hands on.” How would you describe a person who would be good in that situation?
- All four segments of the program focus on building relationships and establishing trust between people. How important is that in health care? How important is that in your personal relationships? How do you go about doing that?
- Many health care systems are looking at how they can help more people using technology. Some are setting up “telephone only” appointments with doctors and other professionals. Other ideas include “group care” and even medical care by text. What is your reaction to these ideas? What might be some advantages? Disadvantages?
- In the “Pulse” segment, pharmacist Marilyn Nash-Yazbeck says in health care, “everyone brings expertise to the table.” Teamwork is an important part of modern health care. What kinds of characteristics are important to work well on a team?
- Different medical situations require different teams of people. Think about yourself or people you know. What kinds of teams might be involved when:
 - A person requires surgery.
 - A person has diabetes.
 - A person suffers an accident that requires a stay in the hospital and rehabilitation.
- At the end of “Breathing Room”, student Cajuan Treadway talks about the white coat of a doctor, and how he aspires to wear a white coat. What does the white coat represent to you? What other things do you associate with health care?



RESOURCES AND HELPFUL LINKS



HEALTH CARE CONCERNS IN THE COMMUNITY

Health care in Michigan takes many forms, from highly funded research-oriented hospitals with large staffs to more modest community-based health care centers as well as physicians in private practice. In addition, the last few years have seen the emergency of many specialty health centers.

More than 700,000 people in Michigan rely on a community health centers. Community health centers are typically local clinics that treat patients regardless of their insurance status or ability to pay, and many have been expanding their facilities to meet the additional demands of the Affordable Care Act.

All of these settings are looking for qualified, enthusiastic employees to help meet their expanding patient demands. In addition, health care is much more complex than what happens inside the doctor's office or within a clinic. Community and environmental factors, the stress of living, and personal choices all impact how healthy a person is and, by extension, how healthy the overall community is.

Below are two articles that help provide some perspectives on health care issues and the challenges and opportunities facing people who choose to make health their career. The first article, "Ten Things to Know About Health", is adapted from a groundbreaking documentary that aired on PBS in 2009 called *Unnatural Causes*. The second article is excerpted from a speech given by DWCHA CEO Chris Allen, in which he talks about the need to consider health as part of the redesign and development of cities across Michigan.

Finally, if you have a smart phone, you are probably aware that there are all kinds of apps you can get to help you watch your diet, track your exercise, etc. Not surprising, "telemedicine" is an emerging conversation in health care that is looking for ways to use technology to provide effective and economic health care support and extend health care to wider communities.

TEN THINGS TO KNOW ABOUT HEALTH

- 1. Health is more than health care.** Doctors treat us when we're ill, but what makes us healthy or sick in the first place? Research shows that social conditions – the jobs we do, the money we're paid, the schools we attend, the neighborhoods we live in – are as important to health as our genes, our behaviors and even our medical care.
- 2. Health is tied to the distribution of resources.** The single strongest predictor of our health is our position on the class pyramid. Whether measured by income, schooling or occupation, those at the top have the most power and resources and on average live longer and healthier lives. Those at the bottom are most disempowered and get sicker and die younger. The rest of us fall somewhere in between. On average, people in the middle are twice as likely to die an early death compared to those at the top; those on the bottom, four times as likely. Even among people who smoke, poor smokers have a greater risk of premature death than rich ones.
- 3. Racism imposes an added health burden.** Past and present discrimination in housing, jobs, and education means that today people of color are more likely to be lower on the class ladder. But even at the same level, African Americans typically have worse health and die sooner than their white counterparts. In many cases, so do other populations of color. Segregation, social exclusion, encounters with prejudice, people's degree of hope and optimism, access and treatment by the health care system – all of these can impact health.
- 4. The choices we make are shaped by the choices we have.** Individual behaviors – smoking, diet, drinking, and exercise – do matter for health. But making good choices isn't just about self-discipline. Some neighborhoods have easy access to fresh, affordable produce; others have only fast food, liquor joints and convenience stores. Some have nice homes, clean parks, safe places to exercise and play, and well-financed schools offering gym, art, music and after-school programs; others don't. What government and corporate practices can better ensure healthy spaces and places for everyone?
- 5. High demand + low control = chronic stress.** It's not CEOs dying of heart attacks, it's their subordinates. People at the top certainly face pressure but they are more likely to have the power and resources to manage those pressures. The lower in the pecking order we are, the greater our exposure to forces that can upset our lives – e.g., insecure and low-paying jobs, uncontrolled debt, capricious supervisors, unreliable transportation, poor childcare, lack of health insurance, noisy and violent living conditions – and the less we have access to the money, power, knowledge and social connections that can help us cope and gain control over those forces.
- 6. Chronic stress can be deadly.** Exposure to fear and uncertainty trigger a stress response. Our bodies go on alert: the heart beats faster, blood pressure rises, glucose floods the bloodstream – all so we can hit harder or run faster until the threat passes. But when threats are constant and unrelenting, our physiological systems don't return to normal. Like gunning the engine of a car, this constant state of arousal, even if low-level, wears down our bodies over time, increasing our risk for disease.
- 7. Inequality – economic and political – is bad for our health.** The United States has by far the most inequality in the industrialized world – and the worst health. The top 1% now owns more wealth than the bottom 90% combined. Tax breaks for the rich, deregulation, the decline of unions, racism, segregation, outsourcing, globalization and cuts in social programs destabilize communities and channel wealth, power and health to the few at the expense of the many. Economic inequality in the U.S. is now greater than at any time since the 1920s.
- 8. Social policy is health policy.** Average U.S. life expectancy increased 30 years during the 20th century. Researchers attribute much of that increase not to drugs or medical technologies but to social reforms; for example, improved wages and work standards, sanitation, universal schooling, and civil rights laws. Social measures like living wage jobs, paid sick and family leave, guaranteed



vacations, universal preschool and access to college, and guaranteed health care can further extend our lives by improving them. These are as much health issues as diet, smoking and exercise.

9. **Health inequities are neither natural nor inevitable.** Inequities in health – arising from racial and class-based inequities – are the result of decisions that we as a society have made. Thus, we can make them differently. Other industrialized nations already have, in two important ways: they make sure there's less inequality (e.g., in Sweden the relative child poverty rate is 4%, compared to 21% in the U.S.), and they enact policies that protect people from health threats regardless of personal resources (e.g., good schools and health care are available to everyone, not just the affluent). As a result, on average, citizens of those countries live healthier, longer lives than we do.
10. **We all pay the price for poor health.** It's not only the poor but also the middle classes whose health is suffering. We already spend \$2 trillion a year to patch up our bodies, more than twice per person the average of what other industrialized nations spend, and our health care system is strained to the breaking point. The U.S. lags behind 28 other countries in life expectancy, 29 other countries in infant mortality, and each year loses more than \$1 trillion in work productivity due to chronic illness.

Adapted from the four-hour documentary series UNNATURAL CAUSES: Is Inequality Making Us Sick? As seen on PBS. Produced by California Newsreel with Vital Pictures. More information is available at www.unnaturalcauses.org.



MAKING A HEALTHY SENSE OF PLACE

By Chris Allen

In the foreword to *The Economics of Place: The Value of Building Communities Around People*, published by the Michigan Municipal League,

author Peter Kageyama writes, “Place shapes us. Place defines us. Place is what forms our identities, our attitudes, and our relationships. ... No longer is it sufficient to build places that are merely functional and safe. Our place making aspirations must be as high and as grand as our economic goals because they are bound together.”

Many of us were introduced to the term “place matters” in the PBS landmark documentary, *Unnatural Causes*. (www.unnaturalcauses.org). Where you live often reflects how well you live. Social determinants that are beyond your control, such as unsafe communities and environmental pollution, create conditions that affect public health.

“Place matters” and “place making” sound similar, but there is a subtle difference: One focuses on the impact of the built and natural environment, among other social determinants, on the well-being of people. The other seeks to design environments that are attractive and promote urban vitality. Both are concerned with creating a healthy sense of place. What’s missing in the latter is people.

The Michigan Municipal League identifies eight essential assets that make communities vibrant places in the 21st century:

- Physical Design and Walk ability
- Green Initiatives
- Cultural Economic Development
- Entrepreneurship
- Multiculturalism
- Messaging and Technology
- Transit
- Education

I would argue that one of the greatest assets of any place is healthy, productive people. The eight essential assets identified by the Michigan Municipal League are essential to an economically vital community and the health of the population. Health, and the innovative ways of creating health — a timeless measure of wealth — is the ninth element.

Few would disagree that an attractive, “livable” urban region is desirable to those who live and work there and those who may be considering relocating there. But would a community be considered “livable” if a significant portion of its population suffered from chronic disease, that

it's infants died at a rate comparable to some developing countries, that its elderly live lives of quiet desperation?

Safe, well-designed streetscapes; clean air and water, parks, green initiatives and accessible public spaces, diversity, literacy, job creation — it's all part of the broad definition of healthy communities, because it encourages exercise, reduces health and injury risk, reduces stress, and promotes social connection.

Rather than place making in the absence of community health, let's look at the economic impact of a healthier community: High maternal and child health results in better educational performance and reduced inclination to pursue crime. Reduced chronic disease and substance abuse improves job readiness and performance. Healthier elderly people, who are more mobile and remain contributing to our society longer, would not only be more humane but it would reduce health costs in a big way.

We must have economic development, and we must create more aesthetically pleasing places to live, work, and recreate, in order retain our best and brightest and recruit new talent. But economic development alone will not create a vital, healthy community for all. In fact, economic development may create unintended consequences, such as air, water, and noise pollution. That's why we advocate for introducing a "health lens" in reviewing economic development projects.

Health is often the missing element in the place making conversation. Place matters for all of us. Place making, in the context of promoting health and well-being, should not create just an aesthetically pleasing feeling. It should create a place that develops healthy people and represent all segments of the population in order for the community to truly emerge with a healthy sense of place.

Chris Allen is the CEO of Detroit Wayne County Health Authority. This essay is drawn from a speech delivered to the Downriver Delta Legislative Briefing in Ecorse, Michigan, May 16, 2014.

HEALTH CARE AS A CAREER

Do you have what it takes for a successful career in health care? While each type of health care job is different, with different academic and training requirements, there are a number of common factors to consider.

There are a number of online sites to help you decide if a health care career is right for you and to provide you information on salaries, training requirements, and job prospects. A few of those sites are listed below.

You may want to start the conversation with a counselor at your high school or ask to shadow a health care worker you know. Another option is to participate in a local pre-health care exploratory program offered at your local hospital, university, or health care center. A few options are also listed below.

CAREER CHOICES

FIVE PATHS

HealthCarePathway.com, a health career exploration web site, identifies five different paths in health care.

- **Direct Patient Care:** Do you want to work with patients and help them feel better? Consider career choices as a medical assistant, pharmacy technician, or LPN.
- **Imaging and Diagnostics:** Would you like to use technology to aid in the diagnosis of sick or injured patients? Explore careers like radiology technicians, MRI technologists, or medical lab techs.
- **Health Care Facility Support:** Perhaps creating a therapeutic environment suitable for health care is appealing to you. Jobs in this area include biomedical engineers, hospital maintenance managers, and others.
- **Health Informatics/Business:** Is the business side of health care what interests you most? Careers span a wide range including information technician, medical coder, health educator, or health administrator.
- **Research and Development:** Would you like to use science and technology to make improvements in medical care? Careers in this area include biostatistics, toxicology, and bioinformatics.

HIGHEST DEMAND

The demand for health care workers has been building in Michigan for some time. Shortages in physicians have been forecast in Michigan for some time, but the greatest needs are actually in professions that require far less training. According to the Bureau of Labor Statistics, health care employment nationally is projected to grow by nearly 11% by 2022, and the following health care jobs are likely to be in the highest demand over the next ten years:

- Personal care aides
- Home health aides
- Interpreters and translators
- Diagnostic medicine sonographers
- Occupational therapy assistants
- Genetic counselors
- Physical therapist assistants
- Physical therapist aides
- Physician assistants
- Occupational therapy aides
- Health specialties teachers, postsecondary
- Medical secretaries
- Physical therapists
- Orthotists and prosthetists
- Nursing instructors and teachers, postsecondary
- Nurse practitioners
- Audiologists
- Dental hygienists
- Therapists
- Substance abuse and behavioral disorder counselors

SALARY EXPECTATIONS

Salaries in the health care field generally reflect a number of factors including the length of training required, how “in-demand” the skills of the employee are in the area they are working, and their experience in the field. An entry level position may pay about \$20,000 a year, while some highly specialized physicians may make \$300,000 a year or more. Some of the health career exploration sites listed below have detailed salary information.

PERSONAL QUALITIES

Those who succeed and gain the most satisfaction from a health care career start with certain qualities. Do you have what it takes to be a great health care professional?

1. **Communications Skills:** A great health care professional has excellent communication skills that include speaking and listening. They are able to follow directions without problem and can easily communicate with patients and families to understand their needs and explain treatments.
2. **Emotional Stability:** A great health care professional is very stable emotionally. Health care can be a stressful career and professionals can encounter many traumatic situations, suffering, and death. A great health care worker is one who is able to work without allowing the stress to cause great personal harm.
3. **Empathy:** Great health care professionals have empathy for the pain and suffering of patients. They are able to feel compassion and provide comfort.
4. **Flexibility:** A great health care professional is flexible with regards to working hours and responsibilities. They are often required to work long periods of overtime, holidays, late or overnight shifts, and weekends.
5. **Good Attention to Detail:** A great health care professional understands that every step in the medical field is one that can have far-reaching consequences. Therefore, they pay excellent attention to detail and are careful not to skip steps or make errors.
6. **Interpersonal Skills:** A great health care professional has excellent interpersonal skills and works well in a variety of situations with different people. They work well with other nurses, doctors, and other members of a staff.
7. **Physical Endurance:** A great health care professional has strong physical endurance and is able to tolerate standing for long periods of time, lifting heavy objects (or people), and performing a number of taxing maneuvers on a daily basis.
8. **Problem-Solving Skills:** A great health care professional can think quickly and address problems as — or before — they arise.
9. **Quick Response:** A great health care professional can respond quickly to emergencies and other situations that arise. Quite often, health care work is simply the response to sudden incidences, and professionals must always be prepared.
10. **Respect:** Great health care professionals respect people and rules. They are mindful of confidentiality requirements and different cultures and traditions. And they respect the wishes of the patient.

Adapted from allcare.monster.com.

ACADEMIC PREPARATION

START PREPARING FOR YOUR HEALTH CAREER IN HIGH SCHOOL

TAKE AS MANY MATH AND SCIENCE COURSES AS YOU CAN

Most high school students have one goal in mind: Receiving their diploma. But if you want to pursue a health career, simply meeting graduation requirements may not be enough.

Whether you someday plan to go to a community college, a four-year university, or medical school, taking rigorous high school courses now can help you:

- improve your chances of getting into the school of your choice,
- expand your health career opportunities, and
- dramatically increase your future income.

For almost all health careers, experts recommend that high school students complete:

- 2-4 years of math, including geometry and Algebra II
- 2-4 years of science, including biology, chemistry, and physics
- 4 years of English
- 1-2 years of computer science

Unfortunately, most states don't require high school students to take enough math or English.

This information is excerpted from an article that appeared on www.ExploreHealthCareers.org in October, 2010. On that site, you can also download, save and print a [PDF of Health Career Academic Pathway](#), a checklist to help with your personal academic planning.

OTHER CAREERS RELATED TO HEALTH CARE

Not everyone in health care has direct interaction with patients. Many researchers on medical issues spend much of their careers in academic settings and laboratories. Bio-medical engineers design devices to more effectively deliver medication, help patients cope with the loss of limbs or mobility, or design and build hospitals and health care settings and their complex systems of oxygen, heating and ventilation, communication, and comfort. The need for IT professionals in health care is also exploding with the growth of medical records technology.

There are also a number of allied health professions that support the work of health care providers. Medical billing and coding professionals are indispensable to hospitals, doctors offices, medical centers, and other healthcare providers. They facilitate reimbursement for patient services from insurance companies and the Medicare and Medicaid systems.

Health care management is a very complex business that has a demand for skilled managers in hospitals, residential care, and outpatient facilities, as well as in the practices of doctors and dentists. Entry-level positions often involve helping administrators with medical records and health information management.

Strong preparation in math and science is still required for these kinds of careers.

In the end, your choice may depend on your personality and finding a career that is a comfortable fit. Your counselor or a career or college planner can help you decide which jobs you are most likely to enjoy.



PLACES WHERE YOU CAN LEARN MORE

CAREER EXPLORATION AND INFORMATION

Here are some websites you may find useful:

Health Careers in Michigan: The Michigan Health Council maintains a career guidance site at www.mihott.org. MiHott stands for Michigan Health Careers for Today and Tomorrow. The site has videos describing different health careers and allows you to search for programs at schools across the state. www.mihott.org

Michigan Healthcare Jobs: This site has abundant information about health care careers in Michigan and connects job seekers with employers all over the state. The site is supported by member health care employers. <http://www.mihealthcarejobs.org/>

Five Growing Health Careers on Yahoo.com: Highlights five careers that are expected to grow significantly over through 2018 nationwide. http://education.yahoo.net/articles/5_growing_health_care_careers.htm

ExploreHealthCareers.org: This website, built and maintained by the American Dental Education Association, explores more than 100 different health careers, and includes information about income ranges, training required, and a description of the work. They also have extensive links to organizations of students training for health care, a list of educational institutions, and information about financial aid. Some unusual medical careers are highlighted here. Forensic Odontology anyone? (an expert in bite marks). www.explorehealthcareers.org

How to Study Science: Since success in science is a key part of preparing for a health care, the Explore Health Careers website has a special section on "How to Study Science" at http://explorehealthcareers.org/en/Page/208/Studying_Science_The_Six_Keys_to_Success

State of Michigan Resource Center: The state of Michigan has compiled a number of links to health care resources at <http://www.michigan.gov/healthcareers/0,4590,7-221-39734-,00.html>.

SCHOOLS, COLLEGES, AND TRAINING CENTERS

You can find schools offering health care training in Michigan at www.mihott.org or at www.explorehealthcareers.org. There are so many choices, it can be a time-consuming review.

There are hundreds of options to choose from when you decide to pursue training for a health career. The first question to ask is whether the school is accredited for the program you want to pursue. Depending on the career path you are considering, you may be able to determine if the school is accredited by doing a search at <http://www.caahep.org/Find-An-Accredited-Program/>. The school's website or the admissions office should also be able to tell you more.

Other questions you should consider as you choose a school:

- Does the school support your educational goals?
- Is there academic support?
- Are the teachers engaged and enthusiastic about their topics?
- Do I feel comfortable on campus when I visit?
- Is the school's lab well equipped and the library fully stocked?
- If the educational program is online, does it offer clinical experience and a way to connect directly with students and teachers?

You can start with a list of the health care programs offered at colleges across Michigan at this website compiled by the State: <http://www.michigan.gov/healthcareers/0,4590,7-221-39732-,00.html>



FINANCIAL AID OPTIONS

There are literally hundreds of financial aid options for students who want to enter health care training after high school. Many of the career exploration resource links in this guide have information on financial aid options. Generally, financial help takes one of two forms:

- Direct scholarships and grants: Often competitive, these scholarships may be administered through the training program or may be offered by local or national organizations, including the federal government. Many factors affect selection including academic record and career goals, as well as personal statements and essays.
- Loan forgiveness: Some programs do not offer cash up front, but will forgive or pay back some of your tuition expense each year that you work in the field. These programs are also listed online and can be accessed through your school of choice.

While frequently competitive, many scholarships and grant programs are not awarded each year because of a lack of applicants! It's important to search diligently to find them, and the internet can help you locate them.



CAREER EXPLORATION PROGRAMS FOR MIDDLE AND HIGH SCHOOL STUDENTS

Throughout Michigan, colleges, hospitals, and local community agencies offer programs to help young people experience the health care workplace and decide if a career in health is the right choice for them. A few popular programs are listed below. Please check with the sponsoring organization for more information.

Michigan Area Health Education Center: This program at Wayne State University attempts to link students from underserved neighborhoods with careers in health care. www.MiAhec.wayne.edu

Beaumont Hospital-Saturday Series for Oakland County High School Students: Restricted to students from Oakland County, this program exposes students to a variety of hospital departments where they can learn about health careers and how to prepare for them.
<http://www.oakland.k12.mi.us/departments/careerfocusededucation/student/tabid/854/default.aspx>

Michigan State University – ‘Future Docs’: A program open to 9th to 11th grade students who work with MSU medical students, faculty members, and practicing physicians in the community to improve their study skills, help them with exam strategies, and to introduce to basic medical practices. You must be nominated by your high school guidance counselor to apply for the program.

Wolverine Health Explorers Summer Camp: A non-residential camp for high school students interested in gaining exposure to health care professions. Sponsored by the University of Michigan Career Center. www.careercenter.umich.edu/students/health/wolverinehealth.html.

Biomedical Engineering Summer Camp & Biotechnology Summer Camp: Explore the role of an engineer in either building equipment that will help treat diseases and injury or work in a research lab to genetically engineer bacteria and apply DNA profiling techniques. Operated by Lawrence Technological University. Call (800) 225-5588 for more information.

Camp RN: A two week summer program at Oakland University. Participants learn nursing fundamentals and job shadow nurses in a hospital setting. For more information, call (248) 364-8755.

The Michigan Health Sciences Pre-College Exposure Academy: A two week residential enrichment program sponsored by the University of Michigan Medical School for highly motivated rising 10th and 11th grade high school students. Participants take college prep courses and attend workshops on health issues in the community. Call (734) 764-8185 for more information.

OTHER SITES OF INTEREST

If you aren't sure you're cut out for health care, why not volunteer. Many organizations need extra hands, and it may just be the experience you need to make your decision. Explore options at www.VolunteerMatch.org. Recent listings included some of these Detroit Metro organizations:

American Red Cross

ConnectUs

Detroit Medical Center

Detroit Area Agency on Aging

Heart to Heart Hospice

Lakeside Villa

Detroit Wayne Mental Health Authority

American Heart Association



THE PEOPLE WHO APPEAR IN VITAL SIGNS

Chris Allen is Executive Director of the Detroit-Wayne County Health Authority. A long-time health care and hospital administrator in southeastern Michigan, Chris was selected as the first executive director of the Detroit Wayne County Health Authority in 2005. Chris is a fellow of the American College of Health Care Executives and has held offices on numerous local, regional, and national boards including the American Red Cross, Catholic Health Association, National Arthritis Foundation, and others.

Linda Atkins, CEO, Western Wayne Family Health Centers.

Carla Groh PhD, RN has been at University of Detroit-Mercy since 1996 teaching within all the programs in the College of Health Professions. Her primary teaching interests include research methods, health policy and women's studies. In addition to teaching, Dr. Groh is a certified nurse practitioner in psychiatric/mental health nursing and practices at the McAuley Center. She does individual therapy with women and men who are experiencing symptoms of depression, anxiety, and who are confronted by various socioeconomic issues.

Harjit Kohli, MD is an attending pediatrician at the Western Wayne Family Health Centers.

Beth Nagle, FNP-BC is a Family Nurse Practitioner at the UD-Mercy McAuley Community Health Center.

Marilyn Nash-Yazbeck, RPH

Dr. John Sealey is Director of Medical Education for Authority Health, an approved Teaching Health Center Graduate Medical Education (THCGME) program funded by the Health Resource Service Administration (HRSA). Authority Health was created to establish an innovative community-based model for residency training that will enhance physicians' skills and broaden their perspectives in the service of diverse, vulnerable populations. Further, in anticipation of the expansion of the Medicaid-eligible population in 2014, the Consortium aims to increase the supply of health professionals working in medically underserved communities.

William Strampel, D.O., has been serving as Dean of the College of Osteopathic Medicine, Michigan State University since 2001, in addition to service as a professor of internal medicine. Prior to joining MSU, Dr. Strampel served in the U.S. Army, and was a special assistant to the U.S. surgeon general for operations and readiness. Previous posts included service as chief medical officer for the Tricare Management Activity, which made him responsible for a managed care budget of more than \$8 billion. He also served as director of quality management in the Office of the Secretary of Defense.

Tracy Threat, FNP-BC is a Family Nurse Practitioner at the UD-Mercy McAuley Community Health Center.



GLOSSARY

Community Health Center – Health centers are community-based and patient-directed organizations that serve populations with limited access to health care. They are typically provide primary care, education, and transportation services, and set their fees based on ability to pay. Many health centers are governed by a community board. In those situations, the federal government requires that patients of the center hold at least half of the seats on the board.

CPR – Cardiopulmonary resuscitation (CPR) is a lifesaving technique useful in many emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped. CPR can keep oxygenated blood flowing to the brain and other vital organs until more definitive medical treatment can restore a normal heart rhythm.

D.O. – The degree awarded by a School of Osteopathic Medicine to a graduating doctor. Michigan has a larger number of practicing Doctors of Osteopathic Medicine per capita than many other states, because of Michigan State University's School of Osteopathic Medicine. The curriculum for the D.O. degree is nearly identical to requirements for an M.D. degree, and the two degrees are considered equivalent.

EKG – An electrocardiogram (EKG) is a test that checks for problems with the electrical activity of your heart. An EKG translates the heart's electrical activity into line tracings on paper. The spikes and dips in the line tracings are called waves.

Electronic Medical Records/Electronic Health Records – An electronic medical record (EMR) is a digital version of a paper chart that contains all of a patient's medical history from one practice. An EMR is mostly used by providers for diagnosis and treatment, and is not easily shared with other health care providers. An Electronic Health Record (EHR), by contrast, is designed to be shared by a team of providers working on a single patient's care. EHRs provide portability: they allow a patient's health record to move with them—to other health care providers, specialists, hospitals, nursing homes, and even across states.

FAAN – Fellow, American Academy of Nursing. The American Academy of Nursing's approximately 2,200 fellows are nursing leaders in education, management, practice and research. Fellows represent association executives; university presidents, chancellors and deans; state and federal political appointees; hospital chief executives and vice presidents for nursing; nurse consultants; and researchers and entrepreneurs.

First Aid – First aid is the provision of initial care for an illness or injury. It is usually performed by non-experts to a sick or injured person until medical treatment can be obtained. Certain self-limiting illnesses or minor injuries may not require further medical care past the first aid intervention. It generally consists of a series of simple and in some cases, potentially life-saving techniques that an individual can be trained to perform with minimal equipment.

FNP-BC – Family Nurse Practitioner, Board Certified. The American Nurse Credentialing Center Family Nurse Practitioner board certification examination is a competency based examination that provides a valid and reliable assessment of the entry-level clinical knowledge and skills of nurse practitioners. Once a nurse completes eligibility requirements to take the certification examination and successfully pass the exam, they are awarded the credential: Family Nurse Practitioner-Board Certified (FNP-BC). This credential is valid for 5 years. They can continue to use this credential by maintaining their license to practice and meeting certain other renewal requirements.

Group care – A form of practice in which a health care professional may serve a group of people with similar medical needs at the same time. A common form of group care are health professionals who meet with pregnant women to assess their health, provide education and support as they progress through their pregnancy and prepare for delivery.



Medical home – The medical home is best described as a model or philosophy of primary care that is patient-centered, comprehensive, team-based, coordinated, accessible, and focused on quality and safety. It encourages providers and care teams to treat patients with respect, dignity, and compassion, and enable strong and trusting relationships with providers and staff. Above all, the medical home is a model for achieving primary care excellence so that care is received in the right place, at the right time, and in the manner that best suits a patient's needs.

M.D. - Doctor of Medicine – The degree awarded by most medical schools in the United States to graduating students. (See **D.O.**)

Nurse Clinician – A nurse who is prepared to identify and diagnose problems of clients by using increased knowledge and skills gained through advanced study in a specific area of nursing practice. The specialist may function independently within standing orders or protocols and collaborates with associates to implement a care plan that is focused on the client.

Nurse Practitioner – A registered nurse who has completed advanced coursework and additional clinical education. Nurse practitioners manage acute and chronic medical conditions (both physical and mental) through comprehensive history taking, physical exam, and the ordering of diagnostic tests and medical treatments. NPs (within their scope of practice) are qualified to diagnose medical problems, order treatments, prescribe medications, and make referrals for a wide range of acute and chronic medical conditions.

PCT - Patient Care Technician – An unlicensed but often certified health care assistant. Patient Care Technicians work alongside doctors, nurses and other healthcare professionals to provide direct patient care in a variety of healthcare environments. The Patient Care Technician (PCT) job description includes assisting patients with many tasks that they cannot do for themselves while they are in hospitals, rehabilitation clinics, assisted living facilities, nursing homes or long-term care facilities. PCT may assist patients with tasks such as eating, getting out of bed, taking a bath, and brushing their teeth and hair.

Pharmacist – A pharmacist fills prescriptions, but they also instruct and counsel patients on the proper use and adverse effects of medically prescribed drugs and medicines. Pharmacists undergo university-level education to understand how drugs work, drug uses and therapeutic roles, side effects, potential drug interactions, and monitoring parameters. Pharmacists must have a thorough understanding of anatomy, physiology, and the psychological impact of drugs.

Pharmacy Technician - A pharmacy technician is a health care provider who generally works under the direct supervision of a licensed pharmacist. Job duties include dispensing prescription drugs and other medical devices to patients and instructing on their use. They may also perform administrative duties in pharmaceutical practice, such as reviewing prescription requests with doctor's offices and insurance companies to ensure correct medications are provided and payment is received.

Phlebotomist - Phlebotomists are people trained to draw blood from a patient for clinical or medical testing, transfusions, donations, or research. A phlebotomist technician must pass a certification test after approximately three months of training.

Physician - A physician is a professional who practices medicine, which is concerned with promoting, maintaining or restoring human health through the study, diagnosis, and treatment of disease, injury, and other physical and mental impairments. They may focus their practice on certain disease categories, types of patients, or methods of treatment – known as specialist medical practitioners – or assume responsibility for the provision of continuing and comprehensive medical care to individuals, families, and communities – known as general practitioners. Medical practice properly requires both a detailed knowledge of the academic disciplines (such as anatomy and physiology) underlying diseases and their treatment – the science of medicine – and also a decent competence in its applied practice – the art or craft of medicine.

Population Health - Population health is defined as the health outcomes of a group of individuals. These groups are often geographic populations such as nations or communities, but can also be other groups such as employees, ethnic groups, disabled persons, prisoners, or any other defined group. Population health is also concerned with the distribution of health outcomes within the group, and works to eliminate wide variations in outcomes.

Registered Nurse - A registered nurse (RN) is a nurse who has graduated from a nursing program at a college or university and has passed a national licensing exam to obtain a nursing license.

Resident - Residency is a stage of graduate medical training. A resident physician or resident or resident medical officer is a person who has received a medical or psychological degree who practices medicine usually in a hospital or clinic. The training programs of pharmacists, physical therapists, physician assistants, veterinarians, podiatrists, medical physicists, optometrists, and dentists may also involve a period of training referred to as a residency. Whereas medical school teaches physicians a broad range of medical knowledge, basic clinical skills, and limited experience practicing medicine, medical residency gives in-depth training within a specific branch of medicine.

Specialist - Medical specialists are doctors who have completed advanced education and clinical training in a specific area of medicine, such as cardiology (the heart), dermatology (skin), emergency medicine, or oncology (cancer).

Wellness - Wellness is generally used to mean a healthy balance of the mind, body and spirit that results in an overall feeling of well-being, and not just an absence of disease. Many employers and insurance plans offer wellness programs that offer premium discounts, cash rewards, gym memberships, and other incentives to participate. Some examples of wellness programs include programs to help you stop smoking, diabetes management programs, weight loss programs, and preventative health screenings.

CREDITS AND ACKNOWLEDGMENTS

FOR DPTV

Producer: Oliver Thornton

Associate

Producers: Ariel Bond and Sarah Zientarski

Host: Cynthia Canty

Camera: Bob Berg

Audio: Roger Smith

Editor: Tina Brunn

Teleprompter: Todd Baize

Special Thanks

- Detroit Wayne County Health Authority
- Benjamin Carson High School
- Dorsey Schools
- Michigan State University College of Osteopathic Medicine
- Nottingham Pharmacy
- University of Detroit Mercy-McAuley Health Center
- Western Wayne Family Health Center

Program Development: Lynn Chasiotis

Engineering/Operations Scheduling Coordinator: Michael Sellers

Production Manager: Carlota Almanza-Lumpkin

DPTV EXECUTIVES:

- Senior Vice President of Content and Community Engagement: Georgeann Herbert
- Vice President of Production: Jamie Westrick
- Executive Vice President: Jeff Forster



VITAL SIGNS: WORK FORCE DEVELOPMENT

We would like your opinion as to how effective our Work Force Development program is as an information and education tool. Please take a moment and answer the following questions, which pertain to video program content, educational materials, and presentation. Thank you.

- 1) How effective was Vital Signs: Work Force Development program in increasing your awareness of the challenge to develop health professionals and opportunities that may exist for careers in the health field? (Please answer based on whether you saw the entire program or an excerpt.)
 - ☐ Effective
 - ☐ Fair
 - ☐ Ineffective

- 2) Did you view the program as a whole or an excerpt?
 - ☐ Whole program
 - ☐ Excerpt

- 3) If you viewed the excerpt, was it effective as part of the discussion?
 - ☐ Yes
 - ☐ No

- 4) How was Vital Signs presented?
 - ☐ Small group discussion
 - ☐ Large group discussion
 - ☐ One-on-one personal career counseling session
 - ☐ Self-directed by website

- 5) If you attended a presentation, how effective was the presenter?
- 6) If you attended a presentation, please note the date and location of the presentation.
- 7) Did the information and/or discussion encourage you to pursue a particular health career? If so, please indicate which one.
- 8) Have you talked to a friend or family member about Vital Signs?
- 9) Have you gone to the Detroit Public Television Vital Signs web page, or the Detroit Wayne County Health Authority website for more information on health careers? If so, which did you visit?
- 10 Please tell us a little bit about yourself:
- Age
 - Hometown
 - Male/Female

Thank you for participating in this survey and for considering the possibility of a health career.
We wish you good luck in your future endeavors.