

## Introduction/Background

- The American Academy of Pediatric Dentistry identifies the documentation of current medications and allergies as an essential component of a patient's medical record.<sup>1</sup>
- It is pertinent for parents and guardians to disclose this information to aid clinicians in providing high quality healthcare.<sup>2</sup>
- Well-informed dentists can avoid medical emergencies including cross-reactivity of drugs, allergic reactions, and other adverse events.<sup>3</sup>
- Current literature demonstrates parents may be unreliable and cannot always accurately disclose their child's complete health histories.<sup>4,5</sup>
- Several barriers exist which prevent parents from accurately reporting their child's health information such as intentional concealing, language barriers and low health literacy levels.<sup>6,7</sup>
- There continues to be poor integration between different medical record systems limiting availability of health information to dentists.<sup>8</sup> This can lead to jeopardizing patient safety and quality of care.<sup>9</sup>

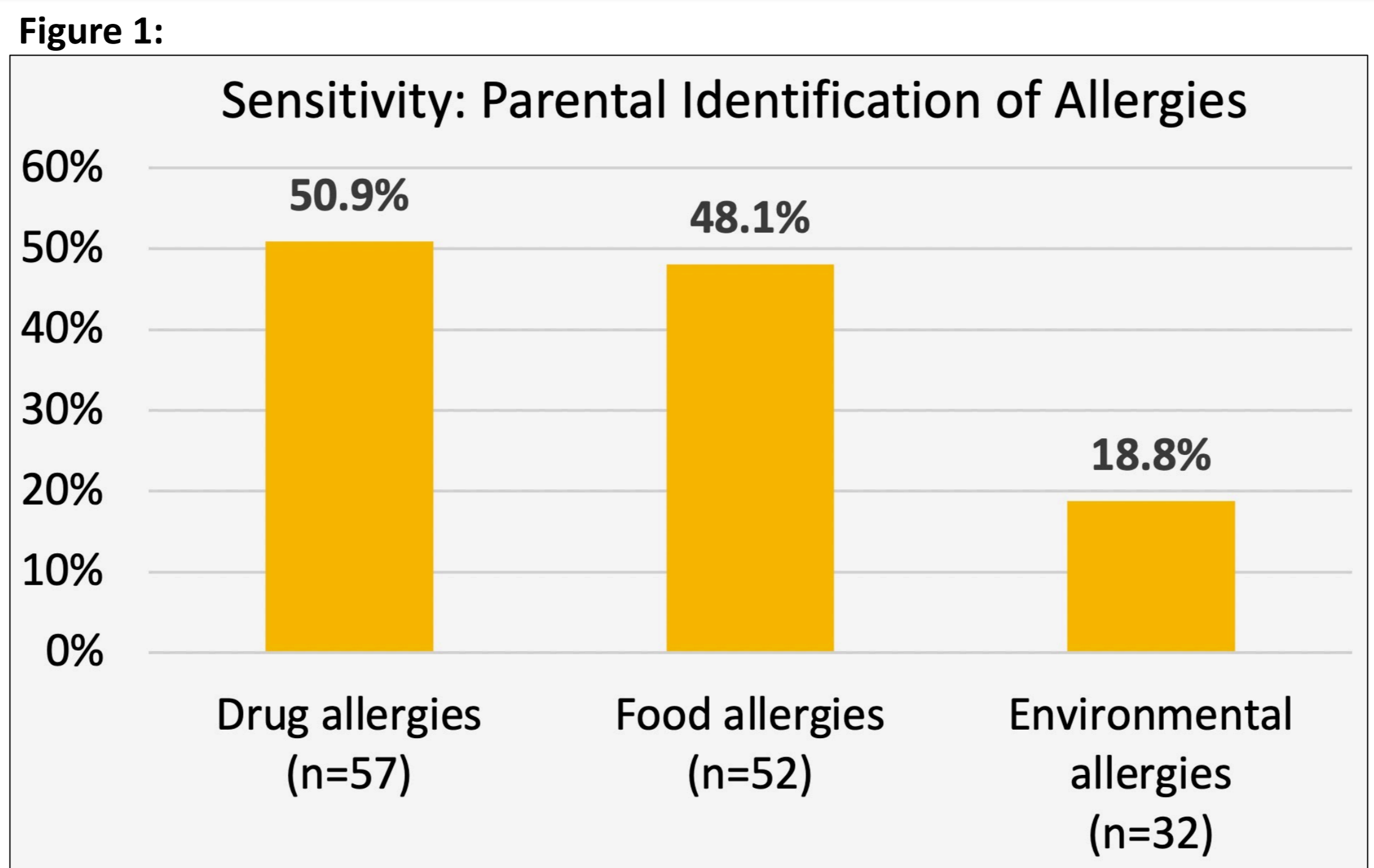
## Methods

- A retrospective chart analysis was performed for a total of 862 eligible patients who were seen in the Pediatric Dental Department at Franciscan Children's Hospital between June 1<sup>st</sup>, 2019 and June 1<sup>st</sup>, 2021.
  - Inclusion criteria:** Patients 17 years and under who presented with their parents and were required to obtain medical consultations prior to initiating dental treatment.
  - Exclusion criteria:** Patients with incomplete or illegible records; and those who presented with non-parents (e.g. other family members, legal guardians, caretakers).
- Allergies were categorized into 3 groups: food, environmental, and drug. Each category was compared to the physician-reported allergies to assess for accuracy.
- Medications reported by the parents were also recorded and compared to the total number of medications reported by the physician, which was subsequently identified as a full, partial, or non-match.

## Objectives

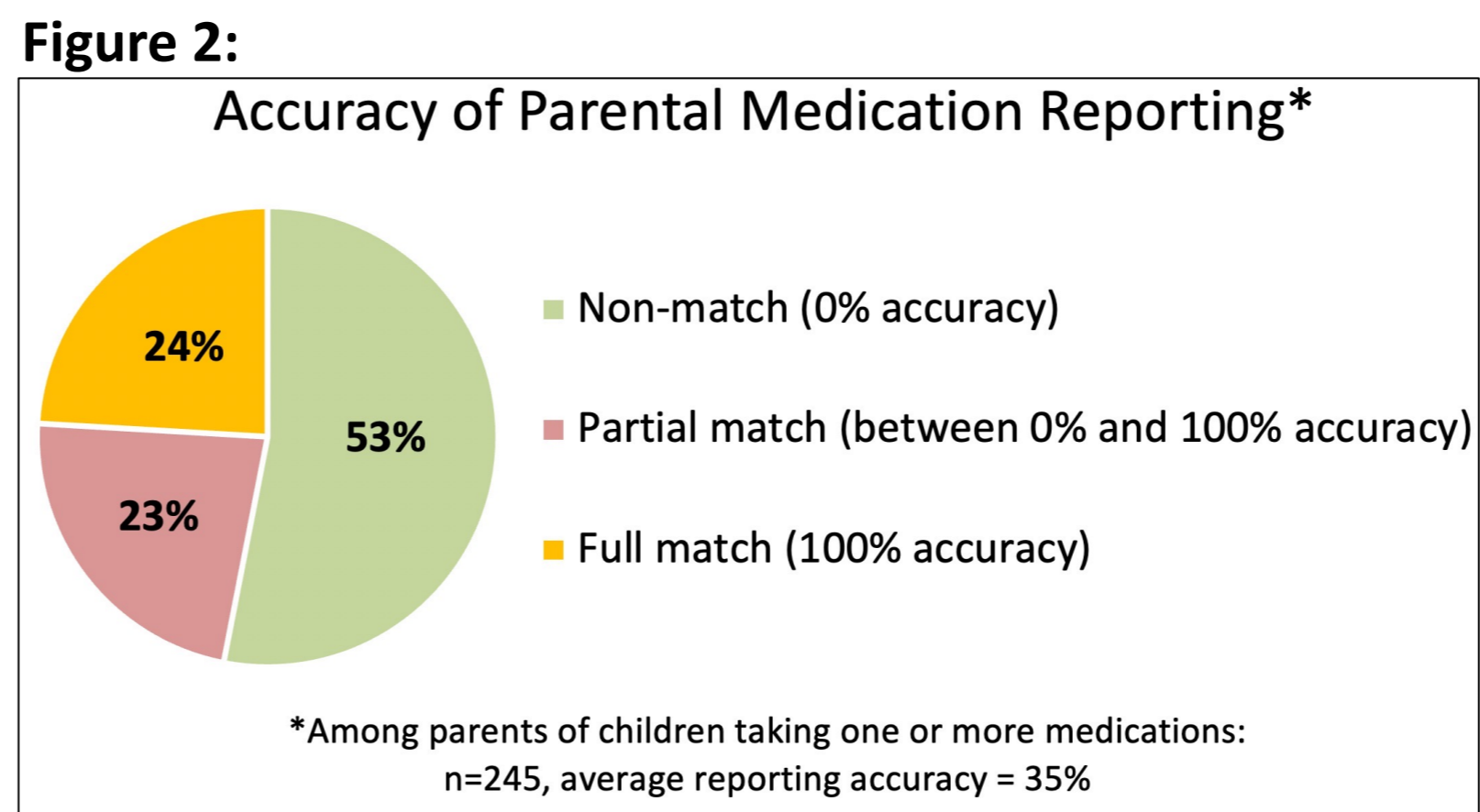
- To measure the accuracy of parent-reported allergies and medication usage by comparing parental reports during dental consultations to medical reports from their child's physician, following history and physical examination.

## Results



**Table 1:**

Physician-reported Medications		
Drug count	% of Total Study Sample	Count (Total n= 862)
0	71.6%	617
1	14.3%	123
2	7.1%	61
3	3.5%	30
4	1.6%	14
5	1.3%	11
6+	0.7%	6



## References: (please scan to view)



## Discussion Summary

**Table 2:**

Most common medications in study sample			
Drug	% (n=862)	N	Effects on Dental Treatment <sup>10</sup>
Albuterol	9.2%	79	Infrequent occurrences of xerostomia, glossitis, sinusitis, unpleasant taste; rare occurrences of dysgeusia and tongue ulcers
Cetirizine	3.2%	28	Xerostomia; rare occurrences of aphthous stomatitis, altered taste, orofacial dyskinesia, stomatitis, tongue edema, tongue discoloration
Flovent	2.9%	25	Localized infections in mouth/pharynx with <i>Candida albicans</i> or <i>Aspergillus niger</i>
Clonidine	2.9%	25	Take caution with vasoconstrictor use, can prolong QT interval/cause torsade de pointes, xerostomia, headache, abnormal taste, orthostatic hypotension
Methylphenidate	2.4%	21	Xerostomia, tachycardia, increases in blood pressure and palpitations, take caution when using local anesthetic with a vasoconstrictor, symptoms associated with bruxism have also been observed
Ferrous sulfate	2.4%	21	Liquid preparations may temporarily stain teeth (which can be mistaken for cavities), contraindicated to prescribe tetracyclines simultaneously with iron since GI tract absorption of both tetracycline and iron may be inhibited
Guanfacine	1.7%	15	Xerostomia & changes in salivation (normal salivary flow once discontinued)
Risperidone	1.5%	13	Can cause torsade de pointes, frequent drooling, xerostomia, orthostatic hypotension, tardive dyskinesia, sinusitis, congestion have been reported; rare occurrences of dysgeusia, tongue paralysis/spasm and trismus
Adderall	1.3%	11	Caution with vasoconstrictors since amphetamines enhance the sympathomimetic response of epinephrine leading to potential hypertension and cardiotoxicity; frequent xerostomia; infrequent speech disturbances, clenching, and bruxism

- Utilizing interprofessional collaboration between dentists and physicians can aid in obtaining accurate medical history reports in a pediatric dental setting.
- Interprofessional initiatives including the establishment of a shared electronic medical record, shared co-location for dental/medical home, additional provider training in interprofessional education, patient education materials,<sup>11</sup> and medication diaries/allergy cards may provide a solution to the disconnect between medical and dental professionals.

## Conclusion

- In conclusion, discrepancies exist between parent-reported and physician-reported medications and allergies.
- This study highlights the need for educating patient families and dental providers on the importance of collecting information on patient medications and allergies in the interest of providing safe dental care.
- Future studies should aim to better understand causes of discrepancies between dental records and medical records.