Stop TB Massachusetts
c/o Cynthia Tschampl,
35 Bedford Court,
Concord, MA 01742
tschampl@yahoo.com

October 16, 2018

Stuart Altman, PhD
Chair, Health Policy Commission
Re: Request for Testimony for the 2018 Cost Trends Hearing

Dear Prof. Altman:

On behalf of Stop TB Massachusetts, a group of tuberculosis (TB) experts and advocates for TB elimination and an affiliate of Stop TB USA, we respond to the request for testimony on health cost trends in the Commonwealth.

Just in the last year or so Massachusetts has suffered a double-digit increase in tuberculosis, a serious hepatitis A outbreak, enhanced risk of West Nile Virus, a massive fentanyl-related HIV outbreak; steady increases in syphilis and chlamydia, an alarming spike in gonorrhea, and the introduction of two new tick-borne diseases…our daily reality reveals infectious diseases—in old, new, and drug-resistant flavors—are increasing our suffering, avoidable ED visits and hospitalizations, disabilities, and health care expenditures. Moreover, every health care provider relies on our public health infrastructure for one type of support or other: from diagnoses, to disease surveillance, to outbreak management…the list is too long to cover here.

Tuberculosis requires special attention because of its complexity; however, TB also offers insights into the benefits of preventive efforts and the huge costs of neglecting the same.

A quick refresher: TB is caused by a mycobacterium spread by breathing air. The disease is preventable, as well as curable, although there can be serious side-effects, such as permanent loss of hearing. TB is the leading infectious killer in the world, claiming more lives than AIDS and malaria combined each year.

Back to the matter of health costs:

1. Increasing generic drug prices, highlighted in the hearing this year, are of especially grave concern in the case of infectious diseases, because the population, rather than an individual patient, is subsequently impacted. In 2016 the price for cycloserine, a decades-old, specialized antibiotic, was increased by 300%. Cycloserine was the fourth anti-TB tool affected by price increases in as many years. This particularly impacts Massachusetts, because 1 in 4 of our active cases are drug-resistant so something, and we have nearly triple the national rate of extremely complicated cases, so called "multi-drug resistant TB" (MDR). A course of "regular" TB will cost us around $40,000; MDR-TB cases cost between $200,000 to $1.3 million, each.
2. We are losing ground, as 2017 saw a 10.5% increase in TB cases and 2018 shows no sign of decrease. We have just this past year lost 4 TB clinics, that operate as public-private

partnerships. Years of budget cuts and subsequent reduction in trained personnel have resulted in diagnosis delays and an increase of the reservoir pool of TB infection, estimated at 300,000 persons in the Commonwealth. The only real progress against that primary source of active TB disease is the Lynn Community Health Center's innovative model for expanding TB prevention services within the primary care sector and beyond into the community. This program is also a great example of greater integration of public health and health sectors, with increased coordination, competency, and capacity.

3. Increasing costs to families is of special concern where infectious diseases are involved. It has long been documented that any out-of-pocket charges reduce acceptance of and completion of TB and TB infection treatment. This is a recipe for expensive outbreaks, such as the multi-million-dollar TB outbreak in MA in the 1980s, the billion-dollar outbreak of TB in New York in the 1990s, and the multi-million-dollar TB outbreak in Wisconsin just five years ago.

To avoid further such incidents in Massachusetts, we recommend the HPC take concrete actions to strengthen prevention, including:

1. In all your efforts, **please consider the impact on population health and on the public health sector. To the extent possible explore and encourage further integration of or a shift to population health improvements…**where life expectancy gains surely lie, as well as potential health cost savings.
2. **Urge the Legislature and the Administration to increase investment in infectious disease infrastructure and personnel** (especially for drug-resistant TB); and
3. **Work with the Administration to urge the NIH to protect public interests, particularly in the case of medicines essential for public health,** (e.g., using its powers under the 1980 Bayh-Dole Act).

TB prevention saves lives and costs. A study published in 2016 by Dr. Ken Castro and colleagues estimated the number of TB cases averted and societal costs saved due to "concerted action and targeted public health funding" during 1995–2014: 145,000 to 319,000 cases were averted with $3.1 to $6.7 billion in savings, excluding deaths averted. Nevertheless, we are not currently able to take advantage of this prevention opportunity due to lack of public health personnel, training for front-line clinicians, and other public health infrastructure.

Finally, TB thrives at the crossroads of inequality. For example, compared with white residents, the relative risk of being diagnosed with TB in MA in 2017 was 66.7 times higher among Asian, 33.5 times higher among Black, and 12.0 times higher among Latino residents. TB interventions would also help alleviate health disparities. These gaps cry out for action.

We thank the HPC for the opportunity to offer testimony. Please contact Dr. Cynthia Tschampl (Tschampl@yahoo.com, 978-776-3020) or Dr. Tom Garvey (tqg4@aol.com) for additional documentation or clarifications.

Sincerely,
Cynthia A. Tschampl, PhD & Tom Garvey, MD, JD,
Co-Chairs, Stop TB Massachusetts

Relevant articles:

1. http://www.wbur.org/commonhealth/2018/09/24/hepatitis-a-outbreak-massachusetts;
2. http://www.wickedlocal.com/news/20180924/25th-massachusetts-resident-diagnosed-with-west-nile-virus;
3. https://www.reuters.com/article/us-usa-health-stds/cases-of-newborns-with-syphilis-doubles-in-four-years-cdc-idUSKCN1M52Q5?utm_source=Global+Health+NOW+Main+List&utm_campaign=596c91284b-EMAIL_CAMPAIGN_2018_09_25_04_55&utm_medium=email&utm_term=0_8d0d062dbd-596c91284b-2935617;
4. https://www.statnews.com/2018/09/05/plane-quarantined-at-kennedy-airport-amid-reports-of-100-ill-passengers/;
5. https://www.wired.com/story/african-swine-fever-scientists-should-track/?utm_source=Global+Health+NOW+Main+List&utm_campaign=cc7980daa7-EMAIL_CAMPAIGN_2018_10_08_12_17&utm_medium=email&utm_term=0_8d0d062dbd-cc7980daa7-2935617;
6. https://fpif.org/bad-bugs-how-the-white-house-is-stoking-a-world-public-health-crisis/?utm_source=Global+Health+NOW+Main+List&utm_campaign=0f47694383-EMAIL_CAMPAIGN_2018_07_13_03_15&utm_medium=email&utm_term=0_8d0d062dbd-0f47694383-2935617;
7. http://www.npr.org/sections/goatsandsoda/2017/02/14/511227050/why-killer-viruses-are-on-the-rise;
8. http://healthaffairs.org/blog/2016/06/22/zika-flint-and-the-uncertainties-of-emergency-preparedness/;
9. https://www.statnews.com/2016/10/18/tuberculosis-activist/;
10. http://www.npr.org/sections/goatsandsoda/2017/03/11/519518318/beyond-lyme-new-tick-borne-diseases-on-the-rise-in-u-s;
11. https://www.cdc.gov/mmwr/volumes/66/wr/mm6617e2.htm?s_cid=mm6617e2_e;
12. https://www.statnews.com/2017/05/09/raw-milk-cheese-illness/;
13. https://www.washingtonpost.com/national/health-science/imams-in-us-take-on-the-anti-vaccine-movement-during-ramadan/2017/05/26/8660edc6-41ad-11e7-8c25-44d09ff5a4a8_story.html?utm_term=.db65959eac4c;
14. https://www.statnews.com/2017/06/15/bird-flu-mutations/;
15. https://www.nbcnews.com/storyline/zika-virus-outbreak/zika-mosquitoes-are-more-places-you-thought-cdc-says-n774791;
16. https://khn.org/news/south-texas-fights-tuberculosis-one-blood-test-at-a-time/;
17. http://healthaffairs.org/blog/2017/08/22/funding-for-local-public-health-a-renewed-path-for-critical-infrastructure/.