

Spatial Analysis and Assessment of Vermont's Dental Health Landscape



Services / Expertise

Spatial Analysis
GIS Mapping
Data Discovery & Compilation
Web Hosting

Market

Government

Project Location

Montpelier, Vermont

Date Completed

2013

Project Owner

Green Mountain Care Board, State of Vermont
JSI

Project ID#

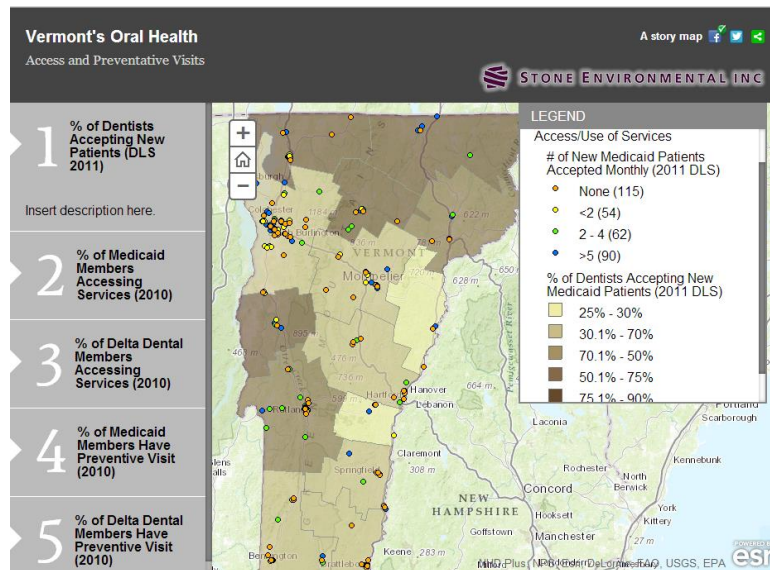
2013-052

Project Manager

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Project Team

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ArcGIS Storymap of Results.

As part of its mission, the Green Mountain Care Board (GMCB) wanted an evaluation of Vermont's current oral health care delivery and financing systems to inform system improvement and the development of solutions to reduce barriers and increase access to quality risk-based and evidence-based care. In particular, the focus of the evaluation is analyzing existing data to understand oral health status and access, reviewing and conducting a gap analysis of Vermont's Oral Health Burden Report; conducting an inventory of program services and other related programs, inventory service levels, population served and program costs; and auditing oral health financing, prevention and treatment programs/systems

Stone worked collaboratively with John Snow, Inc. (JSI) and GMCB to develop a scope and structure for conducting the spatial analysis of oral health care in Vermont to support the evaluation effort. Stone was responsible for collecting, compiling and analyzing the diverse oral health data in Vermont. The data collection focused on five content areas:

- Structural: Workforce status and distribution
- Financial: Medicaid vs. Insured
- Access & Use of Services: Availability
- Prevention: Fluoridation, Frequency
- Outcomes: Decay, Periodontal, etc.

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For each of the study topics Stone conducted a spatial analysis and mapping for multiple characteristics. These included:

Structural:

- Percent Dentists over 55 years old
- Federally qualified health center dental clinics
- FTEs per 100,000 population by Health Service Area

Financial:

- % of town insured
- % of town on Medicaid
- % of people that did not get care due to cost

Access & Use of Services:

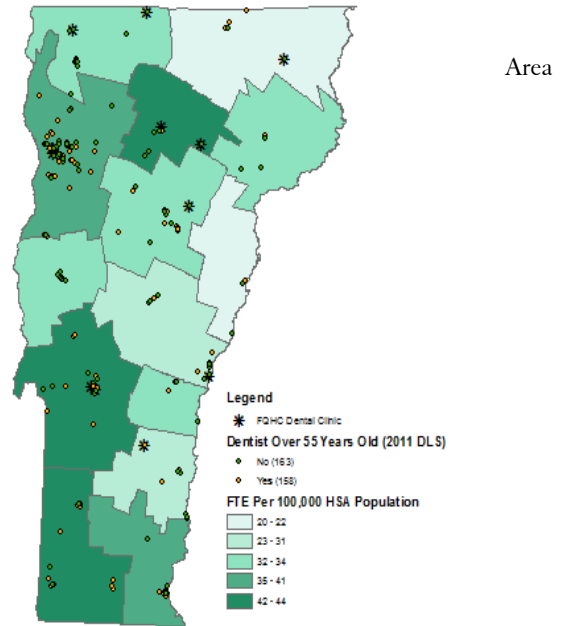
- % insured accessing services
- % Medicaid accessing services
- % insured members have had a preventive visit
- % Medicaid members have a preventive visit

Prevention:

- % of households with Fluoride by town
- % of school enrolled in Fluoride mouth rinse
- Towns with Tooth Tutor Participants

Outcomes:

- Visit frequency by HSA
- Reason for not going to the dentist by HAS
- % all permanent teeth lost to decay or disease



Aging Dentist Population with FTE/100,000 HSA Population.

Upon completion of the Spatial Analysis a series of story maps were created in ArcGIS Online for presentation to GMCB and the public. Stone and JSI presented the results to the GMCB as interactive discussion using the maps to illustrate various oral health issues and conditions in Vermont. <http://vtdentalhealth.stone-env.net/>