

Proposed Project: Acupuncture's impacts on health care utilization amongst Vermont Medicaid and BCBS enrollees with chronic pain.

A prior study provided evidence that "Vermont patients who self-select acupuncture for the treatment of their chronic pain would benefit physically, functionally, psycho-emotionally, and occupationally." However the study was not able to assess the impact of acupuncture care on the utilization of other medical services. This is important in order to make net cost projections for the addition of acupuncture as a covered service.

The main research question the proposed study is designed to answer: Does acupuncture care effect the utilization and expenditures associated with other medical services?

Proposed Design:

Population – Medicaid patients (n=600) with chronic pain (same definition as in prior study)

Intervention – up to 12 acupuncture treatments over a one-year period delivered by a local network of licensed acupuncturists (this could be varied in subgroups if DVHA wished to analyze the effect of different benefit levels).

Controls - Comparison group (randomized or case matched) (300 each group).

Outcomes – Medicaid – utilization of other medical services; PROMIS measures

How does this project differ from the original study?

- 1) Unlike the first study, it is powered to detect differences between utilization of other medical services including changes in opiate use.
- 2) Unlike the first study, it allows for a full year of utilization, which is a much better assessment of true impact than the 60-day periods we compared in the first study.
- 3) It includes controls that will allow us to draw firmer conclusions about the causality of any changes observed.

Who would conduct the study?

The study would be designed and conducted in collaboration with DVHA by Cindy Thomas at the Schneider Institutes for Health Policy at Brandeis University along with Robert Davis at Acupuncture Vermont. Additional consultants would include Remy Coeytaux from the Wake Forest School of Medicine and Peter Wayne from the Osher Center for Integrative Medicine at Brigham and Women's Hospital and Harvard Medical School.

Additional benefit and leverage: An important opportunity to leverage this study during the analysis stage is that we will also have access to data from BCBSVT's implementation of an acupuncture benefit (likely to begin in Jan 2019), which they have generously offered to contribute to our data set. This offers a naturalistic experiment that directly complements our more traditional design. This combination of approaches, populations and data sets will bolster our confidence in and understanding of the results of the primary study.

Major Hurdle:

Although the Legislature can choose to use the Evidence Based Education and Advertising Fund to support this project, they are only able to appropriate funds for a one year time cycle (July through June). The feasibility of this approach requires two years and \$400,000. If we tried to conduct the project in one year with \$200,000, we would lack the requisite statistical power and study period to draw meaningful conclusions.

Possible remedies to overcome hurdle:

- 1) Ask the legislature to create a two-year project with one year of funding. We can provide a status update next year and request the second year of funding.
- 2) Ask DVHA or the Health Department to fund the second year out of their general budget.
- 3) Seek a funding match from a private foundation for year two.