**Background**

- The pediatric vaccine schedule is front-loaded in the first 4 years of life. The vaccines schedule picks up back up in the adolescent years.
- Children under the age of 5 have more preventative visits with doctors.1
- Well child check rates decrease in adolescents compared to their younger counterparts.4
- Children older than 9-years of age typically see dentists more often than their primary care doctors.1
- The rates of Well Child Checks and Vaccination rates dropped during the COVID-19 pandemic.3
- Dentists play key roles in preventative health (diet, oral hygiene, etc.) but past studies have found that most dentists feel uncomfortable counselling on topics such as vaccines.1
  - The HPV vaccine is of particular importance to dentistry as HPV can cause oral cancers.
- There is an opportunity for dentistry and medicine to collaborate in adolescent preventative health topics such as vaccines.

**Study Purpose and Aims**

**Purpose:** Create a collaborative process between dentistry and medicine to increase vaccination rates and WCC in children aged 9-17.

**Aims:**
1. To increase vaccination rates of the Tdap, MCV4 and HPV9 vaccines by 5% in patients aged 9-17 through vaccination at pediatric dental visits and through assisted scheduling.
2. To increase WCC rates through reminders during dental visits and assisted scheduling for overdue patients.

**Patient Population**

- Patients aged 9-17 overdue for Tdap, MCV4, HPV or WCCs on the day of their dental appointment.
- Data Collected from 5/24/2021-10/29/2021
- Patients from three pilot sites at a large Federally Qualified Health Center in Denver, CO
  - Eastside, Westside, Montbello Clinics
- Dental clinics were co-located with medical clinics
- Share EMP
- N=627 Patient Encounters

**Methodology: In Clinic**

Worked with staff across all three clinics to create the workflow below:

- **Dentists received education on vaccines.**
- **Front desk staff ran daily reports of children overdue for vaccines or WCC.**
- "Overdue" stickers placed on identified patient charts. Flyers were also placed in exam rooms.
- **Dentists/Hygienists discussed overdue status with patients and parents.**
- **Amenable patients sent to pediatrics clinic to get same day vaccination from clinic Medical Assistants.**
- **If unable to get same day vaccine, assisted in scheduling WCC or vaccine appointment.**

**Methodology: Data Collection**

- Ran daily EPIC reports to identify patients who were overdue for HPV, Tdap, MCV or WCC.
- Weekly chart review conducted on identified patients to determine if vaccines were administered during their dental visit.
- Patients that did not receive vaccines or were overdue for WCC were identified.
- Identified patient data was sent to clinic clerical staff for follow up scheduling.
- Chart Review was conducted again >30 days after dental visit to identify patients who had completed WCC within 30 days of their dental visit.

**Results**

**Vaccinations:**
- **N=627**
- 10% of patients (N=54) were vaccinated the same day after reminders from their dental provider.
- 9% (N=58) were vaccinated within 30 days of their dental visit with assisted scheduling.
- 3.38% of ALL vaccines given in 2021 in the months of the study were found to be secondary to the MDI intervention.

**Well Child Checks:**
- 1.2% increase in WCC from MDI alone across all three clinics.

**Montebello was more efficacious than the other clinics.**

**Summary & Conclusions**

- Adolescents typically see the dentist more often than their medical providers.
- Patients are receptive to discussing routine vaccinations in the dental setting.
  - 10% of patients who were overdue for vaccines at the time of their dental appointment were vaccinated the same day.
  - Montebello clinic had 16% efficacy.
  - 3.38% increase in vaccine administration across all three clinics.
  - 7.3% increase at Montebello.
- 1.2% of WCC in 2021 across all three clinics were due to MDI intervention.
- The dental office appears to be an effective and appropriate place to offer reminders regarding vaccines and preventative health measures.
- Dentists, dental assistants, and auxiliary team members play a powerful role in promoting and improving WCC compliance and vaccination rates.

**Future Work**

- Increasing efficacy: Part time MA specific to Dental Clinic, legislative work, narrow focus to one clinic
- Expansion: Addition of other vaccines, increasing age range to include younger children or adults

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