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

October 2, 2017

Stuart Altman, PhD
Chair, Health Policy Commission
Re: Request for Testimony for the 2017 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.

Record year for measles in Minnesota; record year for West Nile in California; Zika spreading like wild fire; Chikungunya following the same path…our daily headlines show infectious diseases—in old, new, and drug-resistant flavors—are increasing our suffering, avoidable hospitalizations, and health care expenditures. Moreover, every health care provider relies on our public health infrastructure for some type of support or other: from lead poisoning tests, to 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 disease preventive efforts and the huge costs of neglecting the same.

First, a quick refresher: TB is caused by a mycobacterium spread through breathing. The disease is preventable, as well as curable, although there are serious side-effects, such as permanent loss of hearing and liver failure, for drug-resistant TB treatment courses. TB is the leading infectious killer in the world, claiming more than 1.5 million lives a year.

Back to the matter of health costs:

1. Increasing generic drug prices, highlighted by the HPC, are of especially grave concern in the case of infectious diseases, because the population, rather than an individual patient, is subsequently impacted. Last year 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, as it suffers from an above-average rate of drug-resistant TB; more than 1 in 5 of our active cases are drug-resistant, and we have a rate of the extremely complicated multi-drug resistant TB (MDR) double the national average. A course of "regular" TB will cost us around $40,000; MDR-TB cases cost between $200,000 to $1.3 million, each.
2. Progress against TB in MA has long been stalled due to budget and personnel cuts; the recent FY18 budget is the second year in a row for which the state public health lab line

item received lower appropriations than in any of the three proposed budgets. These budget cuts and continuing fallout from the early retirement incentive program have resulted in diagnosis delays and a likely 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. When the current CDC funding runs out, it will be imperative for the Commonwealth to continue and expand on their success.

3. The trend of increased patient cost sharing, identified by the HPC and the recently released State Auditor's report regarding Ch. 224, 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 four years ago.

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

1. **Urge the Administration and Legislature to offer first-dollar coverage for highly cost-effective prevention services and medications** (especially those targeted for TB);
2. **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); and
3. **Urge the Legislature and the Administration to increase investment in infectious disease infrastructure and personnel** (especially for drug-resistant TB).

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: approximately 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 2016 was approximately 29.7 times higher among Asian, 18.7 times higher among black, and 9.9 times higher among Latino residents. TB interventions would also help alleviate health disparities.

We thank the HPC for the opportunity to offer recommendations. 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