

The Office of the National Coordinator for  
Health Information Technology



# Overview of Health IT in North Dakota: Data to Inform and Improve Performance

Office of Economic Analysis, Evaluation and Modeling  
&  
State HIE Program

*December 2011*

Putting the **I** in **HealthIT**  
[www.HealthIT.gov](http://www.HealthIT.gov)



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## Questions?

- Please contact your project officer with any questions.

# Overview of the Data

## National and state data on:

Health information exchange

Capacity to exchange

Active exchange

Exchange what types of data?  
(e-Rx, lab data, care summaries)

Exchange with who?  
(physicians, hospitals, pharmacies, labs, patients)

EHR adoption

Adoption of a basic EHR

Intent to apply for  
Meaningful Use

# Goals of the “Chartpacks”: A Tool for States

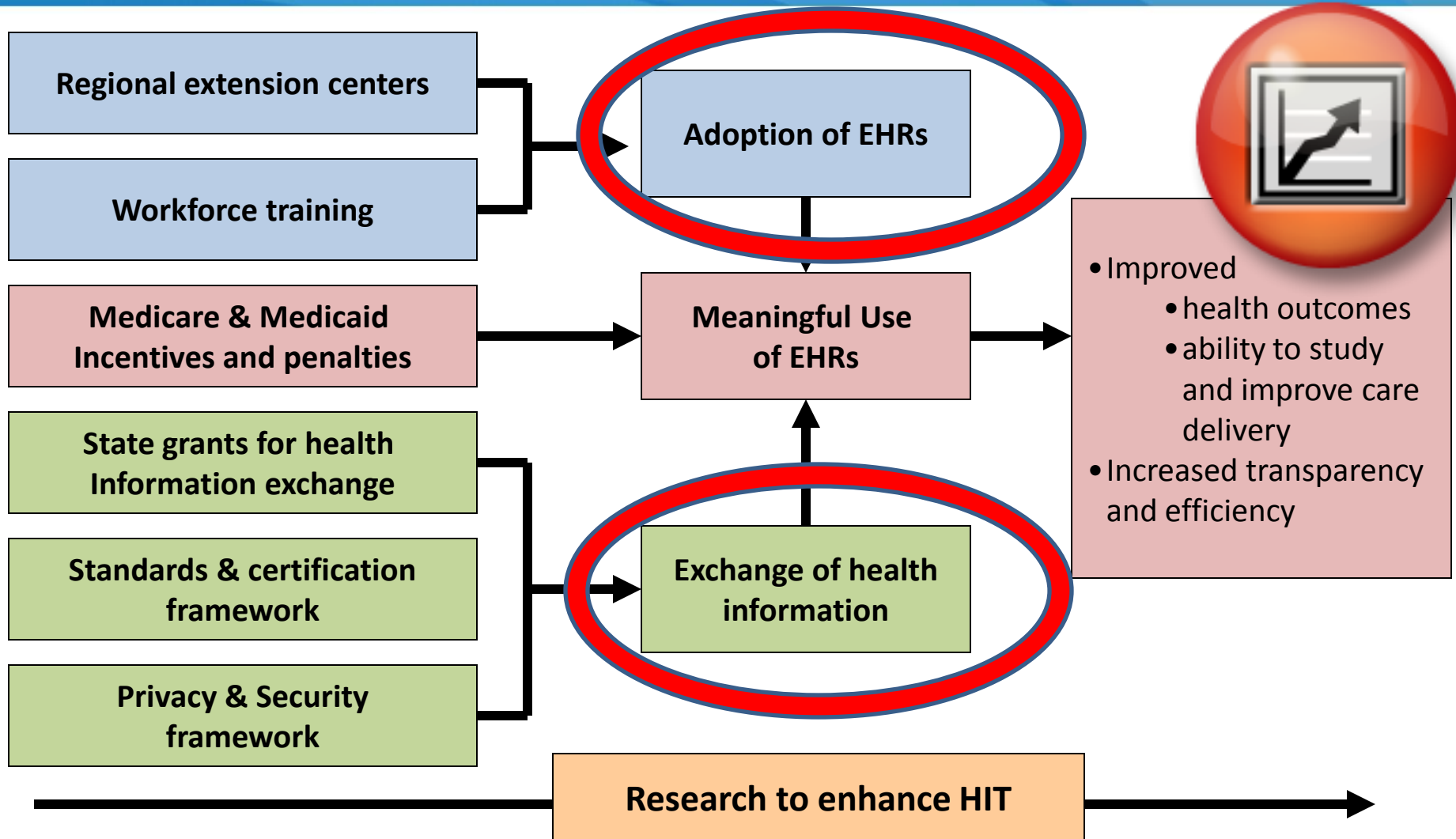
Provide a snapshot of current levels of HIE/HIT capacity and activity underway

Assess trends over time



Help identify gaps as well as areas of strength

# Why Chartpacks?



Source: Blumenthal D. Launching HITECH. N Engl J Med. 2010 Jan 4.  
<http://healthcarereform.nejm.org/?p=2669>

- ONC acquired potential indicators of HIT adoption and use from 3 major sources:
- **National Ambulatory Medical Care Survey (NAMCS) EMR Supplement:**
  - The National Center for Health Statistics conducts this survey of physicians who work in ambulatory care settings annually by mail.
  - Starting in 2010, the sample size was increased so we could generate state-level estimates.
- **American Hospital Association (AHA) survey Health IT Supplement:**
  - The American Hospital Association administers this annual survey of hospitals CIOs online and by mail. We report on non-federal acute care hospitals.
- **Surescripts:**
  - A leading e-prescription network, Surescripts provides the highest quality representative sample of e-prescribing by providers and pharmacies in the United States.

## Potential Indicators of HIT/HIE Capacity and Activity

Data Source	EHR adoption	Labs	eRX	Care Summary	Consumer	State Level Estimates
<b>NAMCS</b>	X	X		X**	X**	X
<b>AHA (Hospital)</b>	X	X		X	X	X*
<b>Surescripts</b>			X			X

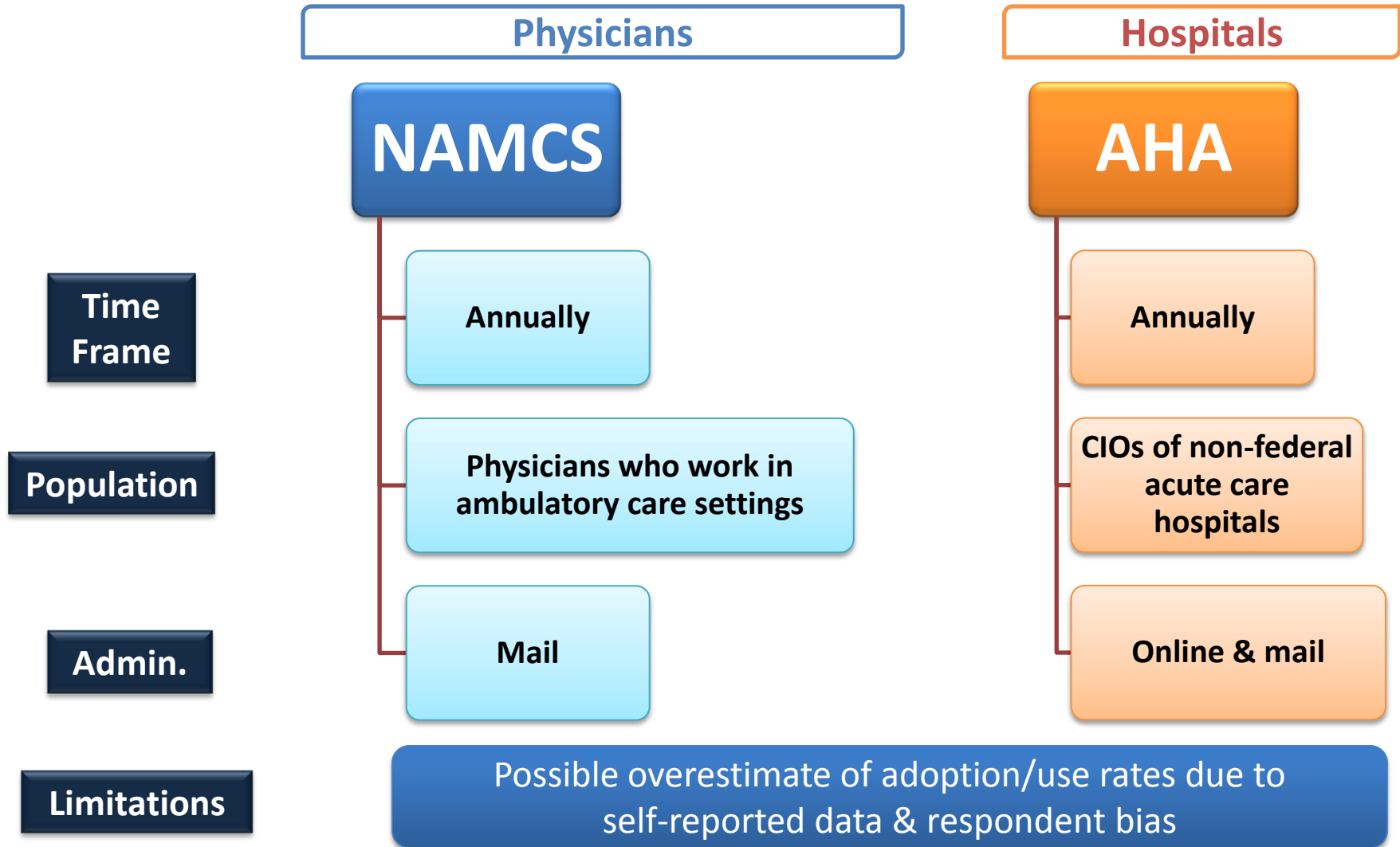
\*Generation of State-Level estimate depends upon sample size and response rate.

\*\*2011 data only will be available later this year.



# ONC's Current Data Sources

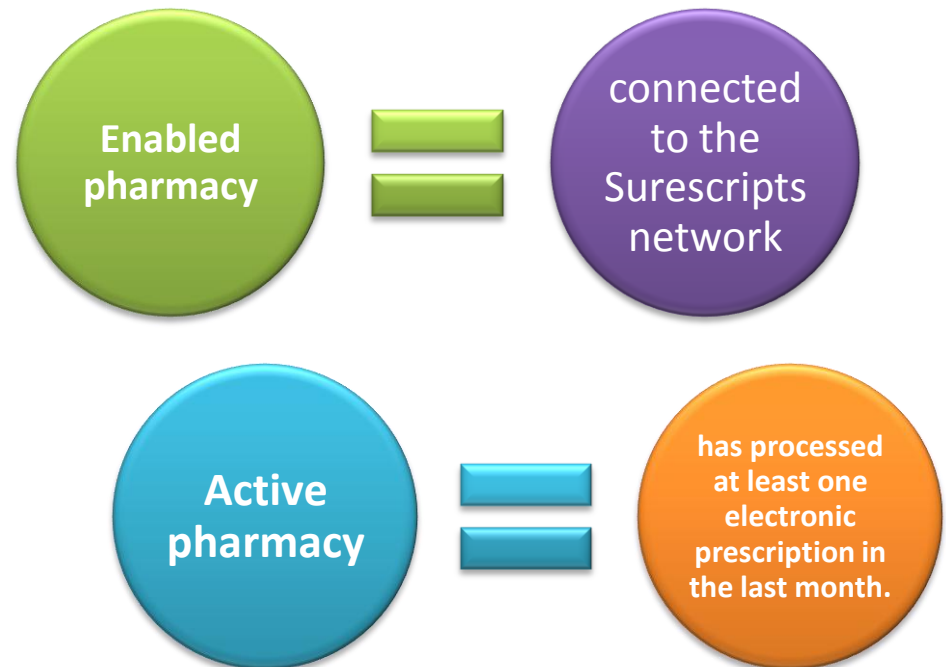
## Provider Surveys



Surescripts, a leading e-prescription network, provides the highest quality representative sample of e-prescribing in the United States.

Data on providers and pharmacies are available **quarterly**.

Market presence may vary in certain territories/states.\*



\*Please report pharmacies that are on a different network to your project officer

# Data Strengths and Limitations

Source	Strengths	Limitations
<b>NAMCS</b>	<ul style="list-style-type: none"> <li>• Oversampling to generate state-level estimates</li> <li>• Administered by NCHS</li> <li>• High response rate</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reported</li> <li>• Non-responder bias</li> </ul>
<b>AHA</b>	<ul style="list-style-type: none"> <li>• High response rate</li> <li>• Respondent is the hospital CIO</li> </ul>	<ul style="list-style-type: none"> <li>• Self-reported</li> <li>• Non-respondent bias</li> <li>• No oversampling</li> </ul>
<b>Surescripts</b>	<ul style="list-style-type: none"> <li>• Geographic scope of more than 92% of all pharmacies nationwide</li> <li>• Large sample size</li> <li>• Zip code level data</li> <li>• Includes both nurse practitioners and physicians</li> </ul>	<ul style="list-style-type: none"> <li>• Coverage varies by state</li> <li>• Denominator not supplied</li> </ul>

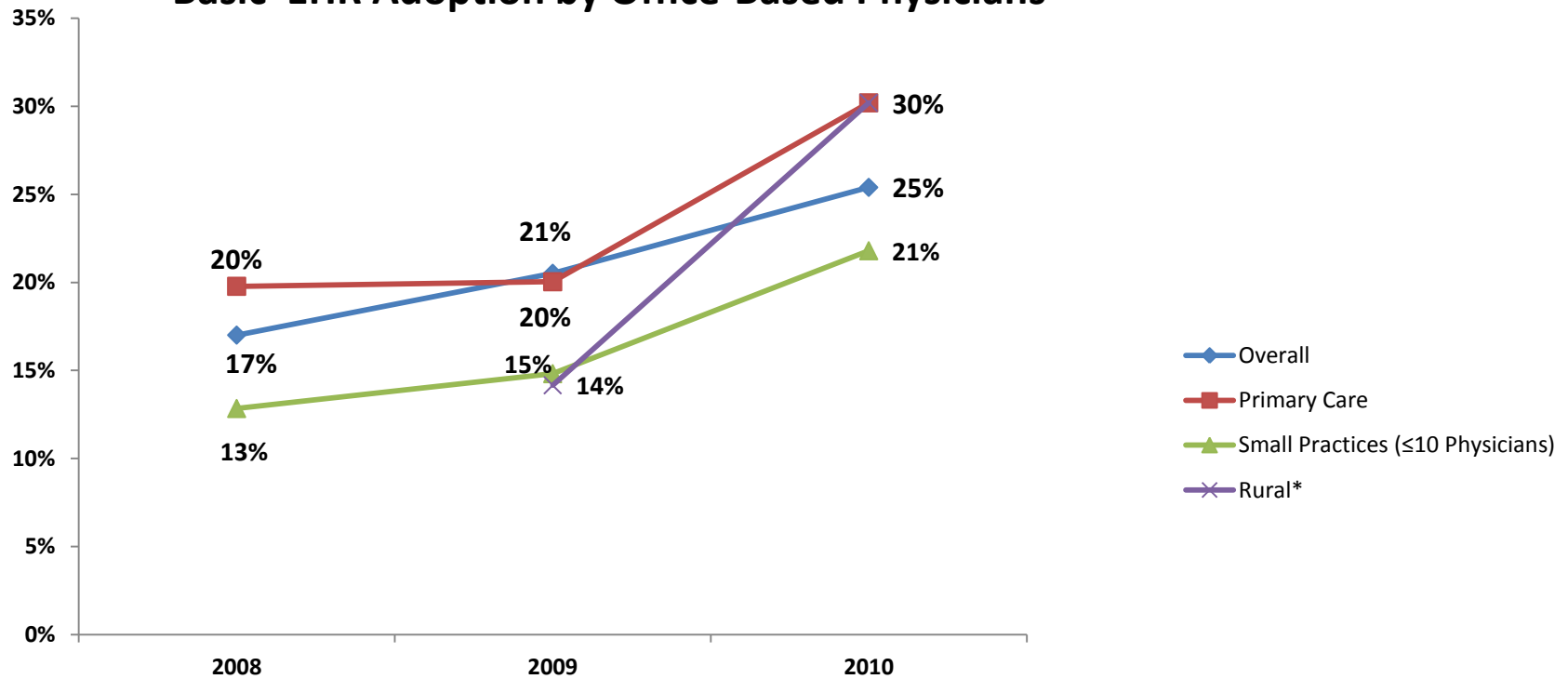
**Over-estimation of HIT adoption**

*Due to small sample sizes, in some cases we may not be able to generate reliable state-level estimates. When the Relative Standard Error is high, it is considered an unreliable estimate and will be indicated with either an asterisk or the data will not be shown.*

# NAMCS Chart Packs

# National Trends: Physician EHR Adoption

## 'Basic' EHR Adoption by Office-Based Physicians



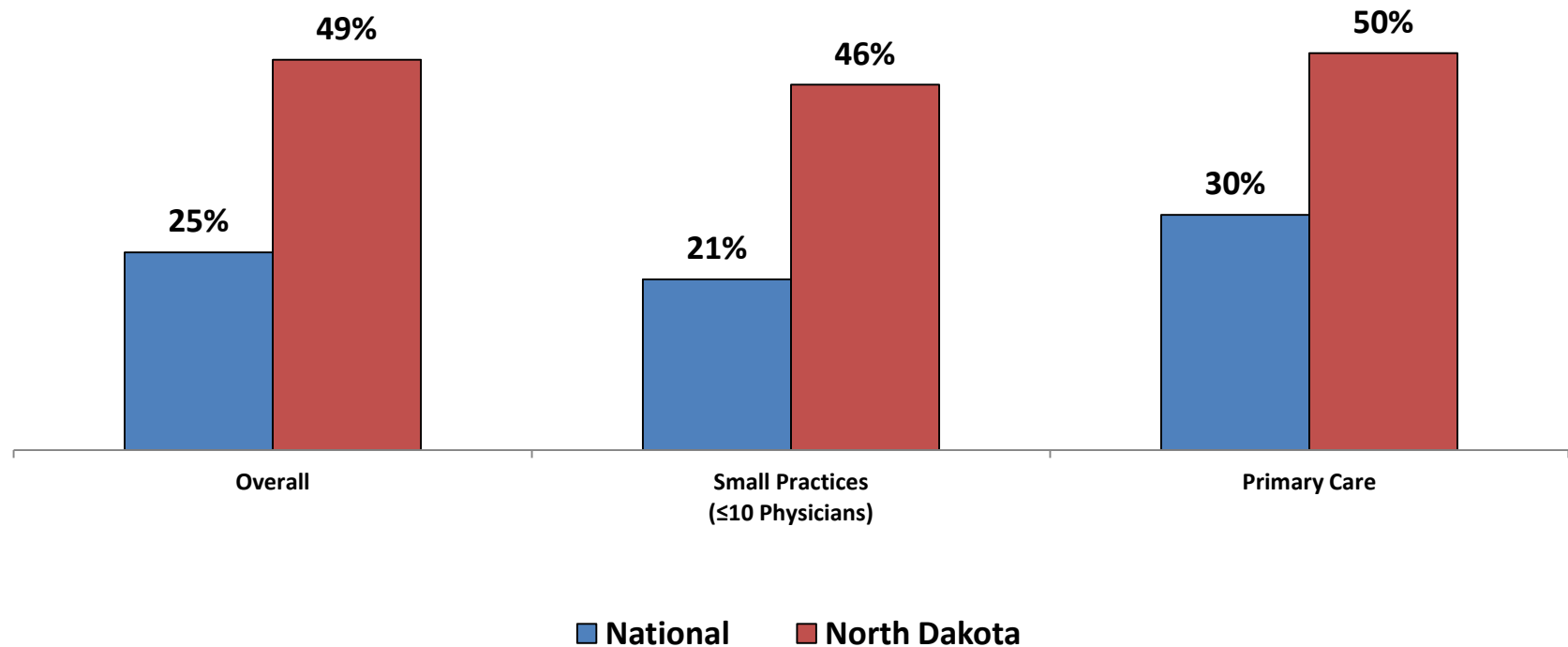
Source: NAMCS, 2008-2010

\*Rural = Non-Metropolitan

Rural estimates not shown for 2008 because >30% relative standard error

# How does your State Compare to National Estimates?

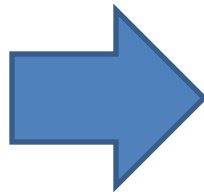
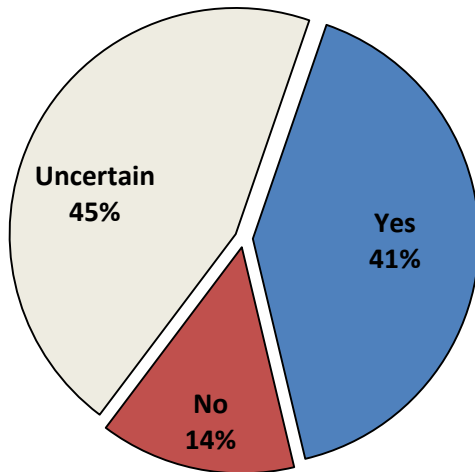
## Proportion of Office-Based Physicians that have Adopted a 'Basic' EHR



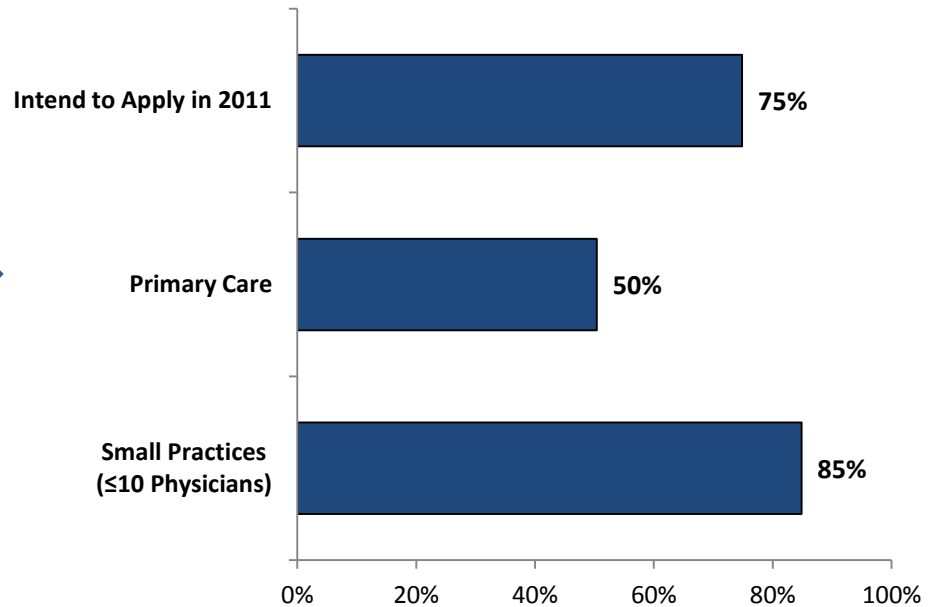
# Nationwide: Physician Meaningful Use Intent



Overall MU Intent for Office-Based Physicians in the Country



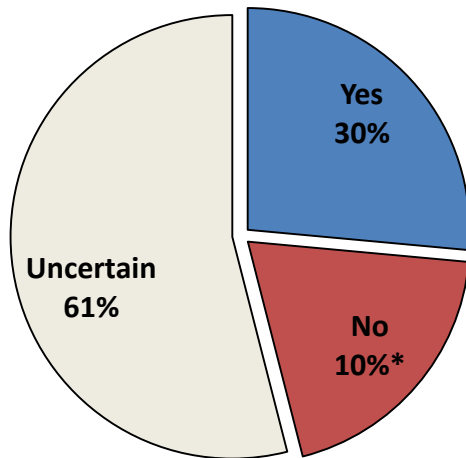
MU Intent for Key Physicians



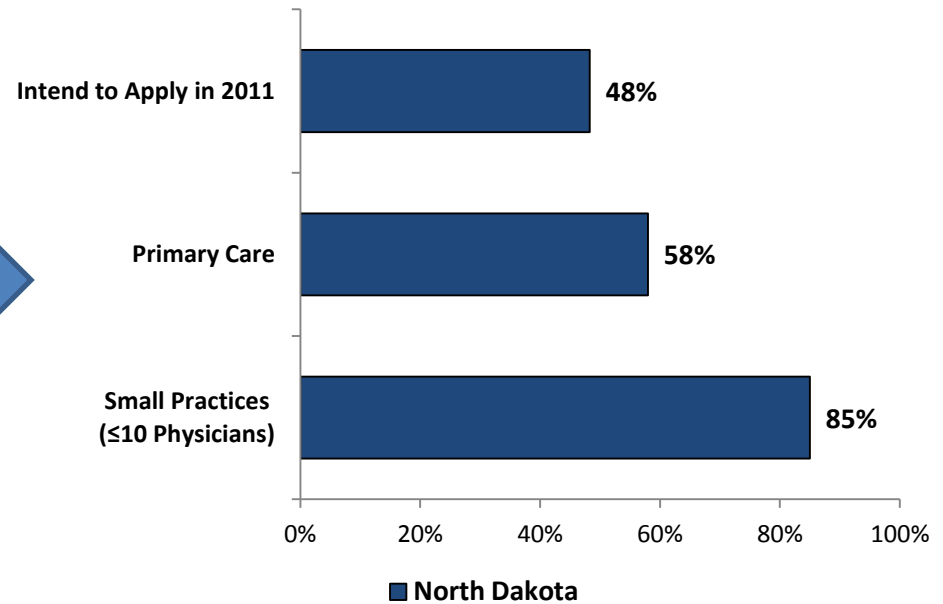
# Physician MU Intent in your State



Overall MU Intent for Office-Based Physicians in North Dakota



MU Intent for Key Physicians



Source: NAMCS, 2010

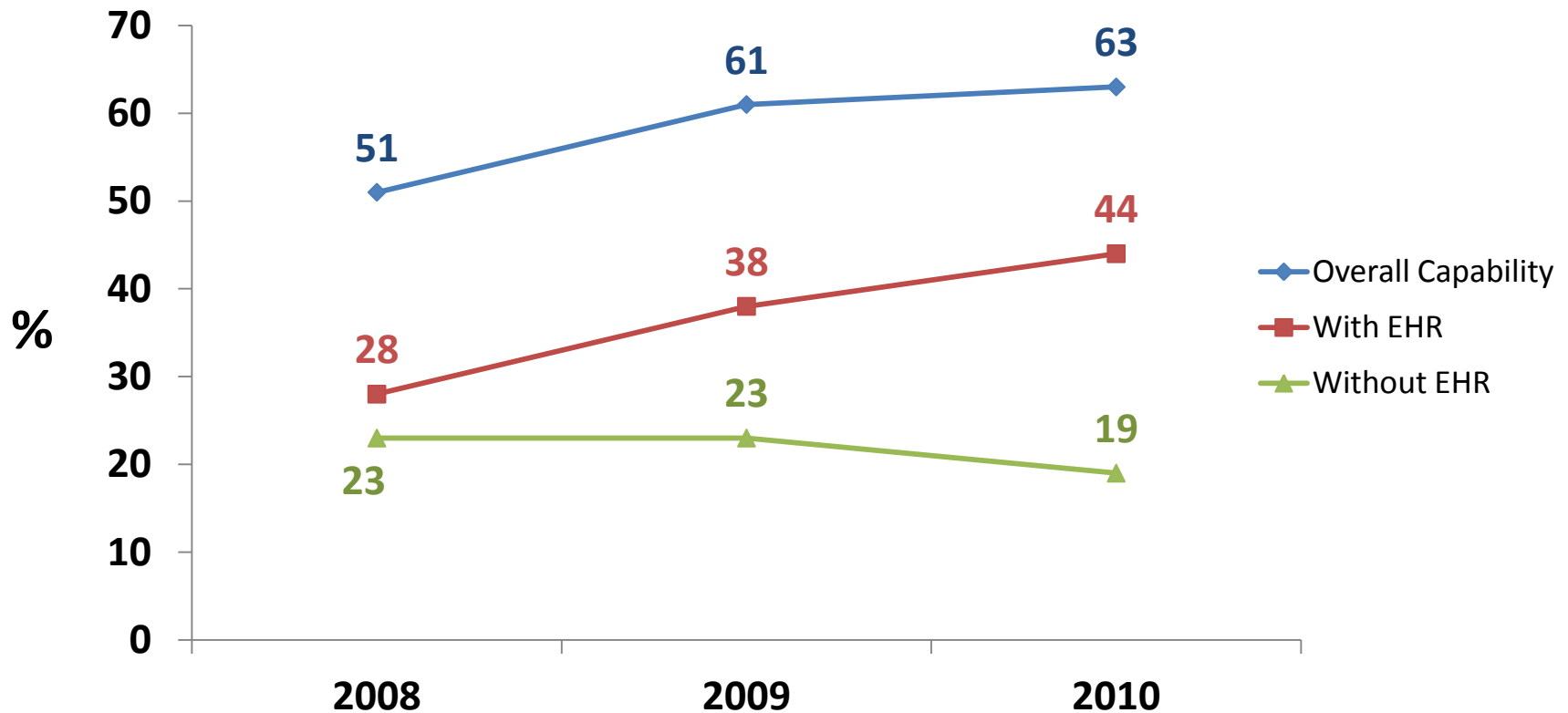
\* Indicates unreliable estimate, Relative Standard Error > 0.3



# National Trends: Physicians Viewing Lab Results Electronically

PIN  
Priority

## Proportion of Office-Based Physicians with the Capability: View Lab Results Electronically



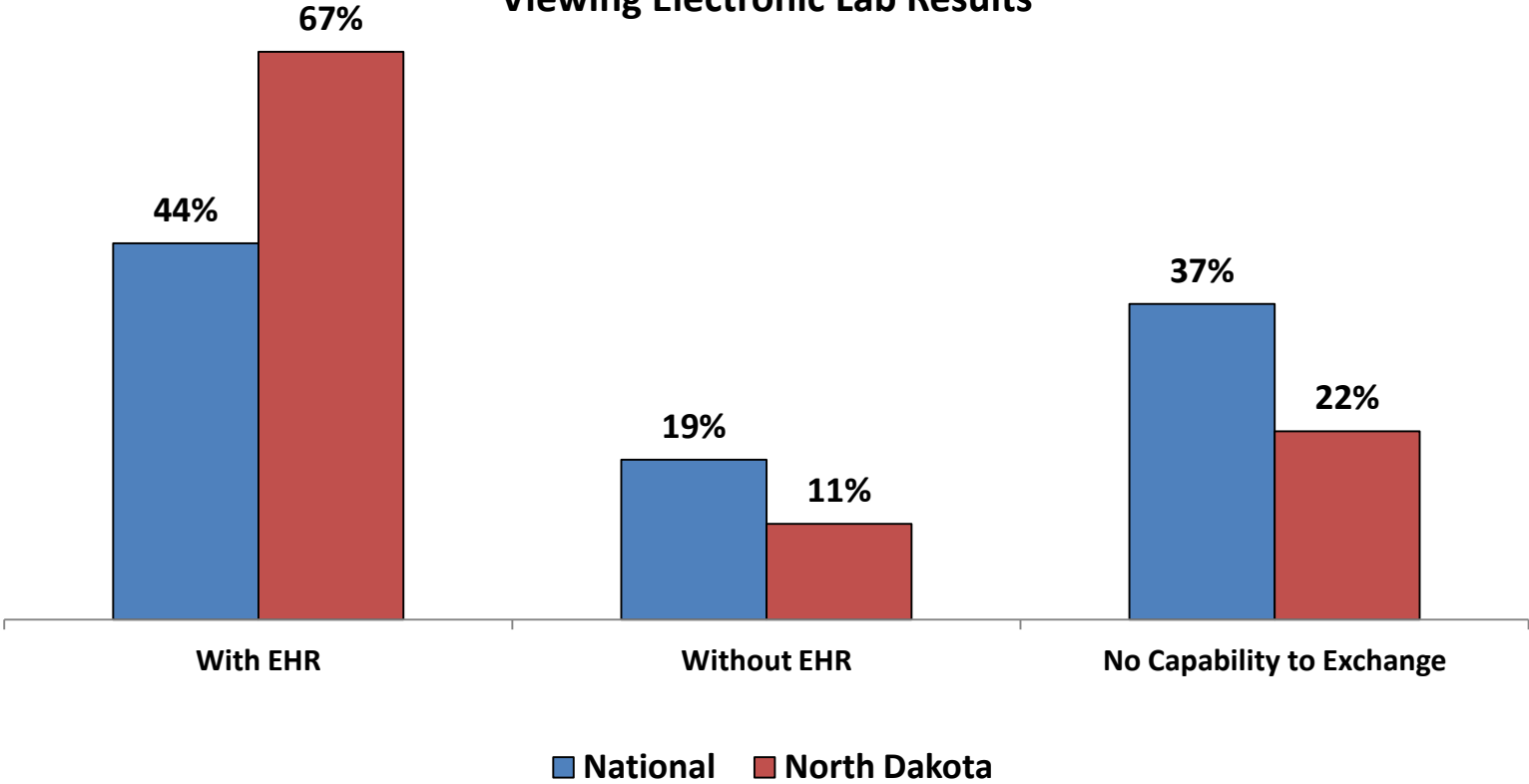
Source: NAMCS, 2008-2010

"EHR" defined by those who report having any EHR

# How does your state compare to national estimates?



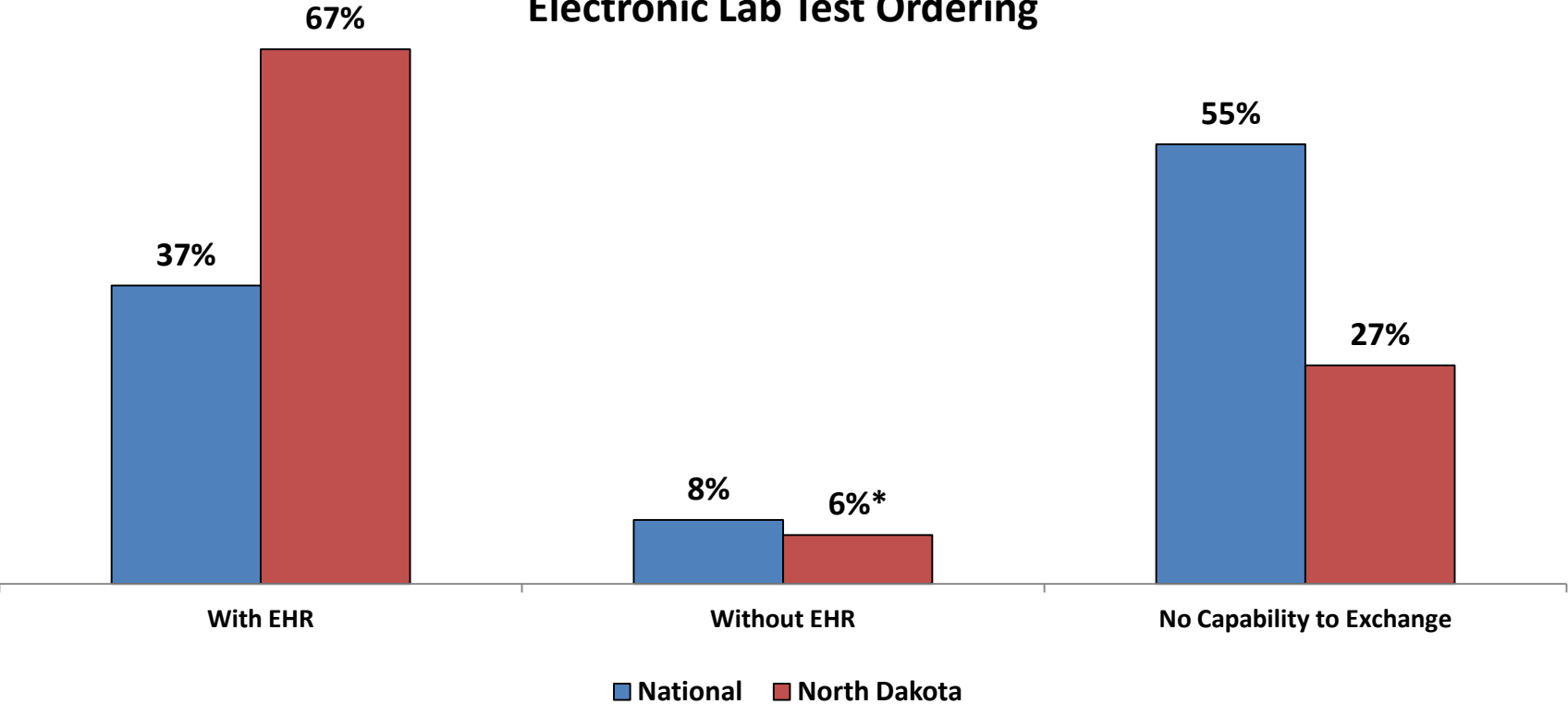
## Office-Based Physicians Capability: Viewing Electronic Lab Results



Source: NAMCS, 2010  
"EHR" defined by those who report having any EHR

# How does your state compare to national estimates?

## Office-Based Physicians Capacity: Electronic Lab Test Ordering



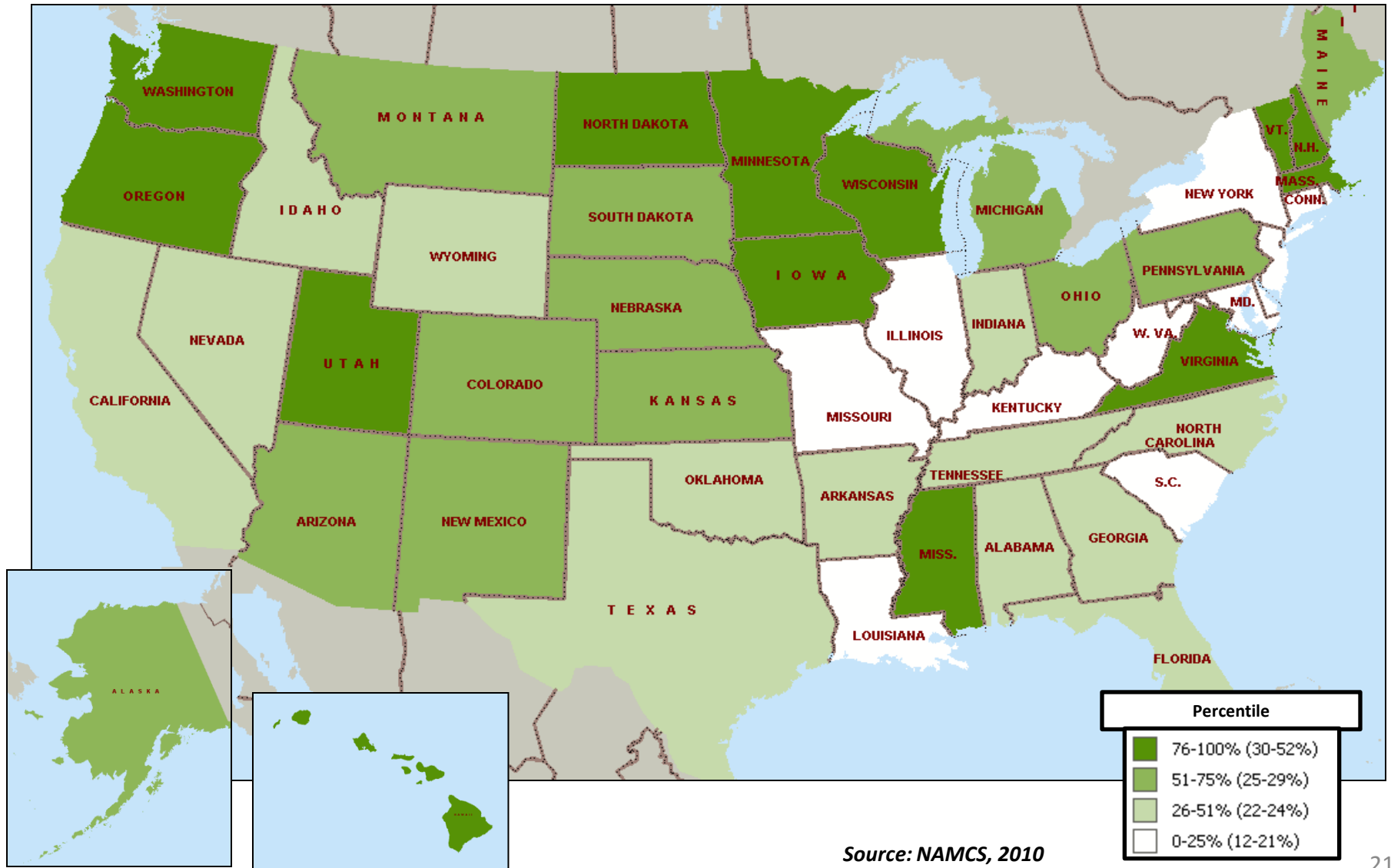
Source: NAMCS, 2010

"EHR" defined by those who report having any EHR

\* Indicates unreliable estimate, Relative Standard Error > 0.3

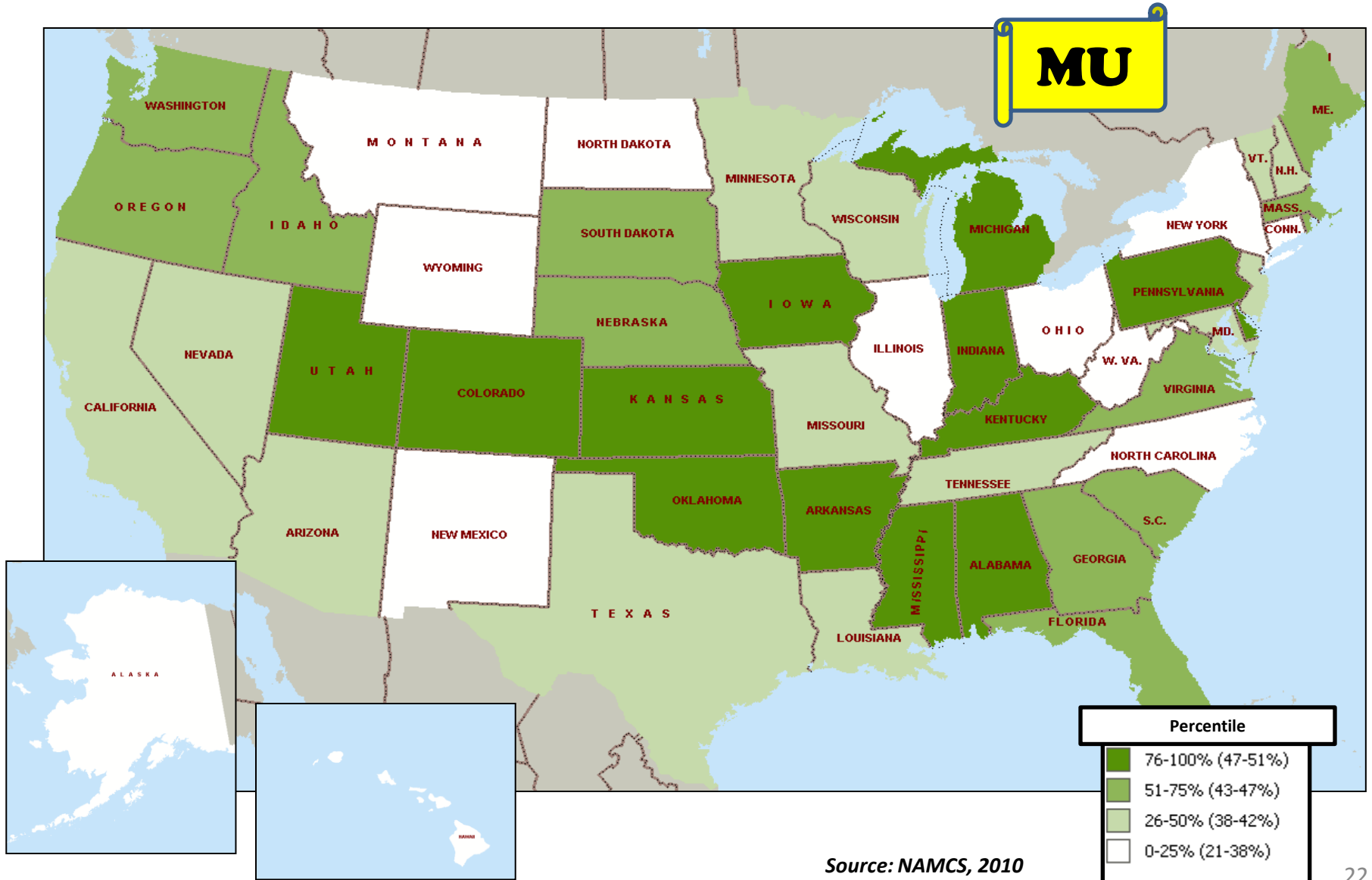
# Nationwide Comparisons

# Statewide Estimates: Physician EHR Adoption

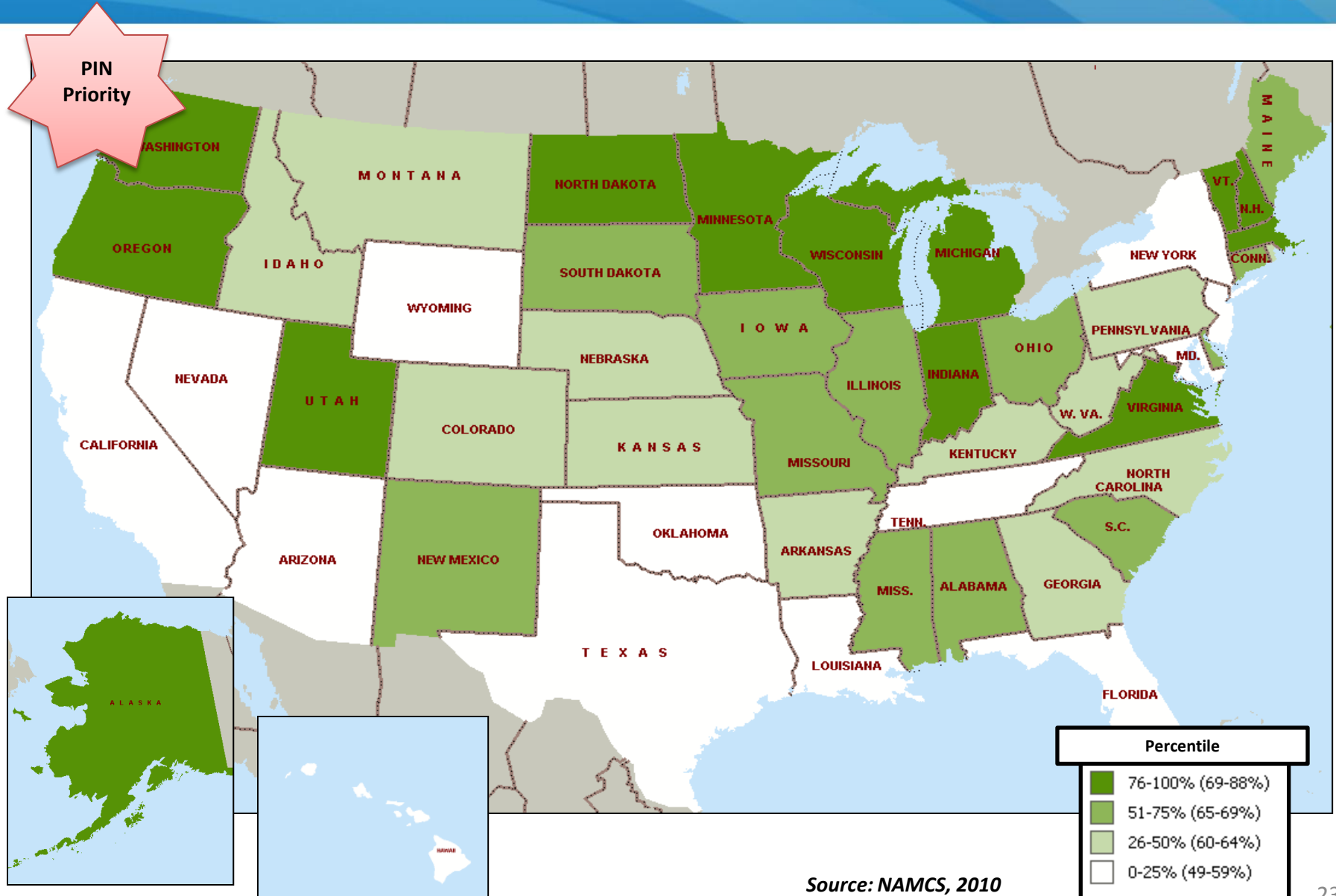


Source: NAMCS, 2010

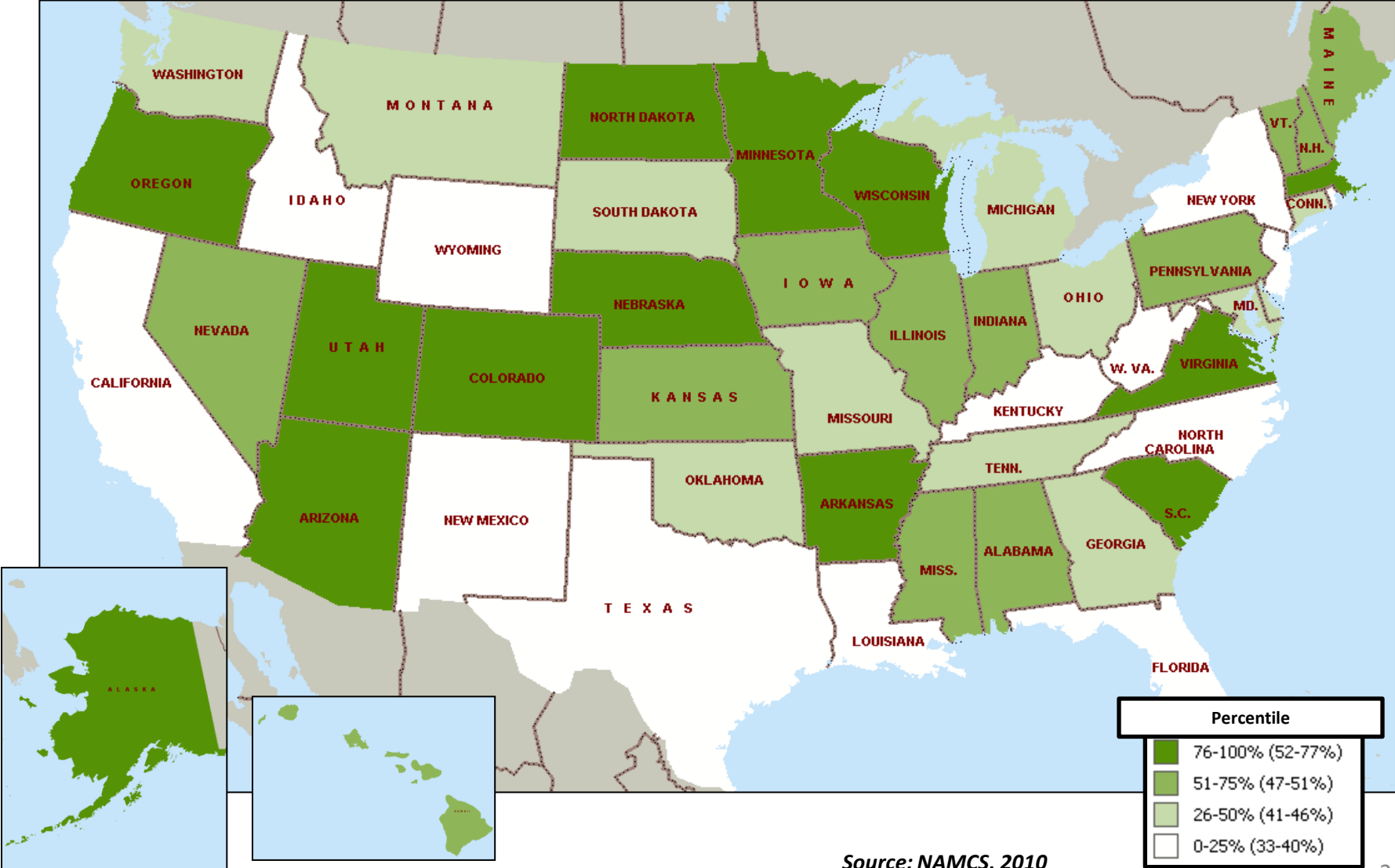
# Statewide Estimates: Physician Intent to apply for Meaningful Use



# Statewide Estimates: Physicians Viewing Lab Results Electronically



# Statewide Estimates: Physician Electronic Lab Test Ordering



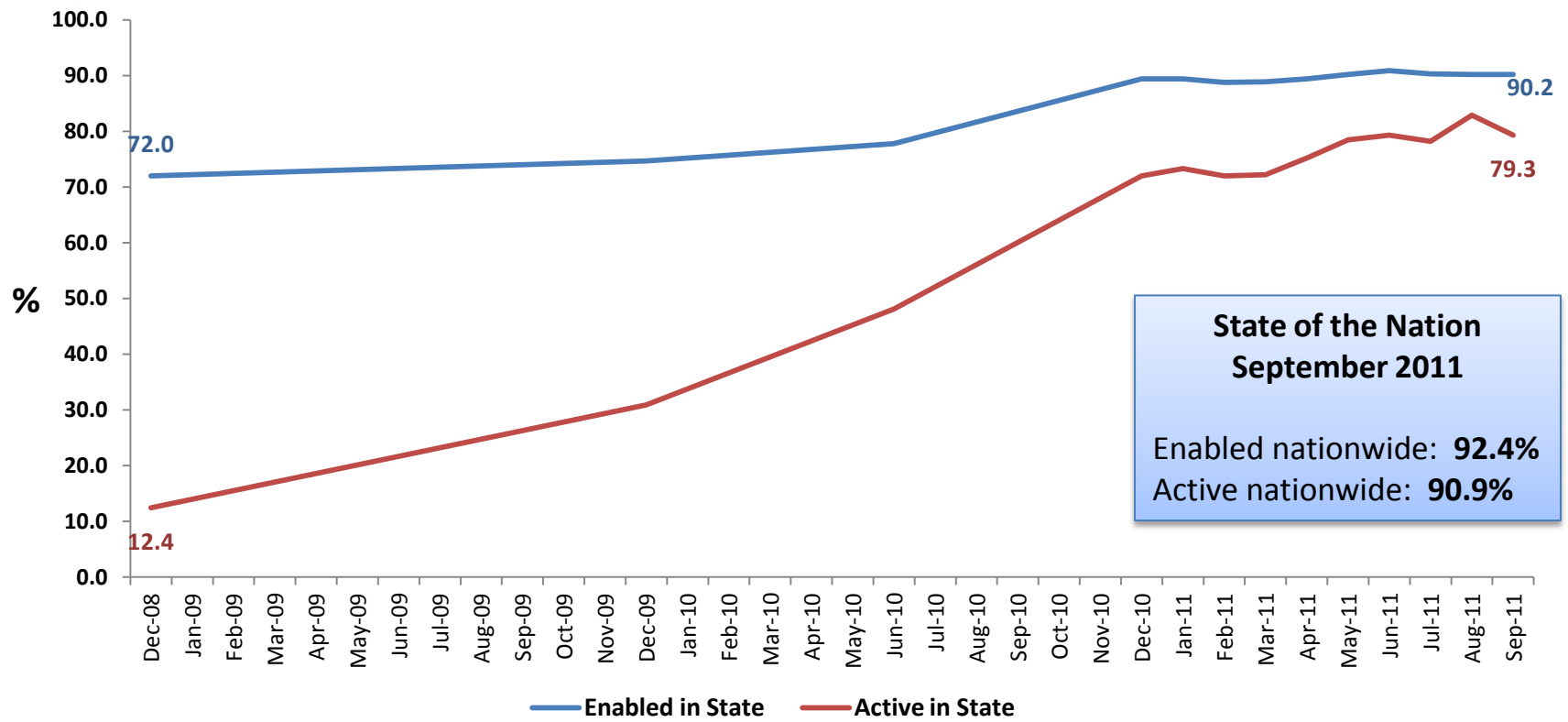


# Measures of ePrescribing

# How does your State Compare to National Estimates?



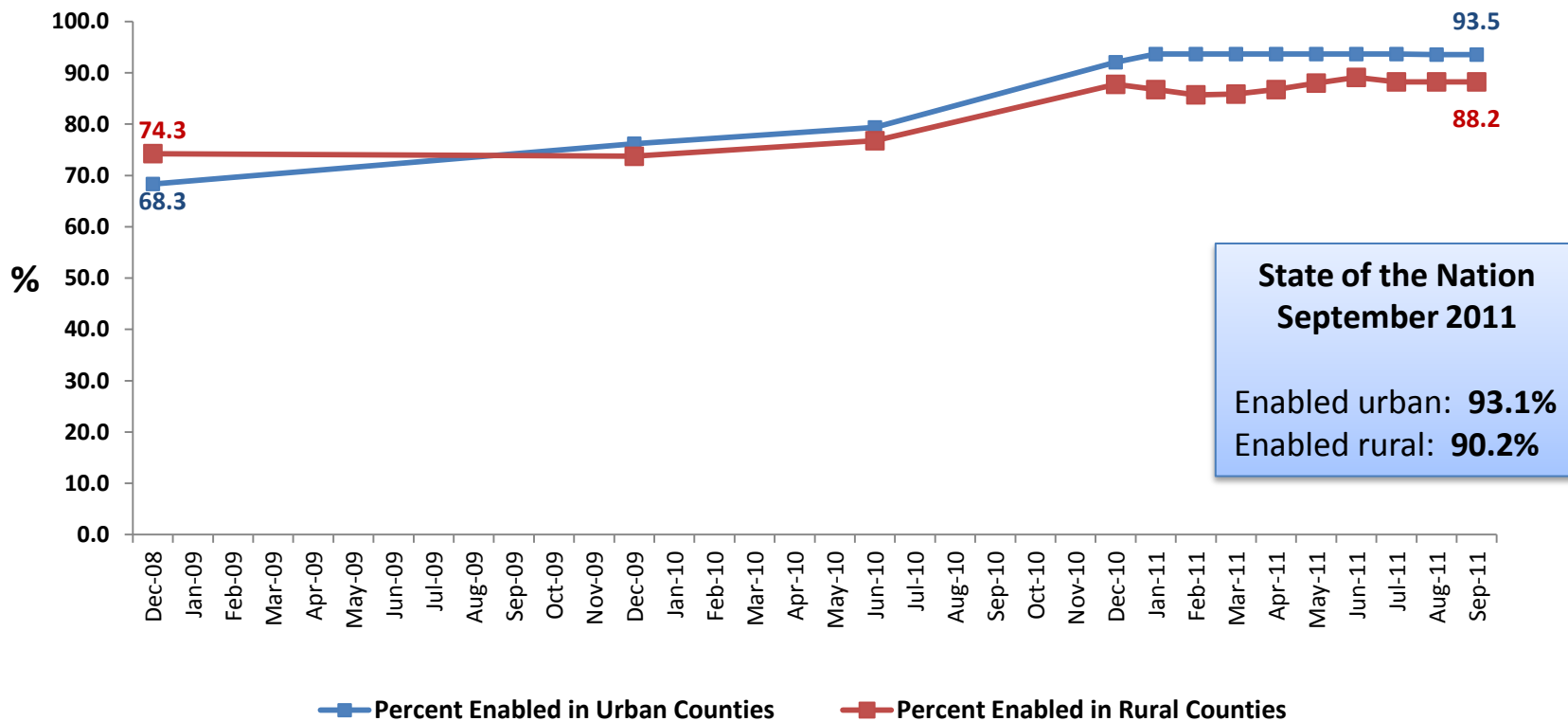
## Percent of Retail Community Pharmacies Enabled to e-Prescribe and Actively e-Prescribing on the Surescripts Network in North Dakota



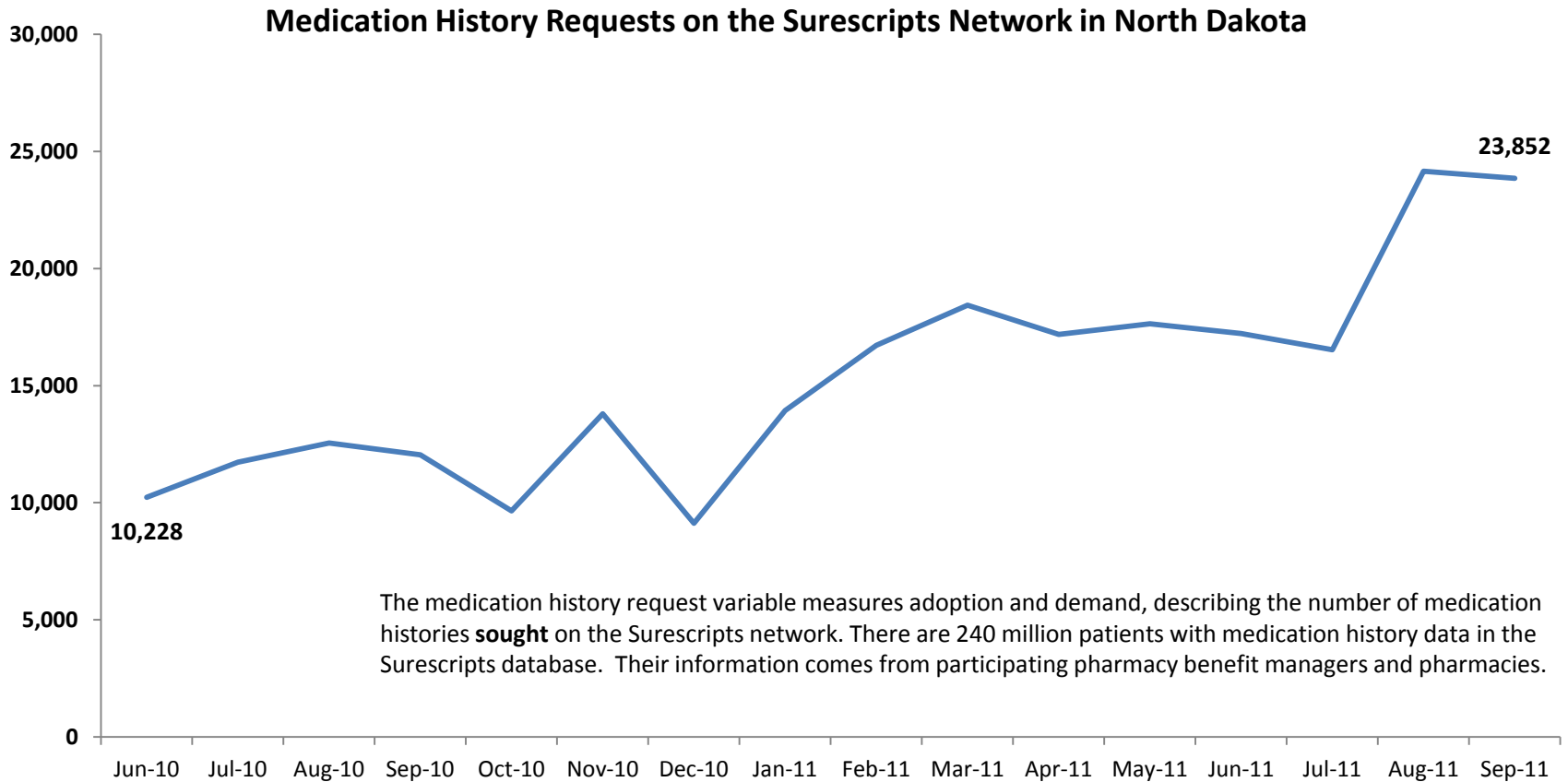
Data Source: Surescripts

# Surescripts Connectivity: Urban vs. Rural Pharmacies

## Percent of Retail Community Pharmacies Connected to the Surescripts Network in Urban and Rural Counties in North Dakota



Data Source: Surescripts

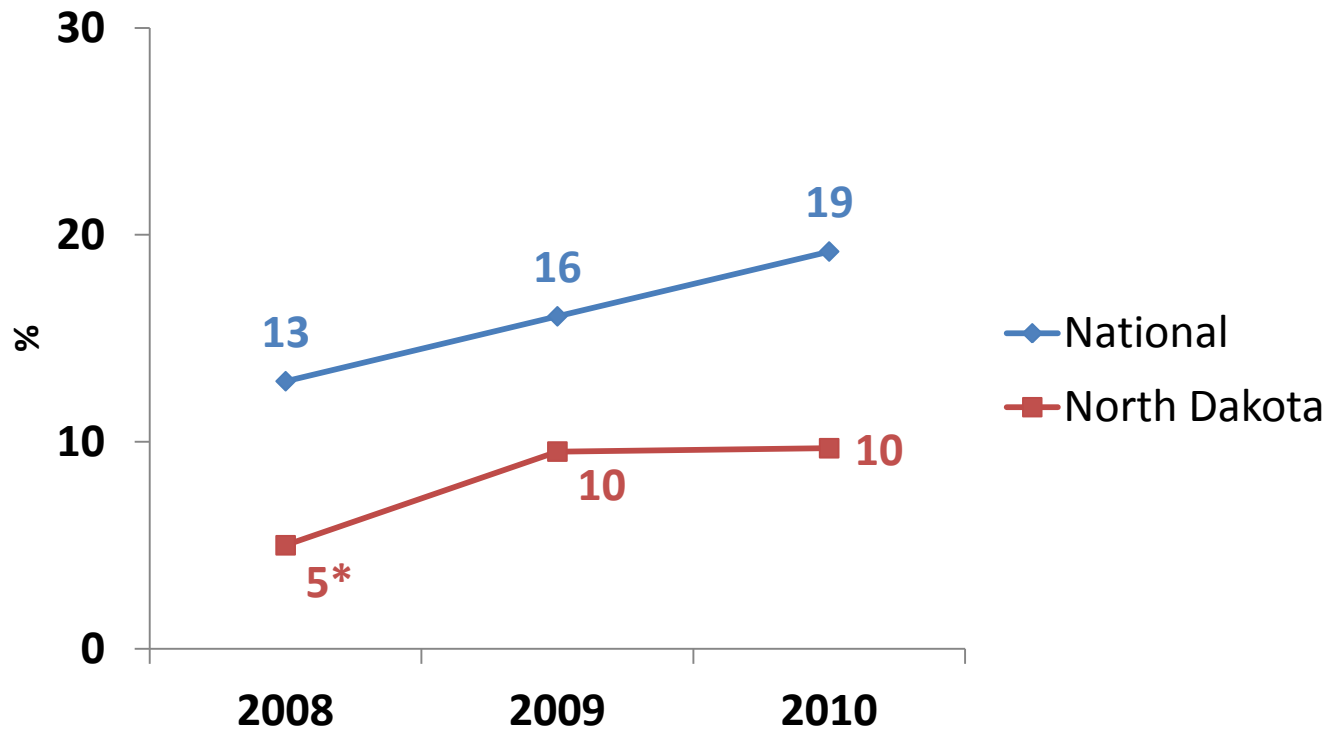


Data Source: Surescripts

# AHA Data

# How Does Your State Compare to the National Estimates?

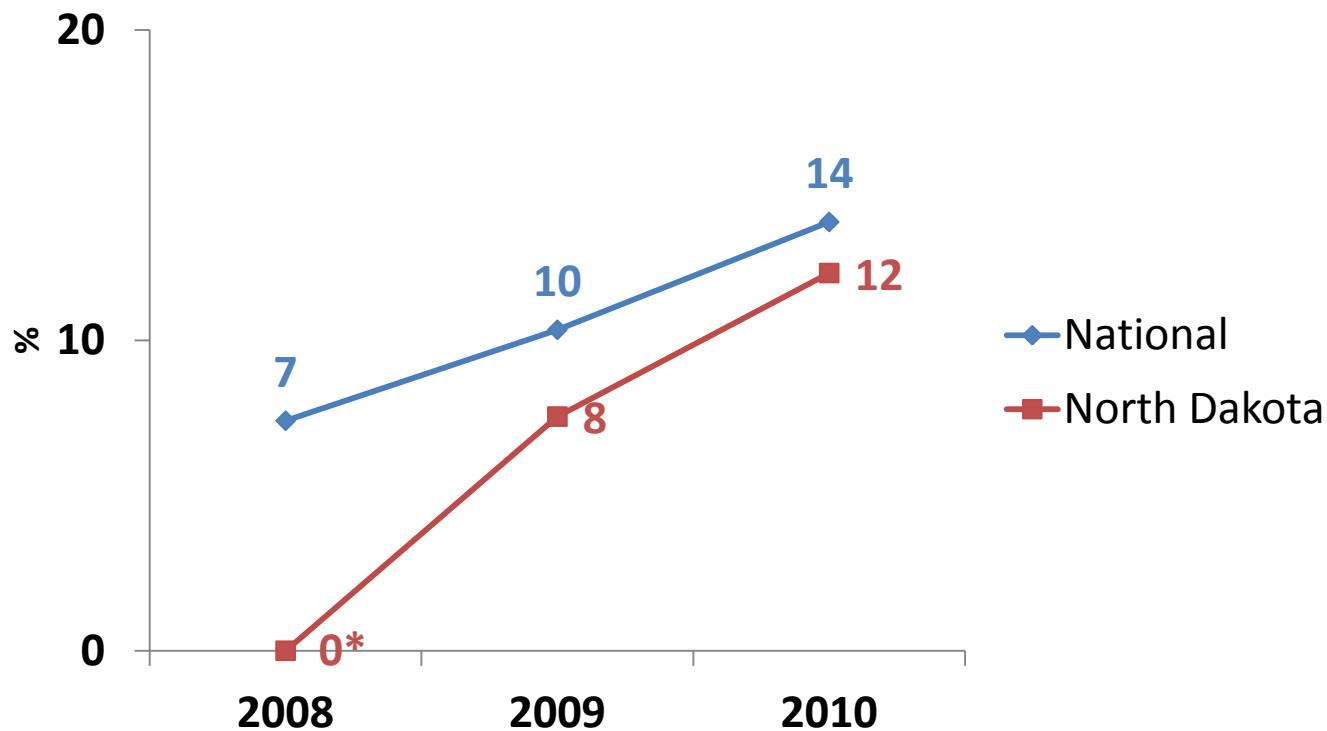
## Adoption of (Basic) EHRs by All Hospitals



Data Source: AHA Hospital Survey

\*Estimate not reliable due to sample size and relative standard error greater than .49

## Adoption of (Basic) EHRs by Rural Hospitals

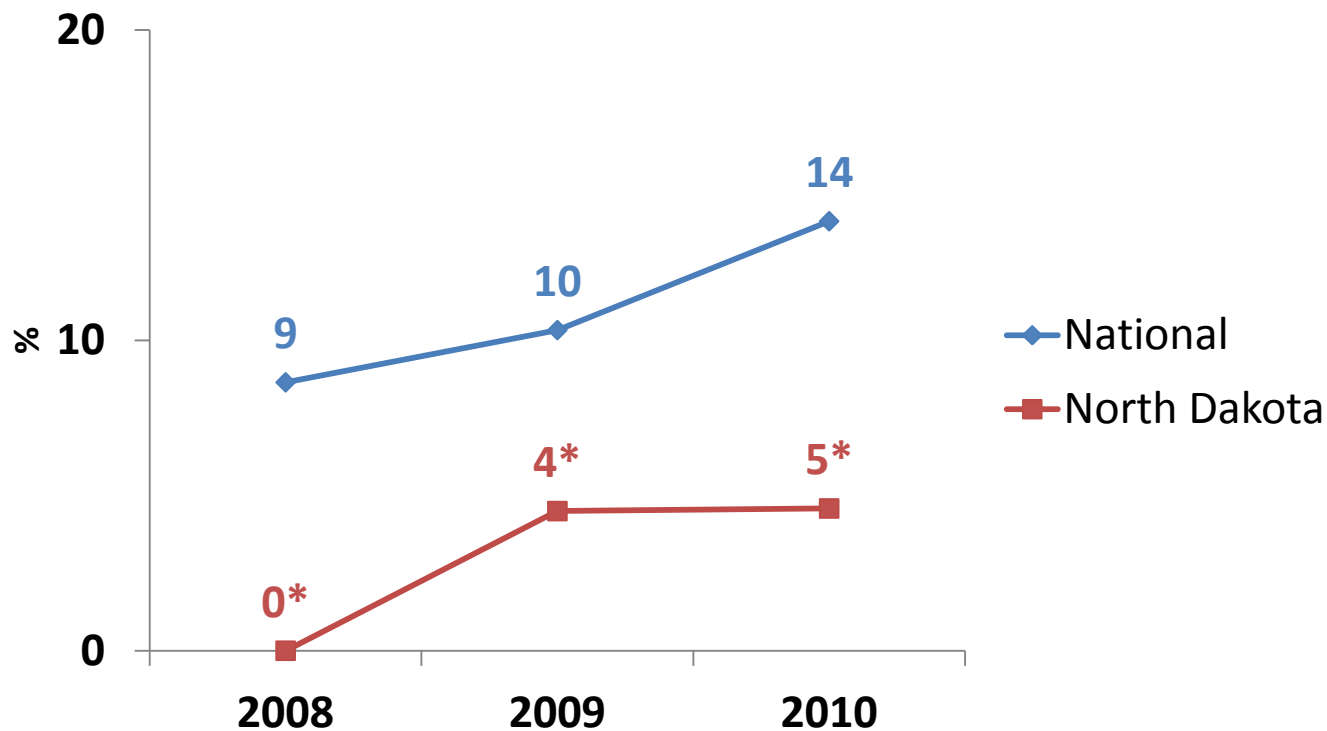


*Data Source: AHA Hospital Survey*

\*Estimate not reliable due to sample size and relative standard error greater than .49

# How Does Your State Compare to the National Estimates?

## Adoption of (Basic) EHRs by Small Hospitals



Data Source: AHA Hospital Survey

\*Estimate not reliable due to sample size and relative standard error greater than .49



# Statewide Estimates: Hospital EHR Adoption



Data Source: AHA Hospital Survey

Data from 2010

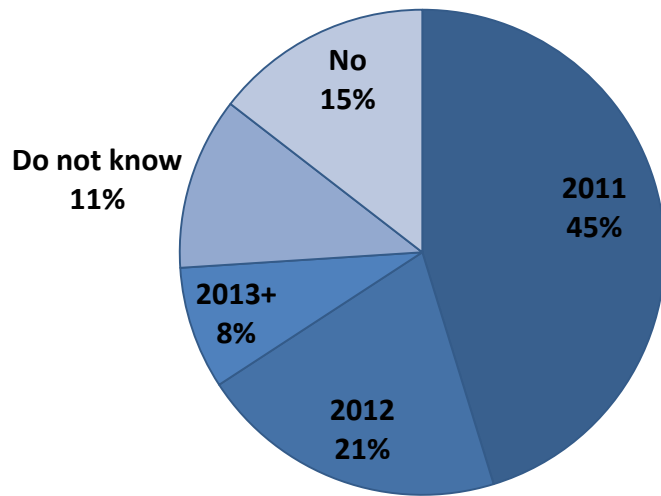
# Meaningful Use

# How Does Your State Compare to the National Estimates?

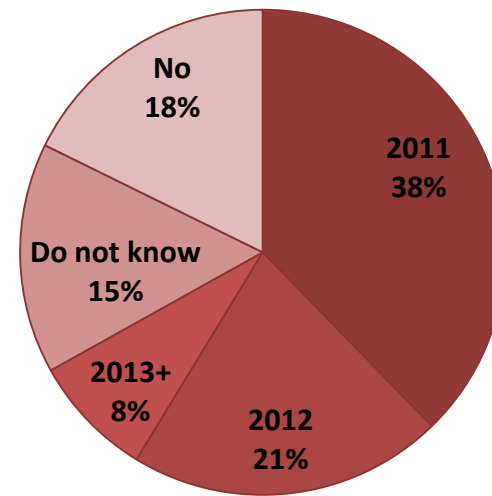
## Year Hospitals Intend to Apply for Meaningful Use



National

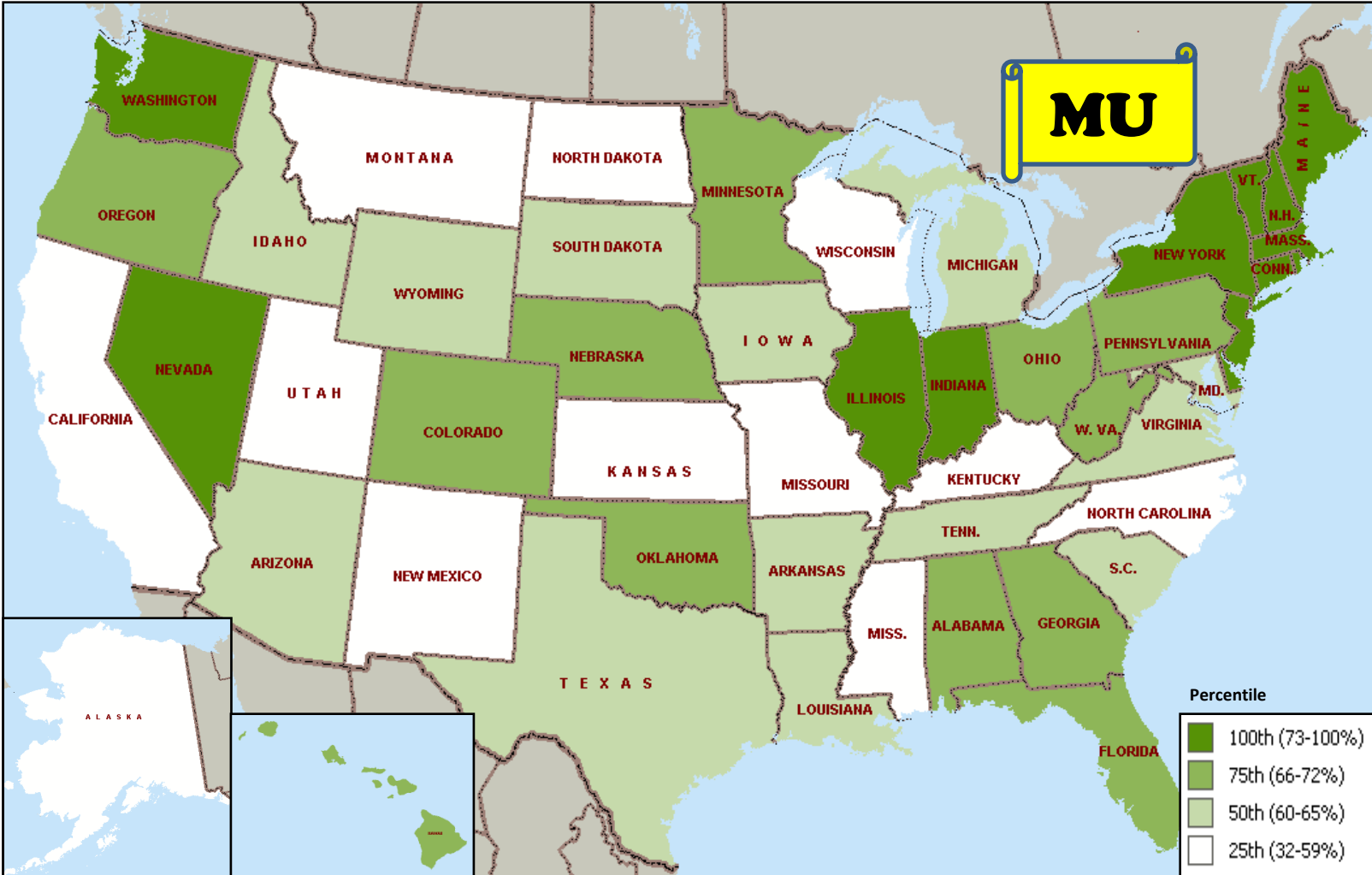


North Dakota



Data Source: AHA Hospital Survey  
Data from 2010

# Statewide Estimates: Hospitals Intending to Apply for MU in 2011/2012



*Data Source: AHA Hospital Survey  
Data from 2010*

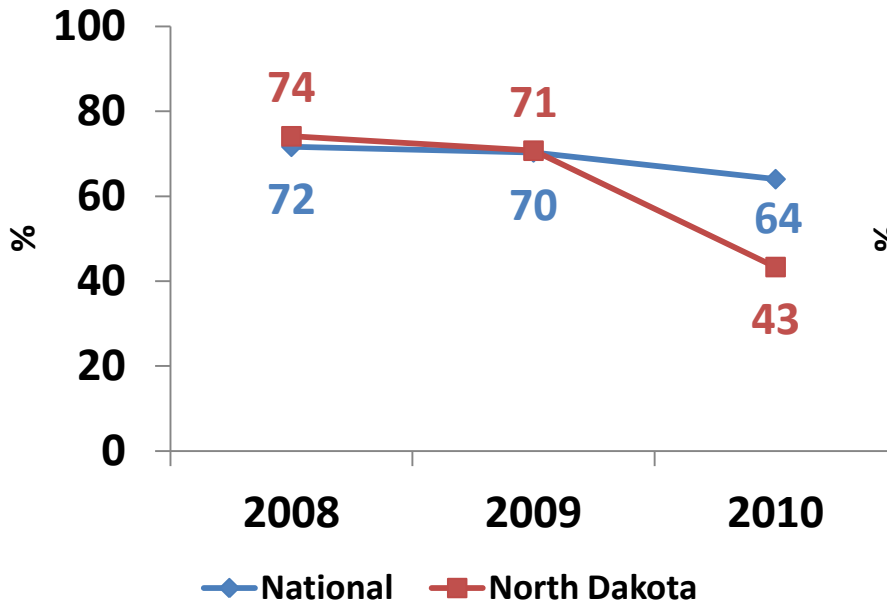
# Measures of Lab Exchange

# How Does Your State Compare to the National Estimates?

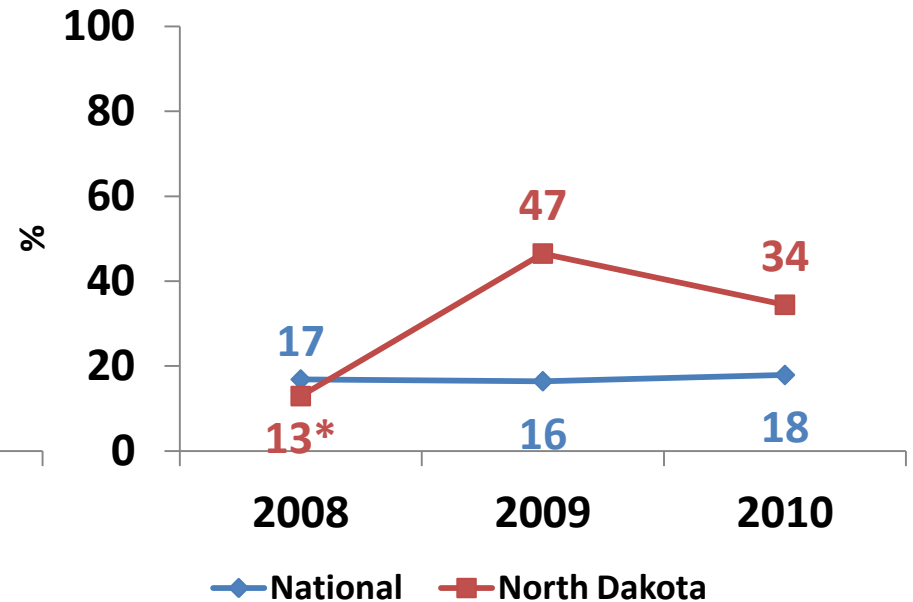
## % of Hospitals Electronically Exchanging Laboratory Reports



### Inside Hospital System



### Outside Hospital System

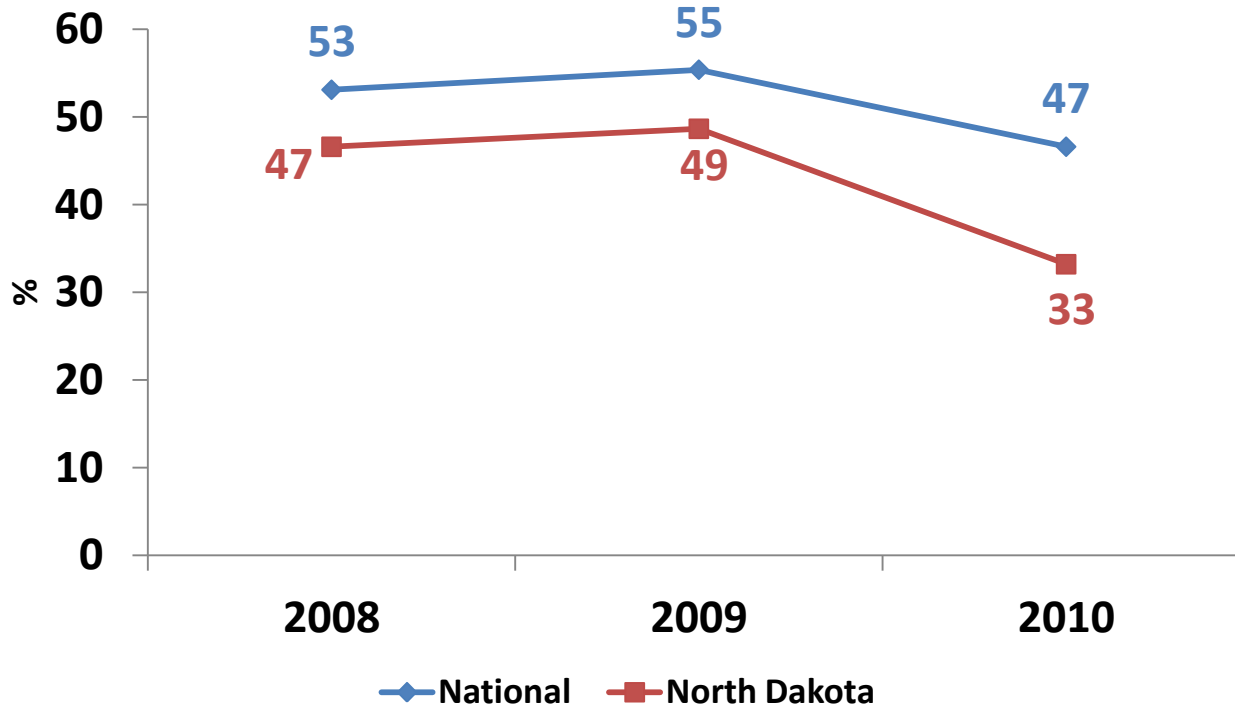


Data Source: AHA Hospital Survey  
Data from 2010

\*Estimate not reliable due to sample size and relative standard error greater than .49

# How Does Your State Compare to the National Estimates?

### % of Hospitals Electronically Exchanging Laboratory Reports with Ambulatory Providers Outside Their System



Data Source: AHA Hospital Survey  
Data from 2010

# Other Measures of Exchange

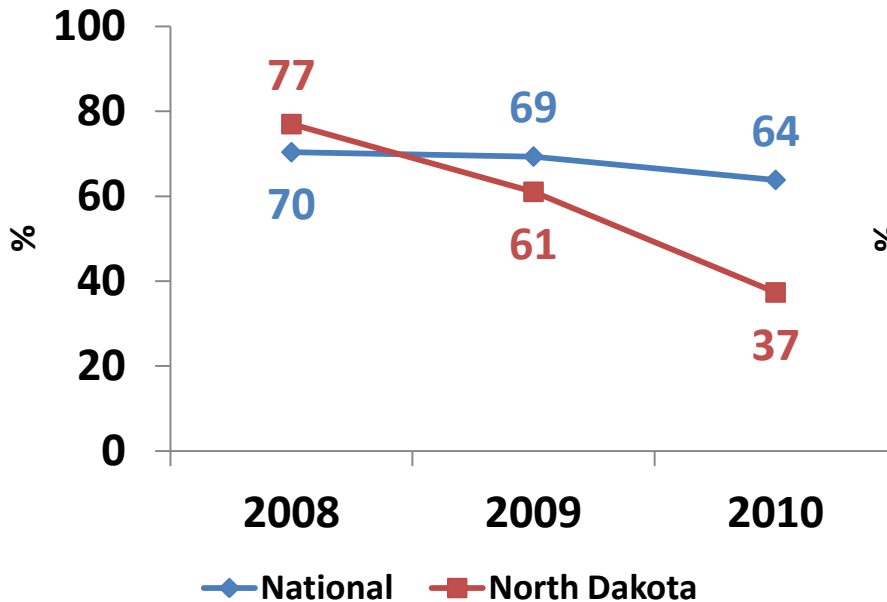


# How Does Your State Compare to the National Estimates?

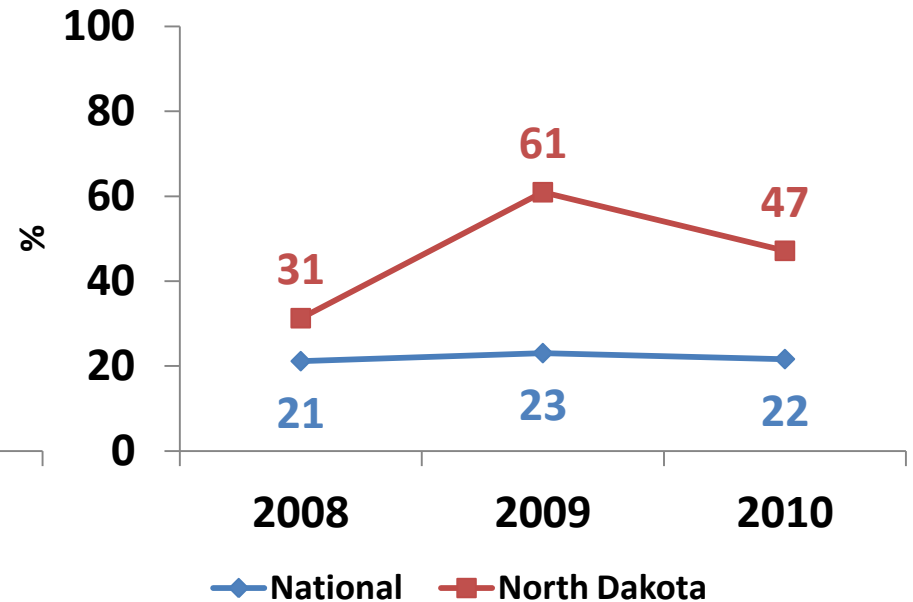


## % of Hospitals Electronically Exchanging Radiology Reports

### Inside Hospital System



### Outside Hospital System



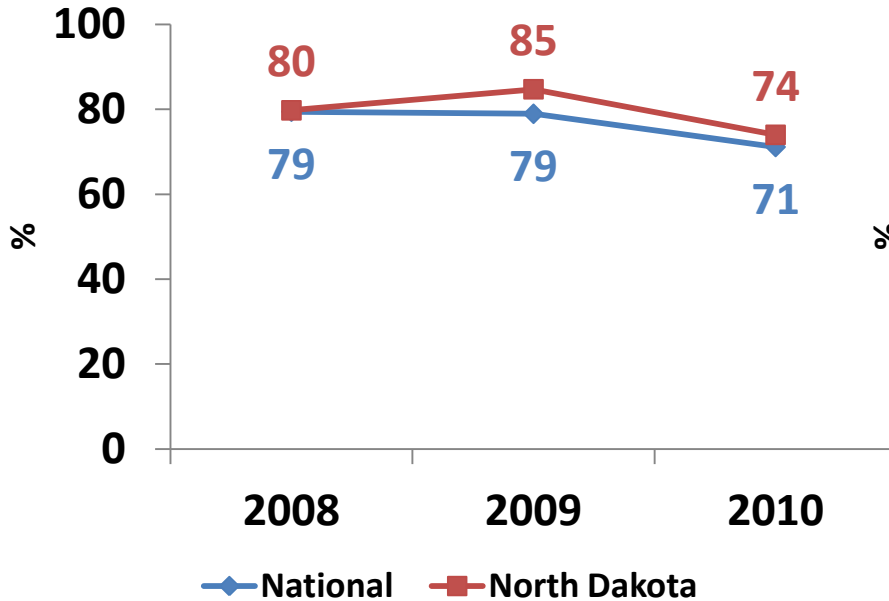
Data Source: AHA Hospital Survey

# How Does Your State Compare to the National Estimates?

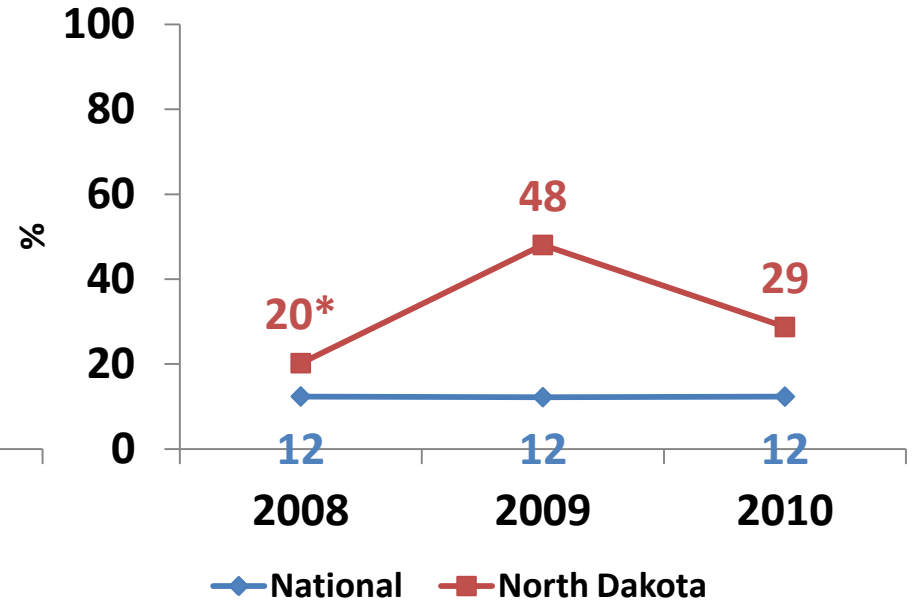


## % of Hospitals Electronically Exchanging Medication Histories with Hospitals

### Inside Hospital System



### Outside Hospital System



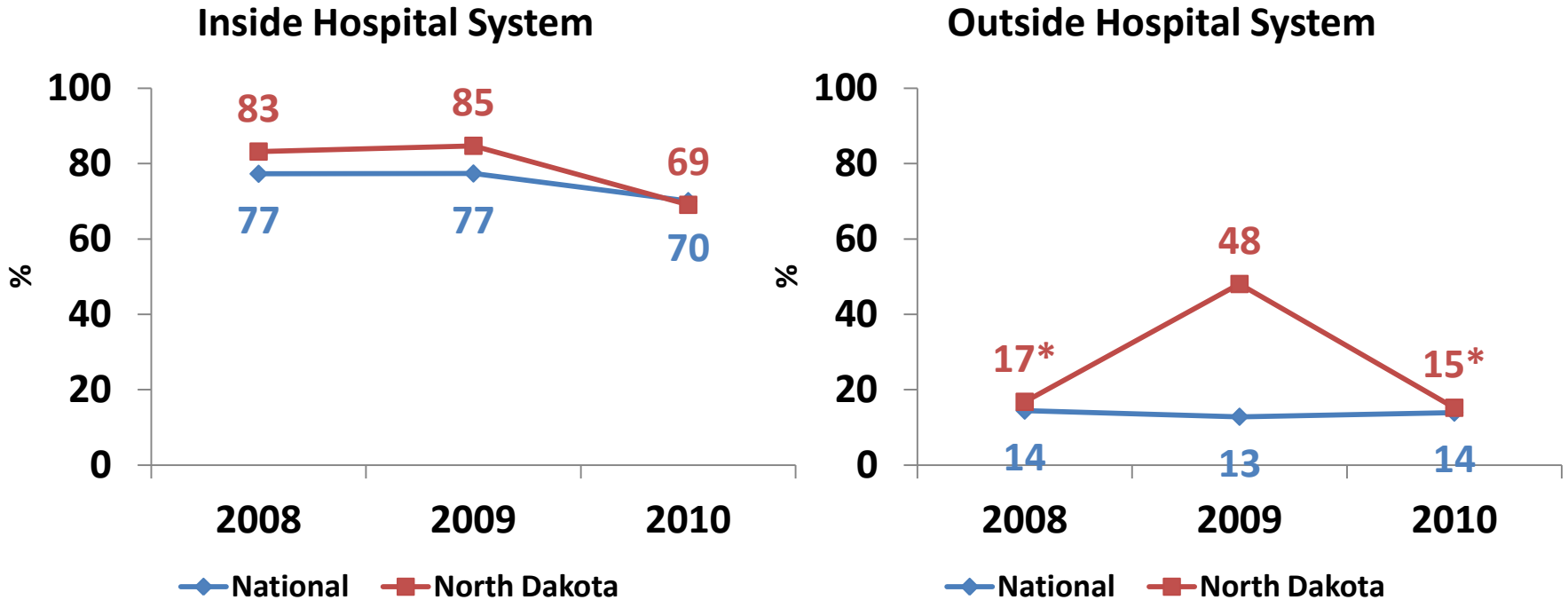
Data Source: AHA Hospital Survey

\*Estimate not reliable due to sample size and relative standard error greater than .49

# How Does Your State Compare to the National Estimates?



## % of Hospitals Electronically Exchanging Care Summaries with Hospitals



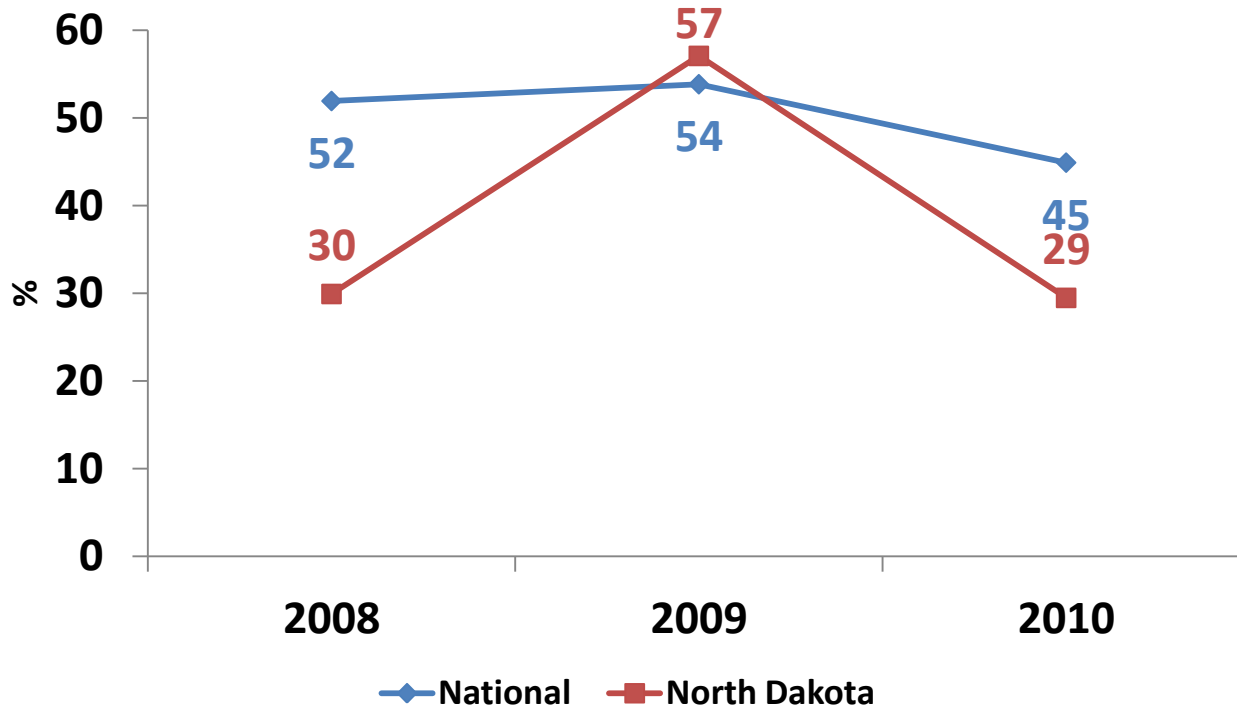
Data Source: AHA Hospital Survey

\*Estimate not reliable due to sample size and relative standard error greater than .49

# How Does Your State Compare to the National Estimates?



**% of Hospitals Electronically Exchanging Radiology Reports with Ambulatory Providers Outside Their System**

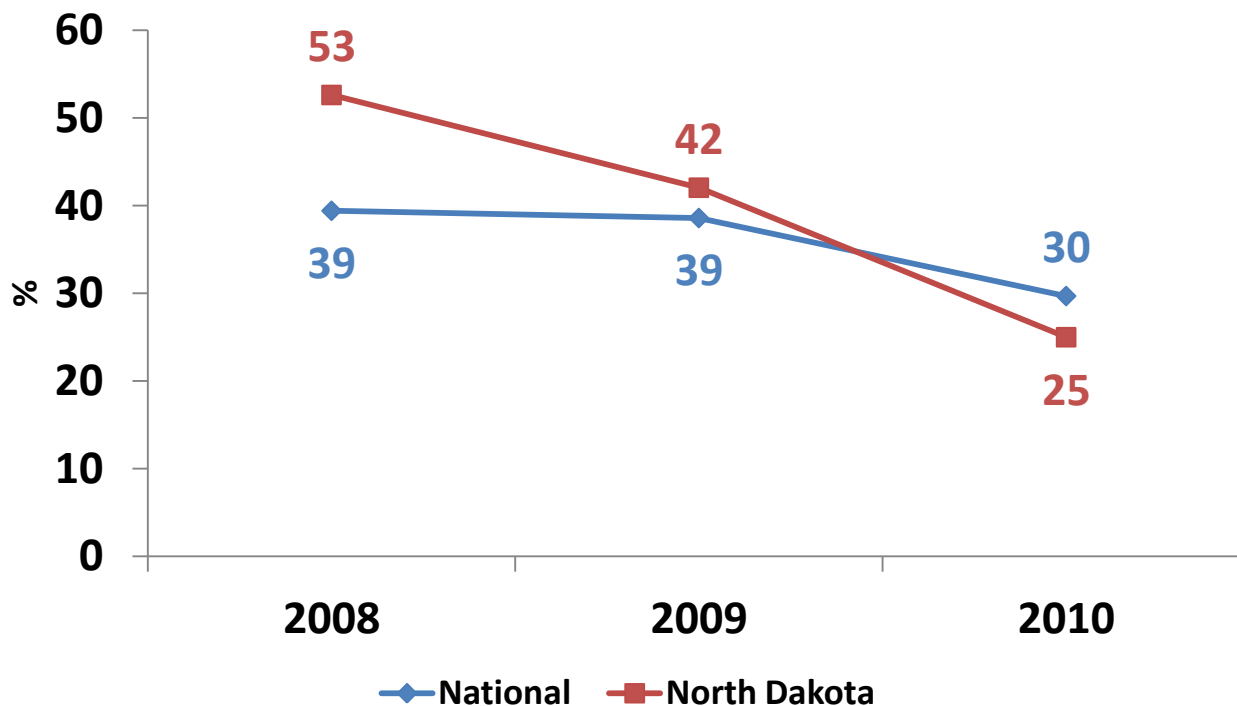


*Data Source: AHA Hospital Survey*

# How Does Your State Compare to the National Estimates?



## % of Hospitals Electronically Exchanging Medication Histories with Ambulatory Providers Outside Their System

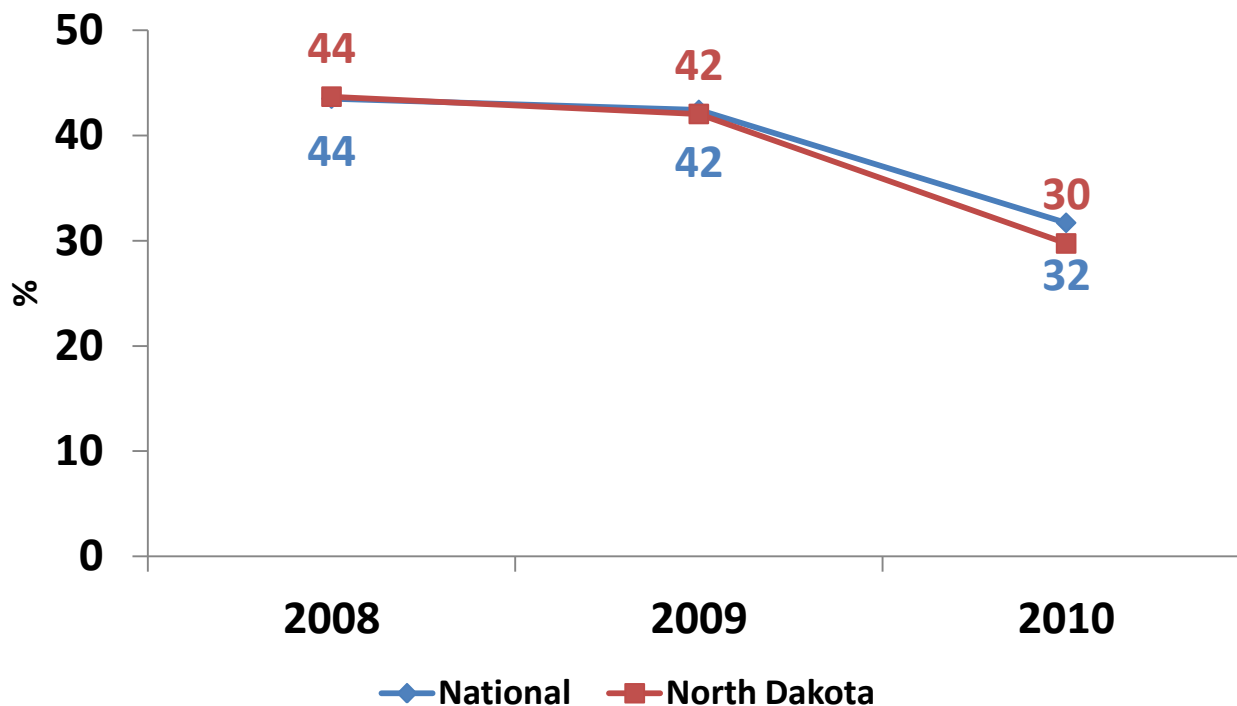


Data Source: AHA Hospital Survey

# How Does Your State Compare to the National Estimates?



### % of Hospitals Electronically Exchanging Care Summaries with Ambulatory Providers Outside Their System

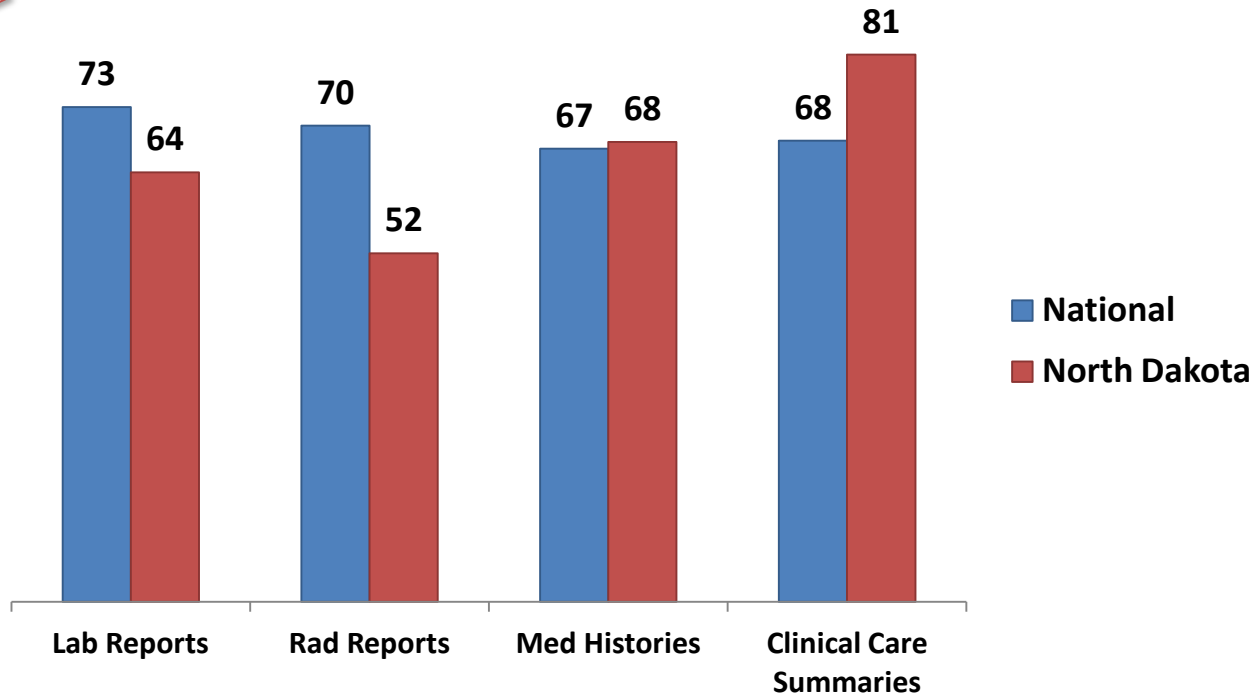


Data Source: AHA Hospital Survey

# How Does Your State Compare to the National Estimates?



## % of Hospitals Electronically Exchanging Key Data with Ambulatory Providers Inside Their System



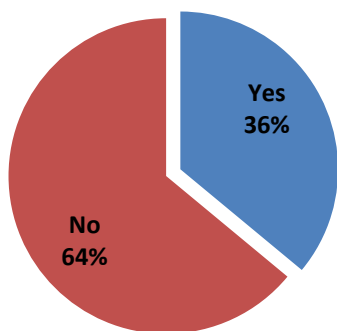
*Data Source: AHA Hospital Survey  
Data from 2010*

# How Does Your State Compare to the National Estimates?

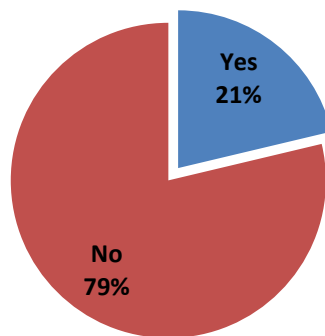
## % of Hospitals with Capacity to Provide Patients with an Electronic Copy of their Health Information<sup>1</sup> within 3 Business Days



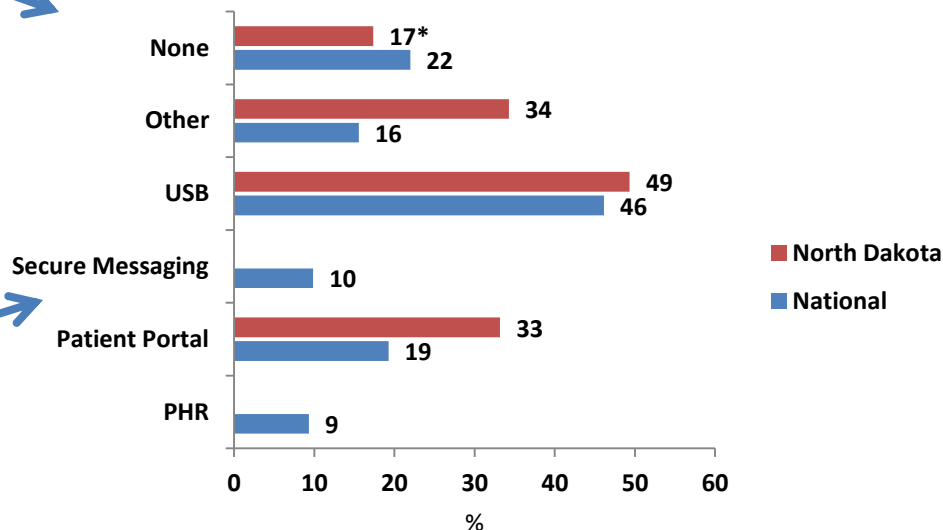
### National



### North Dakota



### Mechanism of Sharing



Data Source: AHA Hospital Survey  
Data from 2010

\*Estimate not reliable due to sample size and relative standard error greater than .49

<sup>1</sup>Includes all of the following: Diagnostic test results, problem lists, medication lists, allergies, and discharge summaries



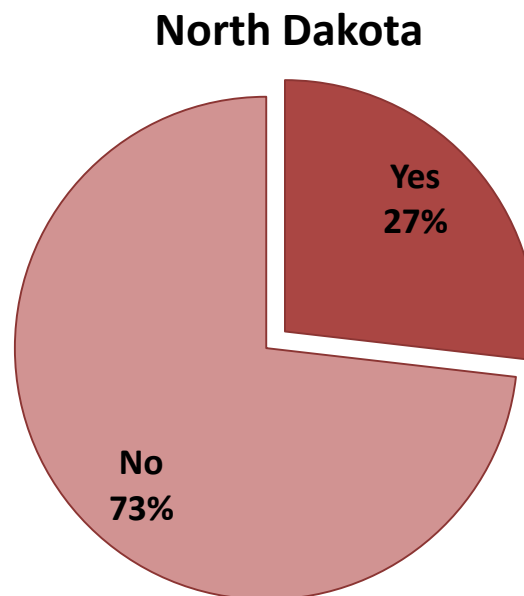
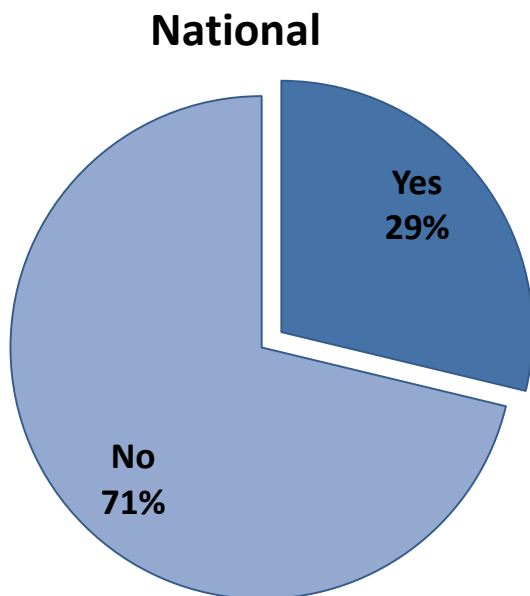
# Statewide Estimates: Hospitals Sharing Data Electronically with Patients



Data Source: AHA Hospital Survey  
Data from 2010

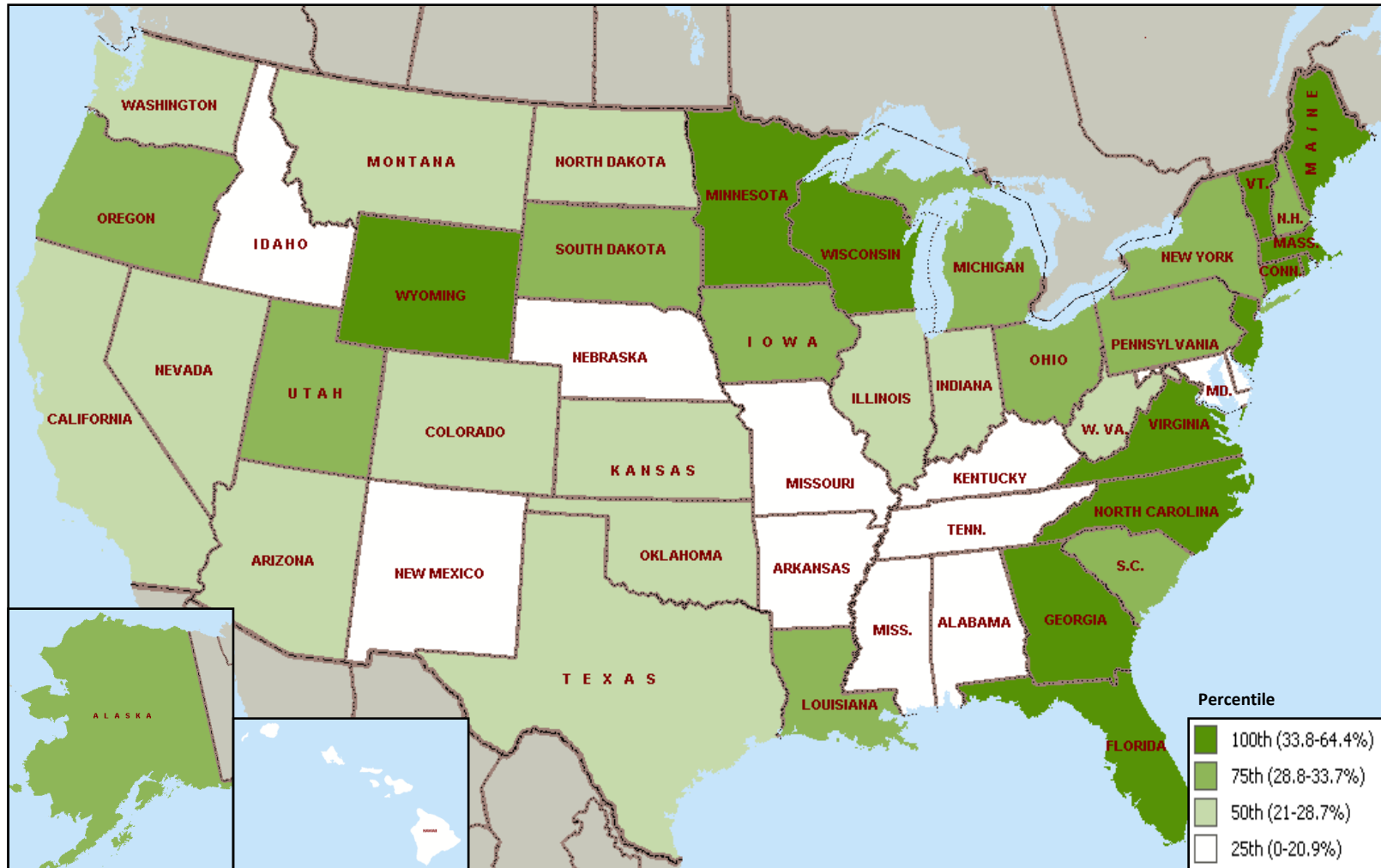
# How Does Your State Compare to the National Estimates?

## % of Hospitals with Capacity to Send Electronic Reminders to Patients



*Data Source: AHA Hospital Survey  
Data from 2010*

# Statewide Estimates: Hospitals with Capacity to Send Electronic Reminders to Patients



Data Source: AHA Hospital Survey  
Data from 2010

# Statewide Estimates: HIE/HIO available in region

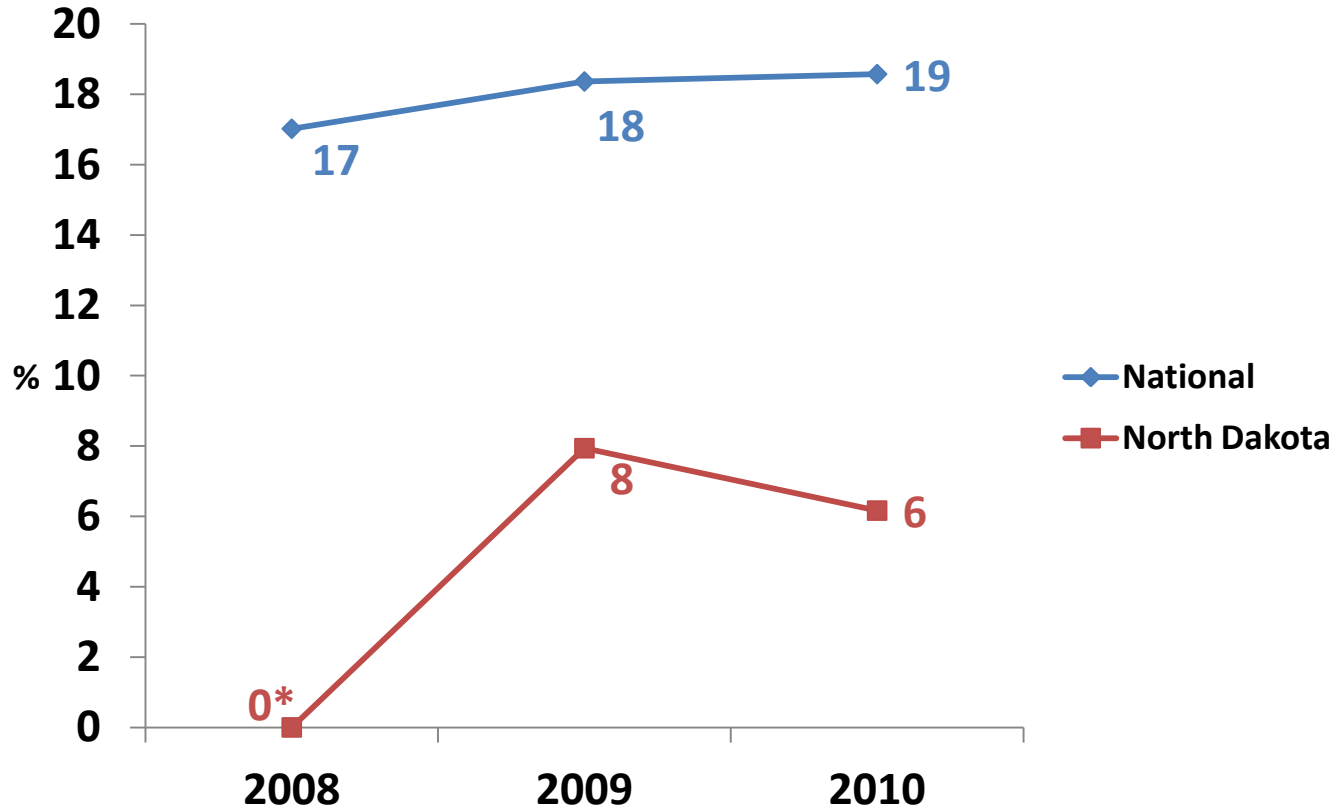


Data Source: AHA Hospital Survey  
Data from 2010



# How Does Your State Compare to the National Estimates?

## % of Hospitals with Exchange Capacity and Participating in an HIO



Data Source: AHA Hospital Survey

\*Estimate not reliable due to sample size and relative standard error greater than .49

# Thank you!