

University of Maryland, Baltimore

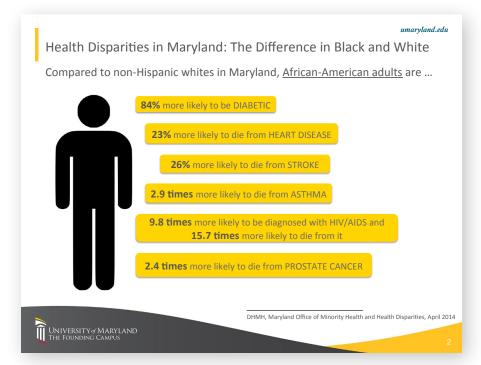
The Greatest Gap: Health Inequity in Baltimore

Jay A. Perman, MD June 2016 I've been asked to talk this evening about one of the greatest challenges we face in Baltimore: grave disparities in health that devastate our city's poorest communities.

If you're poor and black in Baltimore, you're much more likely be sicker than the average Marylander, weaker than the average Marylander, and you'll probably die at a younger age. Make no mistake: These disparities—this inequity—it's a public health crisis.

Last spring, just two weeks after the death of Freddie Gray and one week after the unrest that followed, I delivered my annual State of the University address to the students, faculty, and staff of UMB. I took the title of that address from a phrase I'm sure many of you know well: *Tikkun Olam*—Repair the World.

And that imperative means something very specific for UMB, Maryland's only public health, law, and human services university. It means we have an obligation to close these gaps—in health, wellness, and justice—that imperil our neighbors and threaten our humanity.

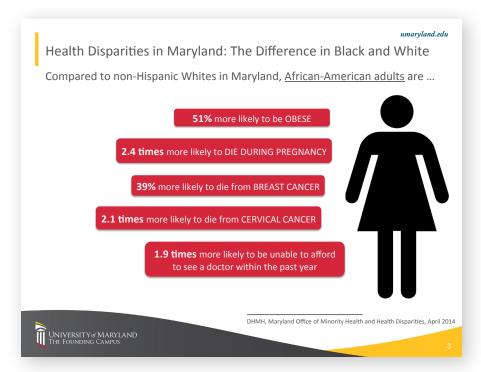


Just so you understand the scope and implications of these disparities, I'll share some statistics.

In Maryland, African Americans are 84 percent more likely than whites to be diabetic.

- About 25 percent more likely to die from heart disease or stroke.
- Nearly 3 times more likely to die from asthma.
- 2½ times more likely to die from prostate cancer.
- Nearly 10 times more likely to contract HIV/AIDS and 15 times more likely to die from it.





In Maryland, African-American women are $2\frac{1}{2}$ times more likely to die during pregnancy.

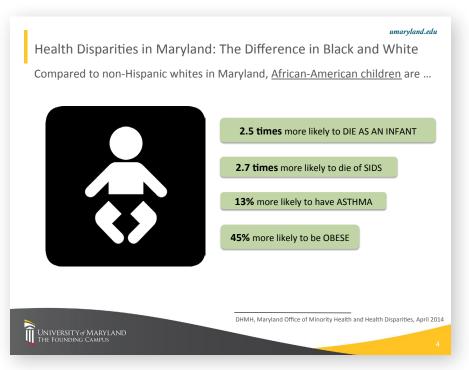
- Twice as likely to die from cervical cancer.
- And 39 percent more likely to die from breast cancer.

And while the state's black residents are much more likely to be diagnosed with chronic diseases and to die from them, they're less likely to be able to afford a potentially life-saving visit to the doctor.

The state's African-American children don't fare any better. They're 2½ times more likely to die during infancy, 13 percent more likely to have asthma, 45 percent more likely to be obese.

Again, these statistics are for African Americans statewide. When you look at Baltimore City, the landscape is even worse. While the city has seen improvements in several health indicators—including certain cancers, stroke, diabetes, and HIV—Baltimore continues to have a mortality rate that's 1.34 times that of Maryland as a whole.

And when you look at the city's lowest income earners (under \$15,000 a year) and highest earners (over \$75,000 a year), you see persistent disparities in the rates of childhood asthma, mental health, and diabetes.



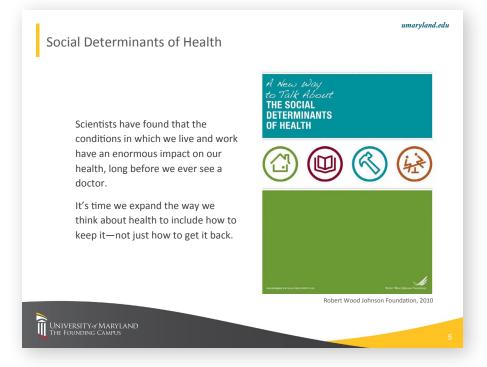


Certainly, some of these disparities are borne of differences in biology and behavior. But a lot of it has do with environment—what we call the "social determinants of health."

Social determinants of health are the conditions in which people live, learn, work, and play. They're shaped by the distribution of money, power, and resources—locally and globally. And they have a huge effect on how well and how long we live.

It shouldn't come as any surprise to you that these conditions are often bleak-often deplorable—for many of our neighbors.

Living in a home with no electricity or with lead paint peeling off the walls;



Social Determinants of Health

Many of the people we serve are denied those things we consider critical to basic well-being:

- · Steady jobs and economic stability
- · Personal and public safety
- · Quality education
- · Reliable housing and transportation
- · Access to nutritious foods and exercise
- · Robust social supports
- · Adequate health care



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living in a neighborhood miles from the nearest grocery store, but with liquor and convenience stores littering the blockthese conditions have everything to do with our health. If children can't safely play outside, and their rec centers are being shuttered one by one, how likely is it that they'll get enough exercise to maintain a healthy weight?

To truly thrive, populations need certain things: good jobs and economic stability; a sense of personal and public safety; high-quality schools; reliable housing and transportation; access to fresh food and exercise, to social supports, and to adequate health care.

Income is perhaps the most *powerful* social determinant of health.

I've highlighted a few neighborhoods of significance to UMB.

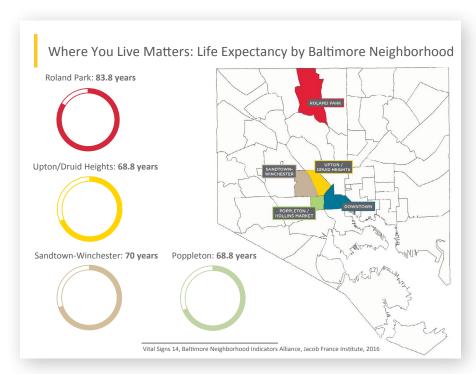
- Downtown-in blue-is where UMB sits.
- Poppleton/Hollins Market—in green—is where we've opened our Community Engagement Center, which I'll talk about in a few minutes.
- Upton/Druid Heights—in yellow—is where we have a number of community schools that we run in partnership with the city.
- Sandtown-Winchester—in tan—is where Freddie Gray grew up and where he was arrested; he would later die at Shock Trauma, just a couple of blocks from my office.
- And I'm using Roland Park—in red—as our comparator neighborhood.

The median household income in Roland Park is more than \$104,000 a year. And if you're a resident of Roland Park, you can expect to live to about 84.

On the other hand, the median household income in Poppleton is \$19,000 a year. In Upton/Druid Heights, it's \$16,000. In Sandtown-Winchester, it's \$24,000.

And now look at life expectancy. Look at the correlation. If you make it to 70 in any of these neighborhoods, you're actually doing okay.

Baltimore City ran an analysis of premature deaths—by definition, that's any death under 75 years old. In the city's analysis, 50 percent—half—of all premature deaths citywide could be avoided if every Baltimorean earned as much as the people who live in the city's six richest neighborhoods.





Shrinking Health Disparities in Baltimore

1. Expand interprofessional education and care

2. Ameliorate the conditions that contribute to

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3. Prepare a local health care workforce



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inequity

It's important that we prepare students to work as part of health care teams not all the time, not for all patients. Not all patients need team-based care. But patients with chronic diseases dopatients with heart disease, hypertension, cancer, diabetes, dementia. They need good coordination of services. They need a holistic approach to their health and well-being, where every provider understands the patient's problems and the plan to remedy them. This is complex, high-cost care. And a team is the best way to deliver it.

areas where we see signs of hope: 1. Expanding—"normalizing"—the delivery

So on to the solutions: I'll highlight three

efforts that UMB is advocating and, more

importantly, practicing. These are the

- of interprofessional education and care.
- 2. Ameliorating the conditions in West Baltimore that contribute to health inequities.
- 3. Preparing local students to pursue careers in the health sciences.
- #1: Expand interprofessionalism.

Interprofessional education is a very simple concept. It's when students from different professions learn from and about each other to improve collaboration and quality of care.

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Collaborating Across Disciplines for Optimal Patient Care

Expand interprofessional education and care

All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics.

- Institute of Medicine Health Professions Education: A Bridge to Quality







At UMB, we have schools of medicine, nursing, pharmacy, dentistry, social work, and law. And students in all of these schools are expected to function in health care teams. People often say to me: "I understand why the health professionals should learn with one another and treat patients with one another. But why the lawyers, why the social workers?" And the question makes sense—if you're working from an old model of care. In the old model, you make the right diagnosis, you prescribe the right medication, and you're done.

Well, you're *not* done. Especially in poor, underserved, and vulnerable communities, you're not done. Let me give you two stories that illustrate just how *far* from done we are.

I've seen many young patients with lead poisoning. In Baltimore, lead poisoning is tragically epidemic. But we know how to get the lead out of a child's blood. We can bind the lead in the GI tract and eliminate it. It's not a complicated process.

So you treat the children, and they get better, and then where do you send them? You send them straight back into the homes that made them sick in the first place. You send them straight back into homes with toxic levels of lead in them.

That child no longer needs a doctor. He needs a lawyer—and he needs one now.

When I was at Hopkins, we had an 8-year-old child whose diabetes was out of control. She kept going into diabetic ketoacidosis—a very dangerous condition—and was repeatedly admitted to the ICU.

The doctors couldn't figure out what the problem was, so they asked me to send a nurse to the child's home. And that's when we found out that there was no electricity in the house. BGE had shut off the family's service. So the girl's mother couldn't keep the insulin refrigerated, as it needs to be. And when the mother was measuring doses in the kitchen, she couldn't actually see how much she was drawing into the syringe and injecting into her child.

What we needed to do wasn't medical at all. We needed to get the lights turned back on. And we needed a social worker who knows how to do that. Once the electricity was restored, the child's diabetes came back under control, and there were no more ICU admissions—which, by the way, cost taxpayers a lot more than a subsidized utility bill.

This is why you need a lawyer. This is why you need a social worker.

People with chronic diseases are the heaviest users of health care. And when their diseases aren't managed well, they're our heaviest users of the most expensive health care—emergency and inpatient treatment.

But there's evidence that patients with chronic illnesses receiving team-based care make fewer visits to the ER than those receiving traditional care. They suffer fewer complications. They're hospitalized less frequently. They're better able to manage their illnesses and maintain a normal routine.

And so at UMB, we bring all of our students together—medicine, nursing, pharmacy, dentistry, social work, law. They come together in simulation labs, where they can practice team-based care on computerized mannequins. We have them create care plans for standardized patients—actors who are trained to portray real patients, with real illnesses—and then provide feedback on how the teams did in terms of communication, coordination, empathy, and efficiency.



And students practice the real thing—with real patients—in my weekly President's Clinic. Every Tuesday afternoon, students join me in the clinic to deliver team care to children with gastrointestinal disorders. They see not just the young patients, but their families, too, and they begin to appreciate the innumerable ways that a family's circumstances affect health and affect treatment. It's a terrific training ground for interprofessionalism.

But the fact is we can see only about a half-dozen patients a day. We need to do more. We need to add to the evidence base validating the interprofessional model. We need to persuade the people who pay for health care—whether that's patients, insurers, or the government—that interprofessionalism is every bit as

Modeling Interprofessionalism: The President's Clinic

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"I saw the big picture of what the family is going through. Even though they're dealing with one situation ... there's a whole story, and so many different parts are affected from this one issue."

"I wasn't sure where social work would fit in, but once the team started talking about [the baby's] medical history, I just listened for snippets — what pertains to social work."





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Building a More Equitable Baltimore

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Ameliorate the conditions that contribute to inequity

"There are two Baltimores. There are clearly two Baltimores."

— U.S. Rep. Elijah Cummings Sept. 27, 2015





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good as I say it is. Because if we don't prove its value—both to the patient and to the payer—interprofessional practice is never going to be our go-to model for chronic disease.

The second effort on my list of three is to improve the conditions that contribute to inequity—to influence the social determinants of health that I just talked about. Because, yes, interprofessional care holds great hope for patients who need a team of providers assembled around them. But if we do community engagement "right," we can actually inhibit the need for this team. We can reduce the incidence of chronic illness in these communities—the kind of illness that benefits most from team care.





At UMB, we knew that in order to have a significant and sustained impact in our community, we'd need to focus our attention and activity. So we looked at where we already had a presence, a footprint—where we were already engaged in nearby neighborhoods and where we wanted to deepen our efforts.

We actually drew a map. This is our geographic area of focus: North Avenue to the north, Howard Street to the east, Monroe Street to the west, and the stadiums to the south. This is where we concentrate our efforts—not only so that we can consolidate our resources and deploy them strategically, but so that we can accurately measure the impact we're having in the community.

And we've already shown that we can have a significant impact in neighborhood schools.

Community schools are public schools whose partner agencies coordinate a network of services that stabilize and strengthen families so that children can achieve.

UMB's School of Social Work is the lead partner agency in a dozen community schools across Baltimore. In a bid for critical mass, five of these community schools are located in one neighborhood—a neighborhood I introduced you to earlier: Upton/Druid Heights. All five schools in Upton/Druid Heights—three elementary schools, one middle, and one high—have a licensed social worker in the school full time.

Reaching Into City Schools

A community school is both a place and a set of partnerships between the school and community resources.

Its integrated focus on academics, health and social services, youth and community development, and community engagement leads to improved student learning, stronger families, and healthier communities.

— Coalition for Community Schools









We've engaged 50+ partners in these schools. With the city health department and the Family League of Baltimore, we knock on neighborhood doors to find pregnant women needing prenatal care. With the United Way, we work to reduce the high mobility rate among poor families, often running interference with landlords threatening eviction. Congregants of a nearby church tutor the children in reading. The Breathmobile, run by our children's hospital, stops by to treat the many schoolchildren—too many—suffering from asthma.

Our nursing students organize parties that bring parents and children together to learn about healthy habits. Our dental students and faculty provide oral care. Our law students help residents with small claims. Our social workers help children process the trauma they experience every day, and ultimately break the cycle of violence ravaging Baltimore's neighborhoods and decimating its families.

Here's just one outcome: Half-a-dozen years ago, Upton/Druid Heights had one of the highest infant mortality rates in the city—18.3 infant deaths per 1,000 births. So with our partners, we began intensive programming for expectant and new parents—prenatal and neonatal counseling, parenting classes.

And among the families participating in the program—several hundred families—there have been *zero* infant deaths over the last five years. The dean of our School of Social Work says *this* is how we're proving that Black Lives Matter to UMB.

I said this before, but it's important to repeat: We work *with* and for our neighbors. That means partnering with community leaders and residents. That means signing onto *their* priorities and bringing resources and expertise to *their* goals.

A good example is the Southwest Partnership, a coalition of seven neighborhood associations in Southwest Baltimore, partnering with six local anchor institutions. It's a big and active group, with specific goals in terms of housing and

commercial development, education and workforce, safe streets, historic preservation. We support the Partnership financially. We sit on its board. We help with needed research and planning.

But the Partnership's vision for the community is its own—as it should be. Because we'll never achieve the outcomes we're after by imposing our will on others. Real change manifests with deep involvement and investment from the communities themselves—homegrown advocacy and effort.

Community engagement is an "all-in" proposition. And that means we won't always get our way. We'll have to give on things. But that's okay: Progress doesn't come without compromise.





Let me share another example of partnership: About a year ago, we started a program to help small local restaurants compete for UMB's catering dollars. We help them secure the equipment and systems they need to accept our credit card and process our catering code. We get them onto our food broker list and hold food fairs on campus, where they meet—and feed—the staff who can send University dollars their way.

A year ago, we were spending .01 percent of our catering budget at businesses in West Baltimore—west of Martin Luther King Jr. Boulevard. That's about \$1,000 a year. And that \$1,000 went to just one restaurant. One year later, after this investment in local purchasing, we'd spent \$36,000 in West Baltimore.

But that's only part of the good news: By using our technical assistance and all of the resources we poured into this program, local caterers had secured another \$50,000 in new money from businesses across the city.



That's \$86,000 in catering receipts going into the pockets of local vendors. In the grand scheme of things, \$86,000 isn't a lot of money. But it's a start. It's a sign of what's possible if we keep putting in the effort.

And it *means* something to our neighbors. It means we believe in them. It means we trust them. It means we want them to succeed, and we'll help them succeed. What it meant to Kim Ellis, here on the right—owner of Breaking Bread Catering—was that she could move her business from a church basement into a prominent storefront on Washington Boulevard, Pigtown's busiest street.

Here's another example: Last fall, we opened our Community Engagement Center in West Baltimore—in the Poppleton neighborhood I mentioned earlier. The Community Engagement Center is a welcoming front door to our West Baltimore neighbors, a scaled-down storefront for anyone who feels intimidated by our towering campus, for anyone hesitant to cross MLK Boulevard—eight busy lanes separating "us" from "them," separating neighborhoods of wealth from neighborhoods of want.

In the center, we offer programs that our neighbors tell us are important to them. Nursing students run a fitness program for local seniors. Our law school offers residents free legal help. A weekly market provides fresh, organic food at prices that our neighbors can actually afford. (And if they can't afford it, they can volunteer in the center; no one is turned away.)



Financial counselors, partnering with our School of Social Work, help residents get out from under the predatory practices that keep them in debt. On Training Tuesdays and Workforce Wednesdays, we use the center to prepare neighbors for the job search and connect them with good opportunities.

But, again, the benefit is mutual. The center immerses our students in grassroots community work, helping them understand the challenges our neighbors face, and what those challenges mean in terms of their own professional—and cultural—competency.

We've logged more than 2,000 visits since the center opened in October. And our goal is to keep that number growing by offering something for everyone in the community. Because this is how you drain the moats that

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encircle urban universities—the moats that keep people out, that keep people apart. This is how you build bridges instead.



The third and final effort I want to talk about is preparing local students to pursue careers in the health sciences. There are a few reasons why this is so important. Obviously, we want to put students on a path to good-paying, rewarding jobs in biomedicine. Opening up these opportunities can buoy families and communities alike. And as we've discussed, income and economic stability are closely tied to individual and population health.

But there's another reason why a well-prepared health care workforce in these communities is so important. Studies show that physicians and other providers of color are more likely to treat minority and medically underserved patients. Studies show that patients and providers

who share a race, ethnicity, or language enjoy better relationships with one another and better communication. And these relationships increase the likelihood that patients will accept and receive high-quality care.



So we need to get more black students into the health professions pipeline. We need to put patients in a position where they're sitting across from a doctor or nurse or physical therapist who looks like them, who understands them, who shares a background similar to theirs and can relate to their experiences. This is human nature. It's natural to want to be comfortable, to share an easy rapport, to feel understood by the person to whom you're entrusting your health.

And this is where the problem lies. We simply don't have enough black health care professionals to give many patients this opportunity. Here's a pretty startling fact: More black men applied to medical school in 1978 than did two years ago. And that drop has occurred even as overall college enrollment among black men has climbed. In the entire United States, just 515 African-American men enrolled in medical school last year.

Just 6 percent of the 87,000 students in U.S. medical schools today identify as African American or black. And their share in the current physician workforce is even lower—4 percent. Meanwhile, if you live in Baltimore, you're living in a city that's nearly two-thirds African American. This disconnect is huge—and it's damaging.

So we're pioneering a program to start building this pipeline of health professionals in West Baltimore. With a grant from NIH, and with partnership from the Greenebaum Cancer Center, we launched the UMB CURE Scholars Program last fall. The program is intended to open up these great opportunities in health care—well-paying, recession-proof, plentiful jobs—and to shrink the yawning disparities we see in this city in terms of health care access, delivery, and outcomes.

We knew we needed to start early—earlier than anyone else had. We wanted to tap into children's natural excitement and curiosity, and get to them before their path to a good career became encumbered.

So now we have 38 scholars from three West Baltimore middle schools. Their commitment to the program is amazing, especially when you know—as we do—the daily obstacles they surmount just to get to school each morning: treacherously unsafe streets; no locks on the doors, no doors on the hinges; drug use rampant in their neighborhoods. No place to be alone; no quiet space to study.

Twice a week, the scholars stay late after school for science projects and mentoring. On Saturdays, they're on our campus—all day—for tutoring, lab tours, and field trips. They'll start a six-week summer camp soon.

And what this immersion is doing is exposing these scholars to careers that were alien to them just eight months ago. A few examples: When Ar'mya applied to the program, she



wanted to be a hair dresser. Now she wants to be a pediatrician. Dayon wanted to be an NFL player. Now he wants to be an inventor. Joshua wants to be a brain surgeon. Corey wants to be a neonatal doctor. Keayon wants to be a football player and a doctor. So it's a good thing that his mentor—who's on faculty in our School of Medicine—is also head physician for the Maryland Terps.









This is how you bend children's trajectories; this is how you lift the arc of their story. We have 100+ mentors—students, faculty, staff—who are deeply involved in these scholars' lives, and invested in their success. We have parents who want something truly great for their children. We have partners engaged and excited about what's possible. It's community-building at its best.

Let me be clear: None of these efforts will yield quick results. But I'm more interested in sustainability than speed. Anchor institutions like UMB are able to make change in our communities precisely because we've been doing the work of engagement for so long—in full partnership with our neighbors. It's slow, hard, and bumpy work. And we'll never give up on it.

I started this talk with the Hebrew phrase, *Tikkun Olam*. At UMB, we absolutely believe our mission is to repair the world. And we're starting right here in Baltimore—right here in our own community—with and for our neighbors.

But none of us can go it alone—not universities, hospitals, governments, nonprofits, philanthropies, businesses, or the communities themselves. We have to have a broad coalition of organizations and agencies with an interest in improving Baltimore's most blighted neighborhoods, with an interest in dramatically improving the health and

well-being of Baltimore's most impoverished and most isolated citizens. We must draw up shared and specific goals, and be held accountable for meeting them. We must sign onto each other's priorities, and support those priorities with people, money, and advocacy.

Meaningful change will happen in our city only if we can agree on what that change should look like and move toward it together.

The national spotlight that shone on Baltimore last year exposed the poverty and neglect, the grave inequities and injustices, that our neighbors endure every day. Our outrage and compassion will get us only so far. It's past time that we act.

Thank you.

