

2022 SCPHA

Rural and urban differences and trends in the South Carolina obstetrician-gynecologist workforce

South Carolina Center for
**Rural and Primary
Healthcare**



**School of Medicine
Columbia**

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Mar 29, 2022

Key findings

Less than one quarter of SC ZIP Code Tabulation Areas (ZCTAs) had an obstetrician-gynecologist (OB/GYN) during 2006-2017. Lower OB/GYN distribution in rural ZCTAs has been an ongoing issues, and will likely worsen as the providers age towards retirement.

1 Finding 1

In 2017, The numbers of **active** OB/GYNs located in **rural** ZCTAs (n=68) were **23** and in **urban** ZCTAs (n=362) **629** .

3 Finding 3

The density of OB/GYNs per 10,000 women aged 15-49 decreased from **9.5 to 8.2** in **rural** ZCTAs, but increased from **12.4 to 13.9** in **urban** ZCTAs;

5 Finding 5

The proportion of **female** OB/GYNs were increased, in **rural** ZCTAs from **17.4 to 34.8%**, and in **urban** ZCTAs from **39.3 to 51.5%**;

2 Finding 2

The **proportion** of ZCTAs with an OB/GYN increased over time, from **8.1 to 9.7%** in **rural**, and **23.5 to 27.1%** in **urban** ZCTAs;

4 Finding 4

The **mean age** of OB/GYNs increased from **50 to 55** in **rural**, and from **47 to 52** in **urban** ZCTAs;

6 Finding 6

The working hours on patient care per week decreased from **56 to 44** for **rural** OB/GYNs, and decreased from **47 to 44** for **urban** OB/GYNs, during 2011-2017.

Introduction

This study aims to

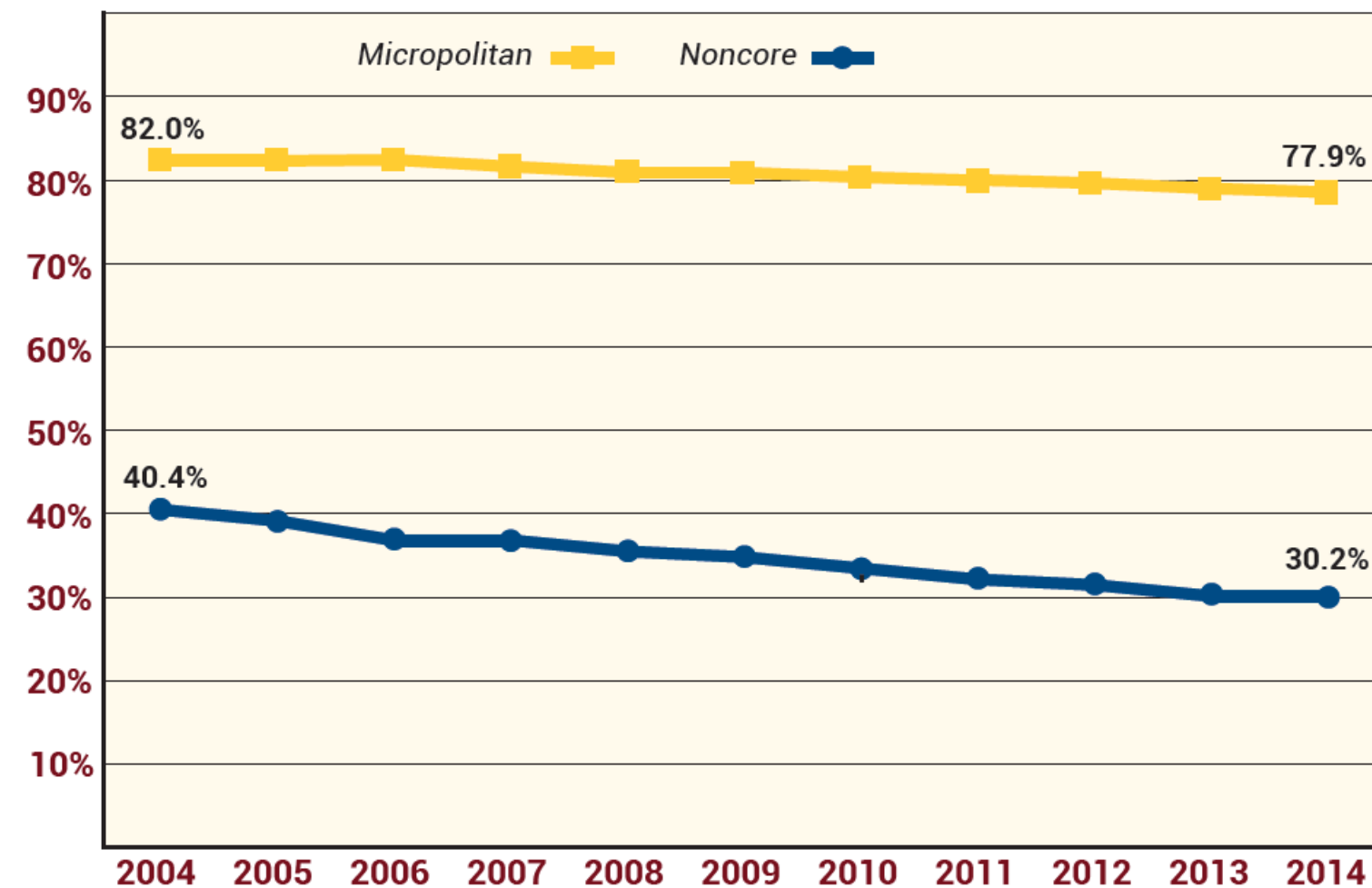
Describe the **rural-urban differences and trends** in the OB/GYN workforce for South Carolina (SC) at the ZCTA¹ level.

Is there a shortage of obstetrician-gynecologists?

--Stonehocker, J., Muruthi, J., & Rayburn, W. F. (2017).

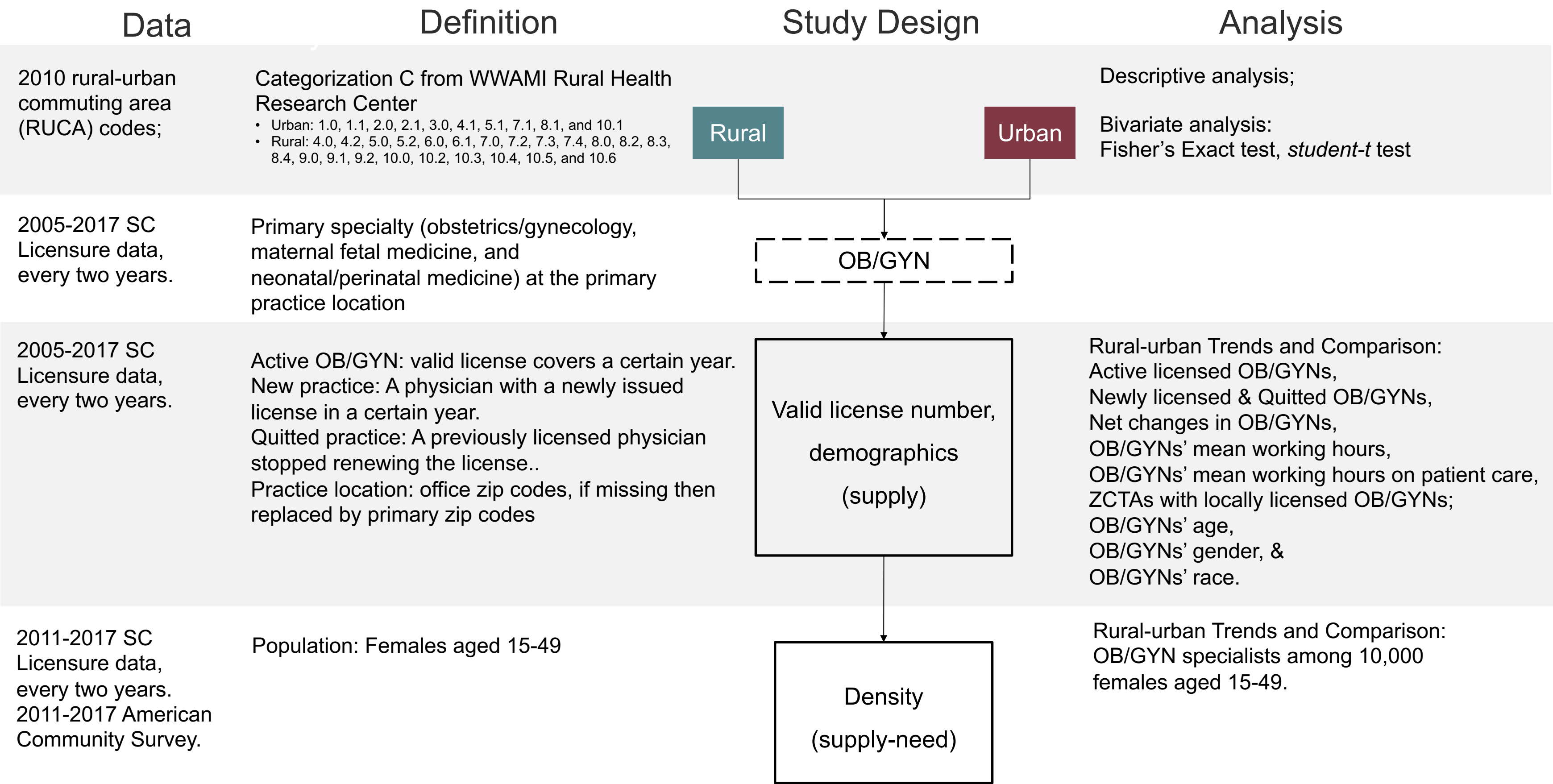
*“Findings were based on certain assumptions that the current national supply of ob-gyns supply is adequate, yet there are **insufficient data** to either support or refute this...Such forecasts require taking into account the current **demographics** of the provider workforce, numbers and characteristics of graduates, **hours worked**, desire for work-life balance, and **retirement**”*

Figure 3. Percent of micropolitan and noncore counties with in-county hospital obstetric care, 2004-14



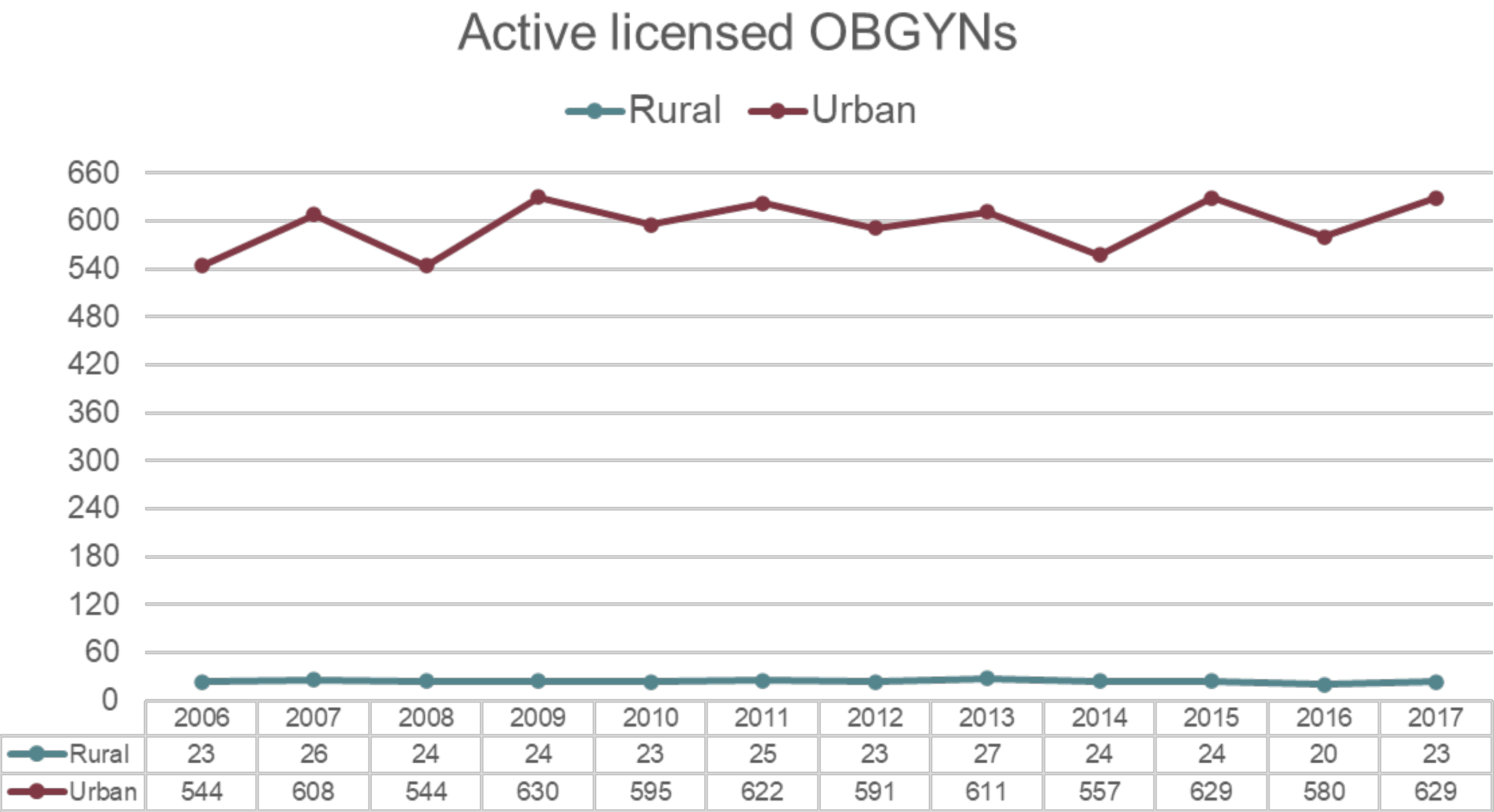
--Hung, P., Kozhimannil, K., Henning-Smith, C., & Casey, M. (2017).

Method



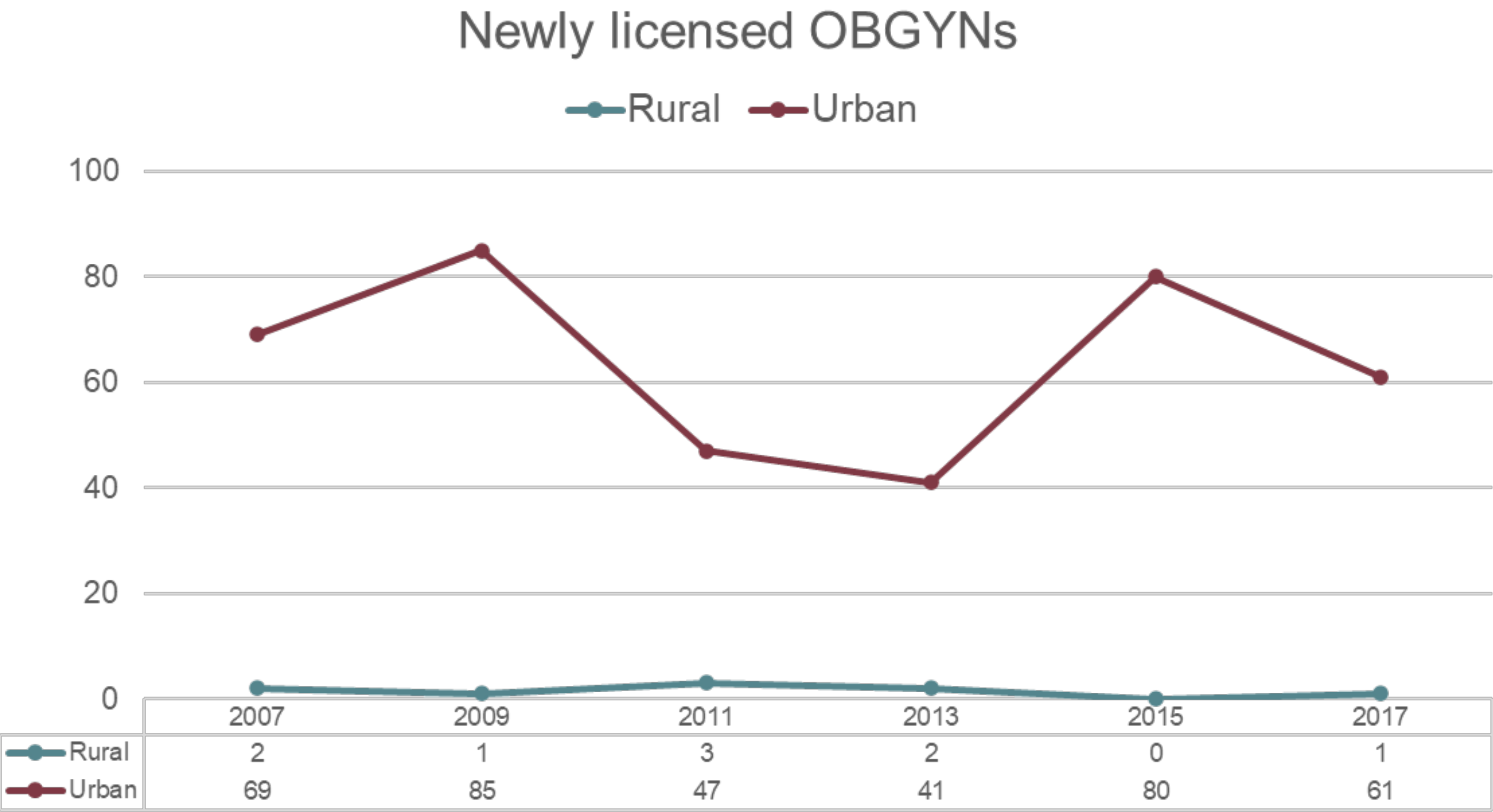
Results-graph/table 1

Active licensed OBGYNs by rurality in South Carolina, 2006-2017



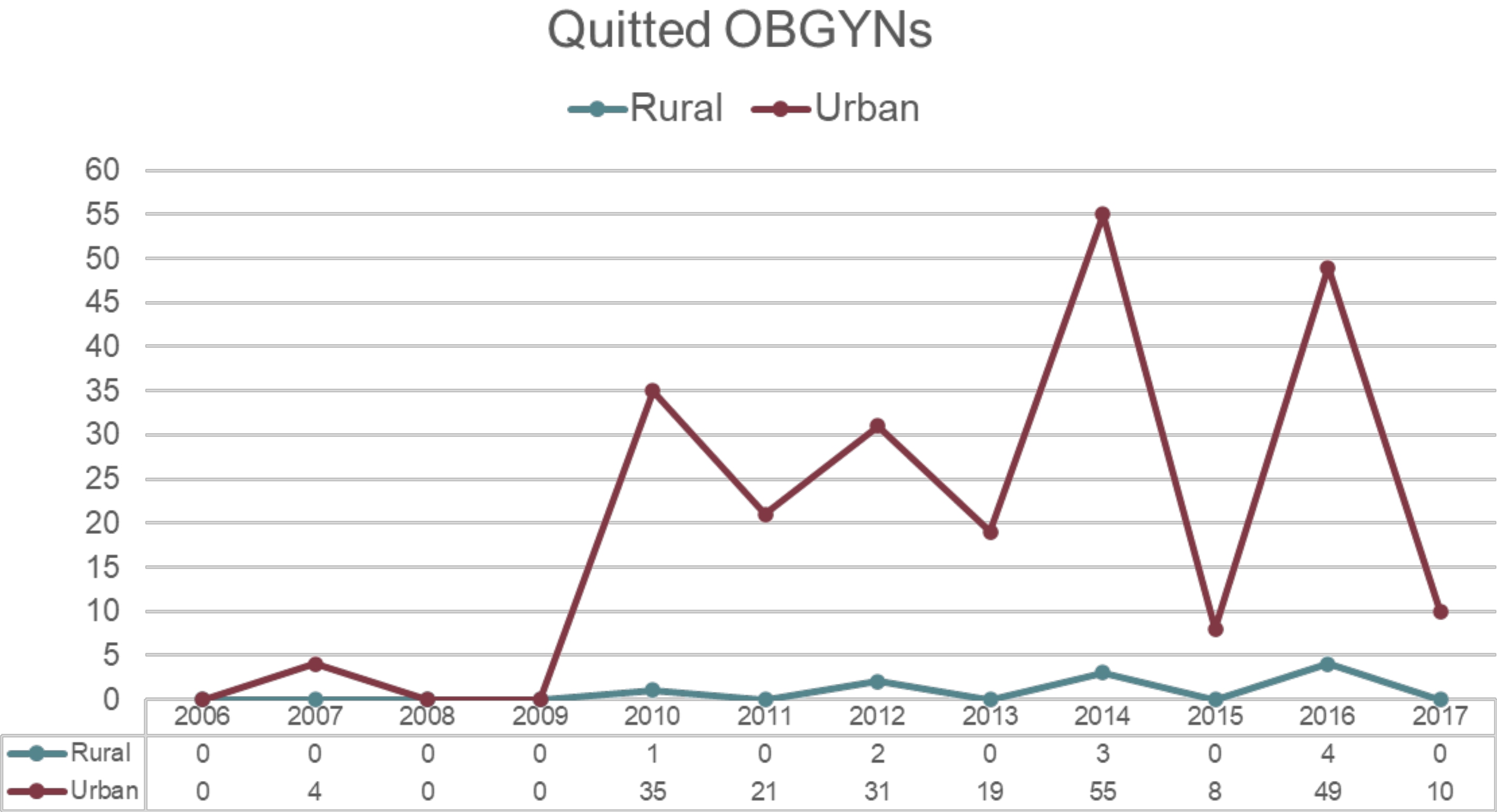
Results-graph/table 2

Newly licensed OBGYNs by rurality in South Carolina, 2007-2017



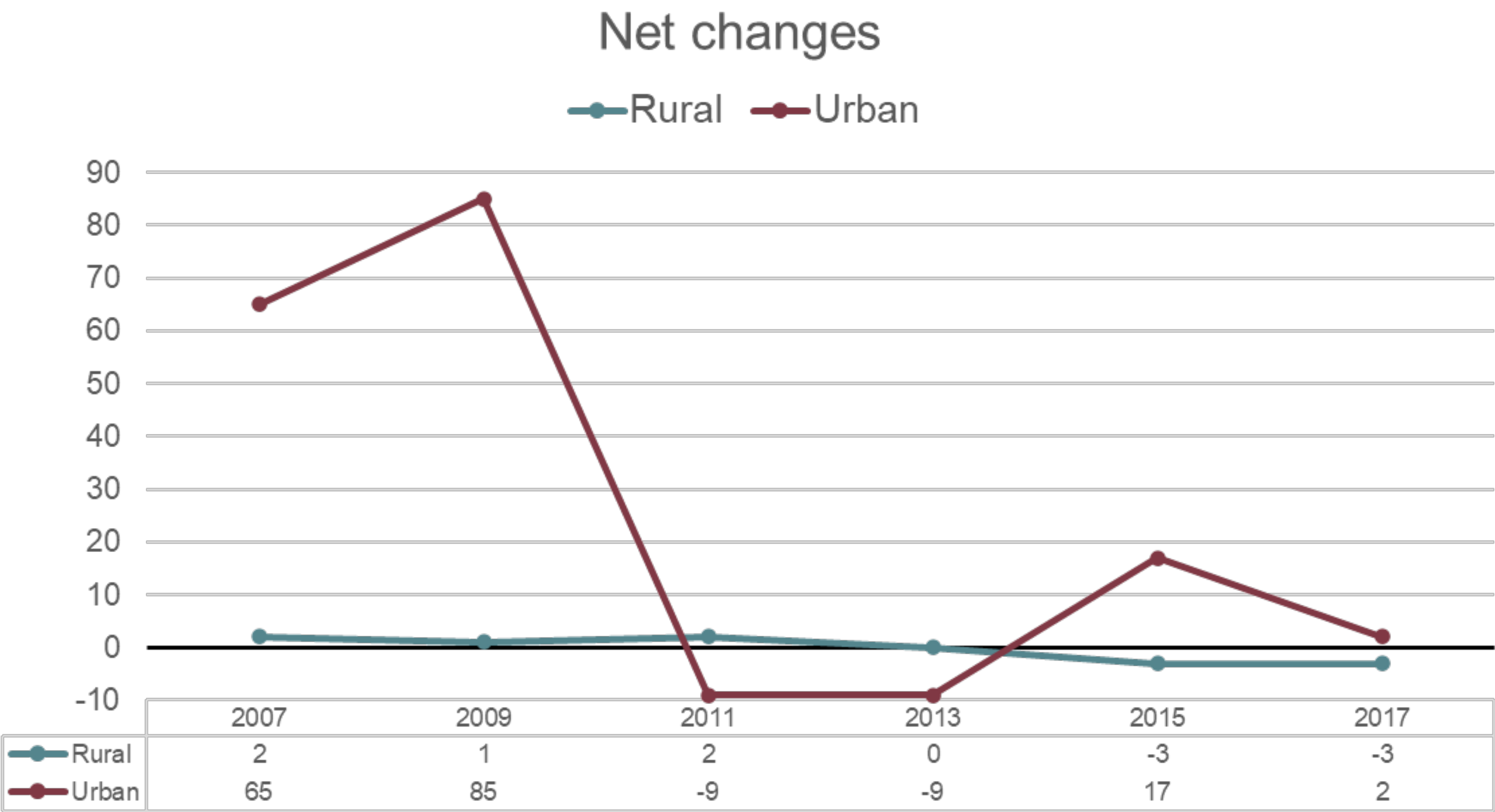
Results-graph/table 3

Quitted OBGYNs by rurality in South Carolina, 2006-2017



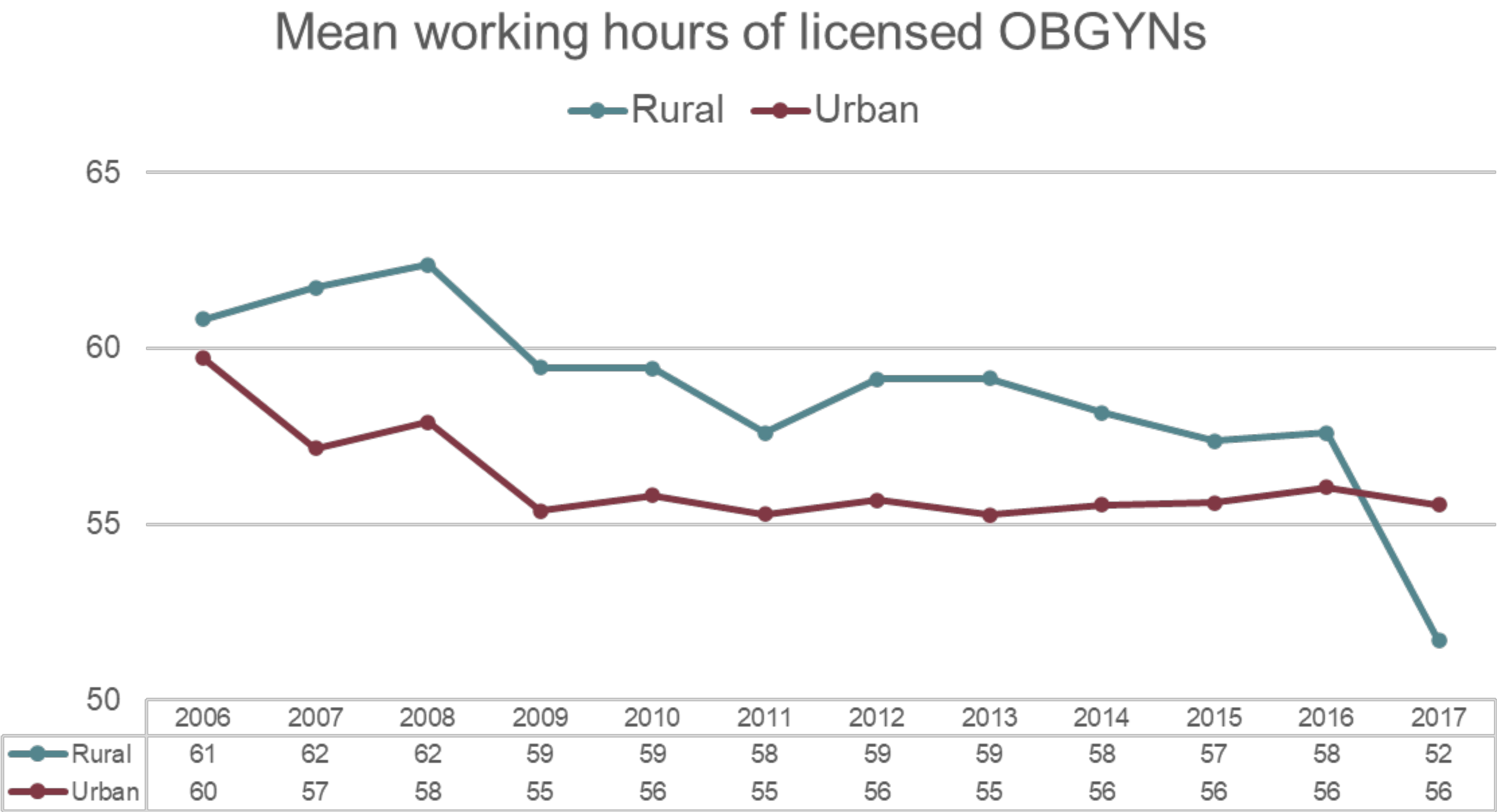
Results-graph/table 4

Net changes in numbers of licensed OBGYNs by rurality in South Carolina, 2006-2017



Results-graph/table 5

Mean working hours of licensed OBGYNs by rurality in South Carolina, 2006-2017

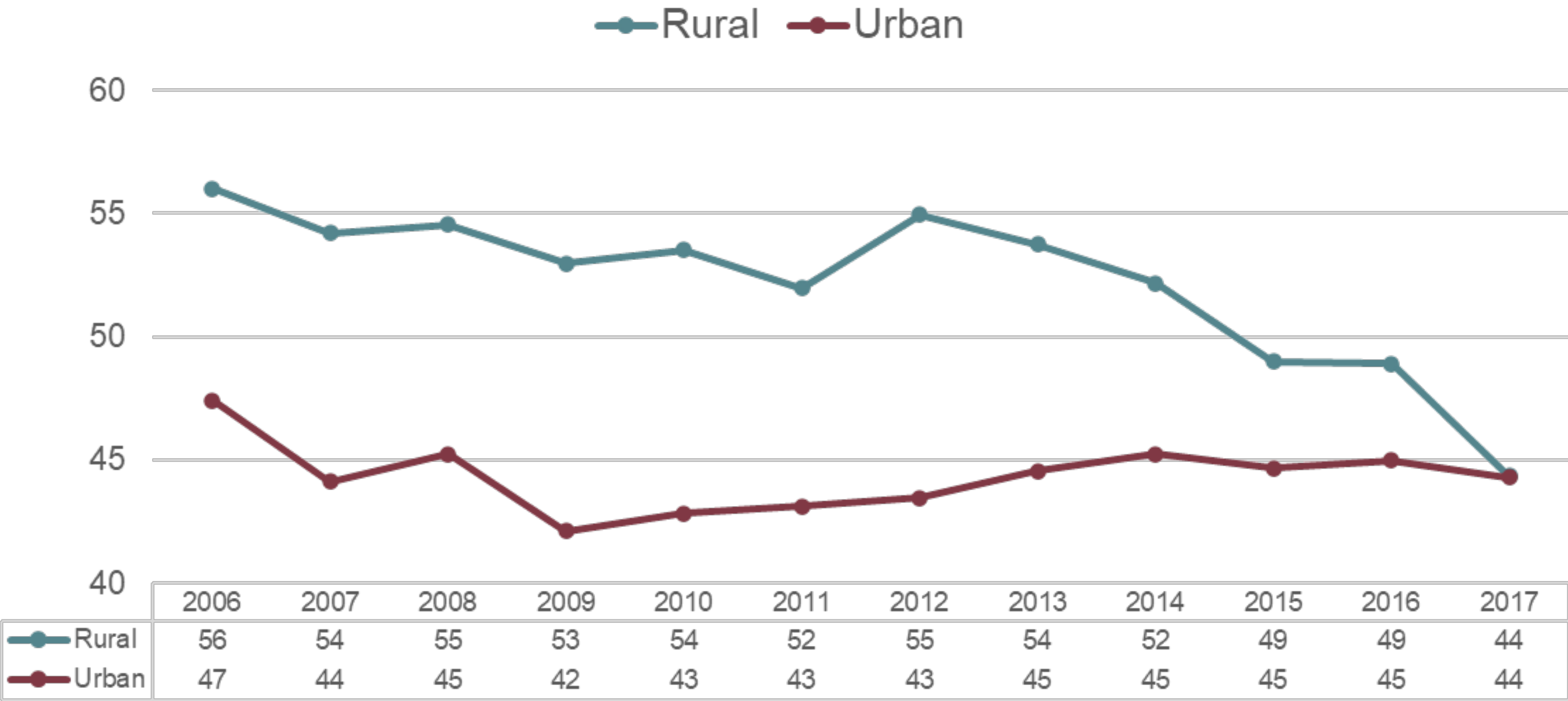


Note:
Differences were
not significant at
the 95%
significance
level.

Results-graph/table 6

Mean working hours on patient care among licensed OBGYNs by rurality in South Carolina, 2006-2017

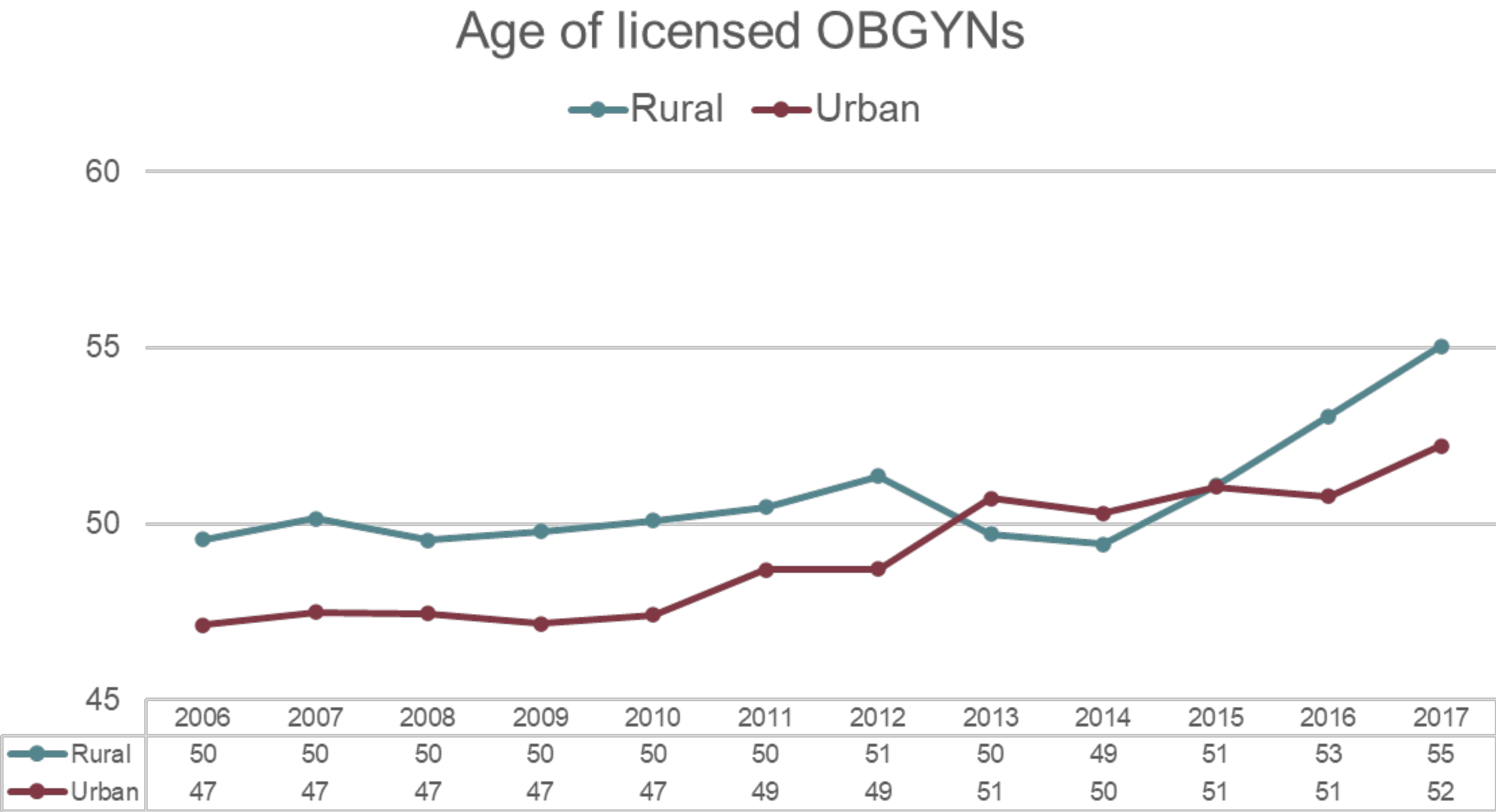
Mean working hours on patient care of licensed OBGYNs



Note:
Differences were
significant at the
95% significance
level before
2013.

Results-graph/table 7

Age of licensed OBGYNs by rurality in South Carolina, 2006-2017

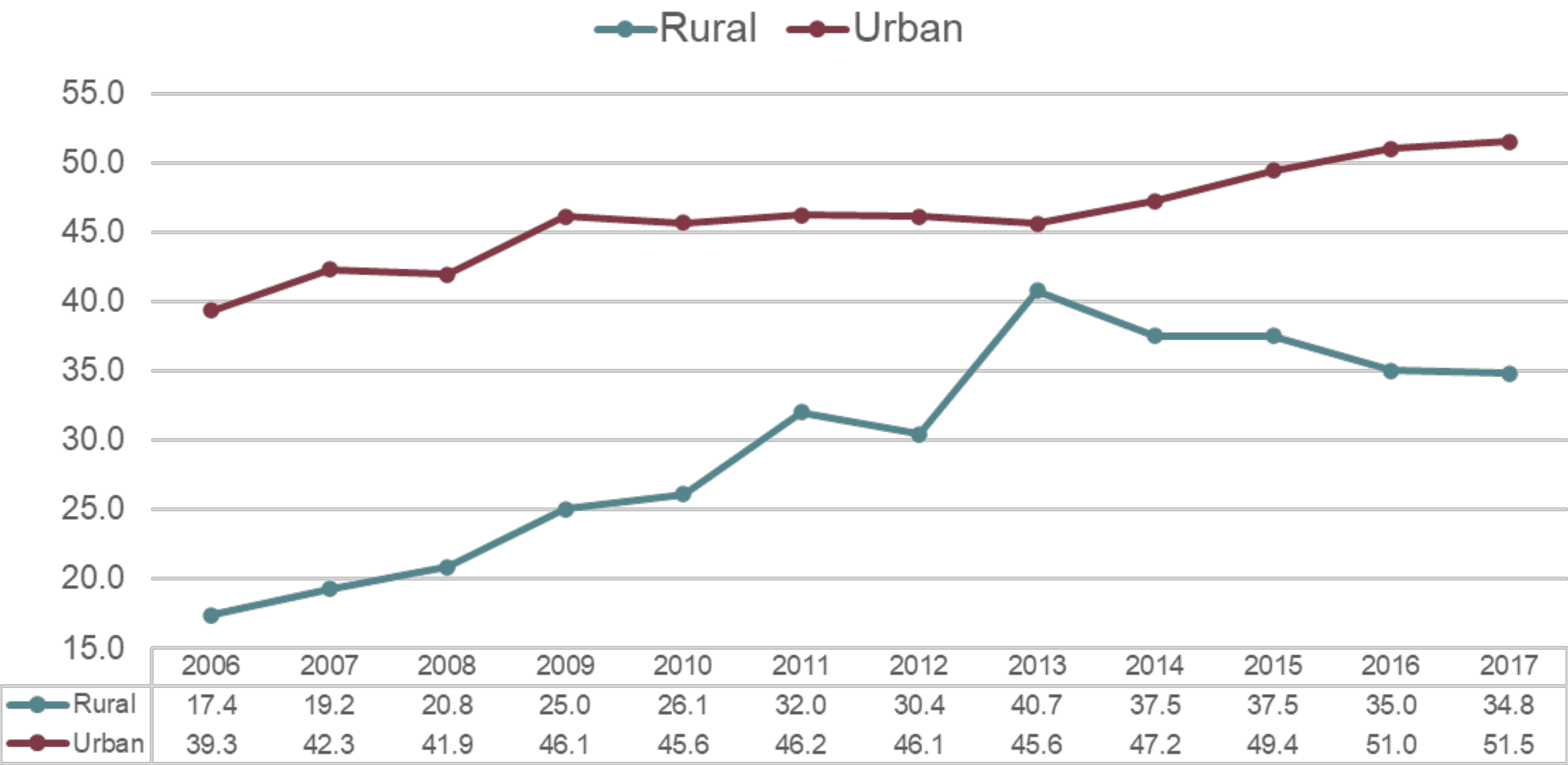


Note:
Differences were
not significant at
the 95%
significance
level.

Results-graph/table 8

Female percentage of licensed OBGYNs by rurality in South Carolina, 2006-2017

Female percentage of licensed OBGYNs

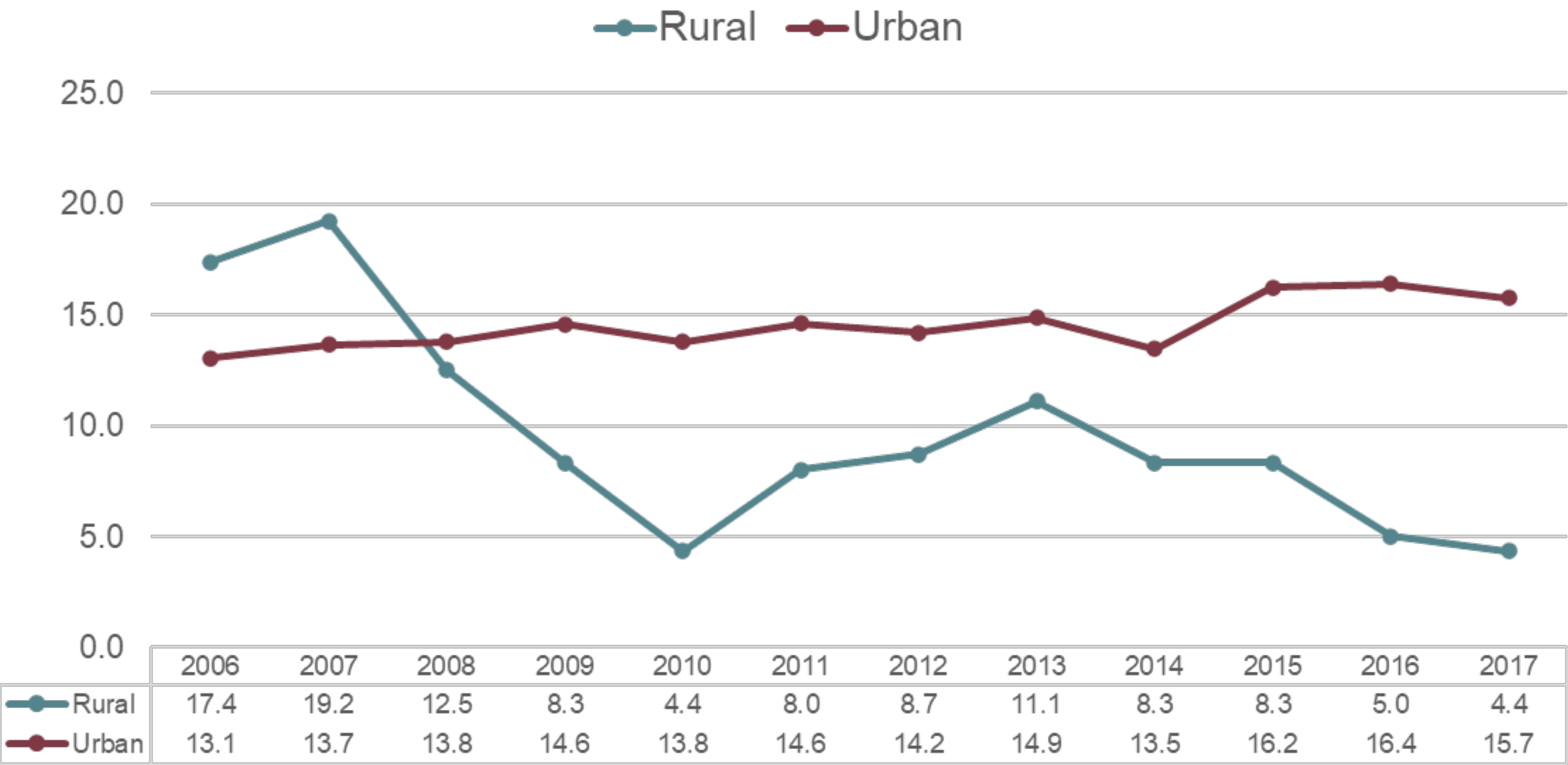


Note:
Differences were
only significant
at the 95%
significance
level in 2006 &
2007.

Results-graph/table 9

Non-White percentage of licensed OBGYNs by rurality in South Carolina, 2006-2017

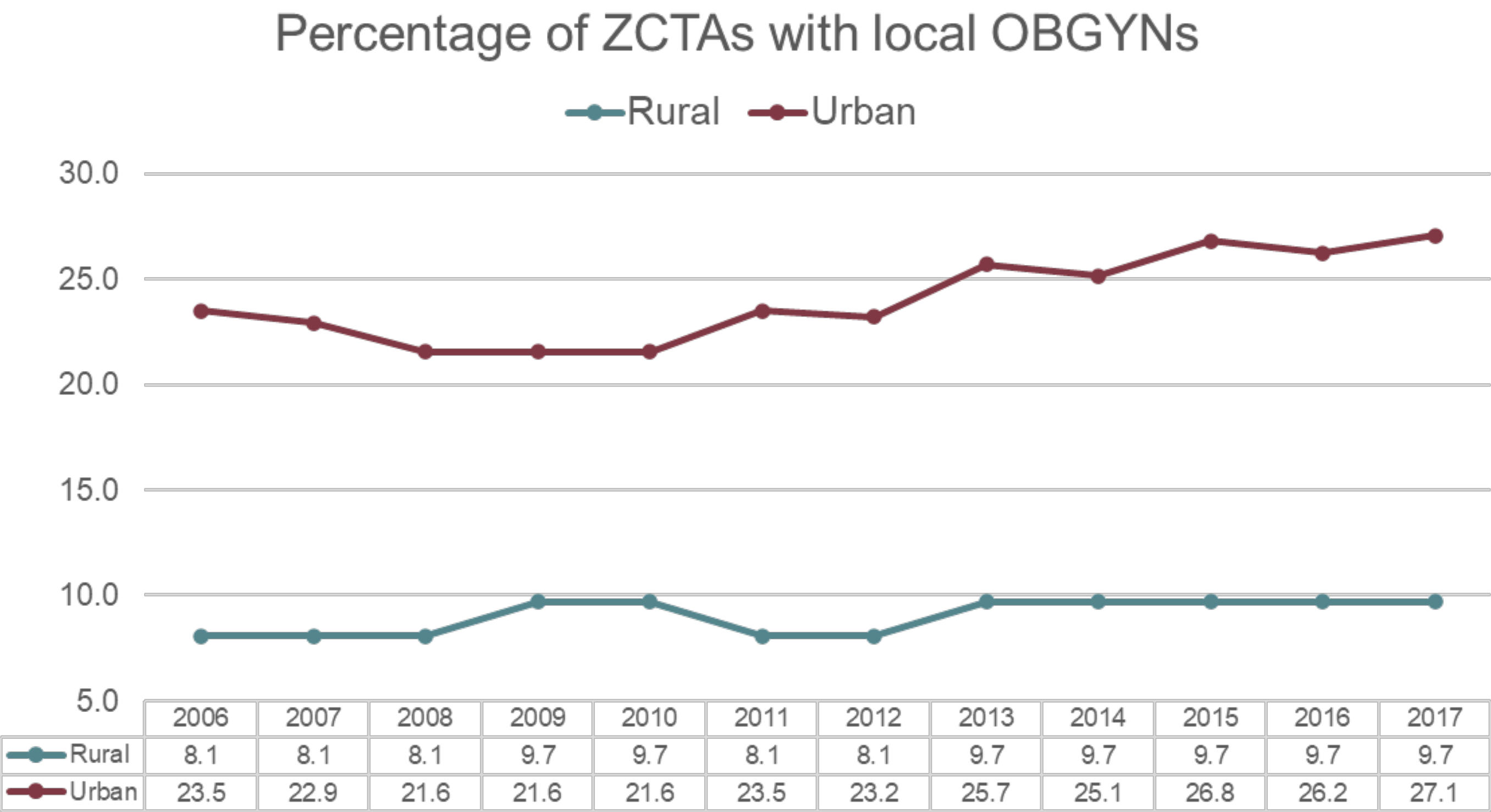
Non-Whites percentage of licensed OBGYNs



Note:
Differences were
not significant at
the 95%
significance
level.

Results-graph/table 10

Percentage of ZCTAs with local licensed OBGYNs by rurality in South Carolina, 2006-2017

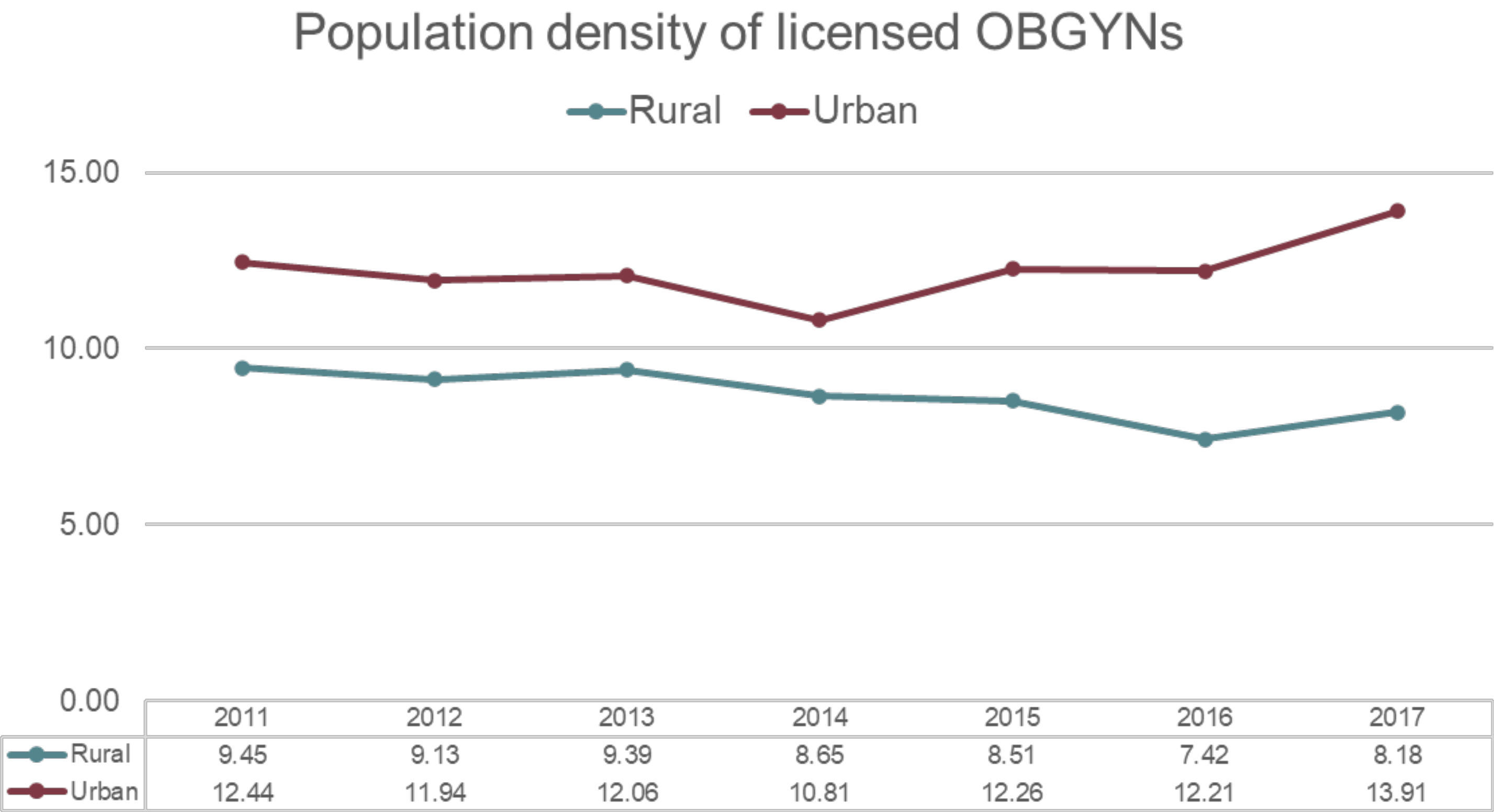


Note: Differences were all significant at the 95% significance level.

May interact with perceived travel burden which could delay prenatal care initiation and may be associated with inadequate prenatal care use.

Results-graph/table 11

Population density of licensed OBGYNs per 10,000 females aged 15-49 by rurality in South Carolina, 2011-2017



Takeaways

South Carolina is losing OBGYN workforce, especially in rural areas.

1

Less than one quarter of SC ZCTAs have a local OB/GYN.

2

In ZCTAs where there is at least one local OBGYN, OB/GYNs density per 10,000 females aged 15-49 was 8.18 in rural and 13.91 in urban ZCTAs in 2017.

3

The number of rural OB/GYNs did not change, that of urban OB/GYNs increased slightly, during 2016-2017 SC.

4

The number of newly licensed OB/GYNs was declining, and the number of quitted OB/GYNs was increasing in rural

5

The mean total working hours and mean working hours on patient care were both declined in rural OB/GYNs.

6

OB/GYNs in both rural and urban SC were aging. Female & non-White proportion of rural OB/GYNs started to decrease since 2013.

Thank You

South Carolina Center for
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