WV HEALTH AFFAIRS INSTITUTE

Exploring Coverage of Meaningful Dentistry Across West Virginia

Sound Strategies / Improve Lives℠

WEST VIRGINIA ORAL HEALTH COALITION
Healthy smiles for all!

Background

1. Oral health is vital for overall well-being, disease prevention, and quality of life.

2. Medicaid dental benefits improve access and utilization for low-income adults.

3. Assessing access requires defining 'meaningful' care, but no standard definition exists for Medicaid participation.
   o Meaningful care = reachable, available and accessible

4. Academic literature defines meaningful use through:
   o Specific billing amounts (e.g., $1 or $10,000), Number of Medicaid patients treated, or claims filed.
   o Claims-based methods are the most accurate for assessing service delivery.

Methods

Defining Meaningful Dentistry

- A 'meaningful' dentist in West Virginia using state Medicaid claims data?

- A general dentist who is...
  - Actively engaged in Medicaid
  - Consistently treating Medicaid-enrolled adults (21 – 64 yrs)
  - Billing for a substantial amount of preventative & emergent care
  - Serving a substantial number of Medicaid enrollees annually

Four Key Criteria

Criteria	Explanation
Provider Capacity	One dentist to every 1,200 adult Medicaid enrollees (1:1,200)
Observed Utilization	Dentist submitted at least one dental claim per 10 adult Medicaid enrollees in their zip code
Cost Threshold	Dentist averages at least $600 in dental claims for each adult Medicaid enrollee billed in either 2021or 2022
Emphasis on Prevention	Preventative services make up at least 50% of adult Medicaid dental claims in their zip code

Steps

- Identifying Dentists and Dental Claims

- Mapping Dental Services:
  - Evaluate Provider Capacity
  - Assess Observed Utilization
  - Check Cost Threshold
  - Emphasis on Prevention

- Assessment of Meaningful Dentistry in West Virginia

Step 1 - Identify Dentists and Dental Claims

- Data Source:
  - 2020–2022 Medicaid claims for enrollees 21+
- Dental Services Analyzed:
  - ED visits & preventative dental care
- Analysis Approach:
  - Examined services at dentist & enrollee levels
  - Used geographic data to refine 'meaningful' dentistry
  - Identified active Medicaid dentists via West Virginia DoHS
  - Aggregated enrollee claims by zip code
  - Matched providers & claims while ensuring privacy compliance

Step 2 - Mapping Dental Services

- Mapping Levels: County & Dentist
- Process:
  - Mapped dentists providing preventative & emergent care using West Virginia DoHS data
  - Aggregated claims at the county level for privacy
  - Assigned ZIP codes to counties based on geographic center
- Analysis Approach:
  - County-Level: Used ESRI's 'Summarize Within' to analyze claims, costs, and enrollees served
  - Dentist-Level: Mapped claims, costs, and enrollees served (2020–2022)

Step 2.1 - Evaluate Provider Capacity

- Data Aggregation:
  - Enrollees (2020–2022) and dentist locations summarized at the county level

- Dentist-to-Enrollee Ratio:
  - Total Number of Medicaid Enrollees in the Evaluation Area divided by the Number of Dentists in the Evaluation Area

- Provider Capacity Criteria:
  - Standard: One dentist per 1,200 enrollees (1:1,200)
  - Adjustments made for county population size

- Capacity Determination:
  - Did Not Meet: Ratio exceeded 1:1,200 (too few dentists)
  - Met: Ratio was 1:1,200 or lower

Step 2.2 - Assess Observed Utilization

County Level

- Data Aggregation:
  - Dental claims totaled at the county level; Medicaid enrollee data used for utilization calculations

- Observed Utilization Ratio:
  - (Total Number of Dental Claims Filed in the County ÷ Total Number of Adult Medicaid Enrollees in the County) X 100

- Utilization Criteria:
  - ≥10% of enrollees must have dental claims annually
  - Ex: 1,000 enrollees → ≥100 claims/year to meet the criterion

Provider Level

- Data Aggregation:
  - Dental claims summarized at the dentist level; enrollees linked to providers for accuracy

- Observed Utilization Ratio:
  - (Total Number of Dental Claims Filed by Dentist ÷ Total Number of Adult Medicaid Enrollees In Zip Code(s) Served by Dentist) X 100

- Utilization Criteria:
  - ≥10% of a dentist's enrollees must have claims annually
  - Ex: 1,000 enrollees → ≥100 claims/year to meet the criterion

Step 2.3 - Check Cost Threshold

- Data Aggregation:
  - Dental claims and enrollees receiving services totaled at the county level
- Average Cost Threshold:
  - Total Dental Claims Paid ÷ Number of Medicaid Enrollees Who Use Dental Services
- Criteria for Meeting Threshold:
  - Counties meet the threshold if average paid claims per enrollee ≥ $600/year
  - Applied at the dentist level—providers are meaningful if their average billing per enrollee exceeds $600

Step 2.4 - Emphasis on Prevention (County Level)

- Data Aggregation:
  - Claims divided into preventative and emergent services; preventative claims aggregated at county level to calculate proportions

- County-Level Percentage of Preventative Services:
  - (Number of Preventative Dental Claims at County Level ÷ Total Number of Dental Claims at County Level) X 100

- Criteria for Preventative Focus:
  - Counties meet the criterion if ≥50% of claims billed to Medicaid are for preventative services

- Next Step:
  - Apply the 50% criterion at the dentist level to assess individual providers

Step 2.4 - Emphasis on Prevention (Provider Level)

- Total dental claims summarized at the dentist level
- Dentist-Level Percentage of Preventative Services:
  - (Number of Preventative Dental Claims at Dentist Level ÷ Total Number of Dental Claims at Dentist Level) X 100
- Criteria for Preventative Focus:
  - Dentists meet the criterion if ≥50% of their Medicaid claims are for preventative services

# Step 3 - Assessment of Meaningful Dentistry in WV

- Criteria Count: Dentists and counties assessed on four criteria

- 'Meaningful' Definition: Must meet all four criteria

- Need Classification:
  - Adequate: 4/4 criteria met
  - Some Need: 3/4 criteria met
  - Moderate Need: 2/4 criteria met
  - Substantial Need: 0/4 to1/4 criteria met

Results by County
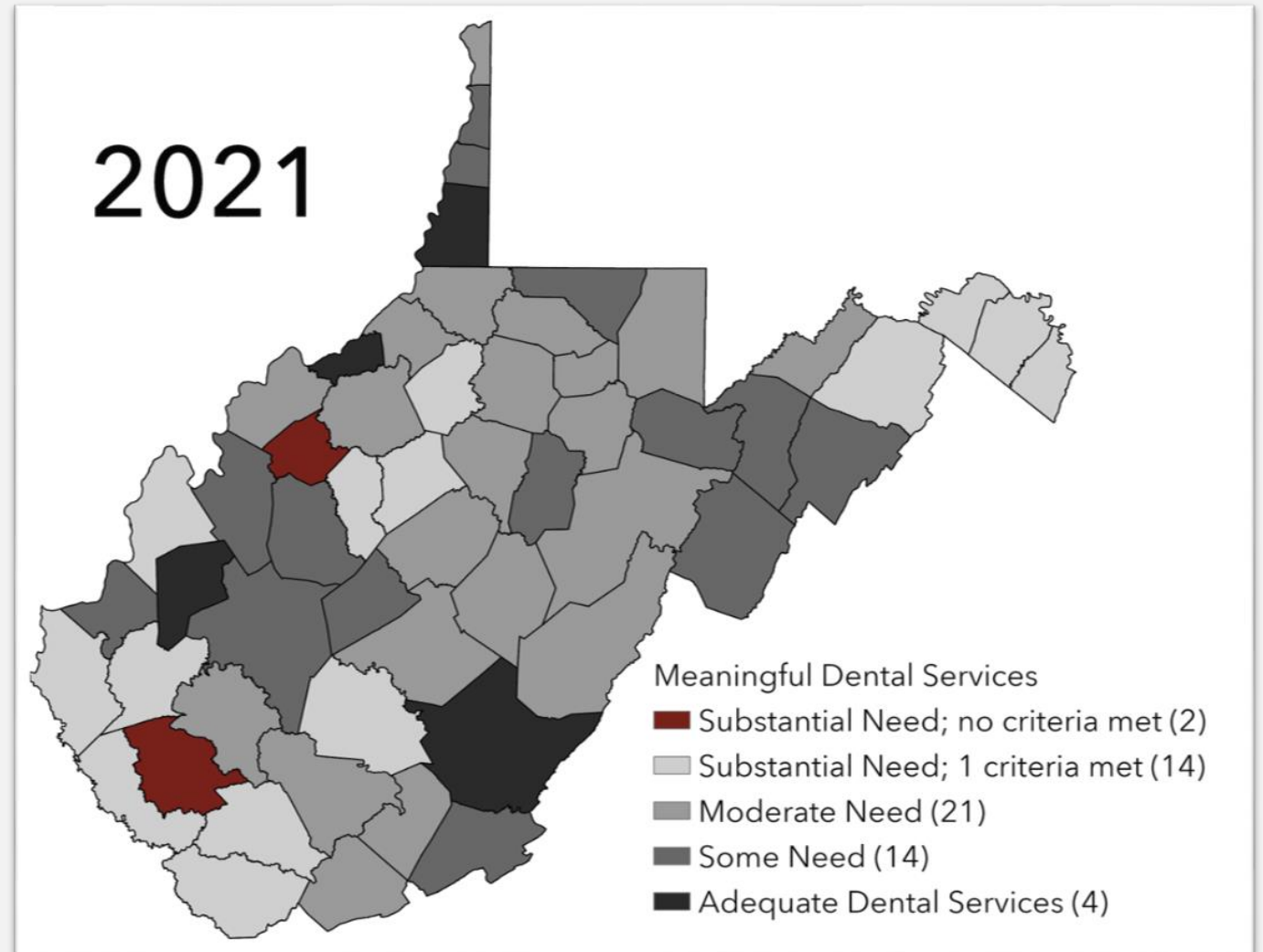
2020 by County

1. No counties met all four criteria.

2. Nine counties met none.

3. Most fell into the one- or two-criteria range.
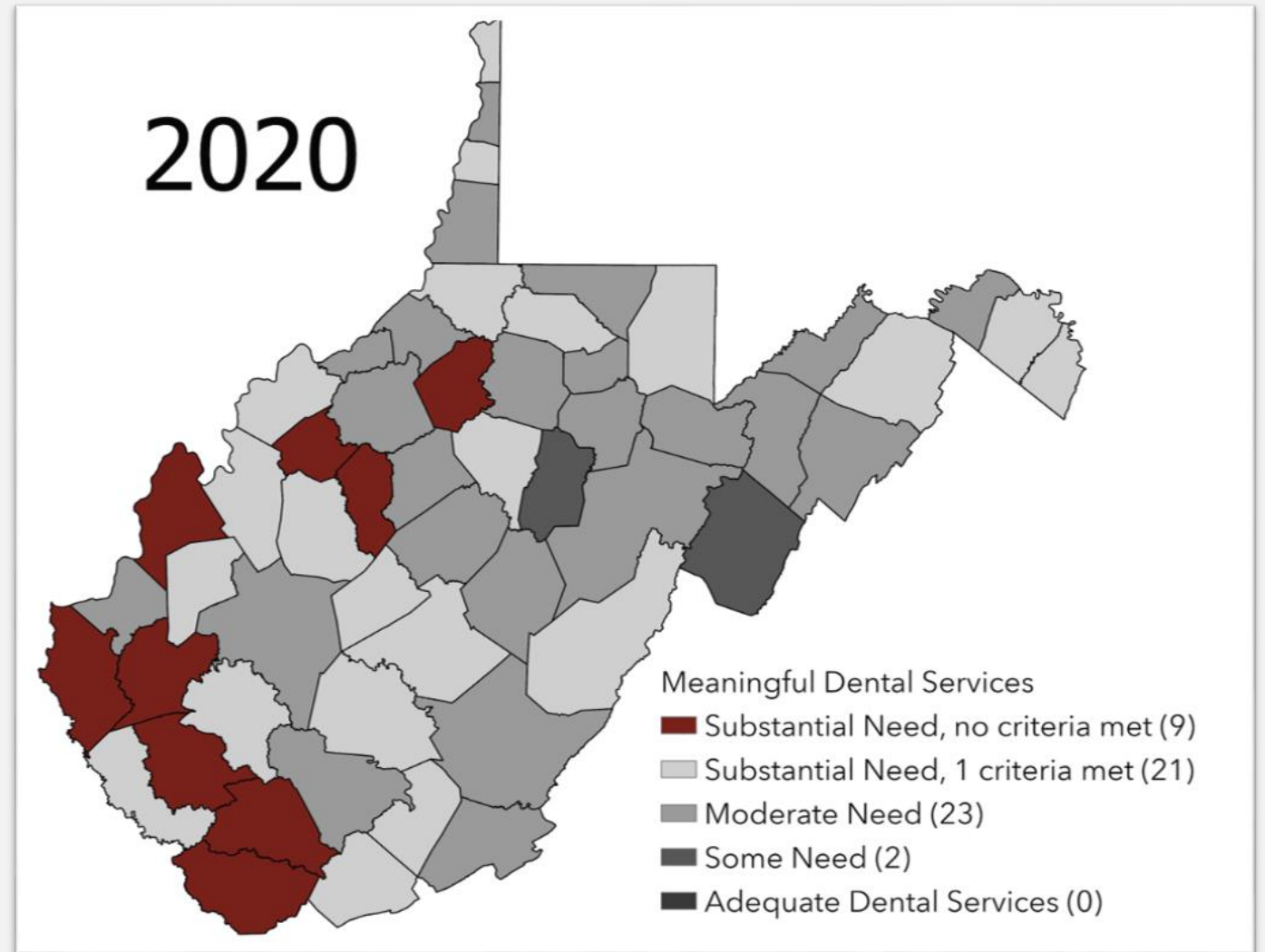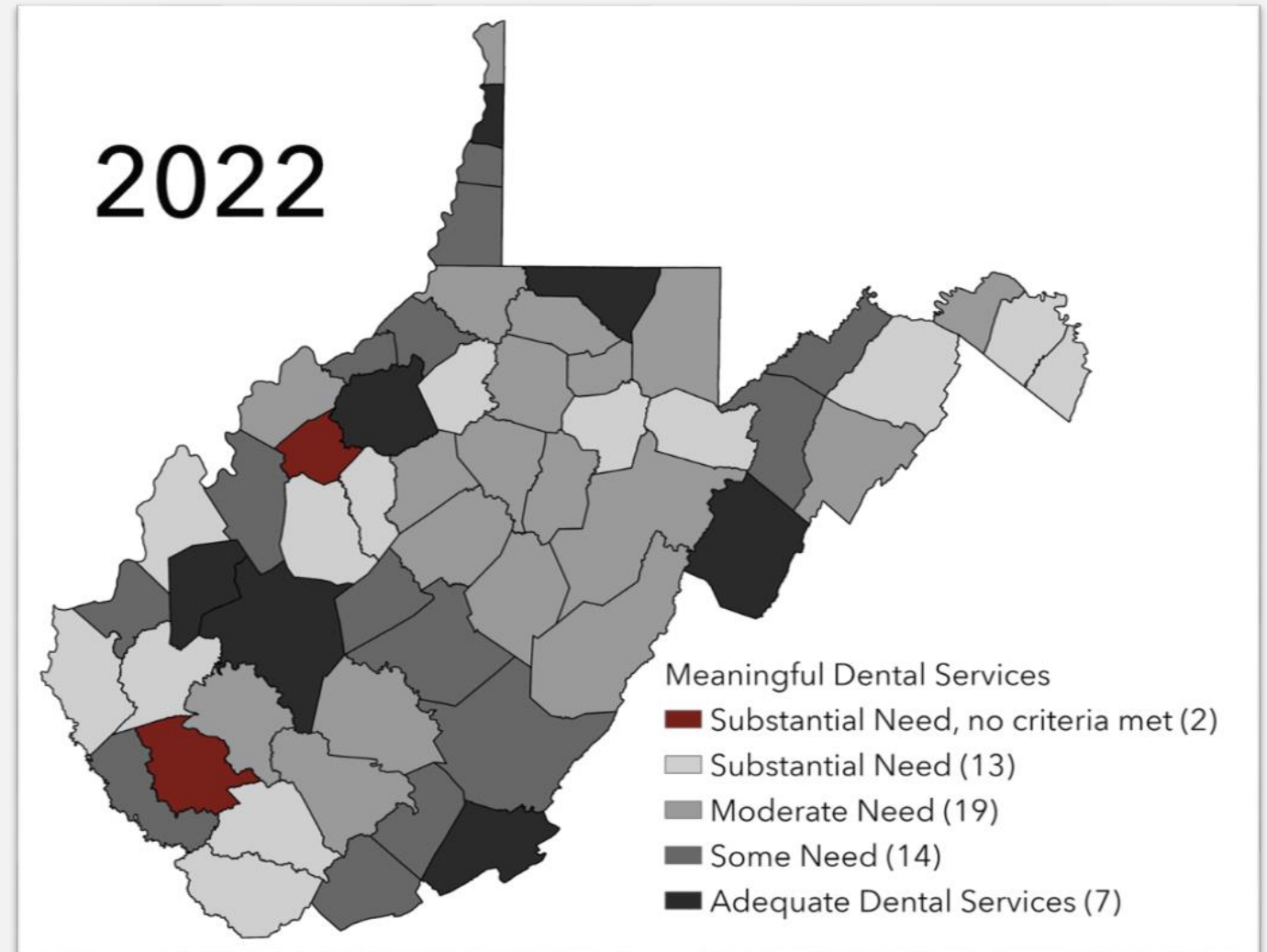
2021 by County

1. A notable improvement:

   o Only two counties met no criteria.

   o Counties meeting just one criterion decreased.

   o The first four counties met all four criteria.

2021

Meaningful Dental Services

- Substantial Need; no criteria met (2)
- Substantial Need; 1 criteria met (14)
- Moderate Need (21)
- Some Need (14)
- Adequate Dental Services (4)

2022 by County

1. Seven counties met all four criteria.

2. The number of counties meeting only one or two criteria declined.

2022

Meaningful Dental Services
- ■ Substantial Need, no criteria met (2)
- □ Substantial Need (13)
- ■ Moderate Need (19)
- ■ Some Need (14)
- ■ Adequate Dental Services (7)

Meaningful Dentists

By County:

From 2020 to 2022, the number of counties meeting multiple criteria for meaningful dentists increased.
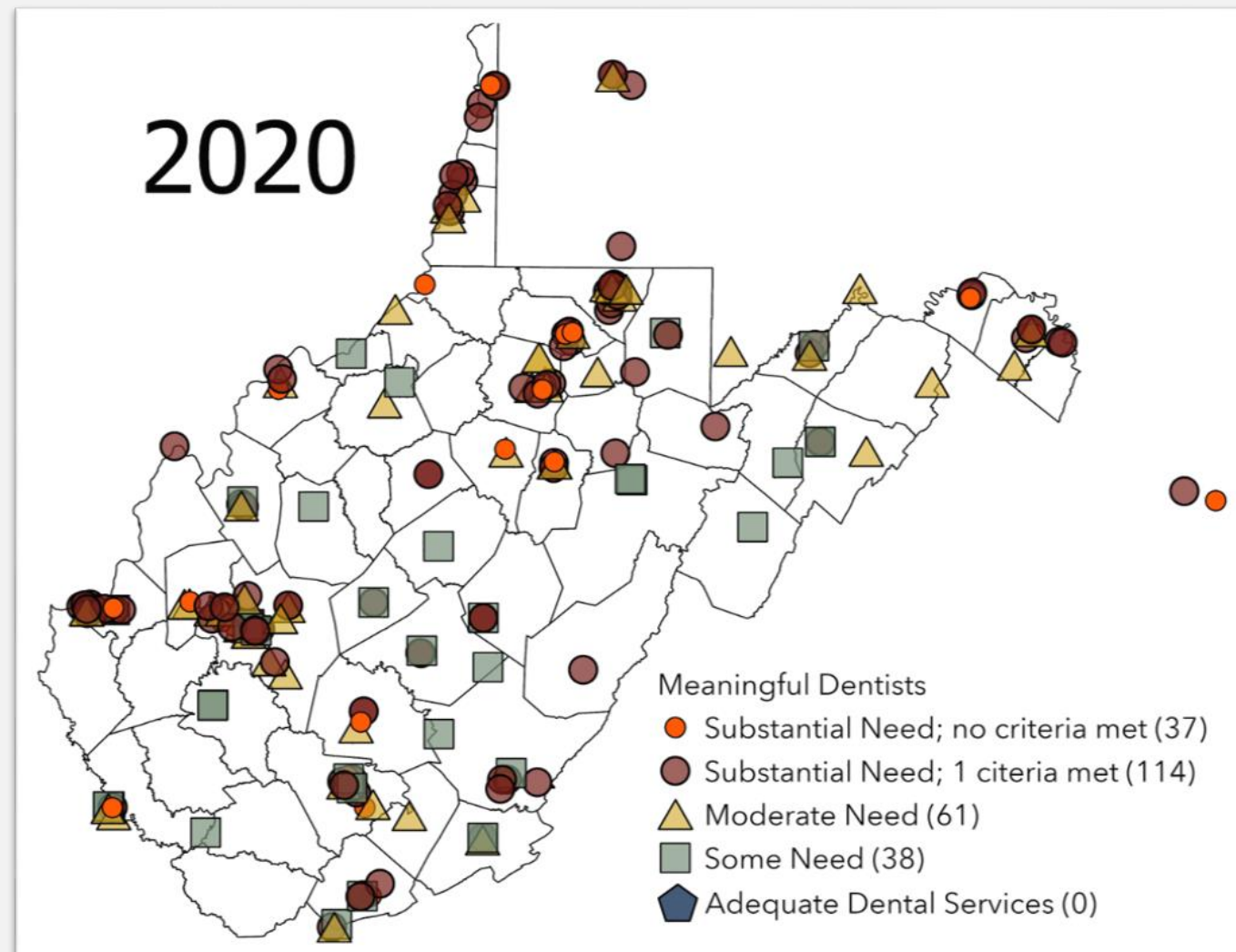
Two counties: Doddridge and Logan demonstrated a substantial need for adult dental services across all three years.

Results by Zip Code Served

2020 by Zip Code

1. No dentists met all four criteria.

2. 37 did not meet any criteria.

3. Most dentists met one (n = 113) or two (n = 61) criteria.

2020

Meaningful Dentists
- ● Substantial Need; no criteria met (37)
- ● Substantial Need; 1 citeria met (114)
- ▲ Moderate Need (61)
- ■ Some Need (38)
- ⬠ Adequate Dental Services (0)
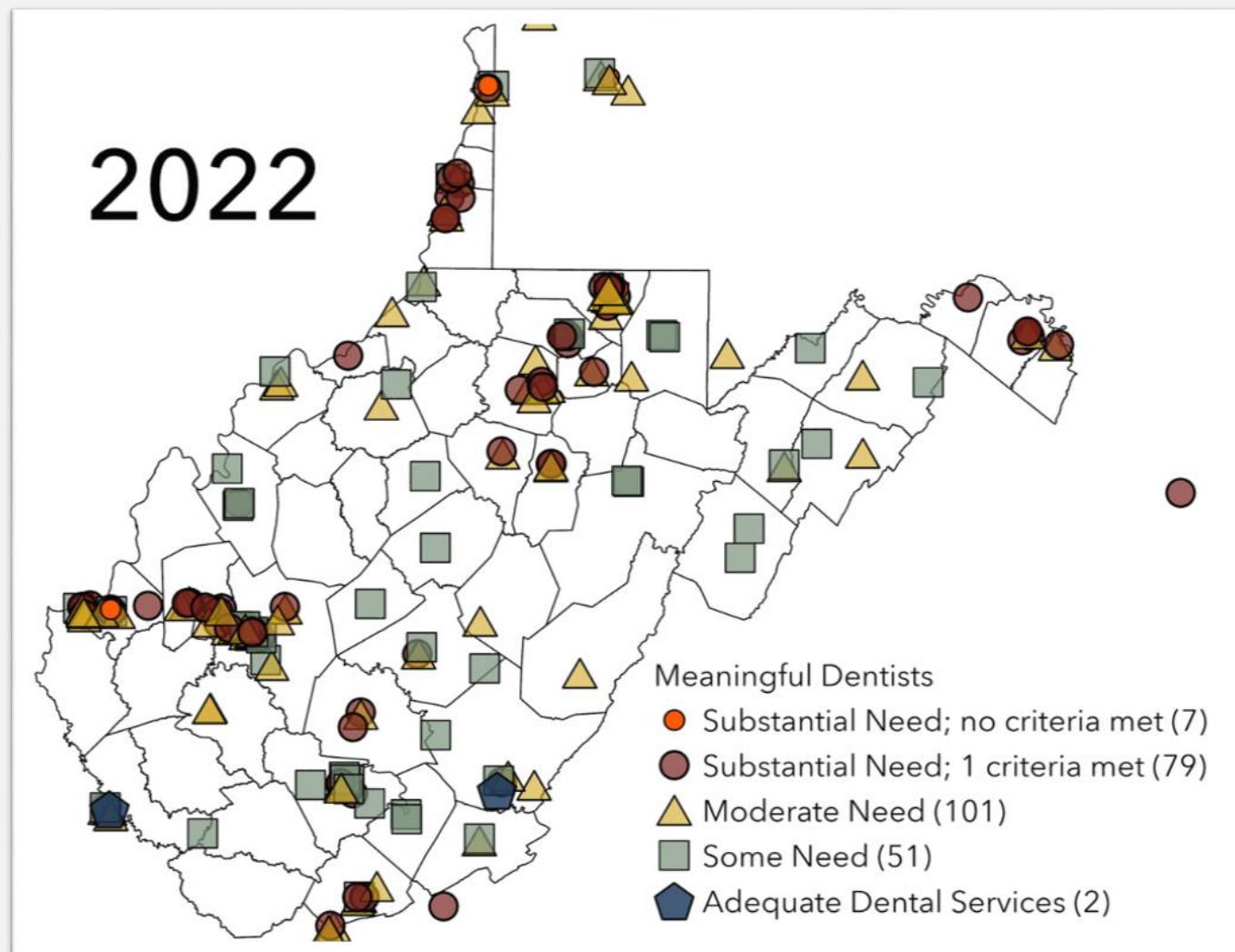
2021 by Zip Code

1. Notable progress:
   o The number of dentists not meeting any criteria decreased to 24.
   o Fewer dentists met just one criterion.
   o This year also marked the first dentist meeting all four criteria.
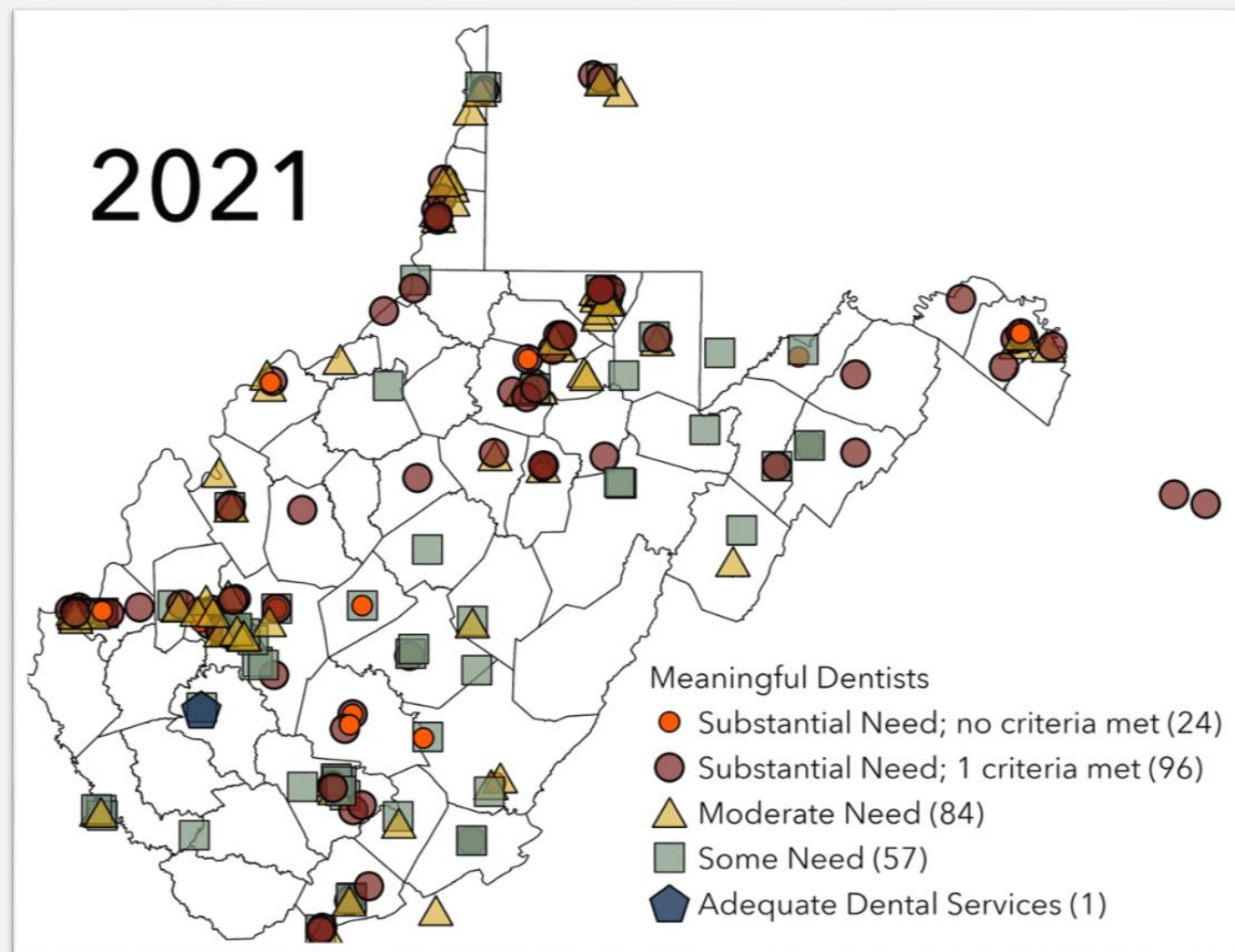
2022 by Zip Code

1. Only seven dentists did not meet any criteria.

2. The number meeting one or two criteria declined further.

3. The number of dentists meeting all four criteria grew to two, though this remains a low figure.

2022

Meaningful Dentists
- Substantial Need; no criteria met (7)
- Substantial Need; 1 criteria met (79)
- Moderate Need (101)
- Some Need (51)
- Adequate Dental Services (2)

Meaningful Dentists

By Zip Code:

From 2020 to 2022, the number of dentists meeting multiple criteria for meaningful dentist participation increased.

Despite observed improvement in some areas there is still considerable need to ensure meaningful adult dental care for Medicaid enrollees across the state.

Conclusion

In Conclusion...

Meaningful Dentistry in West Virginia has improved across all four criteria from 2020 to 2022.

However, there are only a few areas where adequate dental services exist.

Policymakers and providers can work together to expand the provision of dental services to Medicaid-enrolled adults in West Virginia.