

1. SPECIFIC AIMS

Health care systems in the US face complex issues that raise hard questions. Are we generating and effectively using evidence on the relative benefits and harms of medical interventions? Are we certain that our healthcare decisions truly improve population health? What mechanisms do have to meet the Triple Aim of population health, high quality care, and reasonable cost for the system? By statute, the State of Washington has developed two related but separate programs as well as other mechanisms to attempt to answer these questions and improve the health care system and reduce harms to patients while providing efficient access to worthwhile medical technologies.

In 2006, the Washington State legislature passed the Health Technology Assessment (HTA) Act ESHB 2575. The vision of the HTA program is to achieve *better health care outcomes* for enrollees and beneficiaries of state programs by paying for proven health *technologies that work*. Its mission is to Base coverage on evidence that a medical procedure, device, or test is safe, effective, and provides value.

Five years later, in 2011, the legislature passed ESHB 1311 establishing the Dr. Robert Bree Collaborative. The Collaborative is mandated to identify health care services for which there is variation in practice patterns or high utilization trends in Washington State, without producing better care outcomes for patients. The legislature noted that such situations are indicators of poor quality and potential waste in the health care system and tasked the collaborative with identifying strategies to increase the use of evidence-based best practice approaches and promulgate them on a voluntary basis in Washington State.

We propose a systematic study of the implementation of these two laws and related state-driven technology and health care topic assessments. We propose to assess the effect on health care utilization and cost and relate any changes in health care to patient outcomes, both in terms of safety and effectiveness.

Our **specific aims**, therefore, are to:

1. Collaborate with our state partner organizations, both the HTA program and the Bree Collaborative to develop the conceptual model that relates the work of these programs to changes in health care and improvements in patient outcomes.
2. Measure the effect of selected reports from HTA and Bree using a pre-post design and using data from state-funded programs, including the Medicaid program and the Uniform Benefits Plan in WA. We will measure the impact on specific use of technologies on pathway to improvements in morbidity, mortality, patient-centered outcomes.
3. Measure relative effect of these efforts by using a national claims-level data base available to the UW (Truven's MarketScan data) as a control in a quasi-experimental design. We will focus on the public health impact of these laws.
4. Use both qualitative and quantitative approaches to find problems in implementation of each program.
5. Perform an evaluation of laws and approaches taken in both programs in light of the qualitative and quantitative findings in Aim 4.
6. Make recommendations as to model legislation and implementation nationwide.

Based on our review, these two laws in Washington are unique in the US. Assessing their impact on health care and on health outcomes can provide a national model for how to use **legislation to improve population health** at the same time trying to meet the IHI Triple Aim.