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Oral Health Intervention: A Multifaceted Approach to Improve Oral Health Care during Pregnancy

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INTRODUCTION

- Early Childhood Caries (ECC) is the most common chronic disease of childhood¹
- Mothers' oral health status is a **strong predictor** of the oral health status of their children^{2,3}
- **2009:**
 - Vermont spends **\$2.7 million** treating children ages 0-5 with Early Childhood Caries⁴
- **2012:**
 - Vermont lifts the \$495 Medicaid cap on reimbursement for a woman's dental care during pregnancy and up to 60 days after delivery
 - American College of Obstetrics and Gynecology (ACOG) Guidelines on prenatal dental care are published
- **2013:**
 - **74%** of surveyed Vermont providers treating pregnant women are **unaware of the Medicaid change**⁵
 - **82%** of these providers are **not using guidelines** to assess oral health during pregnancy⁵
- **Objective:** To improve prenatal dental referral rates from obstetric providers by facilitating Vermont-specific implementation of ACOG guidelines

METHODS

Oral Health Intervention (OHI) components:

1. Interactive Didactic Session
2. Oral Health Referral Protocol (OHRP)
3. Dental Kits & Pamphlet Distribution
4. Patient-Centered Brochure/Checklist
5. Educational Poster

Provider Intervention:

- **Interactive Didactic Session:** Oral health education, ACOG guidelines, local oral health resources provided to OB/GYN physicians
- **Oral Health Referral Protocol (OHRP):** Designated health providers counsel patients on oral health education, provide treatment authorization letters to dental clinics, facilitate in-clinic dental appointment scheduling. Medical students assume OHRP role once a week.

Patient Intervention:

- Distribution of dental kits with educational resource pamphlets included
- Patient-centered oral health resource pamphlets provide self-management checklist
- Oral Health Awareness Posters in COGS clinic waiting room
- OHRP connects patients to oral health care providers

Measurements:

- **Pre/Post-Intervention surveys:** To assess provider knowledge and practices
- **OHRP impact:** Total number of treatment authorization letters received and appointments scheduled at local oral health clinics

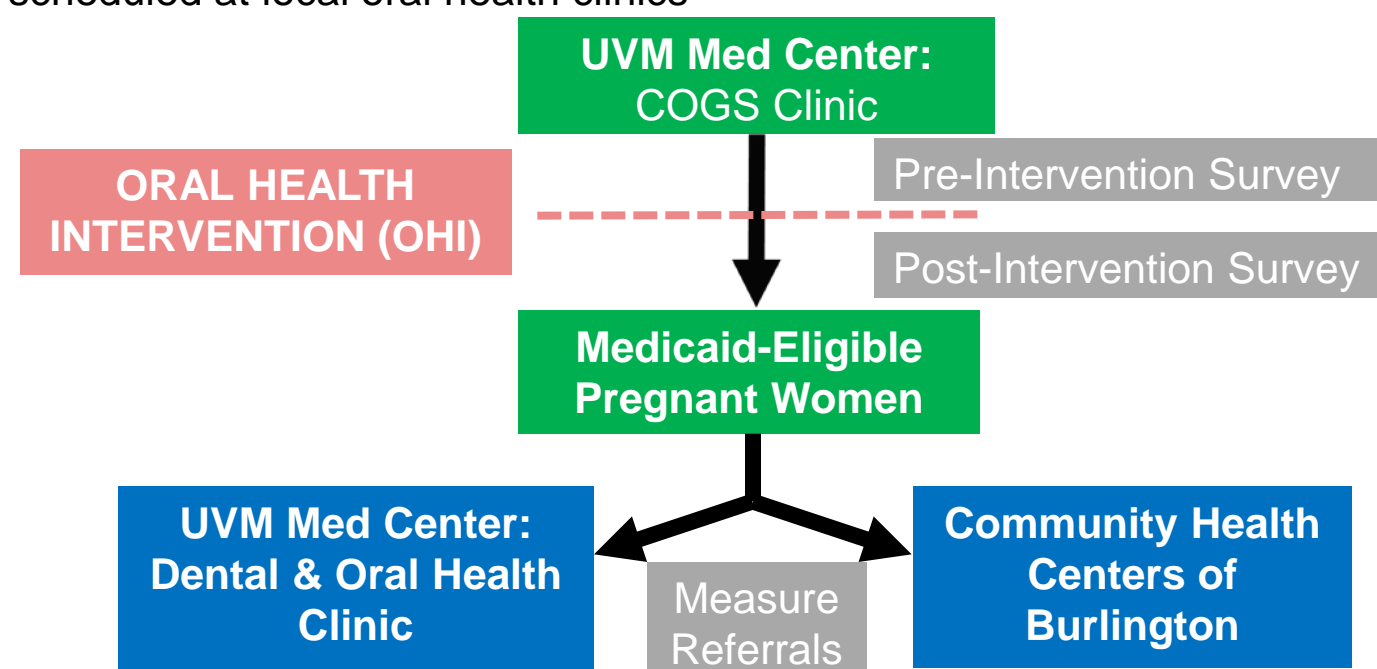


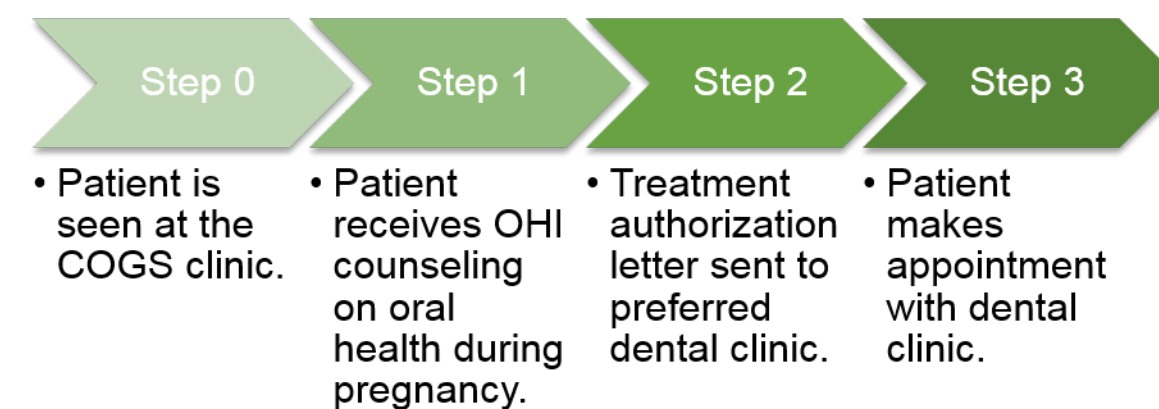
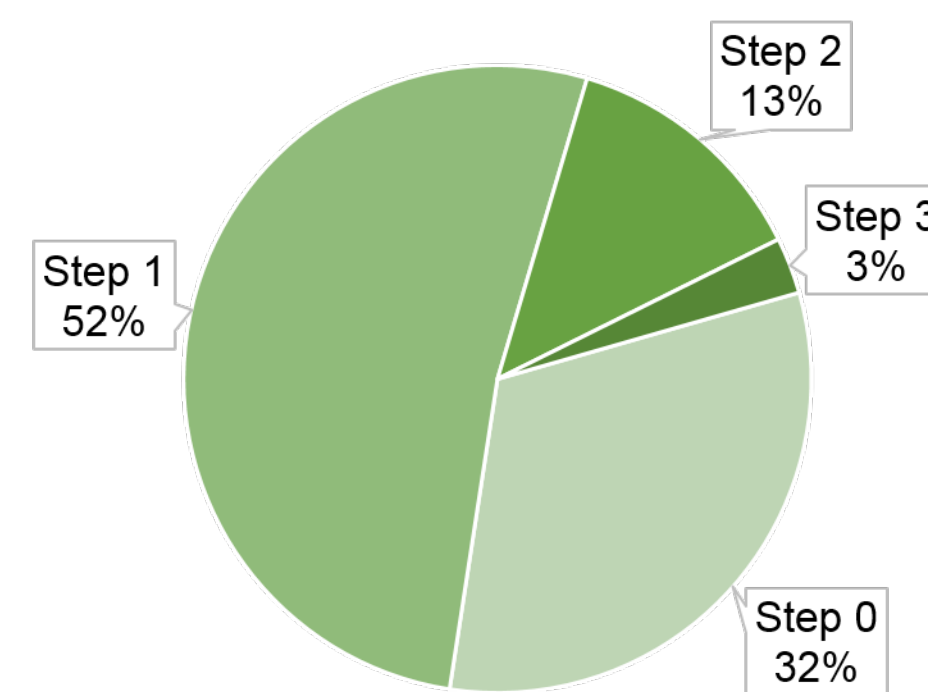
Fig 1. Oral Health Intervention Methods

RESULTS

Patient Results:

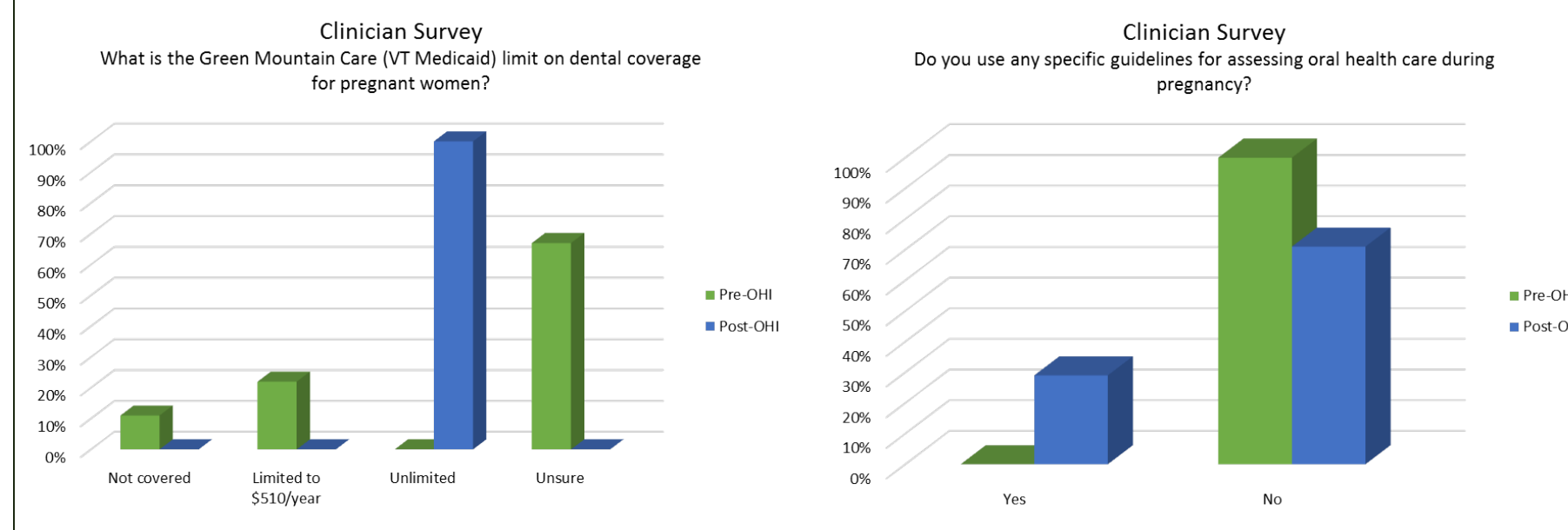
- Out of 69 patients seen at the COGS (Comprehensive Obstetrics and Gynecologic Services) Clinic from October 30th to December 12th, 2014, 47 patients were counseled about dental care during pregnancy. Of those 47 patients, 13 were referred and 2 made appointments.

OHI Impact on COGS Patients
Percentage of patients reaching OHI intervention step and not beyond.



Provider Results:

- Of the 9 physicians at the COGS clinic who were surveyed, none were aware of the current lifting of the Medicaid cap on oral health care during pregnancy. After administration of the OHI didactic session, 100% are aware of the cap lifting.
- With this knowledge, physicians are more likely to utilize ACOG guidelines



DISCUSSION

Conclusions

- The data suggest that the OHI is a feasible model for improving access to oral health care among Medicaid eligible pregnant women of Chittenden County

Limitations

- 98% of patients at the COGS clinic are undergoing substance abuse treatment during pregnancy, increasing barriers to care
- Time limitations caused difficulties in tracking dental appointment attendance
- Our OHI model was limited to two oral health clinics in Chittenden County
- Patients with existing dental care providers were not excluded from counseling
- OHI application consistency was challenged by busy departmental workflow



Future areas of exploration

- Our study builds upon previous research to assess OB/GYN provider knowledge of the lifting of the Medicaid cap and to assess patient barriers to dental care
- Future areas of interest include helping pregnant women follow through with appointments by reducing other barriers such as transportation
- Incorporating ACOG oral health recommendations into the UVM Medical Center health record system may facilitate consistent patient counseling and referrals



Fig 2. OHI Poster & Brochure with checklist (left). Oral Health Intervention desk at COGS Clinic (right).

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