FONTEUM METHODOLOGY

Obstetrics & Gynecology Provider Supply by State

Methodology version v2026.05.0 -- Generated 2026-09-15 02:45:44Z
Public methodology surface -- https://fonteum.com/methodology/obgyn-supply

Active U.S. OB-GYN physicians per 100,000 residents, by state.

Source provenance

Source families: CMS NPPES NPI Registry (public API) + U.S. Census Bureau Population Estimates Program (PEP) V2025
Spatial resolution: State (50 + DC). NPPES does not publish a county-level field of practice in its public API.
Temporal coverage: 2026 snapshot (NPPES queried 2026-05-06; Census 2024 vintage).
Refresh cadence: Quarterly NPPES refresh; annual Census denominator update.
Snapshot: 8,572 OB-GYNs across 51 states + DC, dated 2026-05-06.

Reproducibility

1. Query the NPPES API at https://npiregistry.cms.hhs.gov/api/ with taxonomy_description=<NUCC name> and enumeration_type=NPI-1 for each NUCC taxonomy in the parent specialty's scope (full list in the parent study's methodology).
2. Filter results to records with active license status.
3. Bucket by practice-address state (50 USPS codes + DC).
4. Pull U.S. Census Bureau PEP V2025 (2024 vintage) state population estimates from https://www.census.gov/programs-surveys/popest.html.
5. Compute per_100k = count / population x 100,000 per state. Rank ascending and bucket into quartiles by rank.
6. Apply the parent study's transparent underserved threshold to flag the per-state row's underserved boolean.

The full ingest script is published at scripts/research/nppes-write.ts in the Fonteum engine repository (private). Customers under a pilot or Standard agreement can request the script for independent reconciliation.

Limitations

- Counts NPI-1 individual providers only; the parent specialty taxonomy plus any subspecialty taxonomies the Sec.183 / Sec.188 ingest scoped to. PAs / NPs / CNMs working in the same care setting under different taxonomy codes are out of scope.
- Dataset measures density (per-capita supply), not access. Drive time, appointment availability, insurance acceptance, and wait times are not modeled.
- Underserved threshold is the parent study's transparent baseline cutoff, not a regulatory or clinical definition.
- Provider state is the practice-address state in NPPES. NPPES does not publish a county-level field of practice in its public API; county queries surface state-level density.
- NPPES last_updated reflects when CMS last touched the record -- providers may have moved, retired, or changed practice settings without updating their NPPES record. Roughly 5-15% of records have last_updated > 5 years per CMS published quality reports.

- U.S. Census Bureau PEP V2025 (2024 vintage) state population. Annual estimates between decennial counts; Census itself documents a confidence band of ~0.5-2% depending on state.
- Estimates do not reflect mid-2025+ population movements. Major hurricane / wildfire displacements may distort per-capita ratios for several quarters until next vintage.

Field schema

> npi -- Individual provider NPI (10-digit).
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> taxonomy_codes -- All NUCC taxonomy codes attached to the record (primary + subspecialties).
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> taxonomy_primary -- The provider's primary NUCC taxonomy code.
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> state -- Practice-address state (USPS code) at the time of NPPES record's last_updated.
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> city -- Practice-address city at the time of NPPES record's last_updated.
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> last_updated -- When CMS last modified the NPPES record. Reflects record freshness, not Fonteum snapshot date.
Source: CMS NPPES NPI Registry (public API) (https://npiregistry.cms.hhs.gov/api/)
Refresh: Quarterly - Confidence: 1.0 (verbatim)

> population_2024 -- PEP V2025 state population estimate for 2024 vintage.
Source: U.S. Census Bureau Population Estimates Program (PEP) V2025 (https://www.census.gov/programs-surveys/popest.html)
Refresh: Annual (V<year> vintage releases each March) - Confidence: 1.0 (verbatim)

> count -- OB-GYNs active in NPPES as of snapshot date. The Sec.193 sub-specialty filter parameter (`?subspecialty=<NUCC code>`) on the public API recomputes counts and density against any registered subspecialty taxonomy.
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.95

> per_100k -- OB-GYNs per 100,000 residents (count / population x 100,000).
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.95

> rank_density -- 1..51 rank by per_100k across U.S. states + DC.
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.95

> rank_count -- 1..51 rank by absolute count.
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.95

> quartile -- Q1..Q4 from rank_density.
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.95

> underserved -- Boolean: per_100k below the transparent threshold defined in the parent study.
Source: Fonteum Research (derived from CMS NPPES + U.S. Census Bureau)
Refresh: Recomputed on each NPPES + Census refresh cycle - Confidence: 0.9 - Caveat: Threshold is a baseline cutoff, not a regulatory or clinical definition.

Version history

v2026.05.0 - released 2026-05-06

Initial Audit Pack release. Methodology, provenance map, reproducibility statement, and limitations stack baselined.

Citation

APA:

Fonteum. (2026). Obstetrics & Gynecology Provider Supply by State (v2026.05.0) [Dataset]. Fonteum LLC. https://fonteum.com/methodology/obgyn-supply

Chicago:

Fonteum. 2026. "Obstetrics & Gynecology Provider Supply by State." v2026.05.0. Fonteum LLC. https://fonteum.com/methodology/obgyn-supply.

Plain text:

Fonteum -- Obstetrics & Gynecology Provider Supply by State (v2026.05.0). Snapshot 2026-05-06. https://fonteum.com/methodology/obgyn-supply

BibTeX:

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@misc{fonteum-obgyn-supply-2026,
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  title        = {Obstetrics & Gynecology Provider Supply by State},
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Cross-references

Audit Pack: https://fonteum.com/audit-pack/obgyn-supply
Research study: https://fonteum.com/research
Limitations: https://fonteum.com/methodology/obgyn-supply#limitations
Operator: api@fonteum.com (B2B inquiries) / corrections@fonteum.com (data issues)