



The Landscape of Obstetric Resources and Risks in Indiana: *A Framework for Informing Policy*

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Presentation Objectives

Describe

Describe maternal and child health as priorities (health and legislative) in the State of Indiana

Consider

Consider national report on Maternity Care Deserts and the need for an Indiana specific lens

Analyze

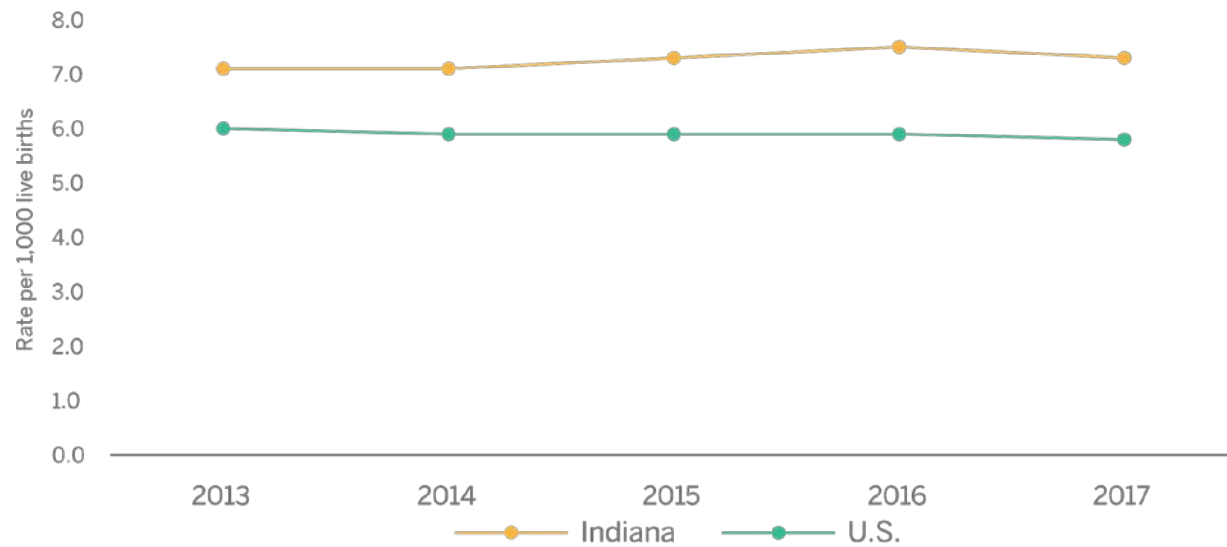
Analyze state data related to obstetric resource availability and health related risk factors

Explore

Explore potential solutions for health system and hospitals to contribute improving Maternal and Child Health in Indiana

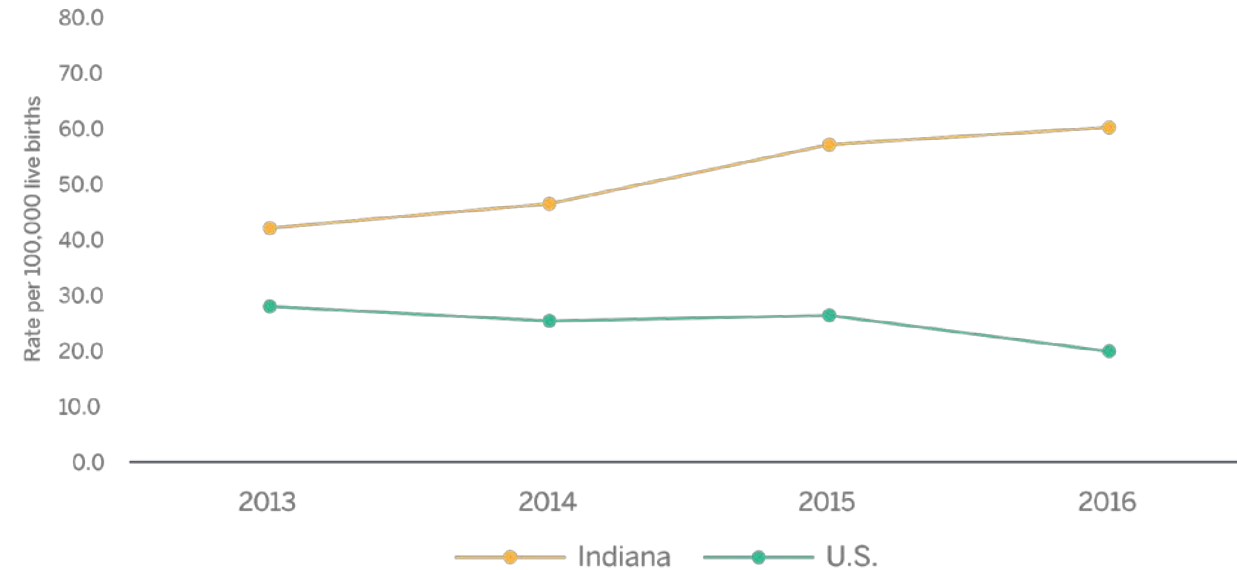
Maternal & Infant Mortality: Call to Action

Figure 1. Infant Mortality Rate for Indiana and the U.S., 2013 - 2017



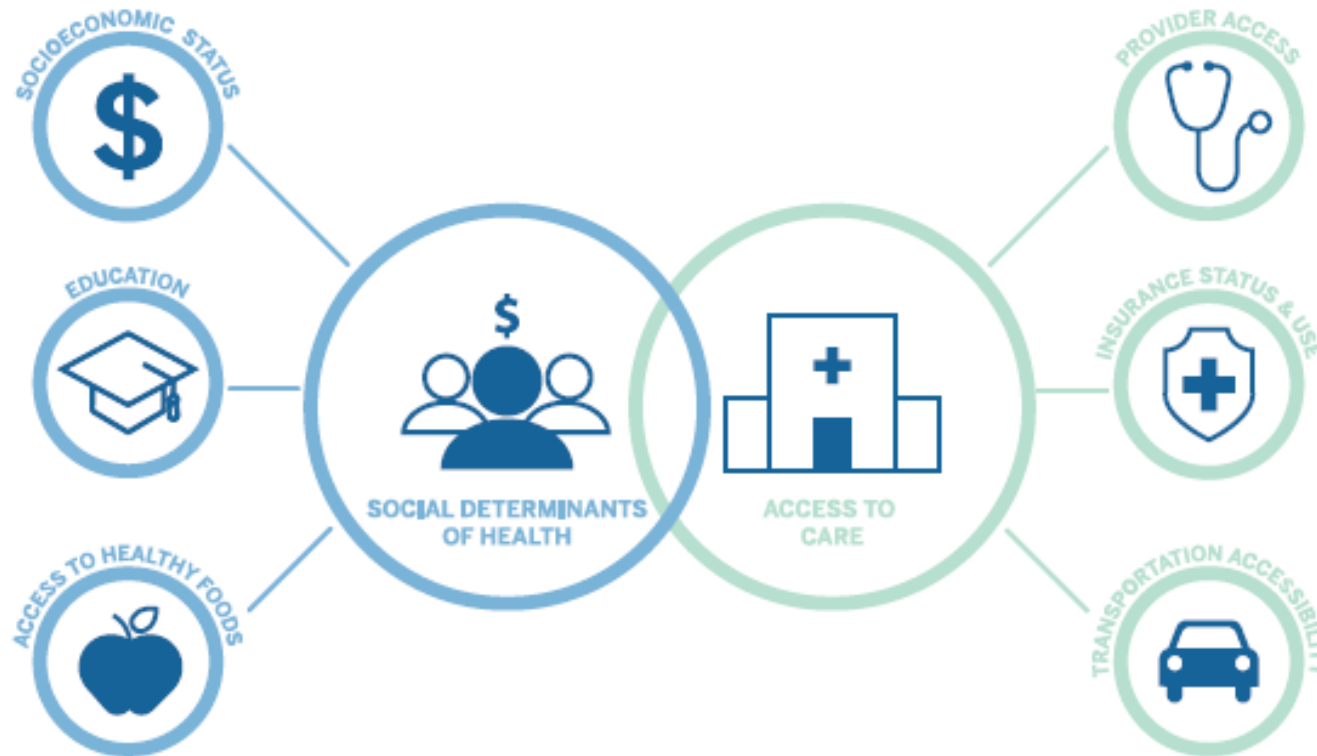
Source: National Center for Health Statistics, CDC; World Bank

Figure 2. Maternal Mortality Rate for Indiana and the U.S., 2013 - 2016



Source: National Center for Health Statistics, CDC; World Bank

Recent Programmatic Initiatives



STATE PROGRAMS TO ADDRESS SOCIAL DETERMINANTS OF HEALTH		STATE PROGRAMS TO ADDRESS ACCESS TO CARE	
<p>TANF Temporary Assistance for Needy Families</p>	<p>SNAP Supplemental Nutrition Assistance Program</p>	<p>NFP Nurse-Family Partnership</p>	<p>OB NAVIGATOR Supplemental Nutrition Assistance Program</p>
<p>SAFETY PIN Protecting Indiana's Newborns</p>	<p>WIC Special Supplemental Nutrition Program for Women, Infants, and Children</p>	<p>NEWBORN SCREENING Protecting Indiana's Newborns</p>	<p>IPQIC Indiana Perinatal Quality Improvement Collaborative</p>
<p>SAFE SLEEP</p>			

Recent Legislative Initiatives

Year	Bill Number and Title	Summary by Bowen Center
2019	HEA 1007 – Perinatal Care	Created a perinatal navigator program through ISDH that will target communities throughout Indiana with the highest infant mortality rates. Also ensures every pregnant woman will be assessed for substance use disorder.
2019	SEA 278- Local Fetal-infant mortality review teams	Allows for establishment of local fetal-infant mortality review teams (review team) to review fetal deaths and infant deaths to gather information to improve community resources and systems of care.
2019	SEA 41-Newborn screenings for health disorders	Adds certain disease screenings to be performed on newborns.
2019	SEA 416-Medicaid coverage for doula services.	Provides that Medicaid pregnancy services may include reimbursement for doula services.
2018	SEA 142-Maternal mortality review committee	Establishes a statewide maternal mortality review committee through ISDH.
2018	SEA 360-Perinatal levels of care designation certification	Requires ISDH to establish a program to certify perinatal levels of care designations for licensed hospitals and birthing centers that provide birthing services.

National Report on Maternity Care Deserts

Nowhere To Go: Maternity Care Deserts Across the U.S.

- 2018 March of Dimes Report
- Used following measures from national data sources to examine access to maternity care:
 - hospitals offering obstetric care,
 - count of OB providers per 10,000, and
 - proportion of women 18-64 without health insurance.

MATERNITY CARE DESERTS

In a very broad sense, access to maternity care can be defined by availability of hospitals providing obstetric care, availability of providers offering obstetric care and access to that care through health insurance. Counties without a hospital offering obstetric care and without any obstetric providers is defined here as a maternity care desert. Women may have limited access to appropriate preventive, prenatal and postpartum care if they live in counties with few hospitals providing obstetric care, few OB providers and a high proportion of women without health insurance.

Definitions	Maternity care deserts	Limited access to maternity care (LAMC)	
		Level 1	Level 2
Hospitals offering obstetric (OB) care	zero	<2 Hospitals	<2 Hospitals
OB Providers (OB/GYN, CNM) per 10,000	zero	<60	<60
Proportion of women 18-64 without health insurance*	any	10% or greater	Less than 10%

Notes: OB/GYN = obstetrician/gynecologists; CNM = certified nurse midwives
*U.S. average is approximately 10%.

Map 1. Access to Maternity Care in U.S. Counties, 2016

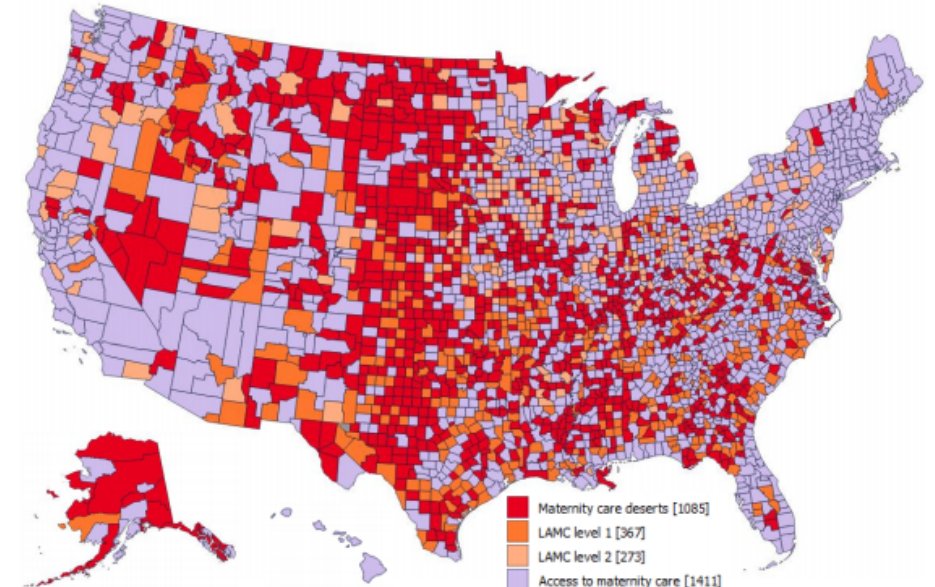


Table 1. Distribution of counties, women, and births by access to maternity care

	Maternity care deserts		Limited access to maternity care (LAMC)				Access to maternity care		Total Count
	Count	Percent	Level 1		Level 2		Count	Percent	
			Count	Percent	Count	Percent			
Counties	1,085	34.6	367	11.7	273	8.7	1,411	45.0	3,136
Women over 15 (in 1,000s)	5,306	4.2	5,857	4.7	4,546	3.6	109,237	87.4	124,946
Births	148,631	3.8	195,308	4.9	137,397	3.5	3,464,664	87.8	3,946,000








Indiana Specific Lens

Why?

- The March of Dimes report is a useful resource for national planning, but **lacks granularity** for community-specific planning
- Simultaneously analyzes obstetric care **resources** (obstetric providers, hospitals with obstetric services) and infant/maternal health **risks** (IMR, prevalence of women who smoke during pregnancy, % pregnant women who received prenatal care in 1st trimester)



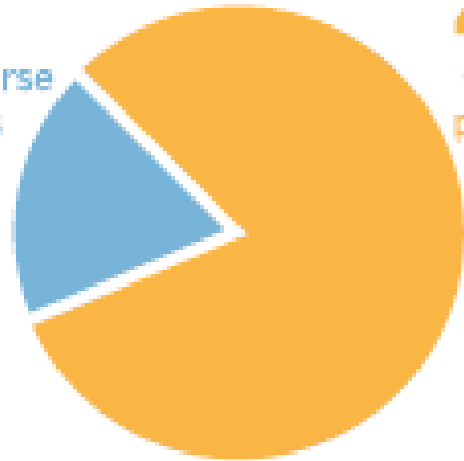
Indiana Landscape Analysis

Category Assignment	Data Points
Obstetric Care Resources	
 No Resources	0 Birthing Hospitals AND 0 OB providers
 Partial Resources	0 Birthing Hospitals, <34 OB provider FTE per 100,000
 Limited Resources	1 birthing hospital, <34 OB provider FTE per 100,000
 Ample Resources	1 birthing hospitals, >34 OB provider FTE per 100,000 or 2 or more Birthing Hospitals, </> 34 OB provider FTE per 100,000
Infant/Maternal Health Risk	
 Low Risk	0-1 Risk factors worse than state average
 Moderate Risk	2 Risk factors worse than state average
 High risk	3 Risk factors worse than state average

Results: Obstetric Care Resources



98⁶
Certified Nurse
Midwives



422⁶
OB/GYN
providers

Distributed through
56 of 92
Counties



87
Birthing
Hospitals

Distributed through
62 of 92
Counties

Results: Obstetric Care Resources (Cont.)



✓ = Resources Available
✗ = Resources Not Available

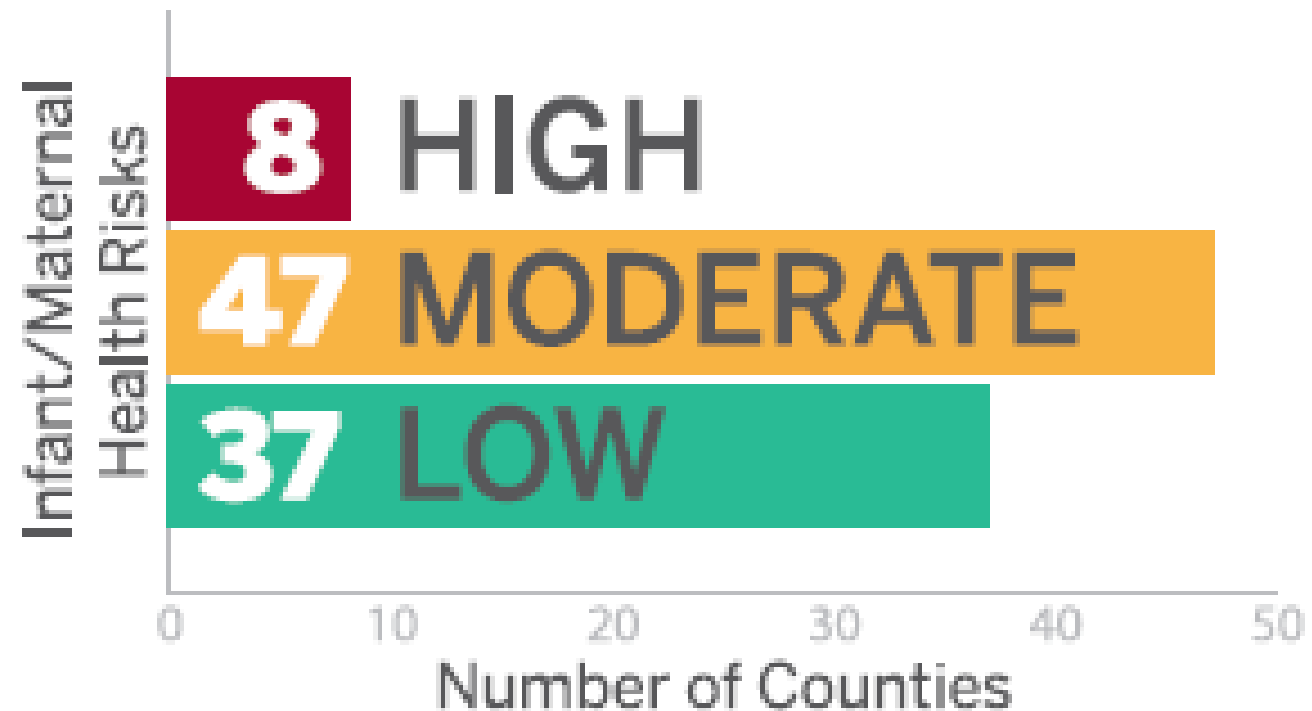
53 COUNTIES
✓ Birthing Hospital
✓ OB provider

9 COUNTIES
✓ Birthing Hospital
✗ OB provider

3 COUNTIES
✗ Birthing Hospital
✓ OB provider

27 COUNTIES
✗ Birthing Hospital
✗ OB provider

Results: Infant/Maternal Health Risk Factors

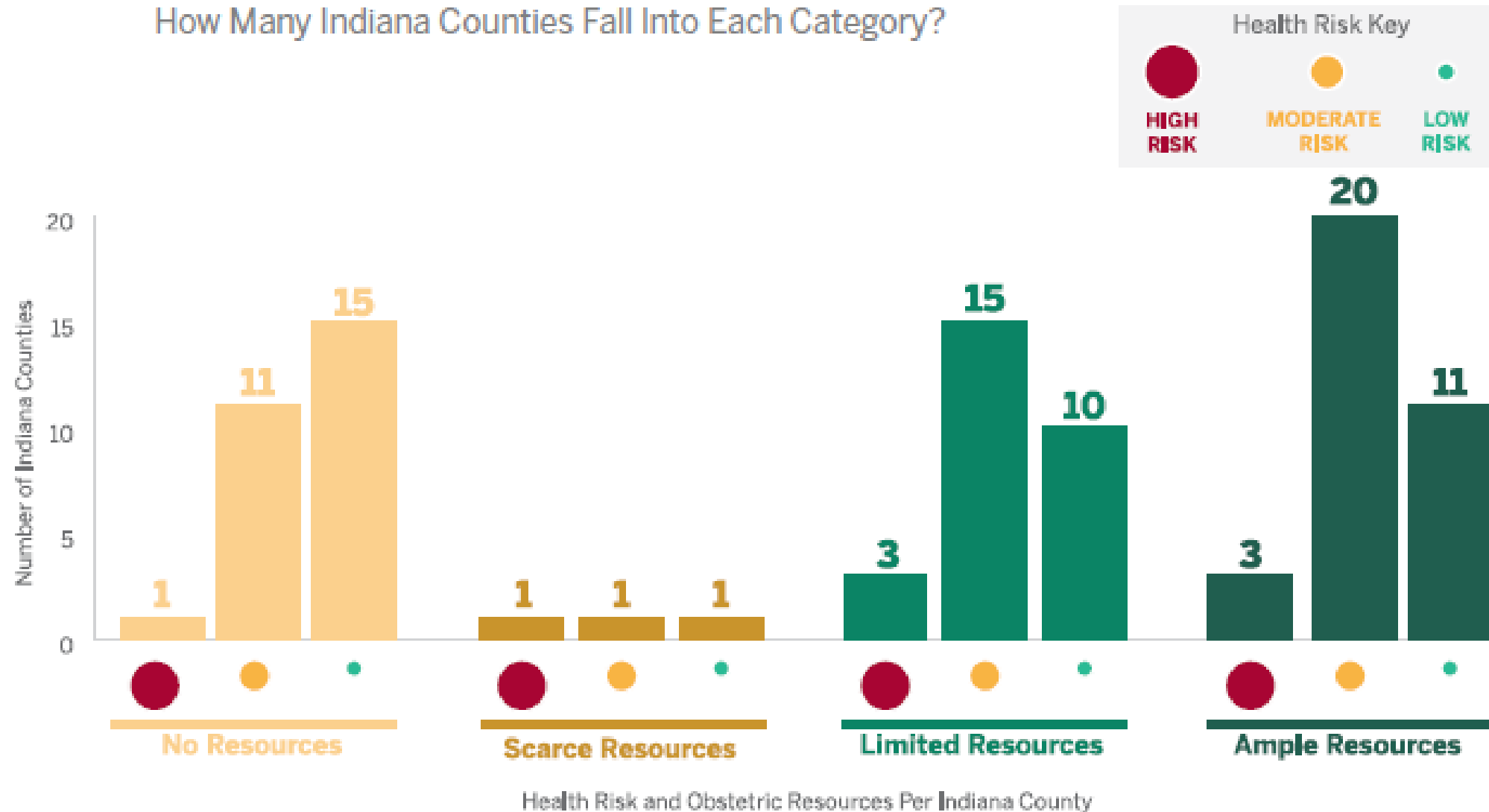


Results

Obstetric Care Resources			Infant/Maternal Health Risk	Total Counties
Obstetric Resource Level	Birthing Hospitals	OB provider FTE per 100K Women of Childbearing Age	Category	
No Resources	0	0	● High Risk	1
			● Moderate Risk	11
			● Low Risk	15
Scarce Resources	0	< 34	● High Risk	1
			● Moderate Risk	1
			● Low Risk	1
Limited Resources	1	< 34	● High Risk	3
			● Moderate Risk	15
			● Low Risk	10
Ample Resources	1 or more or 2 or more	34 or greater or Any	● High Risk	3
			● Moderate Risk	20
			● Low Risk	11

Results

How Many Indiana Counties Fall Into Each Category?



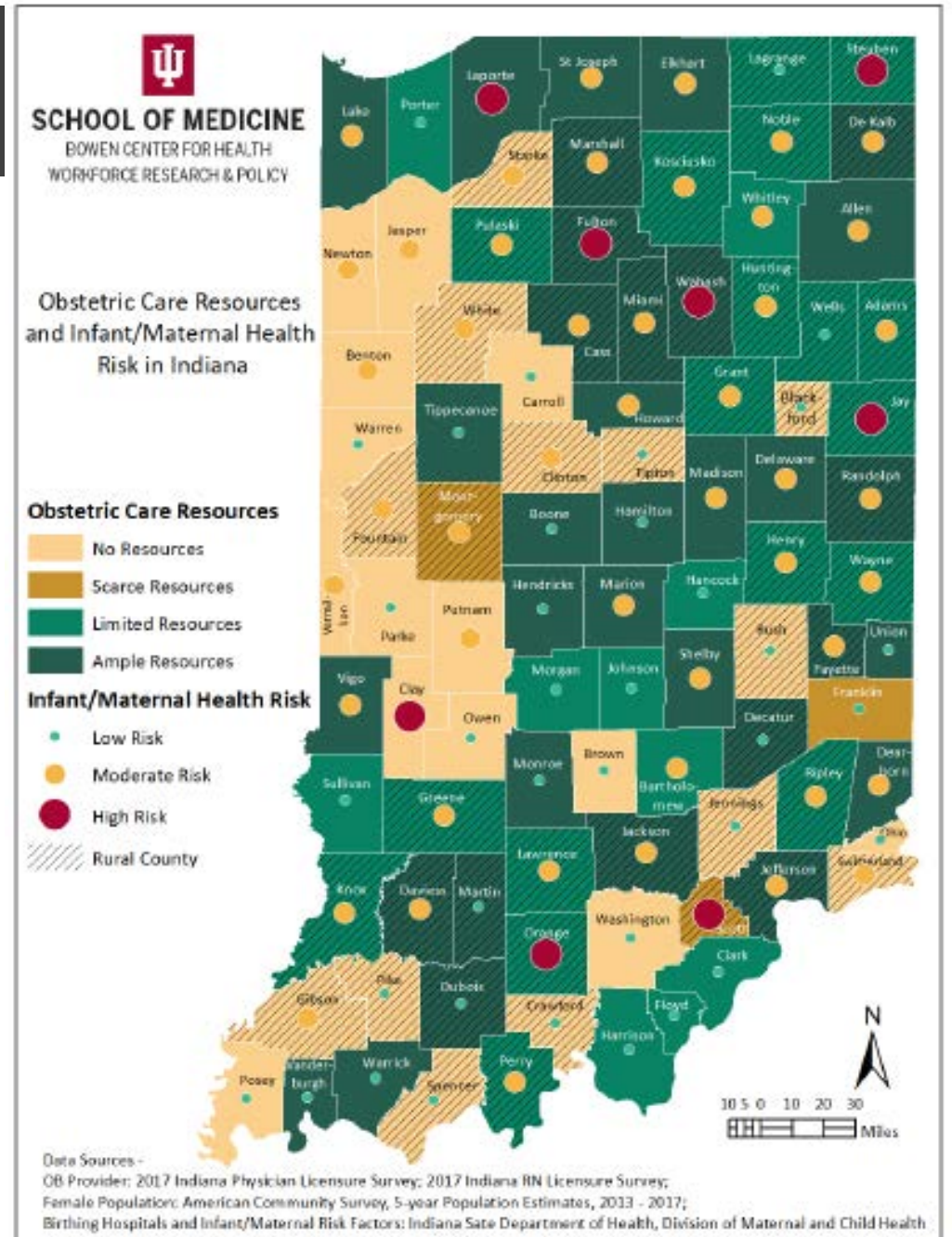
The Landscape

How to interpret this map?

- The lighter the “landscape” the scarcer the resources
- The larger the dot the greater the risk

Major take a ways. . .

- Variations in resources and risk across Indiana counties point to the need for local solutions



Exploring Potential Solutions

Resources	Risk	
	● Low	● Moderate + ● High
Ample	Maintain	+ Social Determinants
Scarce	Coordinate	+ Social Determinants
Limited	Coordinate	+ Social Determinants
None	Recruit, Expand, & Collaborate	+ Social Determinants



Moderate-to-High

Exploring Potential Solutions for Moderate-to-High Risk

Moderate to High Risk: Social Determinants of Health

Regardless of the Level of Resources:

- **Screen for social determinants of health.**
- **Identify champions** among the local health systems/ providers, public health, and social services organizations
- Consider opportunities to enhance health system and social services capacity through new **community-based partnerships**
- Ensure robust **health education programs** for prenatal women.
- Develop **integrated health and social services strategies** (example: perinatal navigator).
- Maintain **bidirectional communication** between health care and social services.
- Generate strategy for **ongoing referrals and coordination** between health care and social services

- **Low Risk**

Ample Resources

Resources	Risk	
	• Low	● Moderate + ● High
Ample	Maintain	+ Social Determinants

- **Low Risk: Maintain**

- Health systems should **ensure proper provider, support staff, and facilities are maintained.**
- Public health and social services organizations should **educate patients/community members** about the services offered within the local community.

Scarce and Limited Resources

Resources	Risk	
	• Low	● Moderate + ● High
Scarce	Coordinate	+ Social Determinants
Limited	Coordinate	+ Social Determinants

- **Low Risk: Coordinate**

- **Care coordination** staff within Primary Care should refer and coordinate OB/GYN Services.
- In the absence of a birthing hospital, **connect birthing facility to local care source** via tele-health, joint privileges for health care providers, and shared charting.

No Resources

Resources	Risk	
	• Low	● Moderate + ● High
None	Recruit, Expand, & Collaborate	+ Social Determinants

- **Low Risk:**
Recruit/Expand/Collaborate

- Consider **recruiting** family medicine/general internal medicine providers to offer more robust pre- and postnatal services to women in the community.
- Develop **regional model** for labor and delivery services to ensure resources accessible within a sufficient distance.

Summary

- Data on health resources are critical to informing policy initiatives
- Examining health resources and outcome/risk factors simultaneously help the community highlight the strengths that already exist and the areas for potential improvement
- Regardless of your community's resource availability and risk factors associated with infant/maternal outcomes, there are steps that can be taken to improve outcome and health resource availability.

