



Department of

**Mental Health &
Substance Abuse Services**

Emerging trends in prescribing buprenorphine: Tennessee 2015-2016

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Overview

Buprenorphine is a drug primarily used to treat opioid misuse disorder. It can also be used to treat pain.

Research questions:

- **How has the buprenorphine prescribing capacity in Tennessee changed between September 2015 and September 2016?**
- **How is the buprenorphine prescribing capacity related to opioid misuse disorder?**

Executive Summary

Opioid misuse disorder

- In 35 counties, more than 200 people are estimated to misuse opioids, with a state total of about 30,394 adult Tennesseans.

Buprenorphine prescribers

- The number of certified buprenorphine prescribers increased 13% from September 2015 (654 prescribers) to September 2016 (737 prescribers).

Buprenorphine patient capacity

- Buprenorphine patient capacity increased 47% from September 2015 (41,020 patients) to September 2016 (60,015 patients).

Opioid misuse disorder met by buprenorphine patient capacity

- Buprenorphine patient capacity exceeded patient need in 23 counties.

Changes in buprenorphine prescribing

Changes in law

- In 2015, the DEA certified health care providers to prescribe buprenorphine at two patient capacity levels:
 - 30 patients
 - 100 patients
- On August 8, 2016, the federal law changed to three patient capacity levels:
 - 30 patients
 - 100 patients
 - 275 patients
- In January 2017, TDMHSAS started regulating buprenorphine clinics.

Current requirements

- Buprenorphine prescribers complete an eight-hour course to become certified to treat up to 30 patients.
- After treating up to 30 patients for one year, the prescriber can request to increase the number of patients to 100.
- After treating up to 100 patients for one additional year, prescribers can request to increase the limit to 275 patients.

Measuring patient capacity

- County-level patient capacity was calculated by summing all of the certified patient capacities (30, 100, 275) for all certified providers in a given county.

$$\begin{aligned} & (\text{Number of prescribers certified up to 30 patients}) \times 30 \\ & + (\text{Number of prescribers certified up to 100 patients}) \times 100 \\ & + \underline{(\text{Number of prescribers certified up to 275 patients}) \times 275} \\ & = \text{Maximum buprenorphine patient capacity} \end{aligned}$$

Note: Maximum buprenorphine patient capacity may or may not be used.

Data source: Drug Enforcement Administration, September 2015 and September 2016

Measuring treatment need

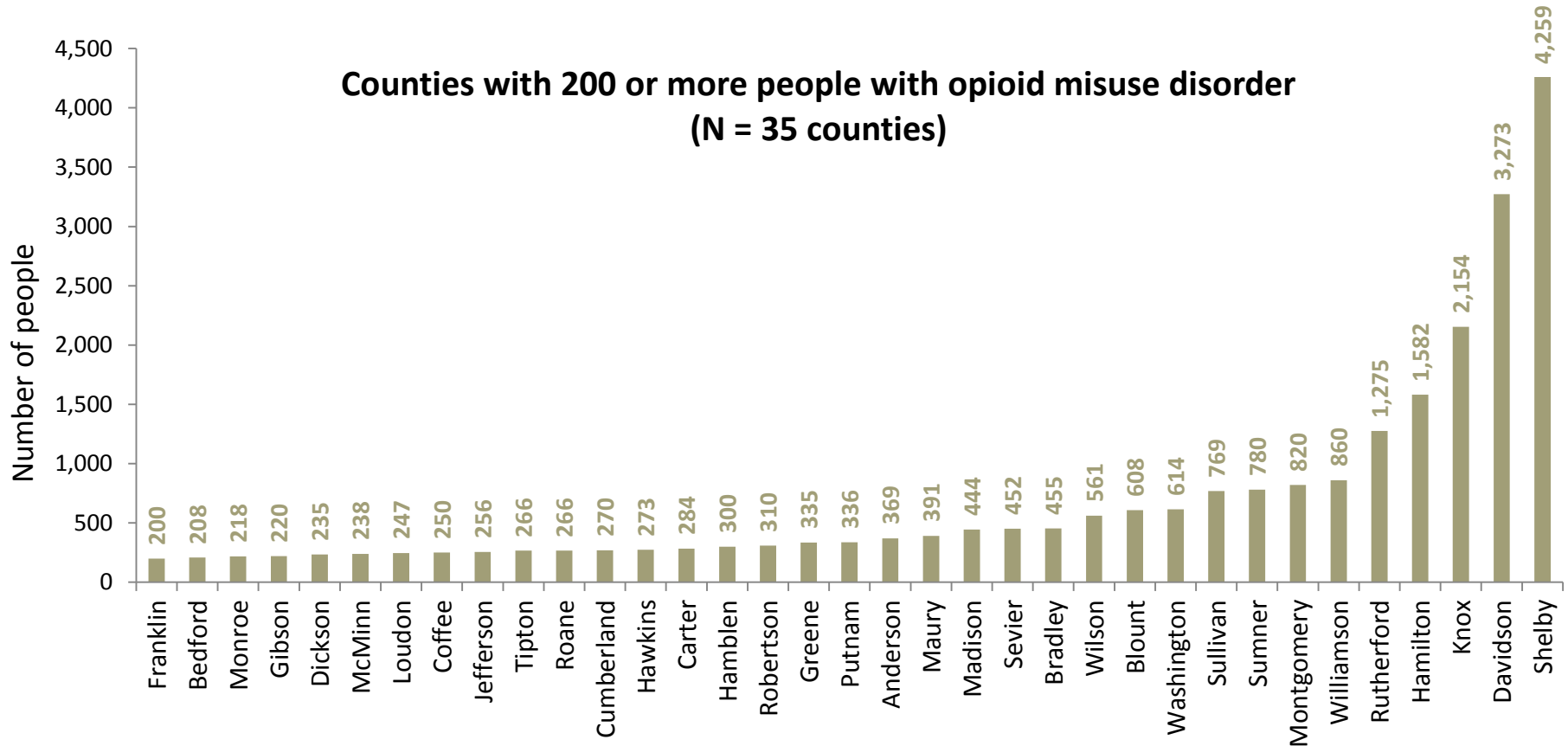
- **Opioid treatment need** = *Number of people age 18 and older using opioids for non-medical reasons X 14% (estimated opioid misuse disorder)*
- **Data sources**
 - Prevalence estimates of the number of people using opioids for non-medical reasons: *National Survey on Drug Use and Health, 2012-2014*
 - Prevalence estimates of the number of people using heroin: *National Survey on Drug Use and Health, 2014-2015*
 - County population (age 18+): *American Community Survey, 2014*
 - Estimated percent (14%) of people using opioids for non-medical reasons that develop opioid misuse disorder: *National Institute on Drug Abuse, Monitoring the Future Survey (2011).*



Buprenorphine treatment need

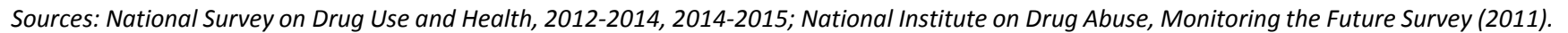
How many counties have 200 or more people with an opioid misuse disorder?

**Counties with 200 or more people with opioid misuse disorder
(N = 35 counties)**



Sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011).

Estimated number of people who misuse opioids, 2012-2015





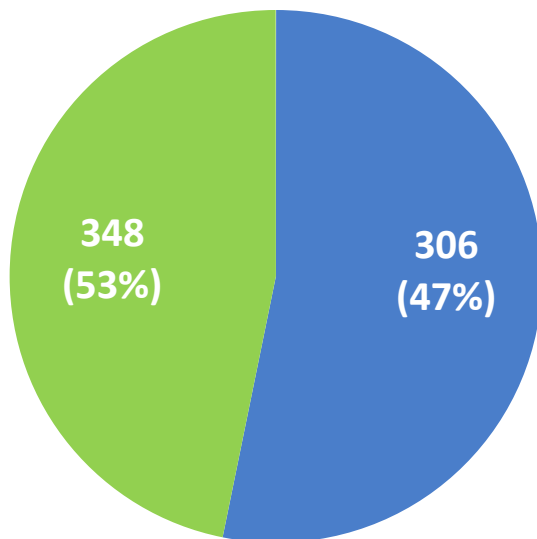
Buprenorphine prescribers

How many certified buprenorphine prescribers are there in Tennessee?

Total number of prescribers increased 13% from 2015 to 2016

September 2015

Number of prescribers = 654



Patient capacity:

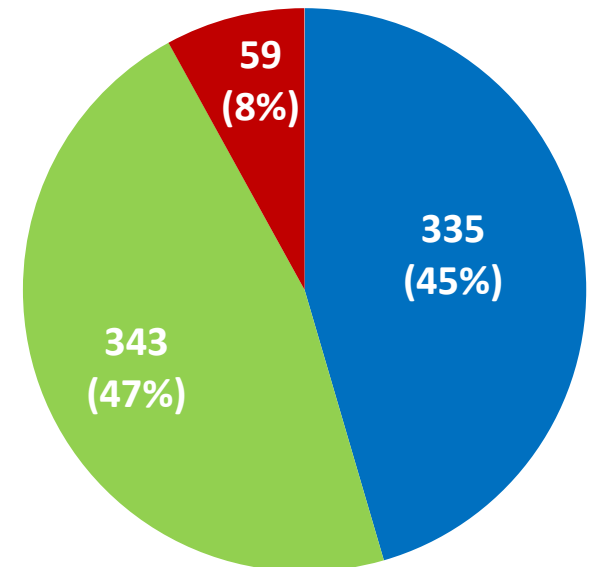
30 patients

100 patients

275 patients

September 2016

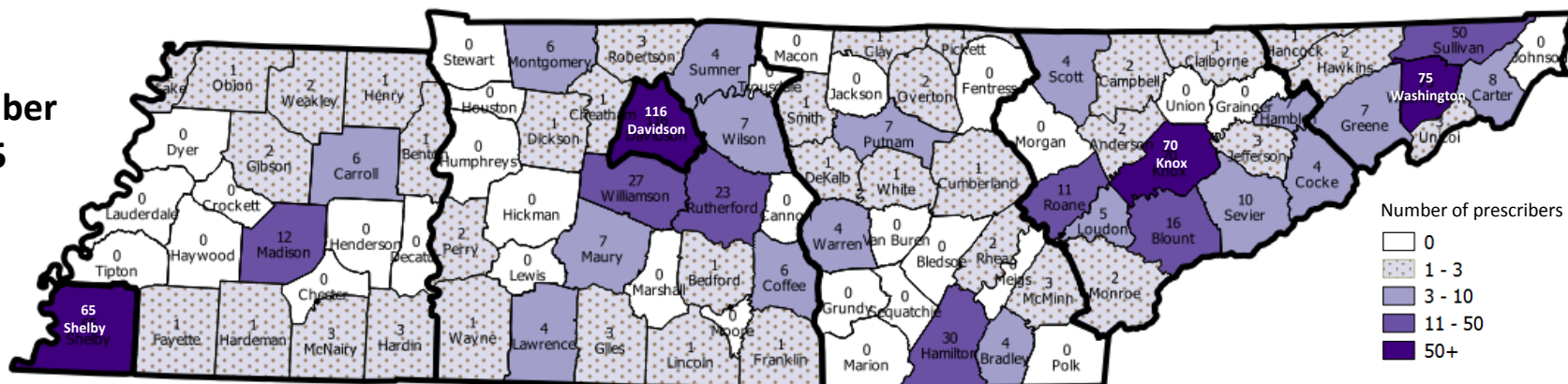
Number of prescribers = 737



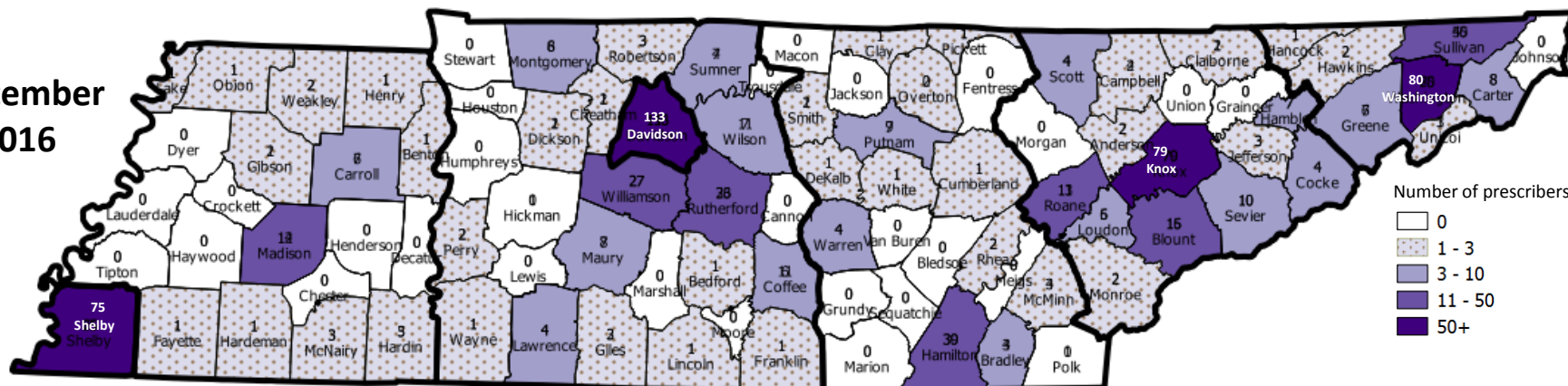
Data source: Drug Enforcement Administration, September 2015 and September 2016

Where are the certified buprenorphine prescribers?

September
2015

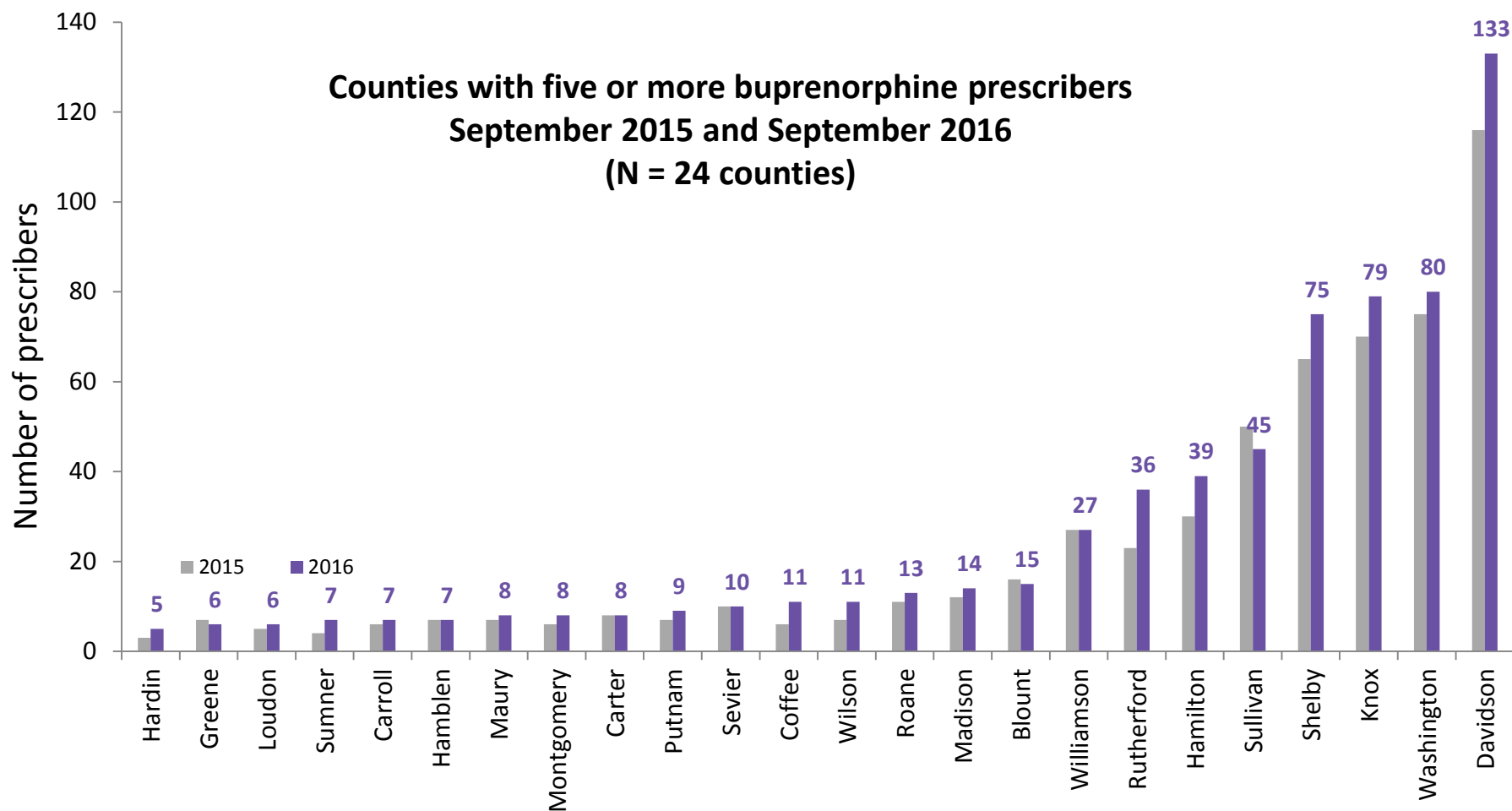


September
2016



Data source: Drug Enforcement Administration, September 2015 and September 2016

What counties had five or more certified buprenorphine providers in 2016?



Data source: Drug Enforcement Administration, September 2015 and September 2016

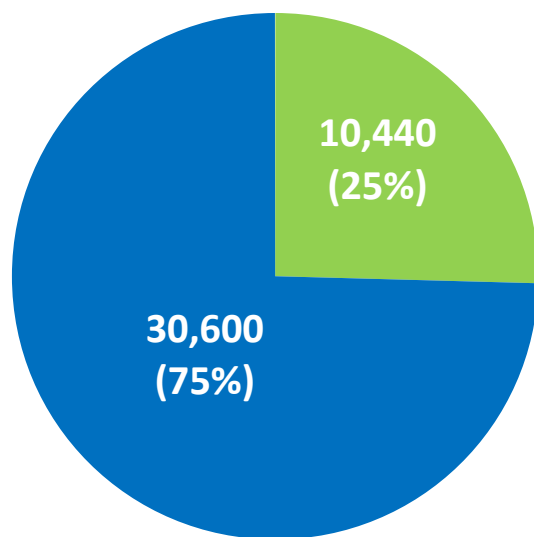


Buprenorphine patient capacity

What is the buprenorphine patient capacity in Tennessee?

Total patient capacity increased 47% from 2015 to 2016

September 2015
Total capacity = 41,040



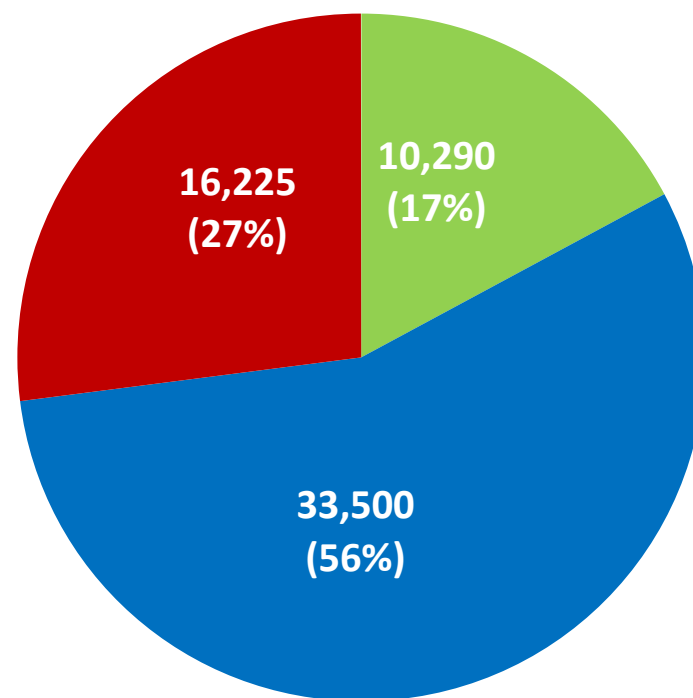
Patient capacity:

30 patients

100 patients

275 patients

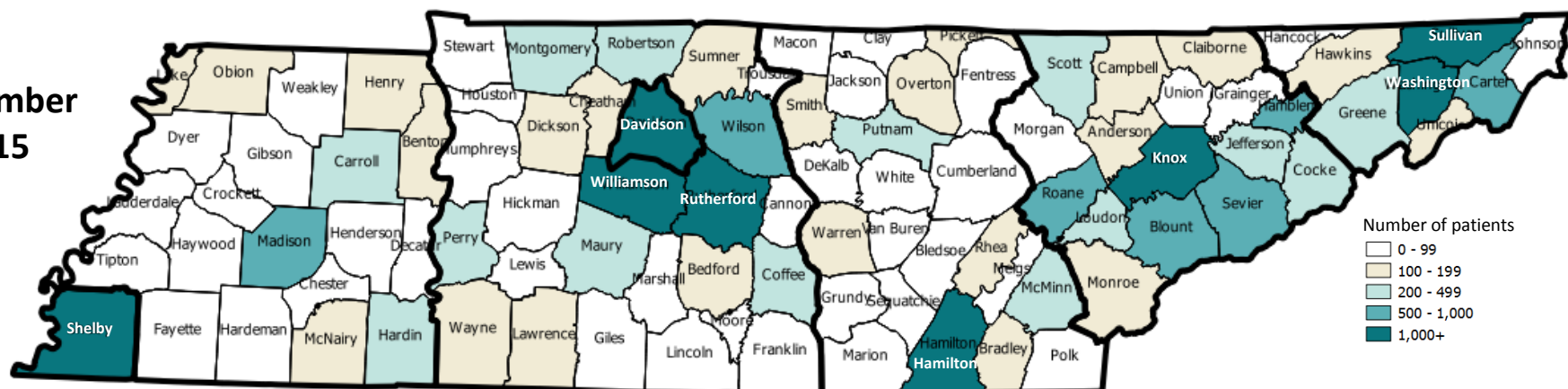
September 2016
Total capacity = 60,015



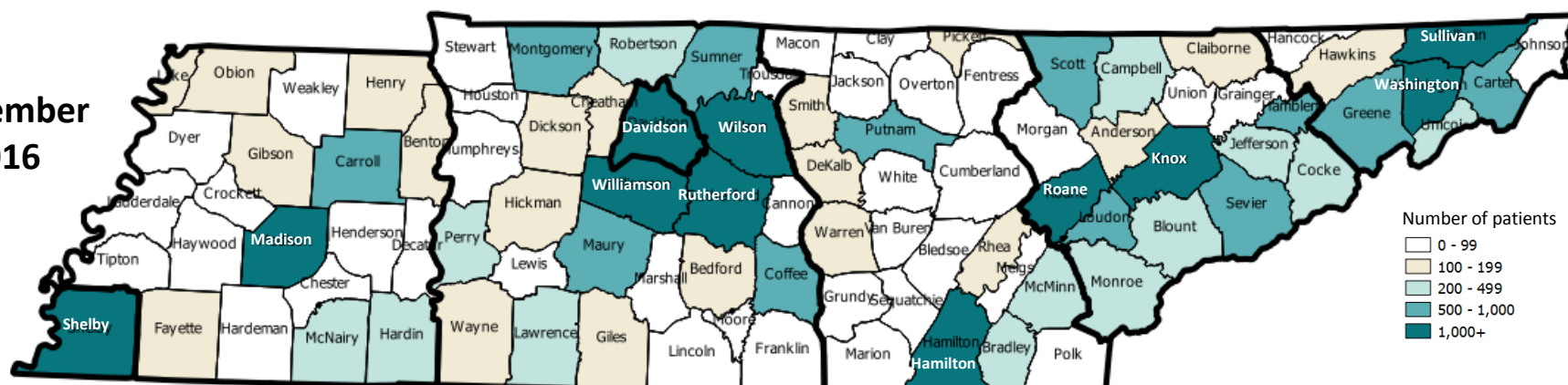
Data source: Drug Enforcement Administration, September 2015 and September 2016

Where is the buprenorphine patient capacity the greatest?

September
2015



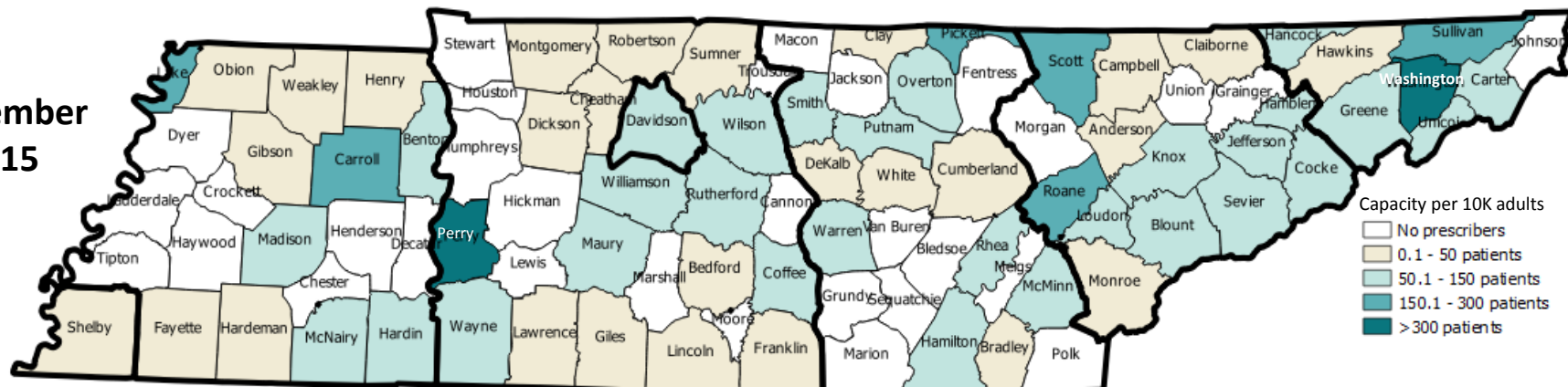
September
2016



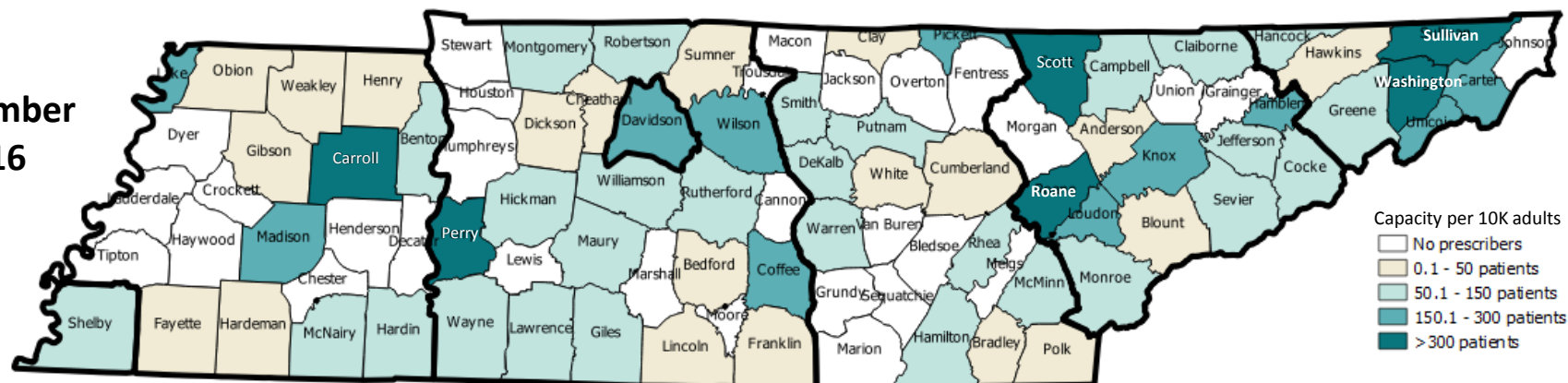
Data source: Drug Enforcement Administration, September 2015 and September 2016

Where is the buprenorphine patient capacity per 10k adults the greatest?

September
2015

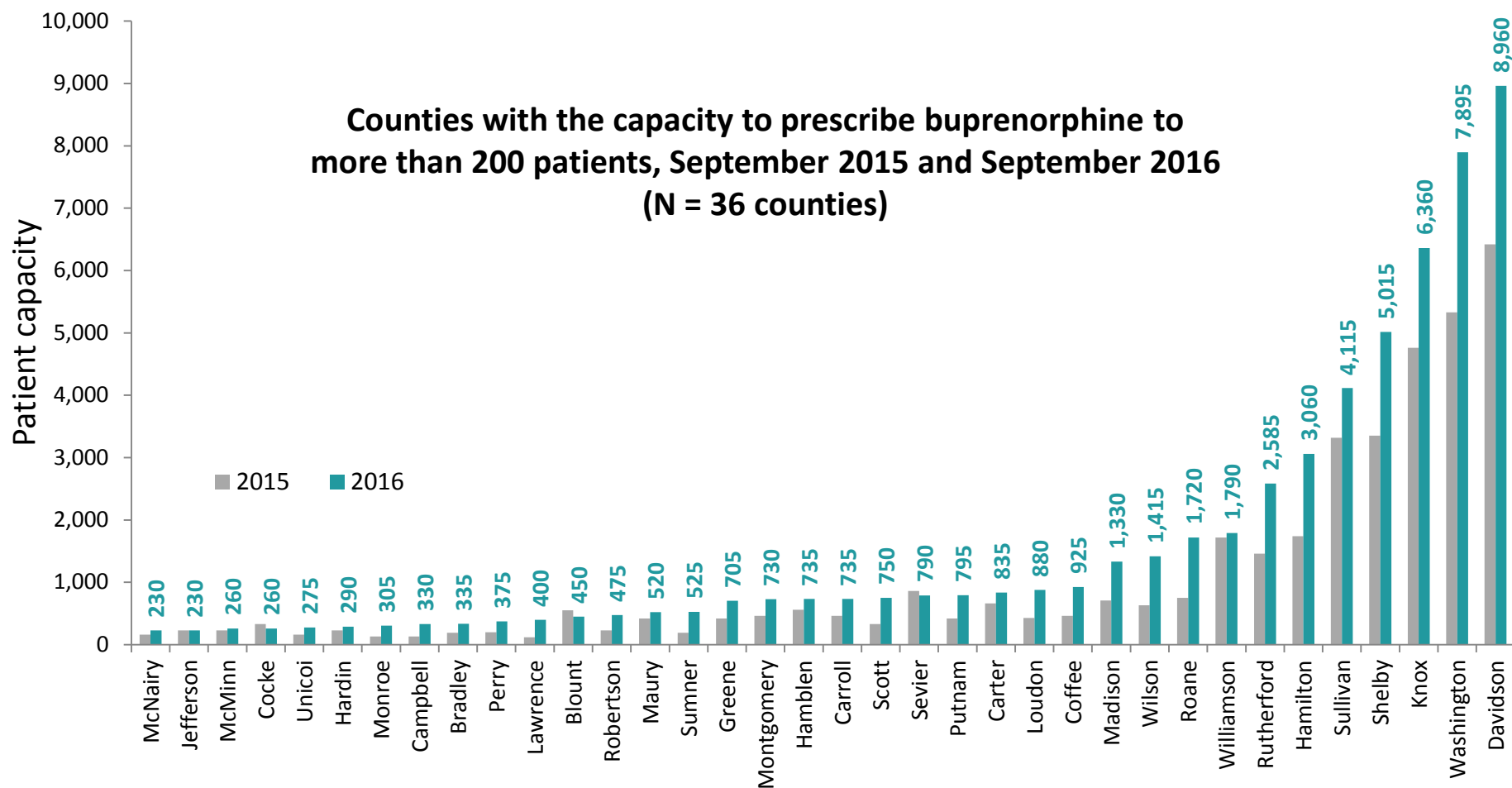


September
2016



Data sources: Drug Enforcement Administration, September 2015 and September 2016; American Community Survey, 2014

What counties had a buprenorphine patient capacity over 200 in 2016?

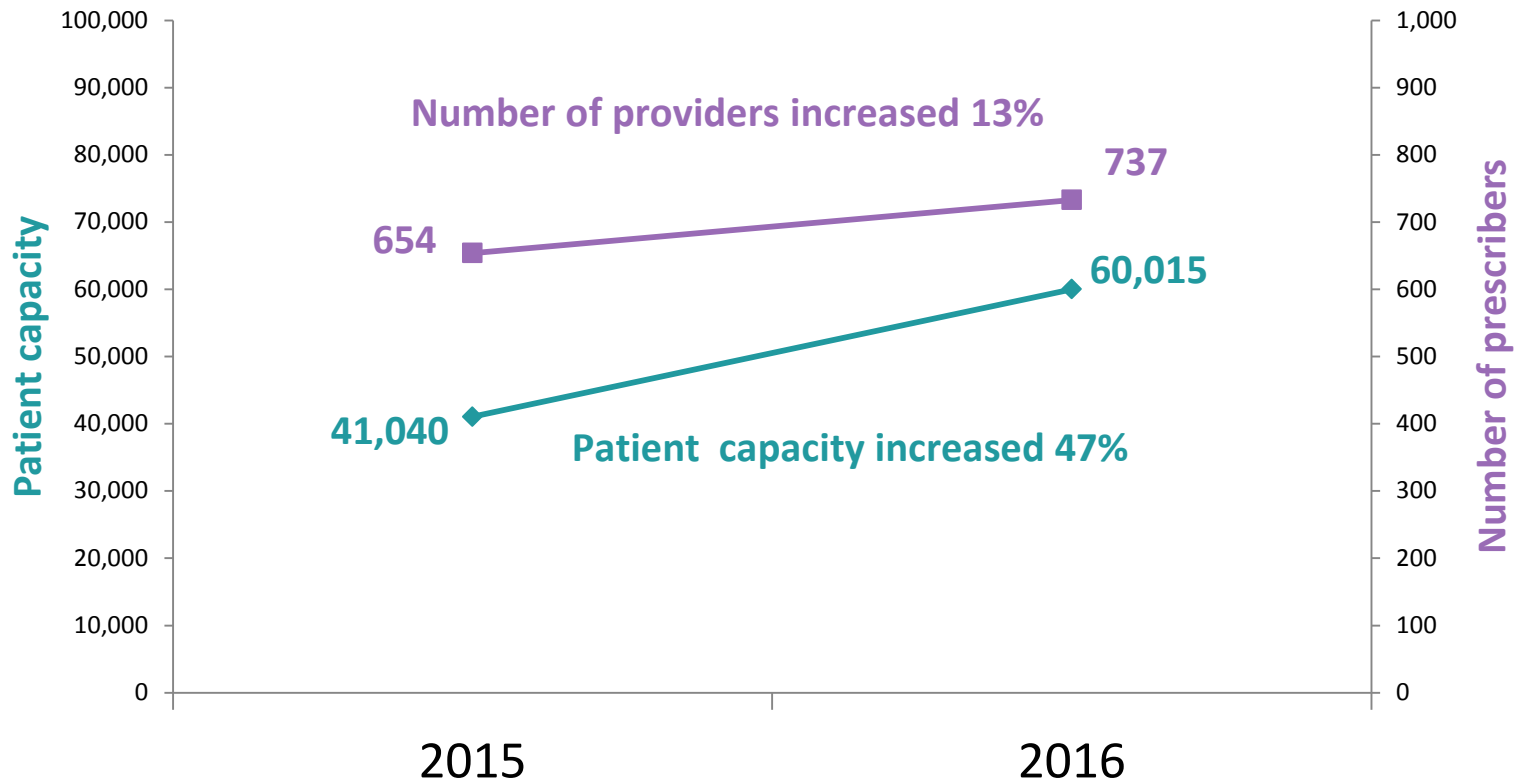


Data source: Drug Enforcement Administration, September 2015 and September 2016



Comparing prescriber numbers with patient capacity

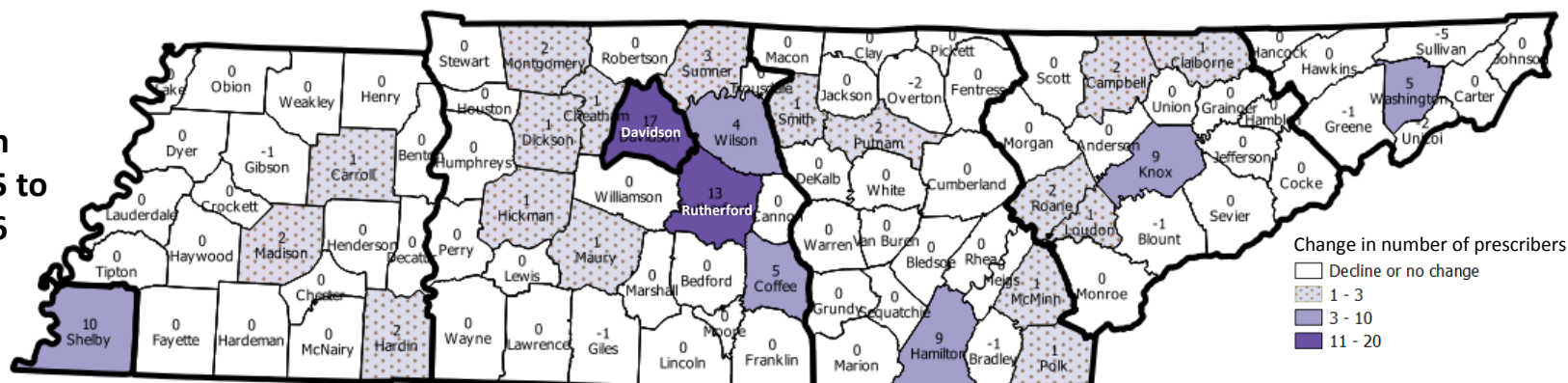
How has the number of buprenorphine prescribers and patient capacity changed from 2015 to 2016?



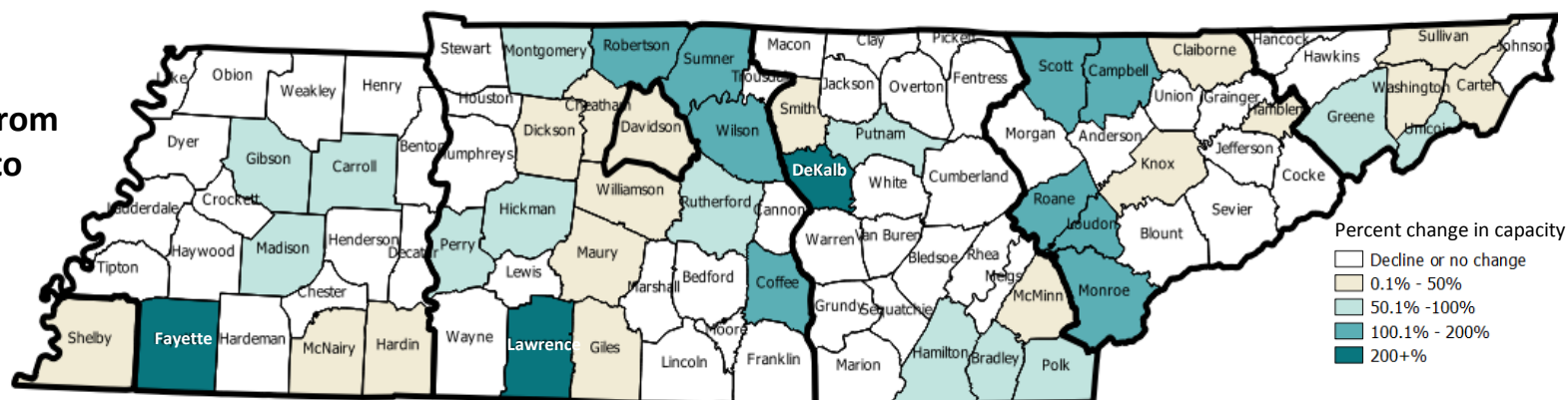
Data source: Drug Enforcement Administration, September 2015 and September 2016

Where has the number of certified buprenorphine prescribers and buprenorphine patient capacity changed between 2015 and 2016?

Change in the number of prescribers from September 2015 to September 2016



**Percent change in
patient capacity from
September 2015 to
September 2016**

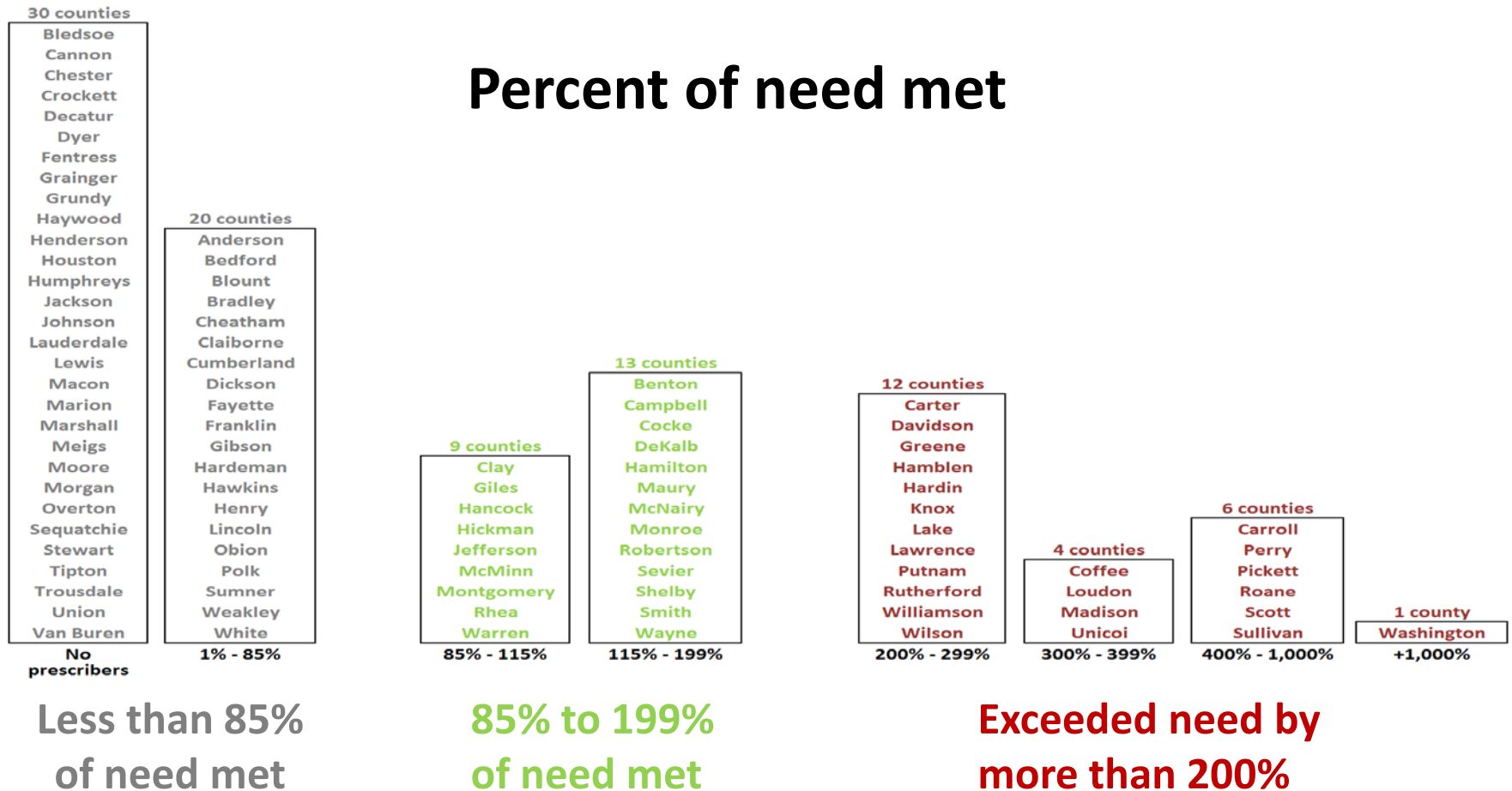


Data source: Drug Enforcement Administration, September 2015 and September 2016



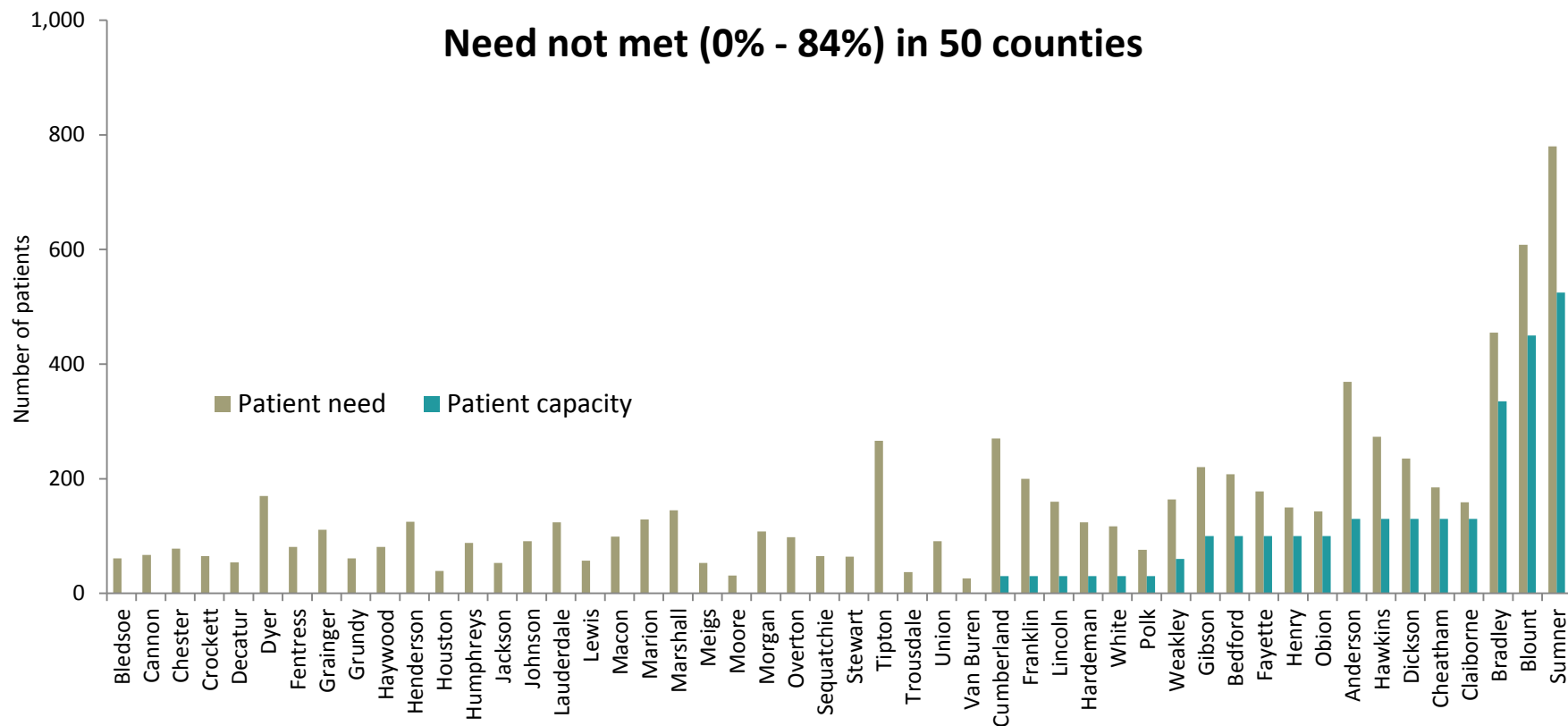
Opioid treatment need met by buprenorphine patient capacity

In 2016, how did the buprenorphine patient capacity meet the need of people misusing or abusing opioids?



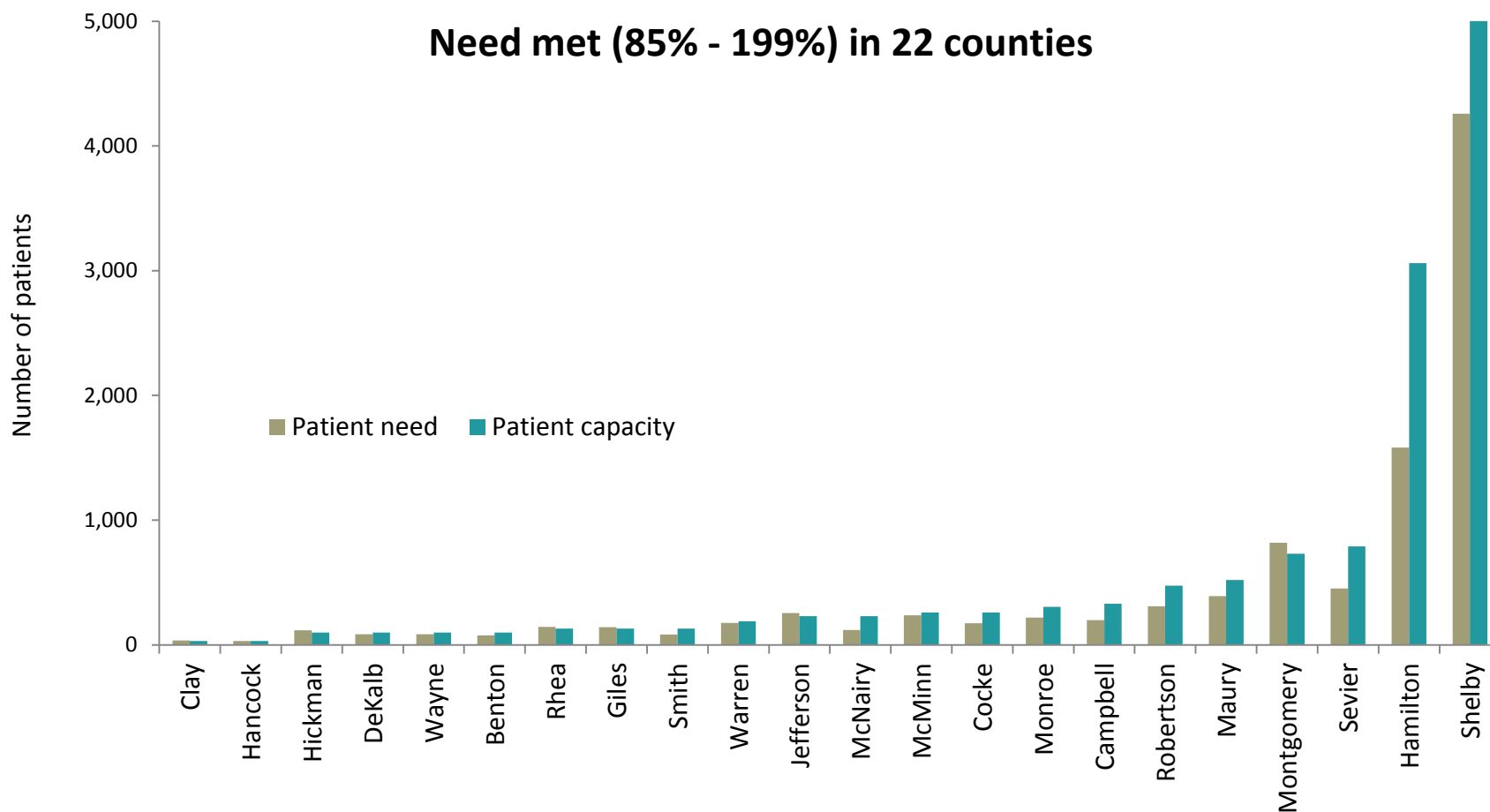
Data sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011); Drug Enforcement Administration, September 2015 and September 2016

What counties did the buprenorphine patient capacity not meet the opioid misuse disorder treatment need?



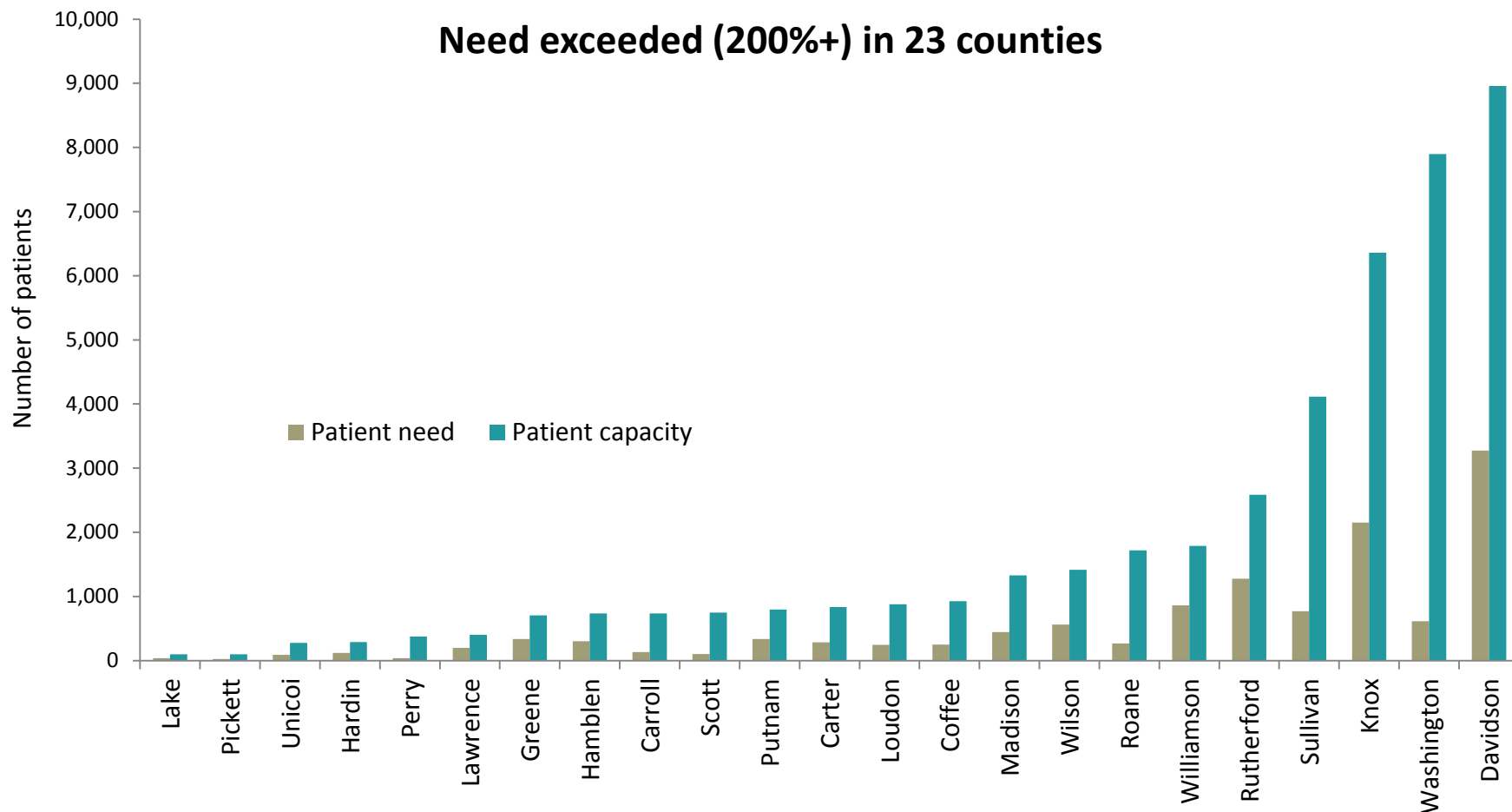
Data sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011); Drug Enforcement Administration, September 2015 and September 2016

What counties did the buprenorphine patient capacity meet the opioid misuse disorder treatment need?



Data sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011); Drug Enforcement Administration, September 2015 and September 2016

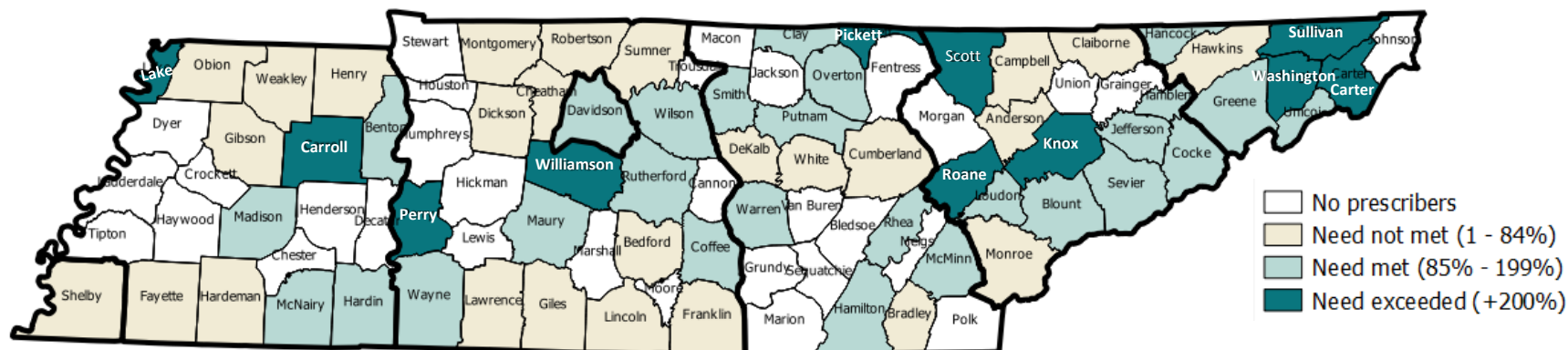
What counties did the buprenorphine patient capacity exceed the opioid misuse disorder treatment need?



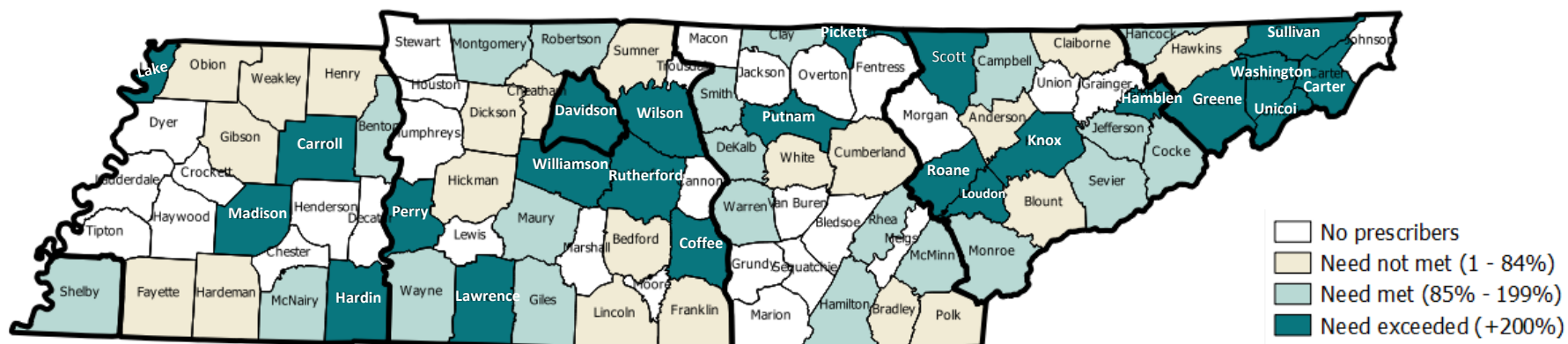
Data sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011); Drug Enforcement Administration, September 2015 and September 2016

Where is the opioid misuse disorder need being met by buprenorphine capacity ?

Need for opioid treatment met by buprenorphine capacity , 2015



Need for opioid treatment met by buprenorphine capacity , 2016



Data sources: National Survey on Drug Use and Health, 2012-2014, 2014-2015; National Institute on Drug Abuse, Monitoring the Future Survey (2011); Drug Enforcement Administration, September 2015 and September 2016

For more information:

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