Ups and Downs: Trends in rural children’s access to care

Janice C. Probst, PhD
Director

Karen M. Jones, MSPH
Associate

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Kids:
(NRHA’s photo contest grand prize winner)
Today: new data on children’s health


- Summary of the takeaway: gains in coverage not matched in service use
- Persistent disparities in some areas

- But first…
Rural: contextual characteristic

Contextual characteristics

Individual characteristics  Behaviors  Outcomes

Andersen, Medical Care 2008
Definitions

- What do we mean by “rural”
- Two common measures: county and Census Tract
County level definitions

- County classifications
  - Short version: a county with no urbanized area of ≥ 50,000 residents
  - Long version: multiple variations based on size of metro area or remoteness of rural area

- Advantage: counties are units of government

- Disadvantage: overbounds urban, particularly in the West
US Counties, by rural status

Metro and nonmetro counties, 2013

Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

http://www.ers.usda.gov/media/1103491/metro_nonmetro.png
Census Tract definitions

- Also: ZIP Code approximations (ZCTAs)
- Coding structure based on commuting patterns: Rural Urban Commuting Areas (RUCAs)
  - RUCA main categories range from 1 (highly urban) to 10 (remote), with subunits

- Advantages:
  - Works well in West
  - NCHS reports on rural children use this metric

- Disadvantages: not a unit of government; varies over time
US, by 3 levels of RUCA (used today)
Okay, back to kids

National Survey of Children’s Health

- Sponsored by Maternal and Child Health Bureau, HRSA, USDHHS
- Telephone survey (landlines 2003, 2007; land and cell in 2011-2012) of households with at least one child age 0 – 17
- Large enough for state-level estimates (>90,000 observations each year)
- Use RUCAs to define rural
- Information available at http://www.cdc.gov/nchs/slaits/nsch.htm
Previous reports

- SCRHRC used the 2003 NSCH for reports on rural children’s oral health and weight status
Previous reports

- MCHB produced reports on the 2007, 2011-12 surveys

The National Survey of Children's Health

The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation 2007
September 2011
U.S. Department of Health and Human Services Health Resources and Services Administration

The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation 2011-2012
April 2015
U.S. Department of Health and Human Services Health Resources and Services Administration
What’s new:

- Trends across the decade: combining three surveys to look for change
- Limitation: precedes implementation of the Affordable Care Act
Context for rural children: Increasing diversity
Slight declines in proportion of rural children who are African American

Percent minority children, by residence, 2003 – 2012, NCSH

Change significant across study periods
Marked increase in proportion who are Hispanic

Percent minority children, by residence, 2003 – 2012, NCSH

- Large Rural Black
- Large Rural Hispanic
- Small Rural Black
- Small Rural Hispanic

Change significant across study periods
Slight increases for “other” children

Percent minority children, by residence, 2003 – 2012, NCSH

Change significant across study periods
Context for rural children: poverty
Rural children: increasing disadvantage

Percent of children living in poor families, by residence, 2003 – 2012 NSCH

- Urban, <100% FPL
- Large Rural, <100% FPL
- Small Rural, <100% FPL

Change significant over study periods
Percent of children living in poor and near poor families, change significant over study periods.
Nutrition programs increasingly important

Proportion of children receiving free or reduced lunch, by residence, 2003 – 2012 NSCH
Nutrition programs increasingly important

Proportion of children in families receiving **food stamps**, by residence, 2003 – 2012 NSCH
Proportion of children with special health care needs has increased

Percent of children with special health care needs, by residence, 2003 – 2012, NSCH

Change significant over study periods within Total, Urban, and Large Rural
Insurance coverage has improved

Percent of children with health insurance, by residence, 2003 – 2012, NCSH

Change significant over study periods within residence
Gains for children in poverty

Proportion of children in poverty with health insurance coverage, 2003 – 2012 NSCH

Change significant over study periods within residence
Medicaid more important for rural

Percent of insured children who receive coverage from Medicaid, by residence, 2003 – 2012 NCSH

Changes were significant within residence
African American kids well covered

Percent of minority children with health insurance, by residence, 2003 – 2012, NSCH

Change in health insurance status across race/ethnicity over study periods were significant within residence.
But disparities for Hispanic kids

Percent of minority children with health insurance, by residence, 2003 – 2012, NSCH

Change in health insurance status across race/ethnicity over study periods were significant within residence.
“Other” children parallel African American

Percent of minority children with health insurance by residence, 2003 – 2012, NSCH

- Large Rural Black
- Large Rural Hispanic
- Large Rural Other
- Small Rural Black
- Small Rural Other
- Small Rural Hispanic

Change significant within residence
White children: upticks among urban, small rural

Percent of white children with health insurance, by residents, 2003 – 2012 NSCH

Change significant within residence
Rural context: access to care
Preventive medical visits lag

Percent of children who received a preventive medical visit during the past 12 months, by residence, 2003 – 2012 NSCH

- Urban
- Large Rural
- Small Rural

Change significant over study periods within residence
Gaps for all children in poverty

Preventive medical visit during past year, by residence, 2003 – 2012 NSCH

- Urban, <100% FPL
- Large Rural, <100% FPL
- Small Rural, <100% FPL

Change significant over study periods within residence
Preventive dental visits lag in rural

Percent of children with a preventive dental visit during the past 12 months, by residence, 2003 – 2012, NSCH

- Urban
- Large Rural
- Small Rural

Change significant over study periods within residence
Particularly for poor children

Percent of children with a preventive dental visit in the past year, by residence and income, 2003 – 2012 NSCH

- Urban, <100% FPL
- Large Rural, <100% FPL
- Small Rural, <100% FPL
- Total, all FPL

Change significant over study periods within residence
Health outcomes
Most parents report healthy children

Percent of children with excellent or very good health status by residence, 2003 – 2012, NSCH

The world’s most boring graph!

Change NOT significant over study periods within residence
Disparities for poor children

Percent of parents reporting child’s health is excellent or very good, by residence and poverty status, 2003 – 2012 NSCH

- Urban, <100% FPL
- Large Rural, <100% FPL
- Small Rural, <100% FPL
- Total, all FPL

Rural Health Research Center
South Carolina
Oral Health: Condition of teeth

Percent of parents reporting excellent or very good condition of child’s teeth, by residence, 2003 – 2012, NSCH
Poverty and Oral Health

Proportion of parents reporting child’s teeth are excellent or very good, by residence and poverty status, 2003 – 2012 NSCH

Change significant for Urban population only
Takeaway

- Progress in some areas:
  - Rural children increasingly have health insurance

- Not changed:
  - Rural disparities persist across most measures of access, although not in measures of health status
  - A substantial group of parents do not see their child’s oral health as “excellent/very good”

- Getting worse:
  - Increasing poverty with no change in rural urban disparities
  - Declines in preventive visits
Thanks!

- Our web site:
  - rhr.sph.sc.edu

- Our funder for studying kids trends:
  - Federal Office of Rural Health Policy, Health Resources & Services Administration, US DHHS

- Contact:
  - jprobst@sc.edu
The Rural Health Research Gateway provides access to all publications and projects from eight different research centers.

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Shawnda Schroeder, PhD
Principal Investigator
701-777-0787
shawnda.schroeder@med.und.edu

Center for Rural Health
University of North Dakota
501 N. Columbia Road Stop 9037
Grand Forks, ND 58202