

**Full Commencement Address of Dr. Monica Bharel, Commissioner of the Massachusetts Department of Public Health. May 21, 2017**

Dean Must, Dean Glover, graduates, families, friends, faculty, and guests: Thank you for inviting me to share a few thoughts with you.

Graduates, congratulations on your accomplishment today. Please join me in thanking your faculty, mentors and advisors for your exceptional education. And your families, friends and supporters who surround you today.

It is an honor to be here to celebrate and to recognize the next generation of healthcare doers, thinkers, and leaders...and to talk about health.

I come before you today to talk about health not just as “the lack of disease”, but as a matter of justice and fairness. **Because MLK’s words resonate today as loud as they did decades ago, “Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”**

I also come before you as someone who believes *deeply* in the importance of the health professions for the future of our country.

You are building your careers in health and healthcare at a pivotal moment in history.

On one hand, we face an uncertain future in public health and healthcare---the questions that we face at a global, federal and state level will dictate how we practice for the years and decades to come.

Yet, simultaneously, you are entering a world where technology is transforming day-to-day practice, and where we can use real-time information to rapidly identify populations at risk for emergent public health issues.

The uncertainty we face presents an opportunity to shape the future of health in a real, meaningful, tangible, transformative way.

Today, I’d like to present to you 3 ideas for what I see as the future of health, and how I believe you must, as our next generation of leaders, seize the opportunity.

At the heart of the argument I make to you is a profoundly simple idea: health is a right, not a privilege, and it is our responsibility to ensure that each individual and population has the full opportunity to achieve health.

To begin, I'd like to talk for a minute about my first main idea: the importance of the social determinants of health.

In a state that operates at the clinical forefront of healthcare, we are also a Department of Public Health that has led the way from smallpox and cholera to HIV, to the emergent issues of today, from the opioid epidemic to infectious diseases.

Today, we are ranked as the 2<sup>nd</sup> healthiest state in the country, and continuously recognized as one of the best places for public health and healthcare.

Yet, we are also a state and a country where, from birth to death, the circumstances of an individual's life can drastically impact their health.

When I served at Boston Healthcare for the Homeless, one of the driving motivations for me was the fact that the age of death for a homeless individual is 51---closer to the age of death for individuals in developing parts of the World than the average American.

The neighborhood you are born into; the school you go to; your parent's health: All of these things directly and dramatically influence whether you develop asthma, diabetes, heart disease, or die young. Our ability to live healthy lives is tied to zip code more than any other factor.

That is unacceptable.

When the American public health movement was born in Massachusetts, experts were, for the first time, making the connections between poor sanitation and disease---something we now take for granted.

Today, I'm looking forward to a time when we take for granted that everyone has access to the health services they need; and when zip code is no longer the strongest predictor of how well or long we live. If we can do this anywhere, we can do it here in Massachusetts.

This is a moral argument, but it is also one with strong cost repercussions.

We know that addressing these social determinants of health upstream, is one of the most effective ways to keep down long- term, downstream health costs.

For example, there is evidence that investments in social services, nutrition programs, and housing bring health benefits while decreasing health care costs for low income individuals by thousands per person.

Yet, despite being a cost driver, determinants themselves are generally some of the last factors we address when it comes to health.

A quick example: When I was at Boston Healthcare for the Homeless Program, I had a patient with severe diabetes who I used to see regularly. He was often behind on his medications, or presented with related medical complications that we struggled to address.

We were well trained on how to deal with his illness in a clinical setting...but, traditionally, we were less trained on how to address the reality of where he should store his medications while sleeping under the bridge; how to obtain the appropriate foods he needed for his diabetic diet; or how to keep track of and get to his appointments.

**MY FIRST LESSON FOR YOU ON THE FUTURE OF HEALTH ---and if you remember one thing today, let it be this:**

**Health inequities are our biggest public health risk, threatening the physical and economic health of our families and communities. They will remain so until we as health professionals, address them head on.**

**We must continue to ensure that health is a right for all; for all deserve health.**

I urge you to always consider address the underlying issues behind a person's medical diagnosis.

**THE SECOND IDEA: The artificial divide between public health and healthcare is narrowing. We must continue to bring the two sides together to ensure better health outcomes, at a better cost.**

I have seen first-hand the importance of this overlap between public health and healthcare approaches. While I come to you today as the Commissioner of Public Health, I have spent 20 years working at the crossroads of medicine and public health, with some of our area's most vulnerable neighbors.

Preparing to be here today I had the chance to think about many of the patients who touched me deeply, particularly during my time at Health Care for the Homeless.

Their stories, their overcoming of obstacles in the most dire circumstances, their hope in the face of unthinkable challenges, is what drives me...and I know so many of you...to our daily work.

Originally, it was a community health worker who first opened my eyes to the power of relationships and connections when she was able to assist a patient I had known for years find housing and decrease his use of alcohol.

After she started working with my patient he went from a regular visitor of emergency departments-sometimes EVERY day- to only a few times a year. When I asked him what had changed he told me simply, “Doctor you are a nice lady and all and try to help me but she REALLY GETS ME.”

Every day at DPH, we are presented with dilemmas at the intersection of public health and personal healthcare, and which is the better approach to solve an acute or chronic problem.

**The second lesson today: Health differences are not driven by clinical care alone. Clinical interventions alone can't remedy health inequities. We need health care systems that address all of our patients' basic resource needs-beyond treating a disease. These health care systems will result in enhanced health care quality, and lower health care costs with the right focus on overall health and the social determinants of health.**

**THE THIRD IDEA: Data must empower us to move more efficiently and effectively.**

At DPH, I talk frequently about pursuing a “precision public health” model. Much as we have done in healthcare, we are moving towards a public health approach that treats the precise illness at hand. This is a model predicated on using data and evidence to address the specific health needs of populations.

As a physician, I know the importance of patient specific measures - of blood pressure and cholesterol levels, for example.

I believe that the future of health will be about taking a sizeable leap forward in how we collect, analyze, and communicate data on both a personal and population scale.

When I came to DPH, one of the biggest surprises to me was that many of our 300+ datasets – one of the largest collections of data in government - lived in silos, limiting effectiveness and impact.

Today, with “precision public health” in mind, we're working to break down those silos; improve the timeliness and usefulness of our data in order to better understand the determinants of health; and support policies that optimize health.

We are producing community-level environmental health and population health profiles that allow stakeholders and researchers to look regionally at the interplay between these factors and health conditions.

A similar revolution is happening on the personal health side.

Earlier, I talked about one of my patients who struggled, due to his living situation, with taking his medication on a regular basis.

Imagine if, through sensors in his drugs, we were able to track that patient's adherence to his regimen, analyze the data, and immediately take action to improve his care.

Trials of this technology are happening---and ideas like it are potentially huge steps forward for how we address chronic illnesses in this country.

**LESSON #3: Data will drive a personal health and population health revolution---we must be at the forefront of ensuring it leads to better, more targeted care – and doesn't inadvertently widen inequity gaps.**

So to put together these three lessons--that the gap is narrowing between healthcare and public health; that the social determinants of health matter; and that data must empower our decision making, I want to talk for one brief moment about a critical issue---the ongoing regional opioid epidemic.

This is an epidemic that grew quietly and exploded loudly, with over five people dying a day in Massachusetts alone.

However, in Massachusetts, we are now implementing new strategies across prevention, intervention, treatment and recovery - the spectrum of care - that seem to be having a real impact.

A few highlights, as they relate to our conversation today, on how we are treating this as the health issue it is:

1. We are using data to identify particular populations and geographic regions that are more at risk--and identifying the social determinants behind those risks.

Beginning last year, DPH brought together an unprecedented number of data sets from across state government and the private sector, along with experts and researchers

from academia, in order to uncover new truths about this epidemic.

We learned, for example, that former inmates are 56 times more likely to die from an overdose than their counterparts. This lesson has led, directly, to efforts to improve treatment for those behind bars, and a better transition plan, once they are being released.

2. In a landmark partnership between public health and healthcare education, we have implemented first-in the nation opioid core competencies, to ensure that professionals who will be interacting with patients understand how to balance the need for pain management with potential opioid misuse.

Tufts has already demonstrated leadership in this area---the PAs in the room today, for example, are among the first to benefit from these core competencies.

Public health and healthcare are also learning from each other when it comes to the best approach to addressing and talking about addiction.

We know that the stigma of addiction is difficult to overturn. But we also know the words we use matter. In 2016, we launched our “State without Stigma” campaign to increase awareness for this *illness*, and to change the language used in referring to it.

Through public education campaigns, the core competencies, and related efforts, we are working hard to use the language of *disease*, rather than that of criminal justice.

Before I leave you, there is one last story I wanted to share. One morning in clinic, I walked in to meet a patient I’ll call Michael. During that first visit, the nurse in the room pulled out about 20 bottles of medication that revealed a long list of serious medical conditions.

Michael was in his 70’s, and he slept in boxes near Boston Harbor. Over the next year or so, I got to know him well enough that he shared with me that while he didn’t trust the government, he served in the armed forces and was a veteran.

His visits were unpredictable. At Health Care for the Homeless, we treated more than medical conditions and so Michael was housed with the help of our case managers and sister housing agencies. Maybe surprising to everyone except him, he returned from time to time to the boxes in downtown Boston.

Every time he showed up to clinic I sighed a big sigh of relief. Michael was here, and for now

was safe, with his wary smile and not always appropriate jokes.

And then one day, like too many in his situation, Michael stopped coming to clinic. When I heard that he had passed away, I sat for a moment and cried. I added his memory to the many other patients I missed, and used the gift of their connection and presence to strengthen my fortitude for this work that we are all so passionate about.

People like Michael deserve help to navigate our health care and social service system effectively; this takes time, and energy, and patience as we build trust and understanding.

Michael's situation highlights vital questions for all of us to address as we move forward today.

How do we identify the vulnerability and treat the whole patient?

As importantly, how do we identify the most vulnerable members and treat the whole population? How do we address root causes, not just the symptoms present in both?

For we live in a world where health should no longer be considered a privilege or a benefit.

Simply, without question or caveat, health is a right. And it is up to us - all of us in this room, - to treat it as such. Whether we work in a clinical sphere, in policy, in research, in education ... it is time we, as leaders in the health professions, approach health from a new perspective, with new techniques, technology and knowledge to benefit the patients and populations in our care.

Graduates, the health of the world is in your hands. Thank you for choosing this life of service. Good luck. And Congratulations.