

ARKANSAS DENTAL CARE UTILIZATION ANALYSES

Sarah Crawford
ACHI Senior Data Analyst

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PROJECT OVERVIEW

- ACHI completed analyses and a report on dental care utilization in AR
- Funded by Delta Dental of Arkansas Foundation, the project supports improved dental care utilization and oral health in Arkansas
- Uses APCD data, supports the Healthcare Transparency Initiative
- Released in 2022; picked up by several media outlets
- <https://achi.net/oralhealth/>



PROJECT OVERVIEW: KEY MEASURES

- Coverage profiles by county
- Pandemic-era utilization trends (2019-2020)
- Utilization of preventive dental visits and other service types
- Utilization of dental care in other medical settings
- Analyses of active providers per county and ratio to population
- Fluoride varnish application trends in dental, medical settings
- Utilization of dental services among uninsured individuals within emergency medical settings

KEY FINDINGS

- 54% of residents have evidence of dental coverage in APCD (1.6 million individuals)
- Claims analyses found too few individuals seek preventive dental services
- COVID-19 dramatically impacted utilization in the state, but utilization mostly returned to pre-COVID baseline levels
- Some counties have a patient-to-active-dentist ratio higher than HPSA thresholds

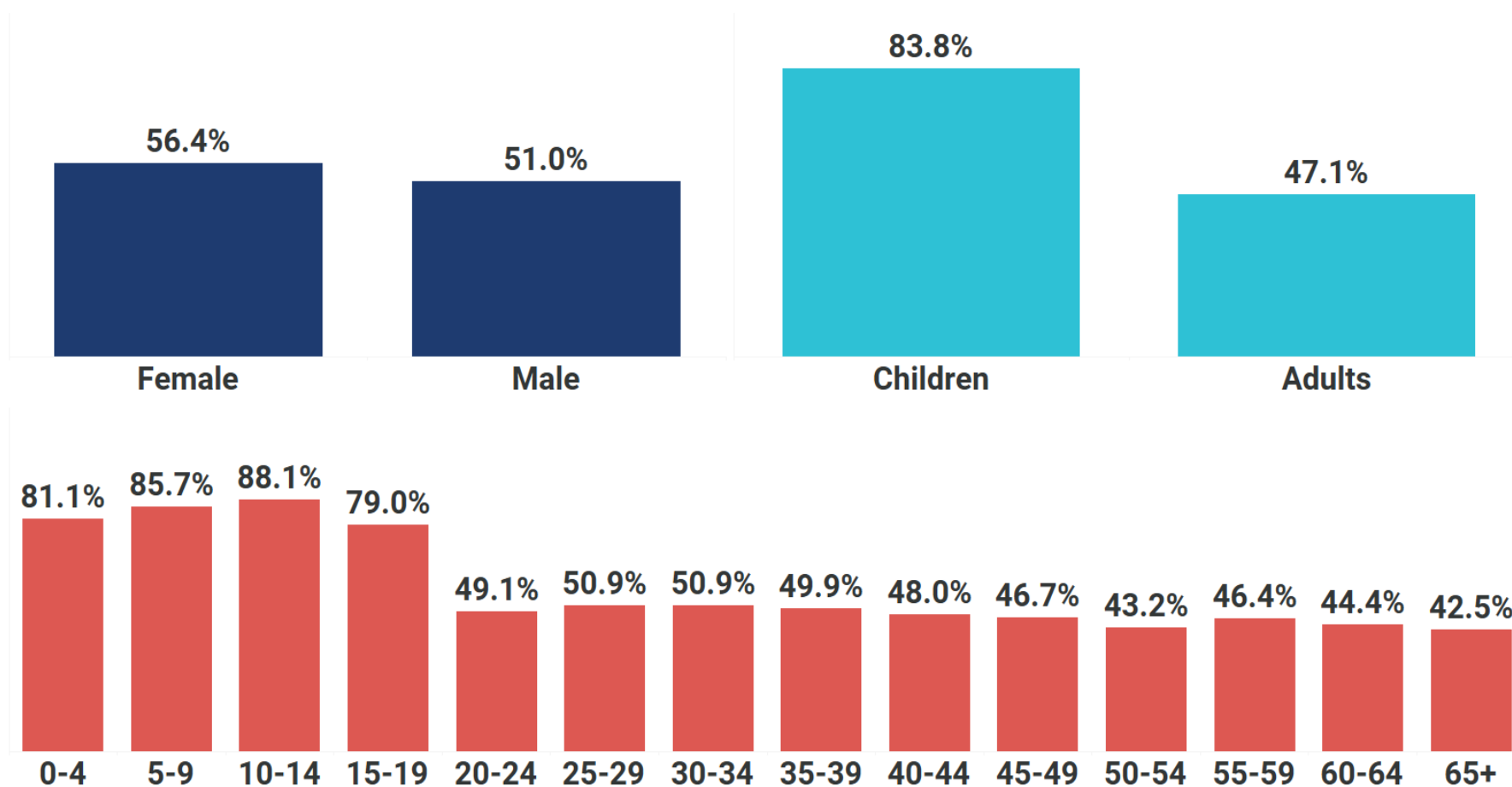
KEY FINDINGS (CONT.)

- Individuals with private dental coverage utilized preventive services at higher rate than adults on traditional Medicaid, with variation across counties
- Many individuals seek dental care in medical settings including emergency departments; utilization was generally lower among individuals who had preventive care in previous years
- Many with no insurance sought dental care in EDs; associated annual charges totaled \$6 million

KEY FINDINGS (CONT.)

- Fluoride varnish applications by dental and medical providers have generally increased annually since 2013
- Analyses of opioid prescribing for tooth extractions found providers generally followed guidelines, with 3-4 day supply being prescribed on average; could support updated guidelines for prescribing

PERCENTAGE OF RESIDENTS WITH EVIDENCE OF DENTAL COVERAGE IN APCD, 2019

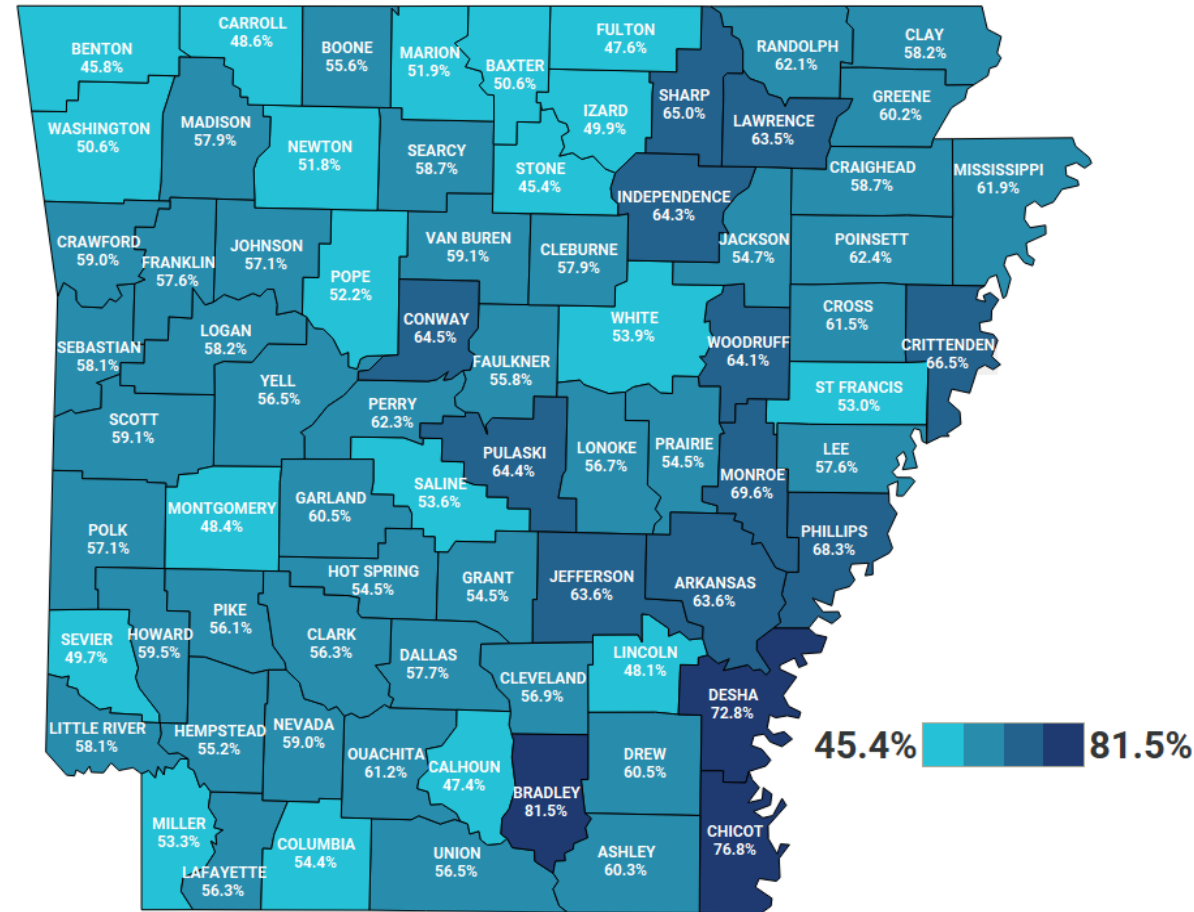


Note: Percentage calculated using 2019 Census ACS Arkansas Population Estimates

Source: Arkansas Center for Health Improvement Analysis of Healthcare Transparency Initiative's (HTI) Arkansas All Payer Claims Database data



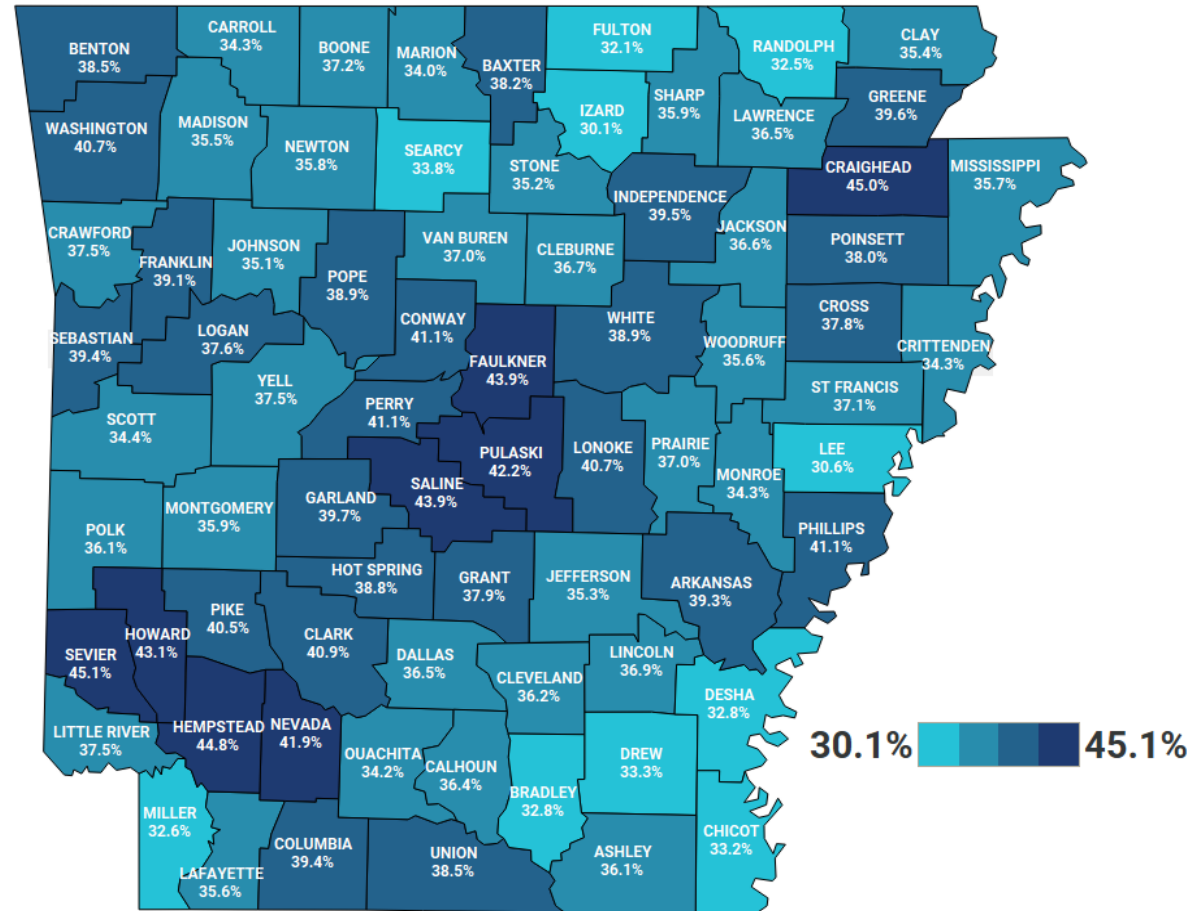
PERCENTAGE OF RESIDENTS WITH EVIDENCE OF DENTAL COVERAGE IN APCD, 2019



Note: Percentage calculated using 2019 Census ACS Arkansas Population Estimate



PERCENTAGE OF INDIVIDUALS WITH UTILIZATION OF ANY DENTAL SERVICE, 2019



Note: Services as evidenced by having an available claim. Non-claims based services are not included.
 Source: Arkansas Center for Health Improvement Analysis of Healthcare Transparency Initiative's (HTI) Arkansas All Payer Claims Database data

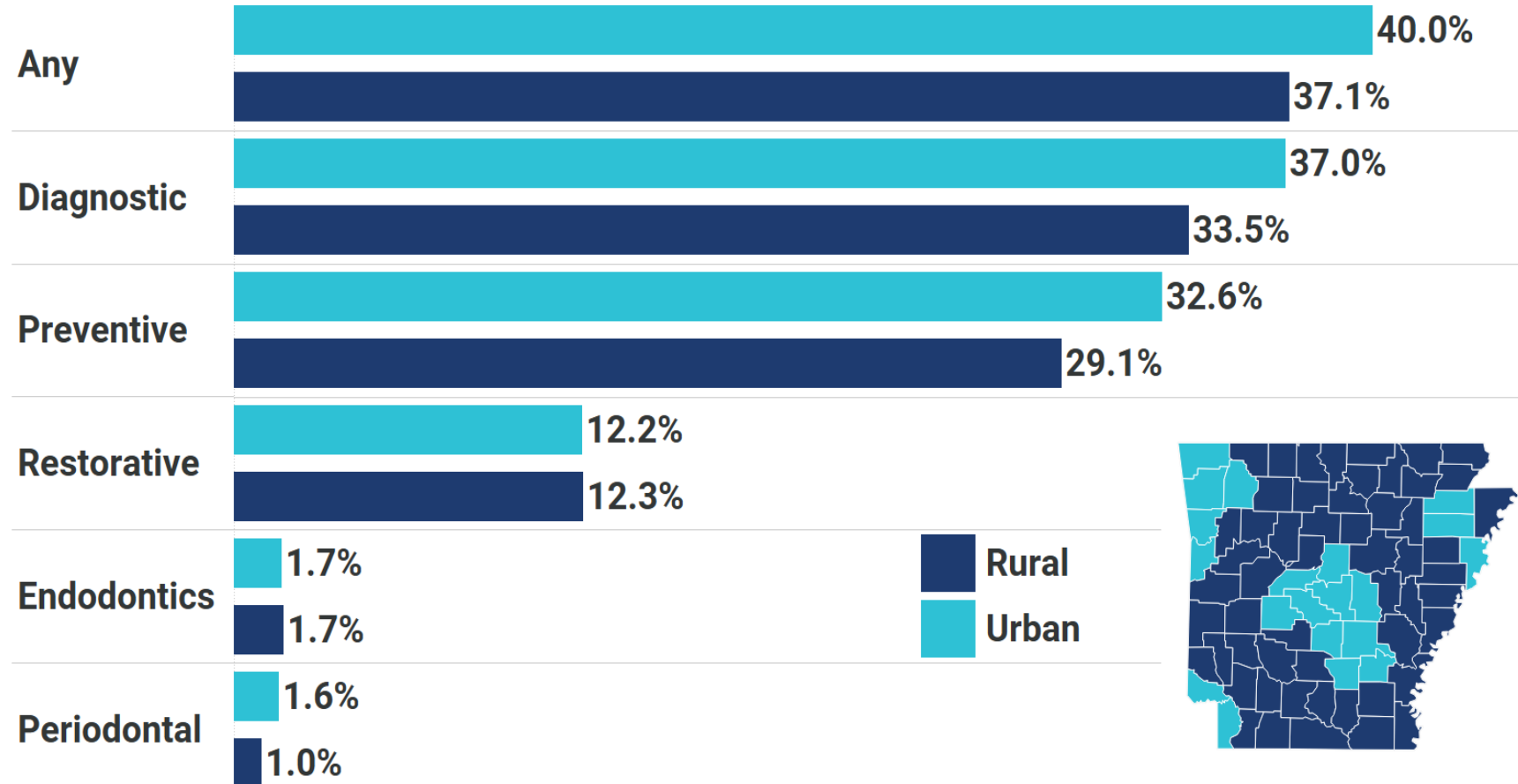


DENTAL PROCEDURE CODE GROUPS: EXAMPLES OF COMMON PROCEDURES

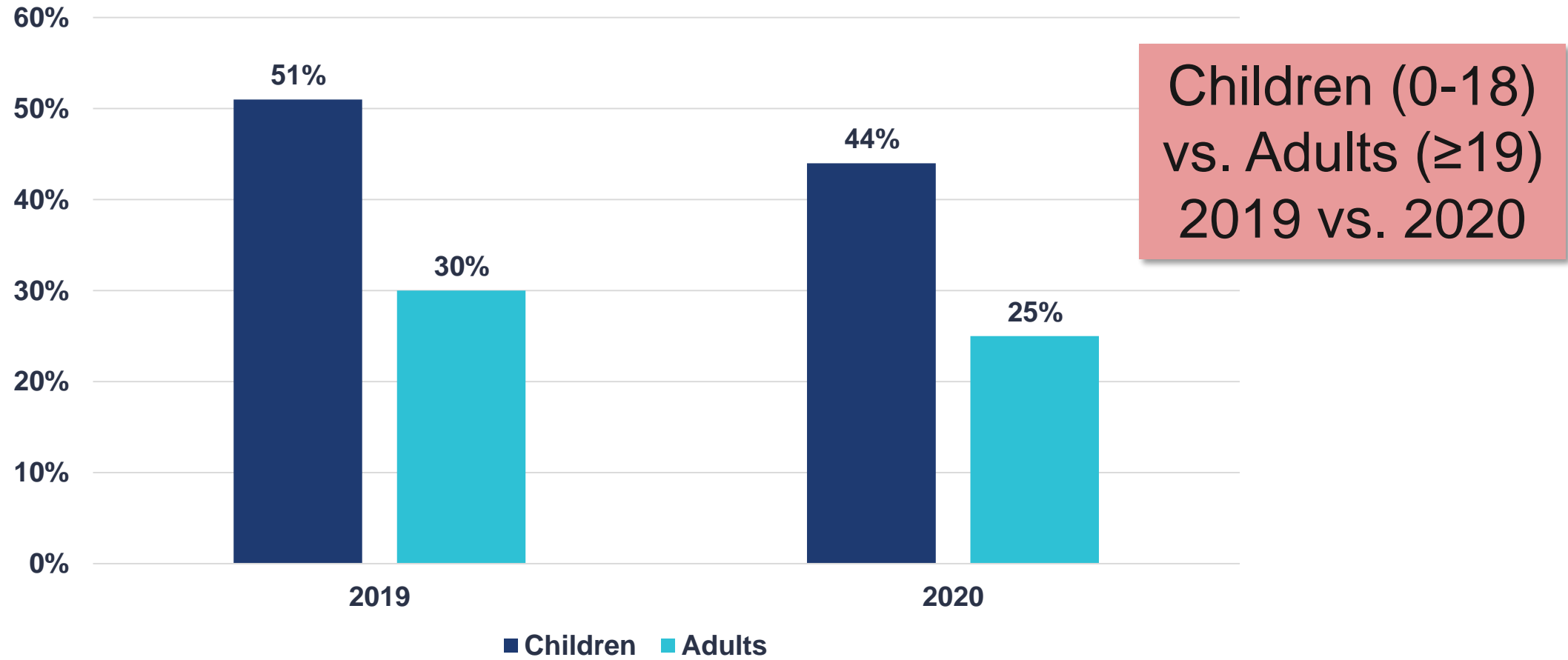
CDT Groupings	Examples of Types of Procedures Included
Diagnostic (D0100-D0999)	Periodic, limited, or comprehensive evaluations, diagnostic imaging such as bitewings and other radiographic images, oral pathology lab tests, etc.
Preventive (D1000-D1999)	Teeth cleanings, fluoride varnish applications, sealants, space maintainers, tobacco counseling, nutrition counseling, etc.
Restorative (D2000-D2999)	Treatment of cavities including amalgam restorations, resin-based restorations, inlays and outlays, crowns, veneers, etc.
Endodontics (D3000-D3999)	Root canal treatments, pulpotomies/surgical removal of pulp soft tissue, direct and indirect pulp capping, apicoectomies (root surface surgery), etc.
Periodontics (D4000-4999)	Gingivectomies or gingivoplasties (gum removal or reshaping), implants, root planning (cleaning of infected root surface), bone grafting, etc.



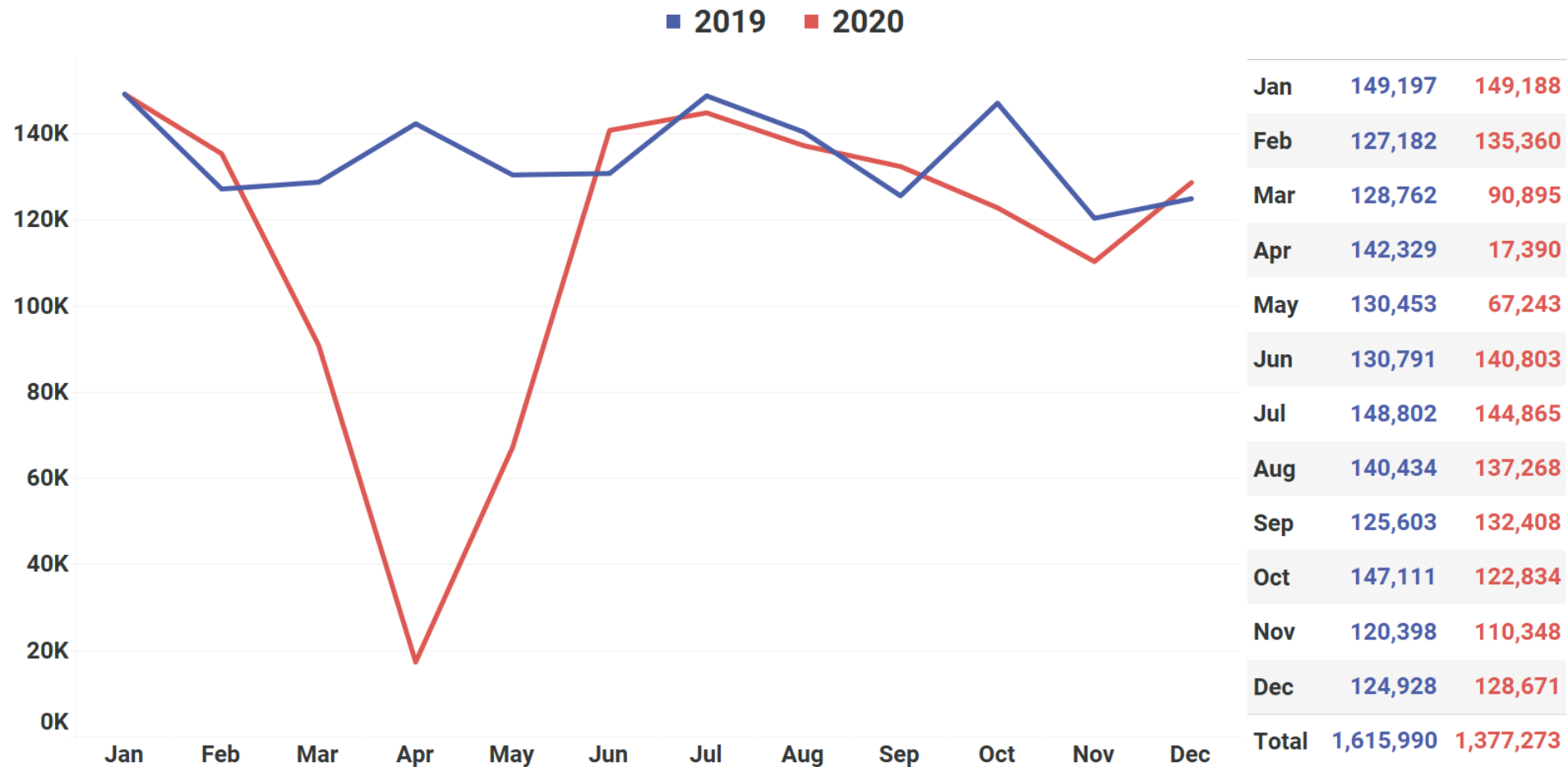
DENTAL UTILIZATION BY SERVICE, URBAN VS. RURAL, 2019



PROPORTION OF INDIVIDUALS WITH DENTAL COVERAGE WHO UTILIZED ANY DENTAL SERVICES



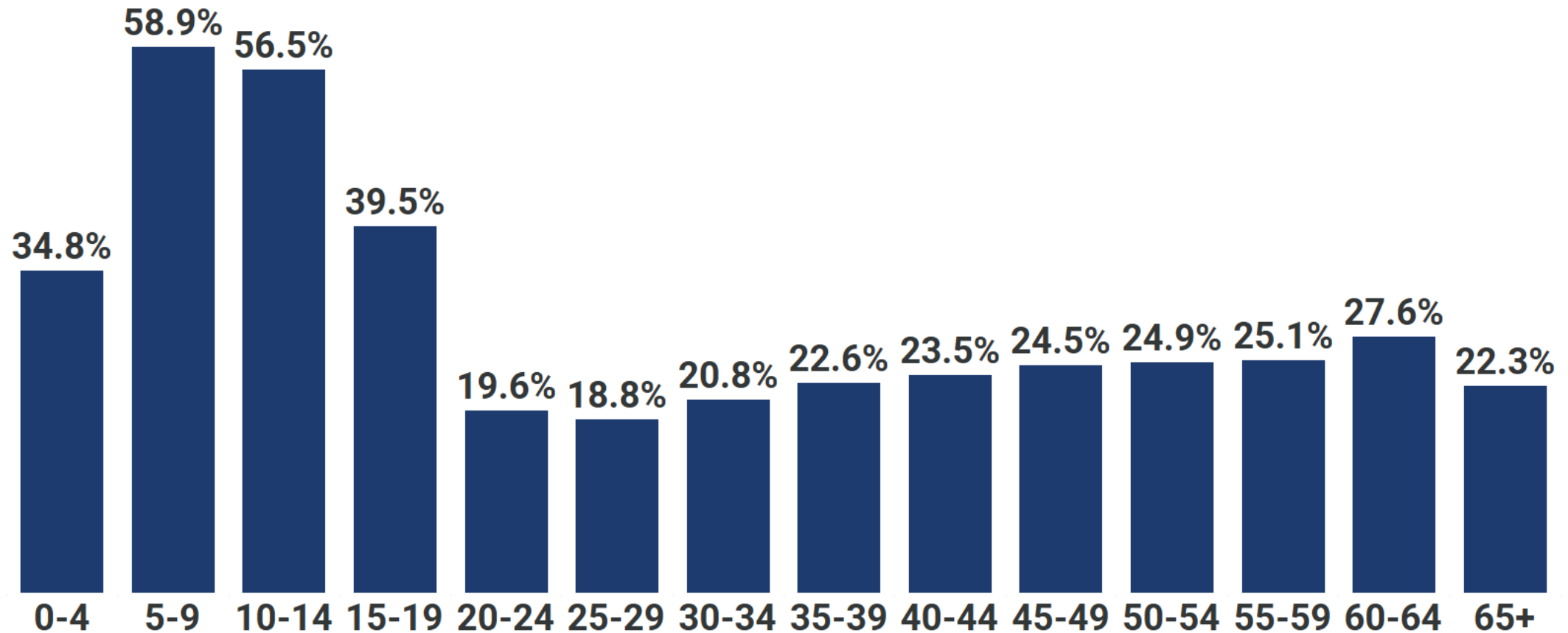
2019-2020 UTILIZATION OF ANY SERVICES IN DENTAL SETTINGS



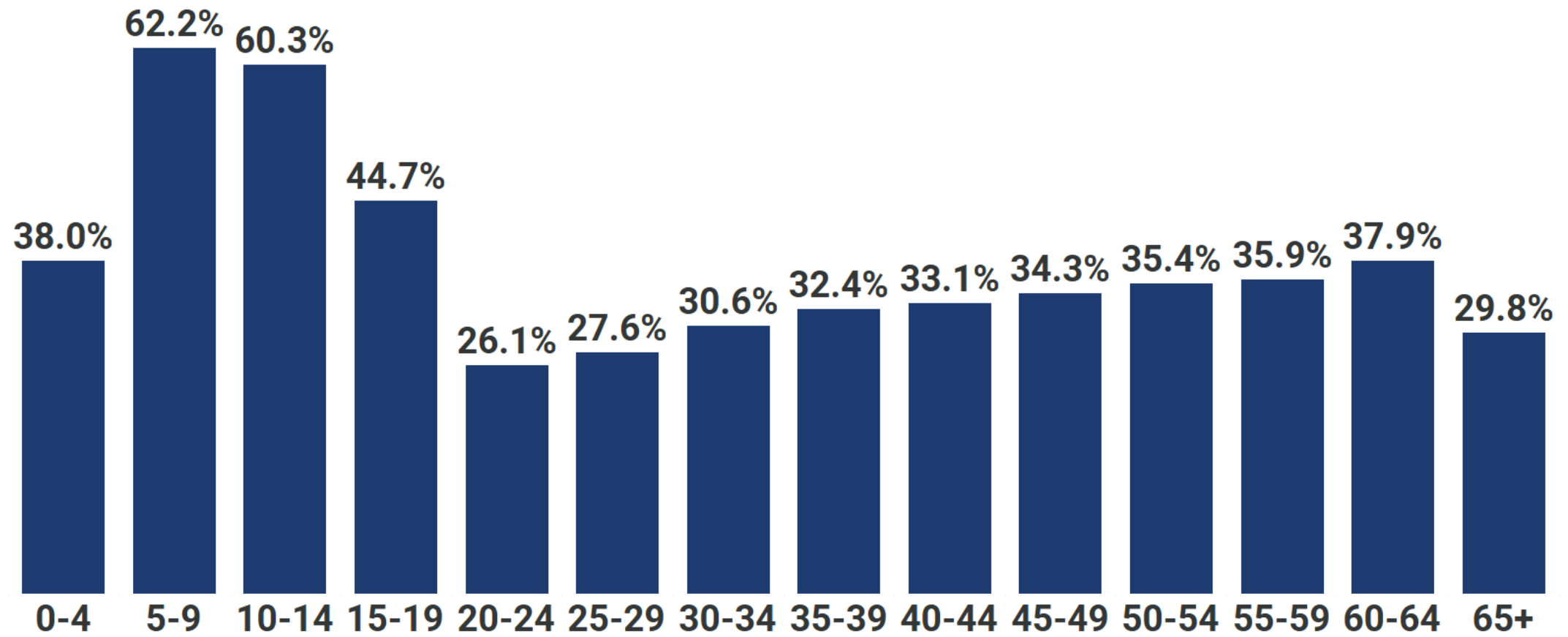
Source: Arkansas Center for Health Improvement Analysis of Healthcare Transparency Initiative's (HTI) Arkansas All Payer Claims Database data



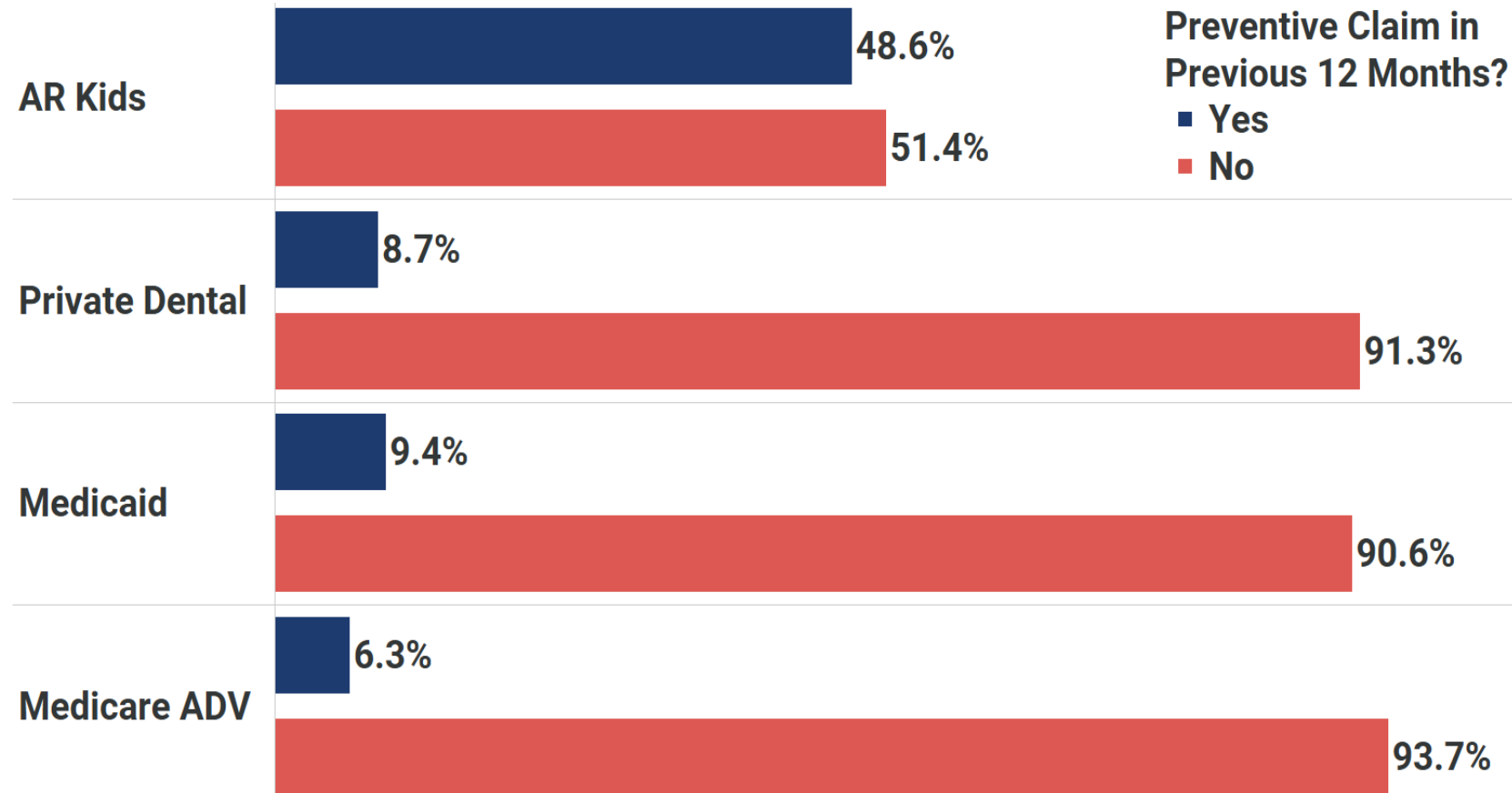
DENTAL UTILIZATION BY AGE GROUP, PREVENTIVE SERVICES ONLY, 2019



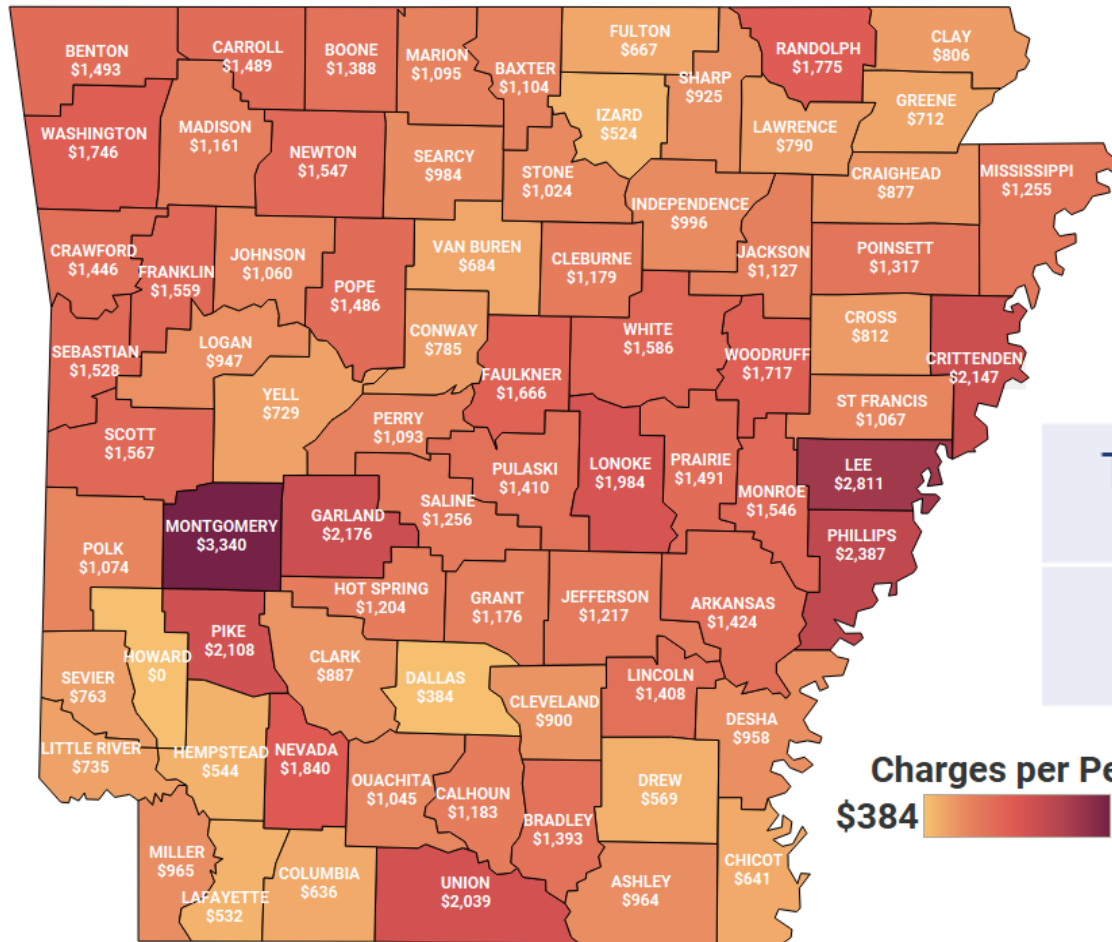
DENTAL UTILIZATION BY AGE GROUP, ANY SERVICES IN A DENTAL SETTING, 2019



PREVIOUS HISTORY OF PREVENTIVE VISITS AMONG PEOPLE WITH DENTAL SERVICE CLAIMS IN MEDICAL SETTINGS, BY DENTAL COVERAGE TYPE, 2019



AVG CHARGED AMOUNT, ED VISITS FOR DENTAL SERVICES AMONG UNINSURED, 2019

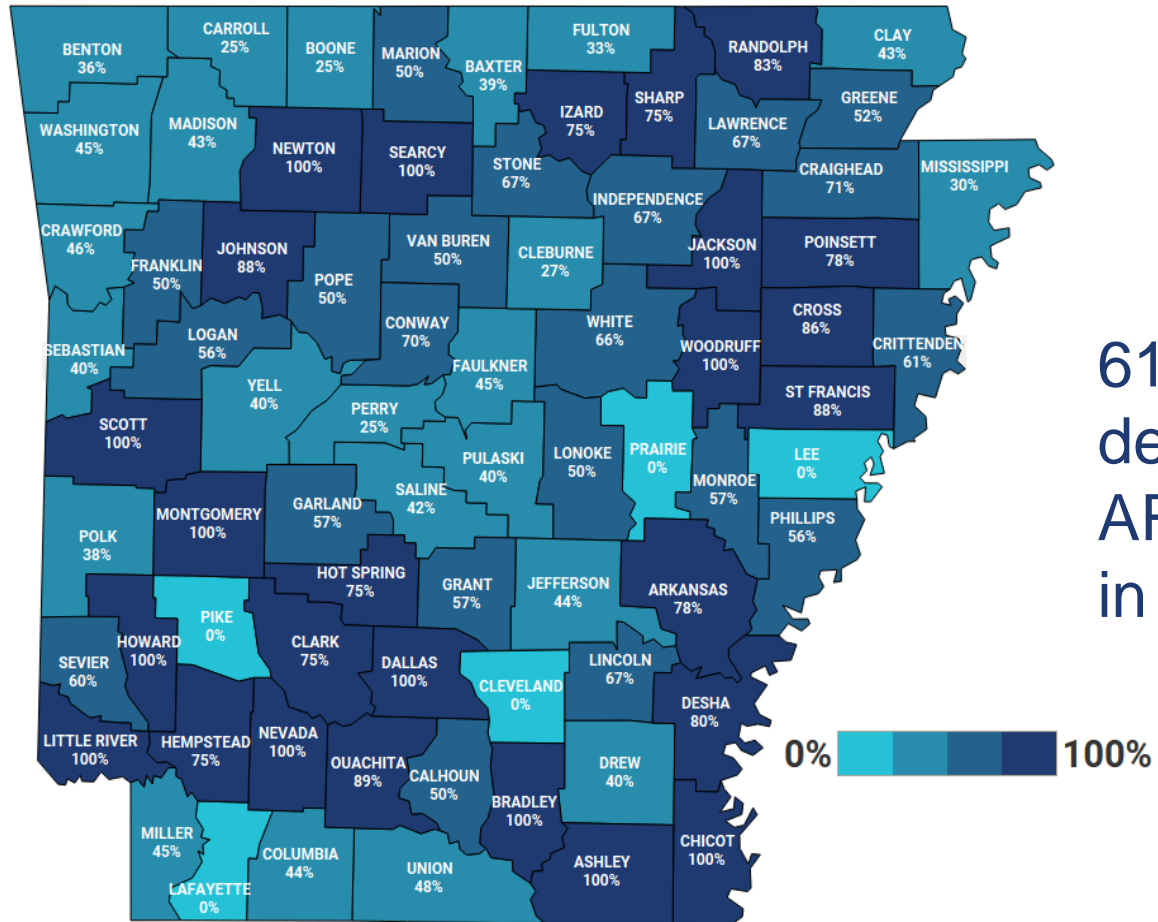


Total Dental Related ED Visits Among Uninsured	3,997
Total Charged Amounts for Uninsured Patient Visits	\$5,587,630

Charges per Person
 \$384 \$3,340



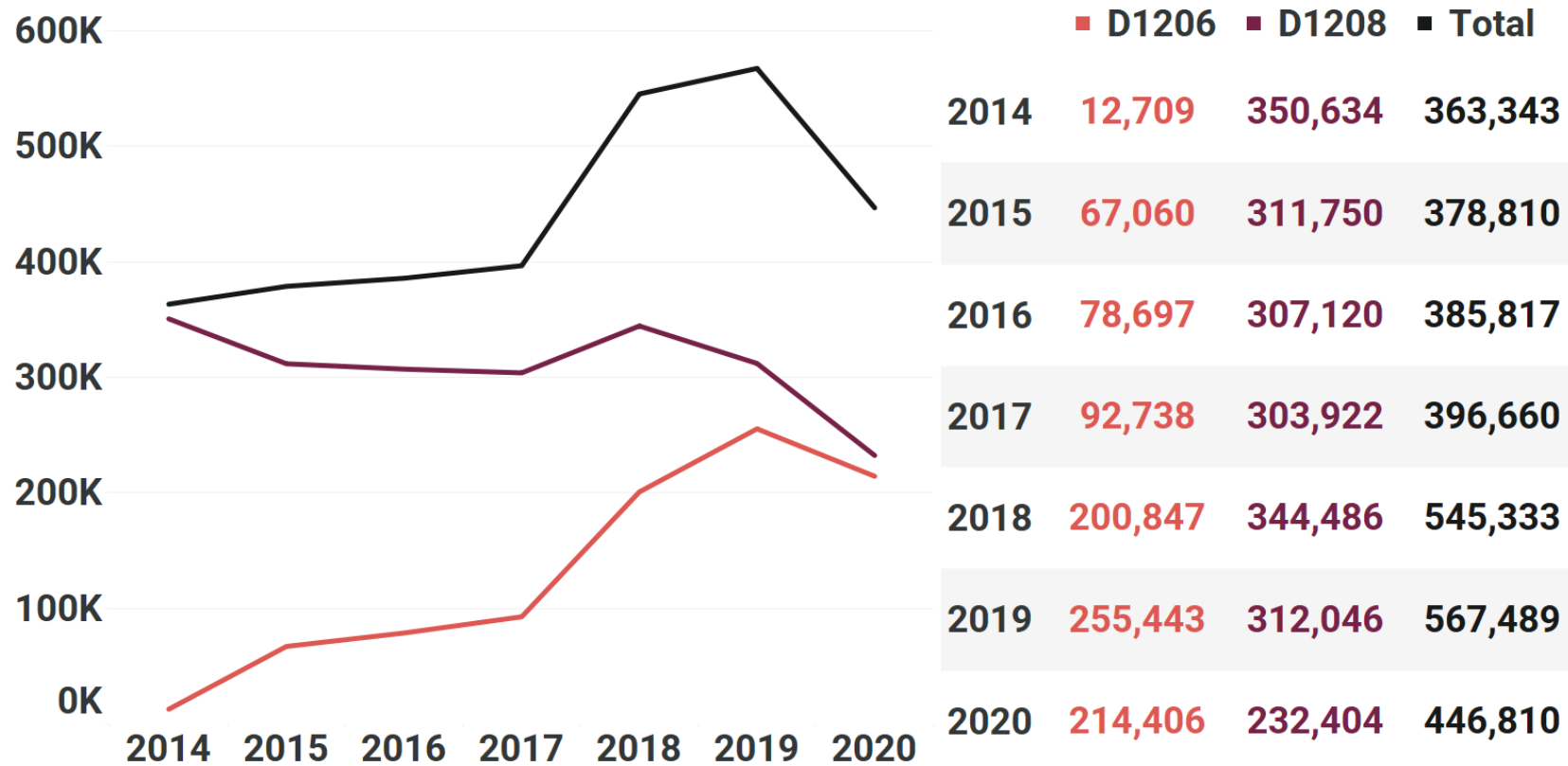
DENTISTS PROVIDING ANY SERVICES FOR CHILDREN WITH ARKIDS, 2019



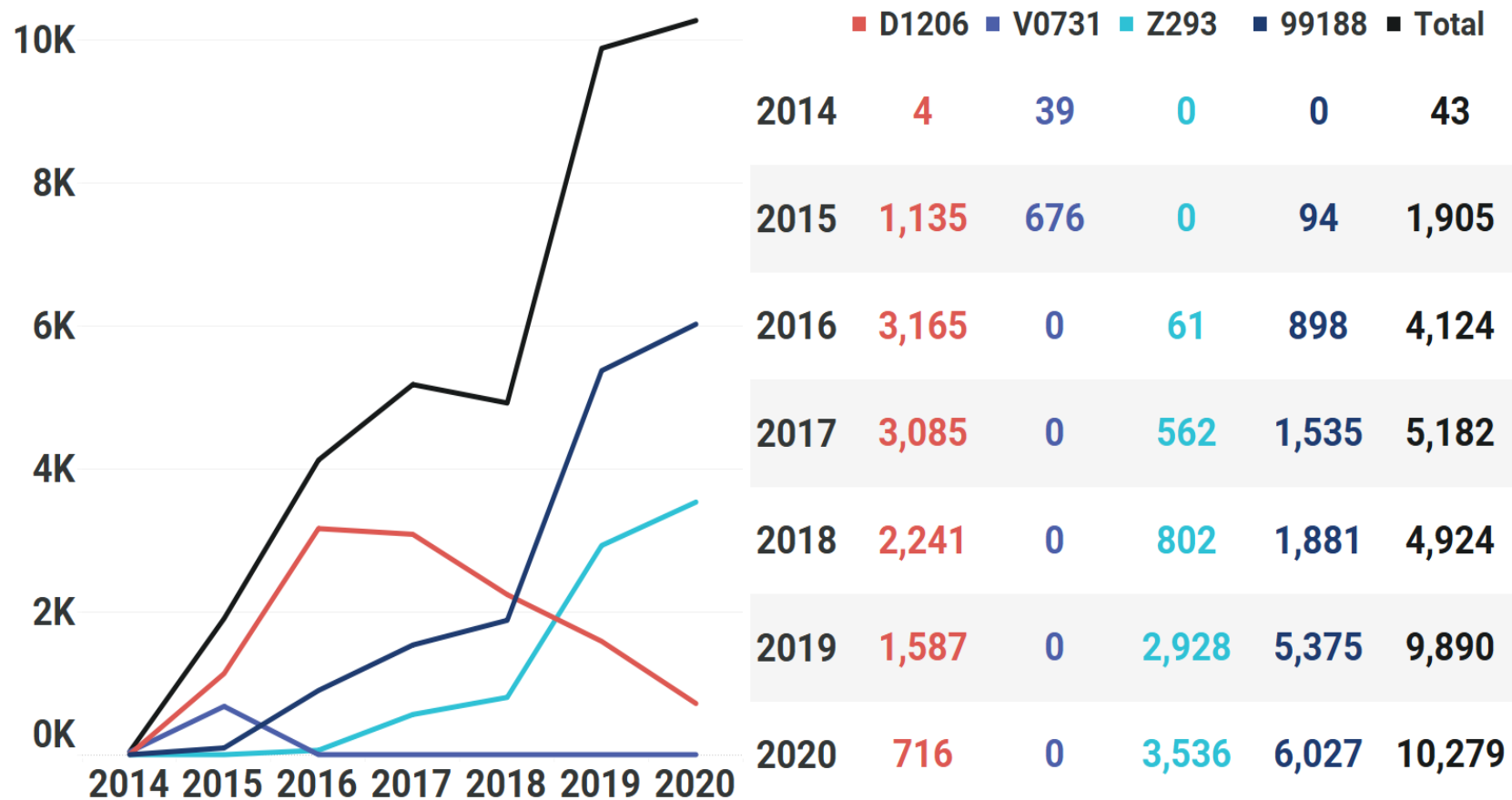
61% of Arkansas dentists treated ARKids enrollees in 2019



FLOURIDE VARNISH APPLICATION TRENDS IN DENTAL SETTINGS, AGES 0-18, 2014-2020



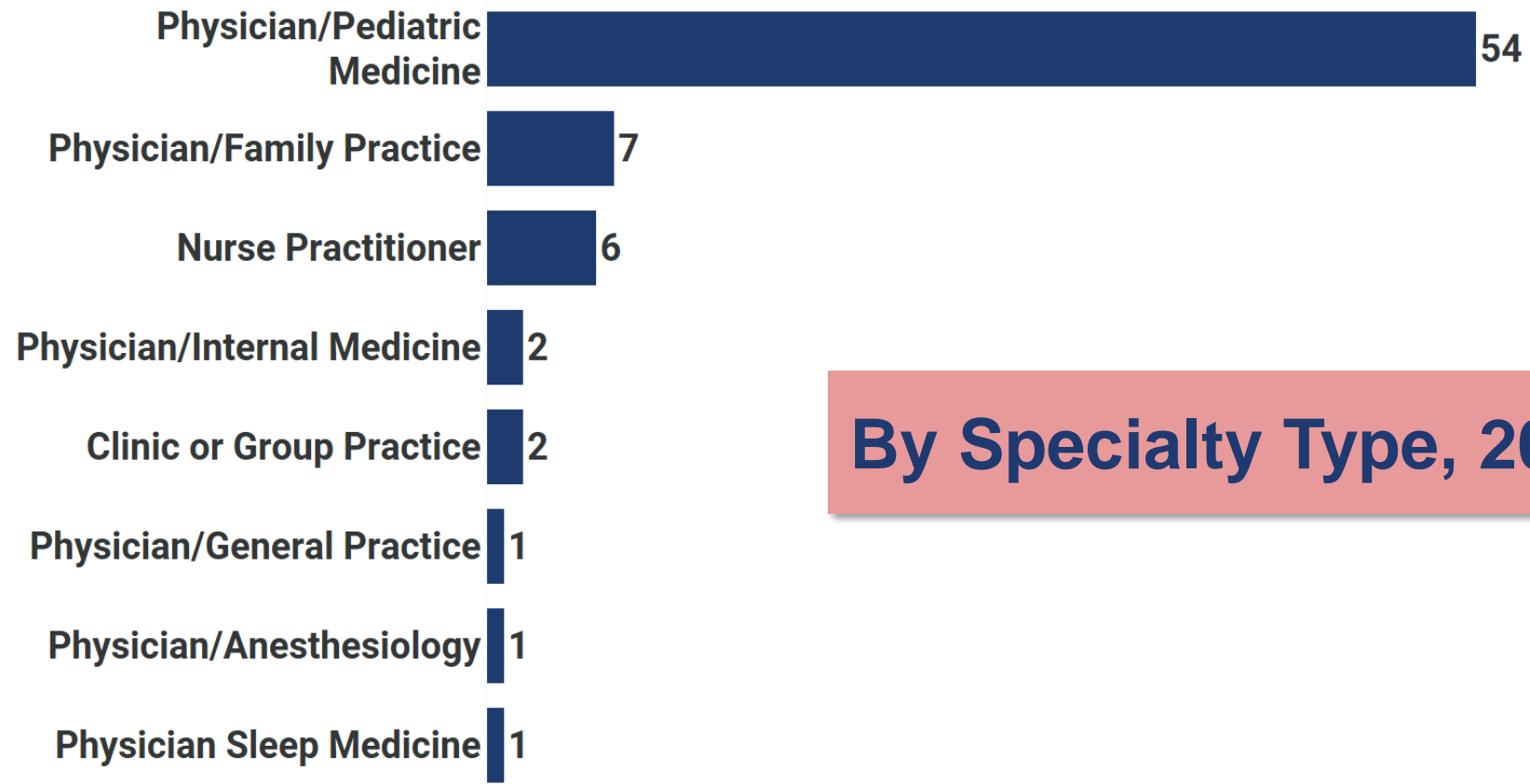
FLOURIDE VARNISH APPLICATION TRENDS IN MEDICAL SETTINGS, AGES 0-18, 2014-2020



FLUORIDE APPLICATION VISITS PER PERSON, 2019

Visits with fluoride varnish claim	Patients ages 0-18	Percentage among those ages 0-18 with dental coverage
Any	415,339	66.5%
1	256,970	41.2%
2	157,180	25.2%
3	1,072	0.2%
4	114	<0.1%
5	<10	<0.1%

MEDICAL PROVIDERS SUBMITTING AT LEAST 20 CLAIMS FOR FLUORIDE VARNISH APPLICATIONS



By Specialty Type, 2019

CONCLUSIONS AND FUTURE RESEARCH OPTIONS

- More in-depth research on provider availability and access could inform future workforce development efforts
- Linkage of additional social determinants data (e.g., income, race and ethnicity, rurality)
- Linkage with medical claims to assess impact of dental care and oral health on overall health (could target pregnant people or other groups with risk of adverse medical outcomes tied to poor oral health)
- Analyses of reimbursement benefit limits, and costs, by coverage type to explore potential impacts on providers or patients

CONCLUSIONS AND FUTURE RESEARCH OPTIONS

- Ongoing collaborative patient education efforts are needed to reinforce the value of routine dentist visits
- Future analyses would be strengthened if additional data sources were available: private self-insured employer claims, public health dental services, temporary or pop-up dental clinics, or other non-claims-based dental care