Medical Advisory Committee for the Elimination of Tuberculosis
c/o Cynthia Tschampl, 129 Tremont St., Cambridge, MA 02139

October 9, 2013

Stuart Altman, PhD
Chair, Health Policy Commission
200 Independence Ave. SW.
Washington, DC 20201

Re: Request for Testimony for the 2013 Cost Trends Hearing

Dear Prof. Altman:

On behalf of the Medical Advisory Committee for the Elimination of Tuberculosis (MACET), a CDC-commissioned group of tuberculosis (TB) experts advising the Massachusetts Department of Public Health (DPH) and the Legislature on matters of TB prevention and control, we write in response to the request for testimony on health cost trends in the Commonwealth.

Three months ago, the Wisconsin Legislature passed $4.7 million in emergency funds to deal with a tuberculosis outbreak originating with one drug-resistant case. The federal government gave an additional $1.4 million, much in the form of Medicaid payments.

In order to avoid such incidents in Massachusetts, MACET recommends the Commonwealth take concrete actions to improve TB prevention efforts, including:

1. **First dollar coverage for TB services and medications;**
2. **Integration of TB prevention into select primary care clinics; and**
3. **Increased investment in TB infrastructure and expertise.**

Worldwide, TB kills more people than any infectious agent except the AIDS virus. There are two forms of the disease. One is active TB—highly contagious, airborne, and cancer-like. The other is TB infection (LTBI)—noncontagious and symptomless, but carrying the potential for transition to active TB at any time over decades. One third of the world's population carries LTBI. Diligent public health measures have kept TB mostly controlled here, but about 300,000 people in Massachusetts have LTBI. In fact, 80% of our active TB cases come from this reservoir of infections.

On discovering an active TB case, DPH immediately creates a management plan and initiates treatment to stop spread to the community. DPH then finds and tests contacts of the case and treats both active TB and LTBI. DPH also wishes to treat people with older LTBI to prevent active cases.

TB treatment demands large investments. Today, TB expertise resides almost exclusively in the public sector. Likewise, contact investigation and most case management are unavailable in the private health sector. Active TB requires at least six months of multiple toxic medications. TB is often stigmatized, so patients hesitate to start medication. Patients are tempted to quit early since symptoms resolve quickly with treatment. Caseworkers navigate these barriers and often directly administer every single dose of daily antibiotics, per CDC guidelines. Failure to complete treatment

creates drug-resistant TB that spreads through the community, which may require years of additional toxic antibiotics, including intravenous (IV). Disability and costs increase dramatically as a result.

Tuberculosis is preventable. TB prevention saves lives and health care costs. LTBI treatment can prevent nearly all active TB and its resulting contagion and sequelae. Treatment of 1,000 otherwise healthy, recently infected LTBI patients averts 117 active TB cases. At 1.4 Quality Adjusted Life Years (QALYs) and $50,000 (from all payers) per case, it saves 164 QALYs and $6 million dollars. The recent Wisconsin outbreak suggests this is an underestimate of savings. Nevertheless, we are not currently able to take advantage of this prevention opportunity.

Our eroded public structures are hard-pressed to maintain TB control efforts. The reservoir of LTBI is largely ignored. Meanwhile, for the insured patients, all cost sharing discourages health-seeking behaviors. *Out-of-pocket charges reduce acceptance and completion of TB and LTBI treatment*.

DPH used to provide free services and free medications purchased at deep discount from the CDC. For instance, rifabutin, necessary to treat HIV-co-infected patients, cost the Commonwealth $50 per month per patient in 2011. The market price was $150. IV antibiotics cost thousands *per day.* The Commonwealth shares the increase cost because a quarter of current TB patients have MassHealth, with more expected under the Affordable Care Act. In addition, medication costs are increasing due to national shortages and supply interruptions. One TB drug price has increased 20-fold already.

On a more hopeful note, there are promising new ways to make TB services more effective and efficient. Primary care clinics with close support from DPH can treat LTBI, thereby improving patient adherence and allowing a more efficient use of TB experts' time. The innovative Lynn Community Health Center, utilizing a patient-centered medical home model, is a key example. Replication will require front-end investment and long-term training and consultation on DPH's part.

Since billing TB and LTBI patients is dangerous and wasteful, the **HPC should encourage first-dollar coverage for all TB-related services and reinstitute fully subsidized TB medications.**

Since integration with the primary care sector is essential to scaling up cost-effective LTBI care, the **HPC should encourage primary care clinics in areas of high LTBI prevalence to incorporate LTBI services**.

Finally, since active TB treatment and outbreak investigation will remain public health functions, providers will need training and consultations to implement LTBI services, and DPH is no longer able to bulk-purchase all TB medicines needed, the **HPC should encourage state investment in TB infrastructure and expertise.**

We thank the HPC for the opportunity to offer recommendations. Please contact Cynthia Tschampl (Tschampl@yahoo.com) or Tom Garvey (tqgarvey@partners.org.) for questions or clarifications.

Sincerely,
Ed Nardell, MD & Tom Garvey, MD, JD,
Co-Chairs, Medical Advisory Committee for the Elimination of Tuberculosis (MACET)
Cynthia Tschampl, PhD Candidate & Hanna Haptu, MD
Co-Chairs, Systems Integration Subcommittee