HEALTHCARE SYSTEM REFORM: WHY DATA AND INFORMATION IS NEEDED TO MAKE IT HAPPEN

JASON MCNAMARA
DIRECTOR FOR HEALTHCARE TECHNOLOGY SERVICES

DEDICATED TO GOVERNMENT HEALTH PROGRAMS
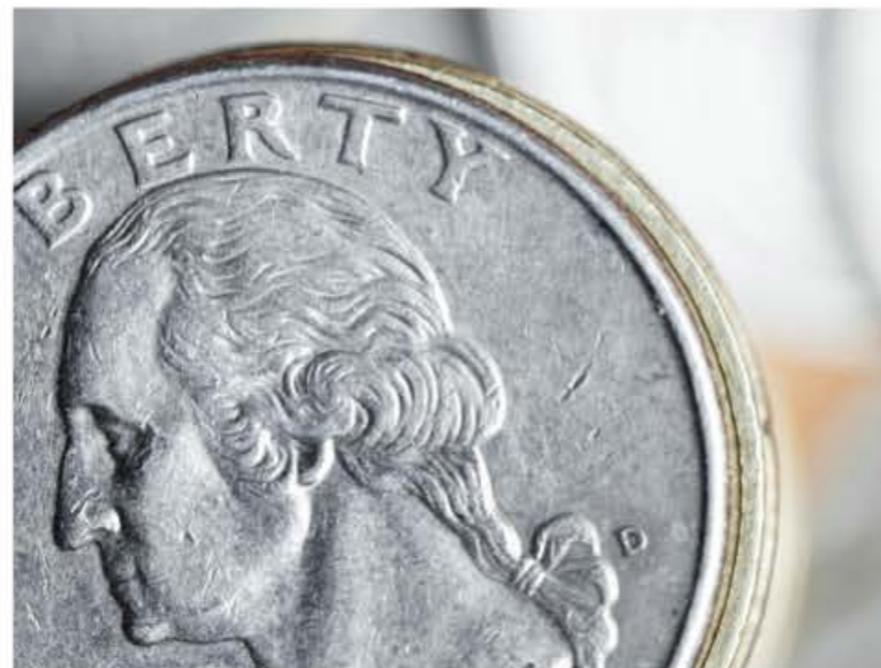
MY JOURNEY

- Medicaid baby – foster child

- Marine Corps Combat Veteran

- Health IT consultant for hospitals and practice consortiums

- VA/DoD Clinical Applications Director

- Centers for Medicare and Medicaid Services
  - Regional Health IT Coordinator
  - Technical Director for Health IT
  - Senior Technical Director for Medicaid IT

- Currently:
  - Director for Healthcare Technology Services/MSLC
  - Adjunct Professor, School of Public Health, GWU
  - President and Co-Founder of Veteran Services Organization (non-profit)
  - Radio Co-Host on the Military Network Radio

KEY TAKEAWAYS

- The CMS strategy is quickly moving across the country

- Data barriers occur at every point in the system – but more accountability from data

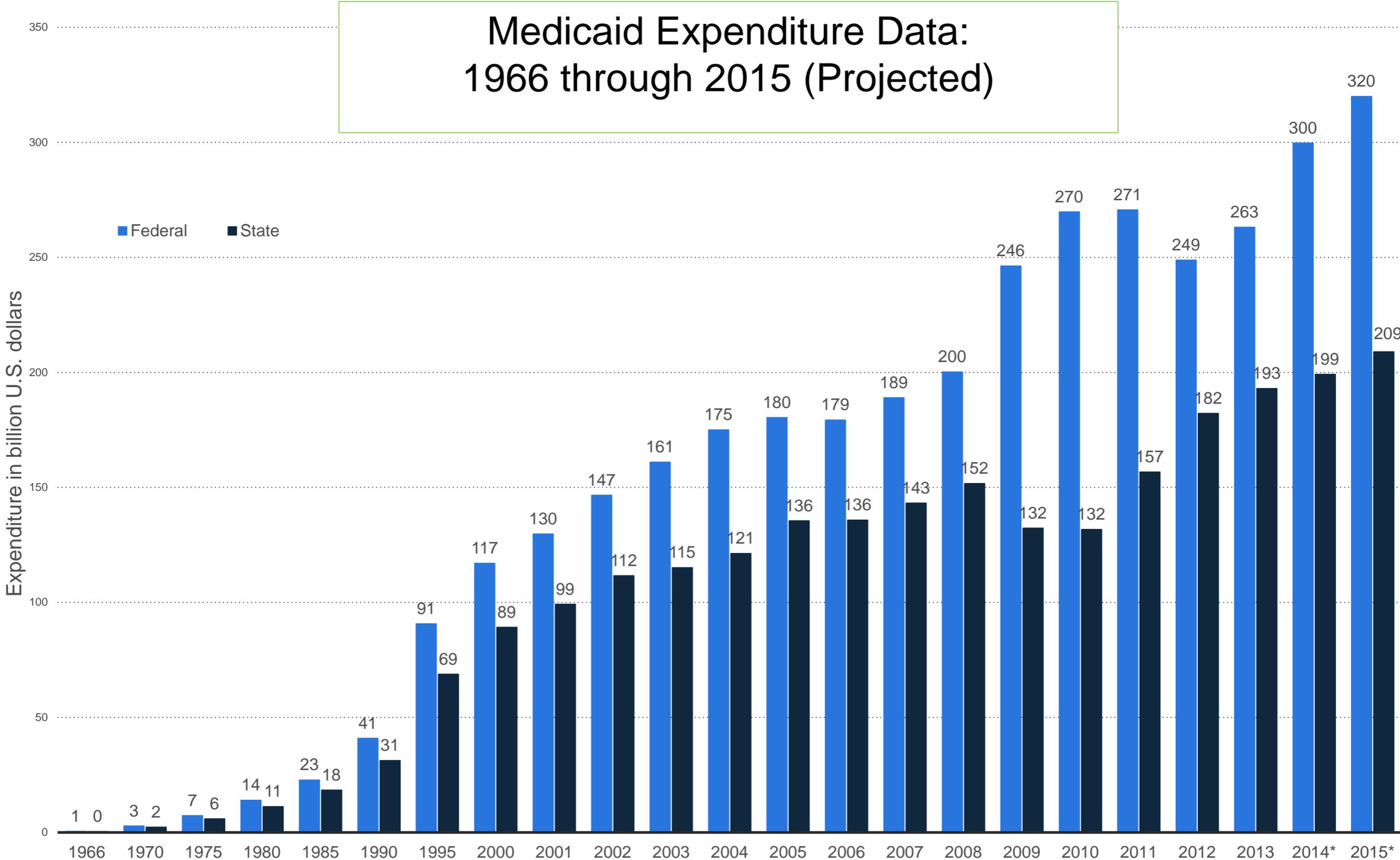- Social determinant data is the new wave of data – not a trend, but requirement

CMS VISION

MEDICAID TRENDS/FACTS

- 50th Anniversary

- Medicaid and CHIP cover over 71 million Americans

- 22% increase in enrollment post-ACA

- Expenditures
  - >$13 Billion CHIP (2013)
  - Medicaid $529 Billion (2015 projected)

Medicaid Expenditure Data:
1966 through 2015 (Projected)

Source: http://www.statista.com/statistics/245350/total-medicaid-federal-and-state-expenditure-in-the-us-since-1966

DIRECTION OF CHANGE

Historical State → **Evolving Future State**

- **Key characteristics**
  - Provider-centered
  - Incentives for volume
  - Unsustainable
  - Fragmented Care

- **Systems and Policies**
  - Fee-For-Service Payment Systems

- **Key characteristics**
  - Patient-centered
  - Incentives for outcomes
  - Sustainable
  - Coordinated care

- **Systems and Policies**
  - Value-based purchasing
  - Accountable Care Organizations
  - Episode-based payments
  - Medical Homes
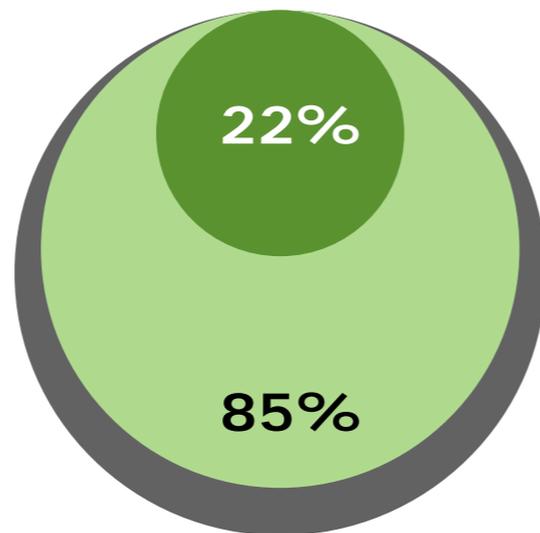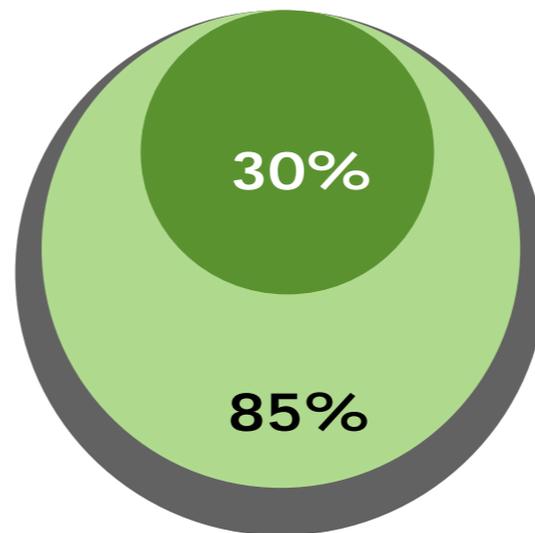 - Quality/cost transparency
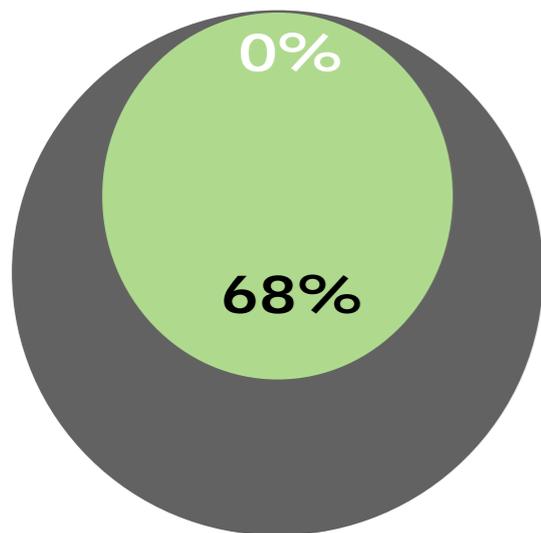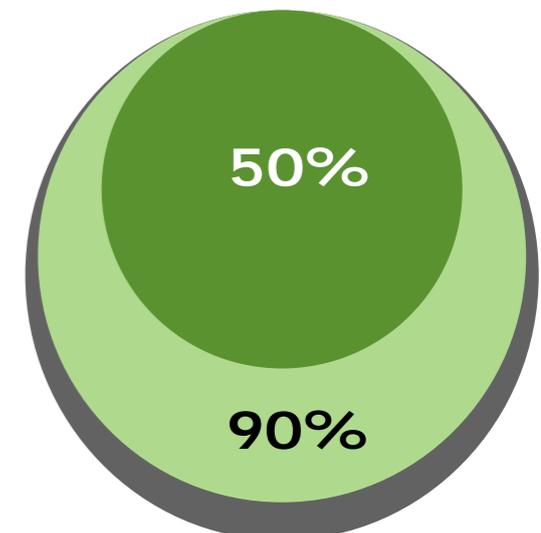
BETTER **CARE.**
SMARTER **SPENDING.**
HEALTHIER **PEOPLE.**

In three words, CMS' vision for improving health delivery is about *better, smarter, healthier.*

- **If we find better ways to pay providers, deliver care, and distribute information:**
  - We can receive better care.
  - We can spend our health dollars more wisely.
  - We can have healthier communities, a healthier economy, and a healthier country.

Focus Areas	Description

Incentives	- Promote value-based payment systems
	   – Test new alternative payment models
	   – Increase linkage of Medicaid, Medicare FFS, and other payments to value
	- Bring proven payment models to scale

Care Delivery	- Encourage the integration and coordination of clinical care services - Improve population health - Promote patient engagement through shared decision making
Information	- Create transparency on cost and quality information - Bring electronic health information to the point of care for "meaningful use" - Rapid learning environments

IMPROVING: "THE WAY PROVIDERS ARE INCENTIVIZED"

- **Health homes are incentivizing patient outcomes and better care**
  - 24 programs in 15 states

- **Shared Savings states are improving quality while reducing costs**
  - 5 states

- **Medicaid Managed Care Management is improving**
  - New contract language, measurements, and accountability (OR)

- **Delivery System Reform Incentive Pools are transforming payment, delivery and information**
  - 5 states

IMPROVING: "THE WAY CARE IS DELIVERED"

- **Supporting providers to align services across sectors in service of beneficiary (Health homes, 1915s, duals, 1115s)**

- **Money Follows the Person and Balancing Incentives Program (and crossing the threshold to HCBS)**

- **Expanded use of quality improvement and quality metrics across multiple programs (Adult Quality Grants, spread of core set, increased use of metrics in 1115 waivers and SPAs)**

- **Specific initiatives such as the Maternal and Child Health Initiative (and early elective deliveries have dropped by almost half)**

- **Series of informational bulletins and SMDs from multiple groups**

- **Innovation Accelerators Program (IAP) - $175 million in contract support**

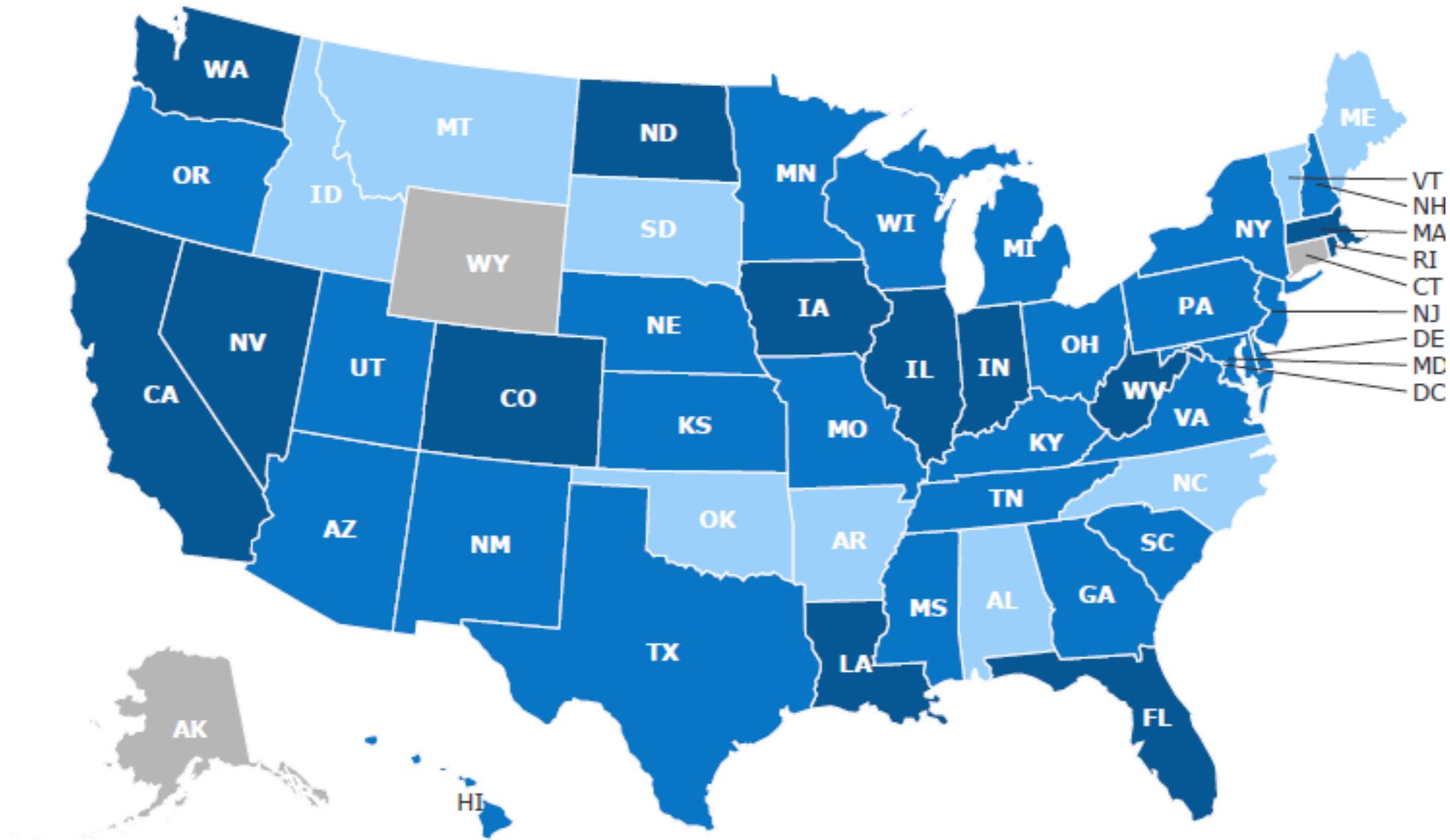## IMPROVING: "THE WAY INFORMATION IS DISTRIBUTED"

- **Electronic health records**

- **Health information exchange and 90/10**

- **TMSIS (public use files and program management)**

- **IAP and data analytics**

- **Transparency of performance metrics and quality performance**

STATES MOVING TOWARDS DELIVERY REFORM*

*http://kff.org/medicaid/fact-sheet/medicaid-delivery-system-and-payment-reform-a-guide-to-key-terms-and-concepts/

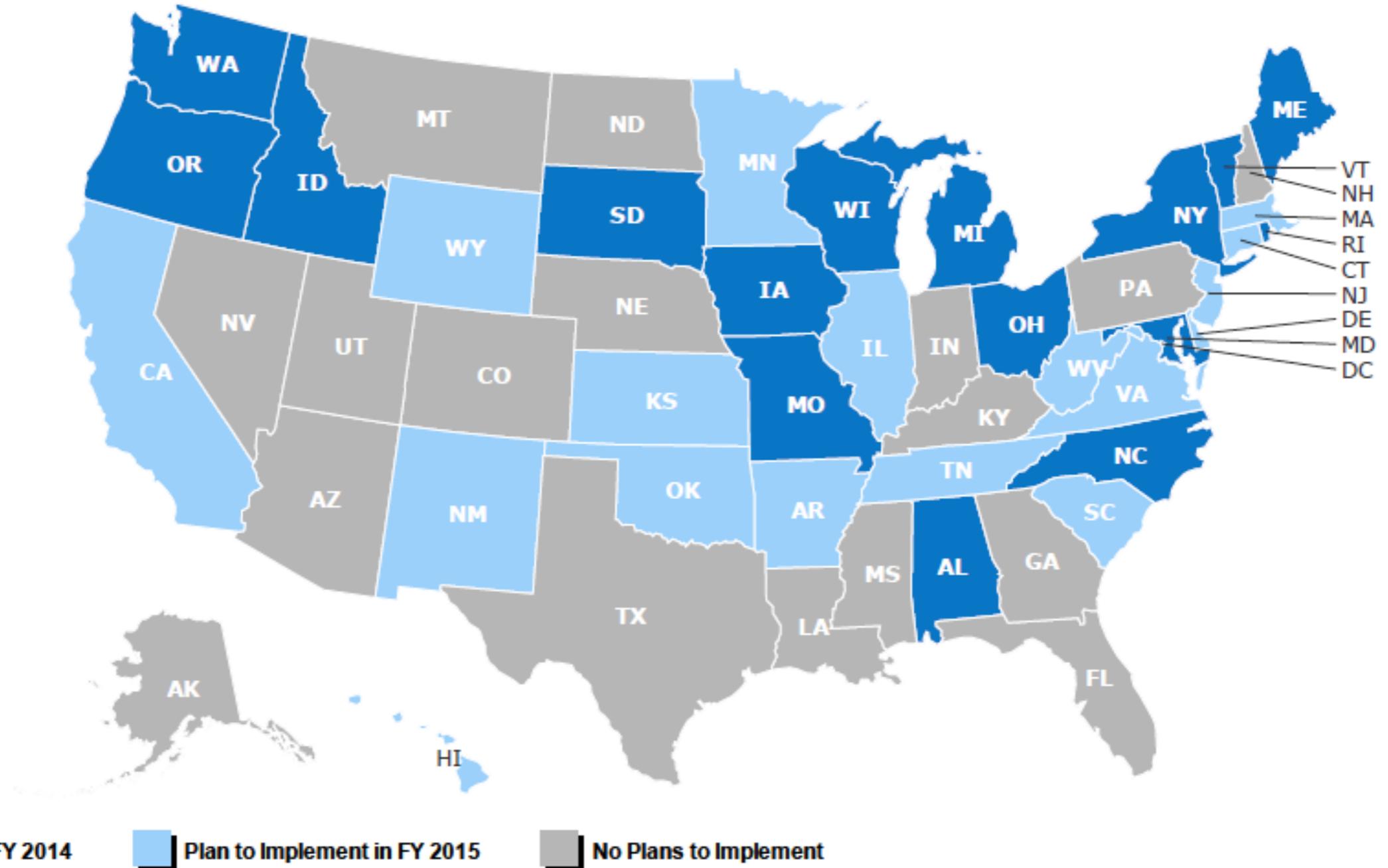# PATIENT CENTERED MEDICAL HOME

In Place in FY 2014 | Plan to Implement in FY 2015 | No Plans to Implement

MEDICAID HEALTH HOMES

Legend:
- In Place in FY 2014
- Plan to Implement in FY 2015
- No Plans to Implement

ACCOUNTABLE CARE ORGANIZATION

DELIVERY SYSTEM REFORM INCENTIVE PAYMENT

Legend:
- In Place in FY 2014
- In Place in FY 2015
- No DSRIP In Place
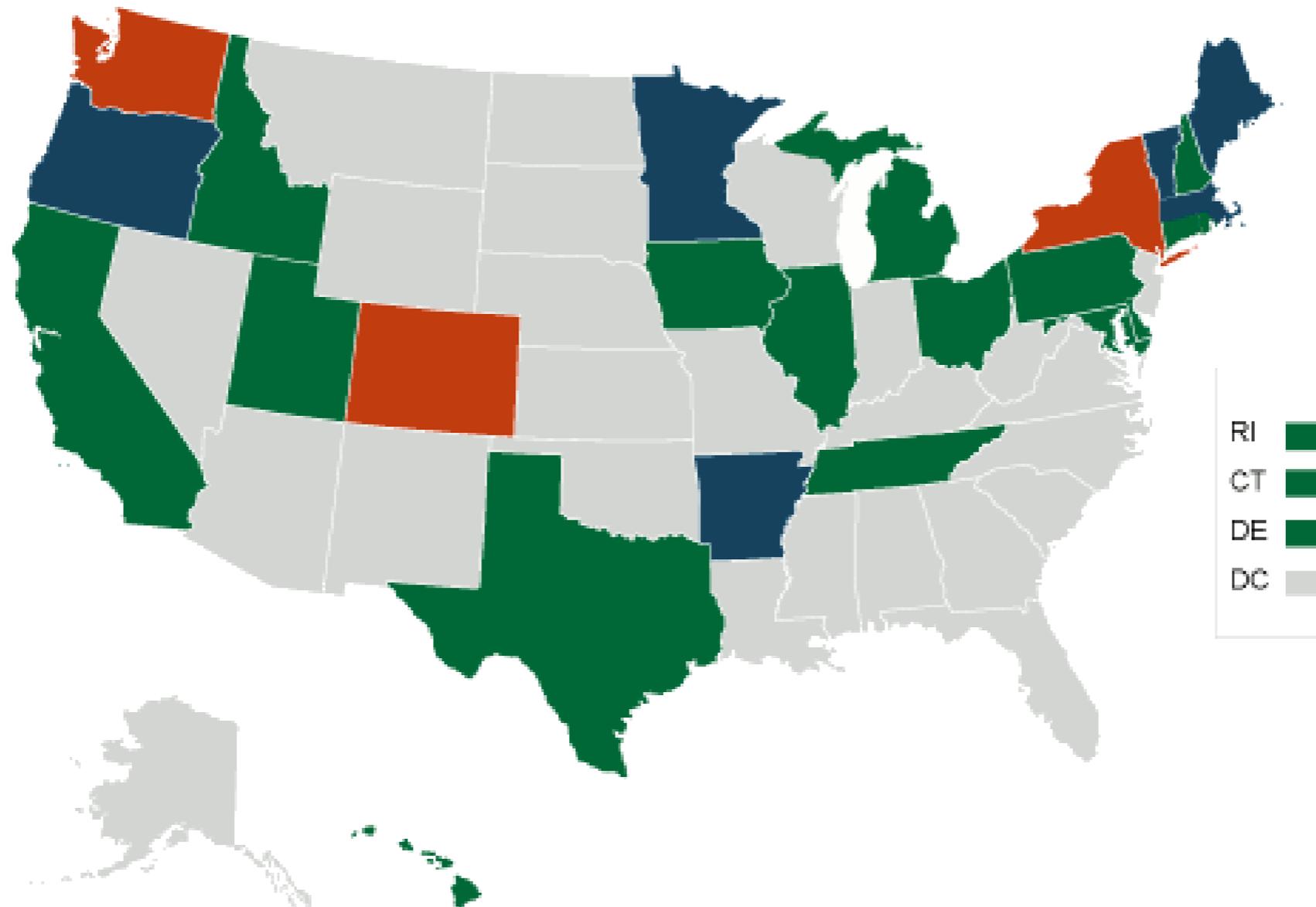
STATE INNOVATION MODELS (SIM) – ROUND 1
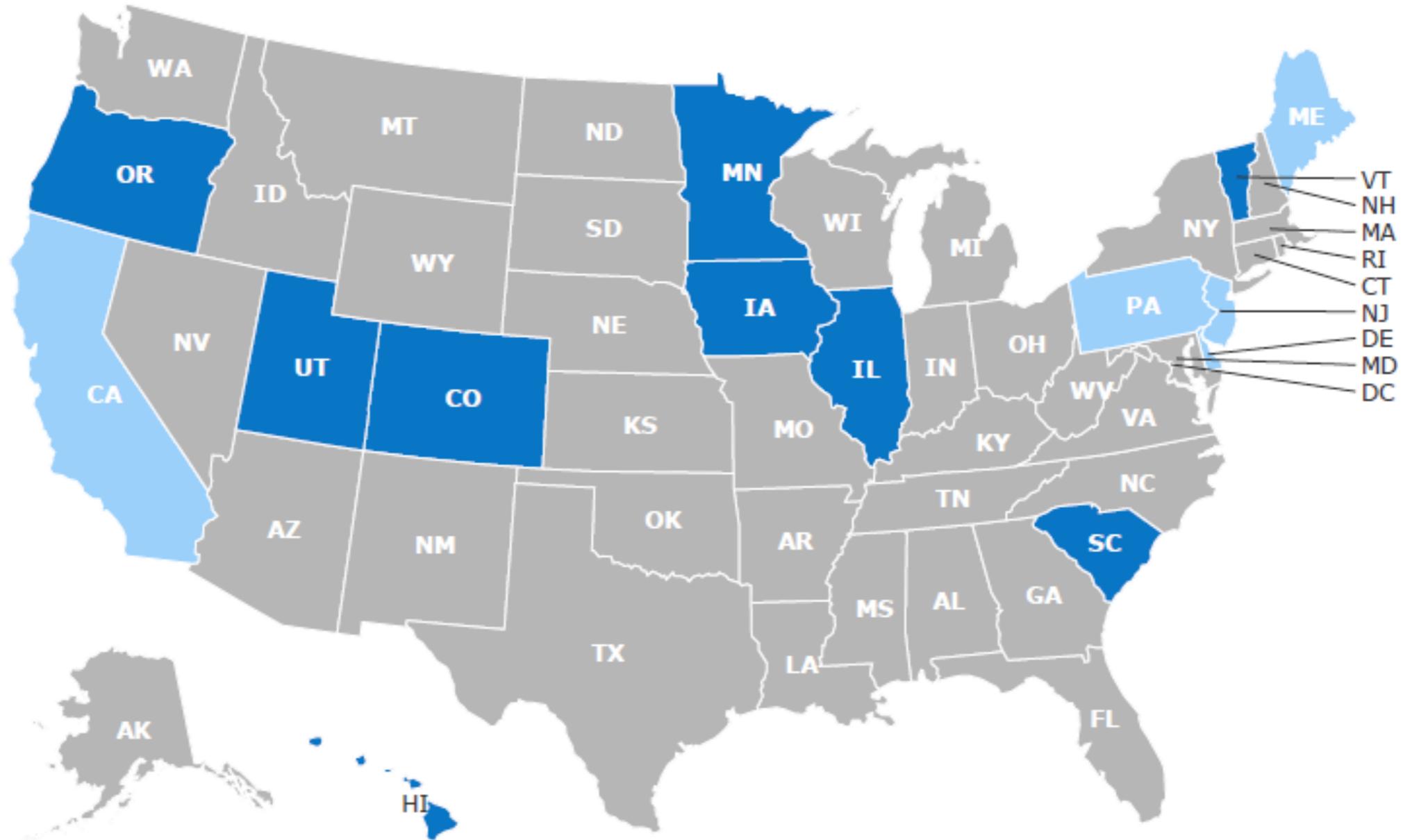
Source: Centers for Medicare & Medicaid Services

STATE INNOVATION MODELS (SIM) – ROUND 2
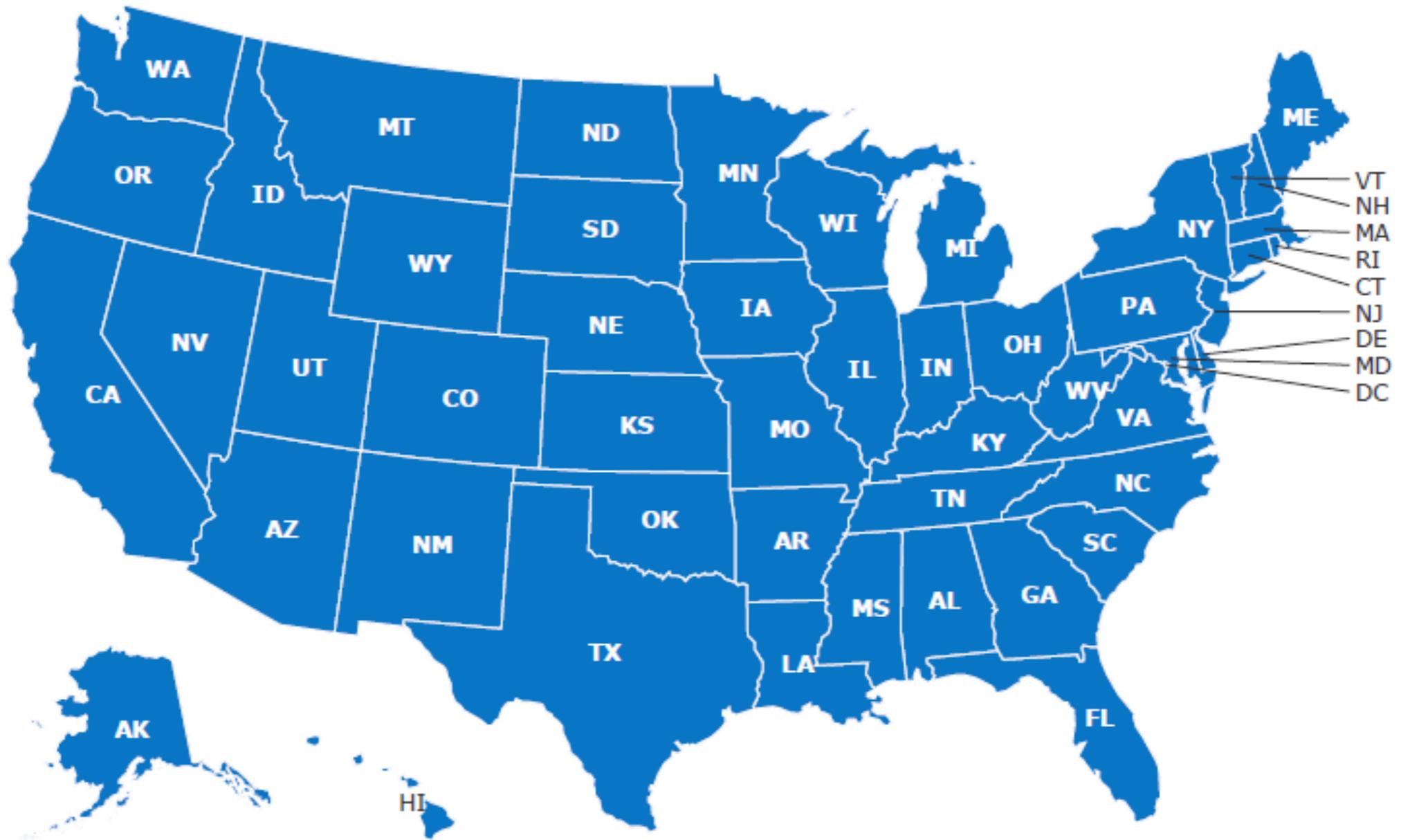

Model Testing Awards   Model Pre-Testing Awards   Model Design Awards

RI
CT
DE
DC

Source: Centers for Medicare & Medicaid Services

SUM OF ALL STATES

■ TRANSFORMED – MEDICAID STATISTICAL INFORMATION SYSTEM (T-MSIS)

TMSIS

- System that allows states to report Medicaid requirements to CMS,* as defined by law:

  - Study encounters, claims, and enrollment data by claim and beneficiary attributes;

  - Analyze expenditures by medical assistance and administration categories;

  - Monitor expenditures within delivery systems and assess the impact of different types of delivery system models on beneficiary outcomes;

  - Examine the enrollment, service provision, and expenditure experience of providers who participate in Medicaid programs (as well as in Medicare); and

  - Observe trends or patterns indicating potential fraud, waste, and abuse in the programs so [CMS] can prevent or mitigate the impact of these activities

*http://www.medicaid.gov/Federal-Policy-Guidance/Downloads/SMD-13-004.pdf

TMSIS DIRECTION OF CHANGE

Old System → New System

- **Key characteristics**
  - Reported quarterly
  - 400 data elements
  - Missing data elements = lack of program oversight
  - 1.5 years to analyze data

- **Data Files**
  - Eligibility
  - Inpatient
  - Long-Term Care
  - Pharmacy
  - Other (catch all)

- **Key characteristics**
  - Reported monthly
  - 1,000 data elements
  - Driving program and policy changes
  - 60 days to analyze

- **Data Files**
  - Eligibility
  - Third-party liability
  - Managed care plan information
  - Provider
  - Four claims files (inpatient, long-term-care, outpatient, and pharmacy).

DATA ANALYSIS CHALLENGES

- No matter which level – data analysis is a challenge:

  - Source data (TMSIS: 9-84% not structured for analysis);

  - Technology or storage bottlenecks (delayed systems or lack of);

  - Noisy data (TMSIS: 12-50% unusable data);

  - Spurious correlations

    - U.S. Spending on science, space and technology correlating to death by hanging, strangulation and suffocation (99.79% correlation (r=.99789))*

  - Measurement Errors

    - Random Errors – more applicable to population health management

    - Systemic Errors – "right system hitting the wrong target" "end-user error"

*http://www.tylervigen.com/spurious-correlations

■ POPULATION HEALTH DATA NEEDS

MASSIVE SHIFT FOR POPULATION HEALTH

- Income

- Education

- Employment

- Family and Social Support

- Community Safety

- Transportation

- Air & water quality

WHY SOCIAL DETERMINANTS MATTER

- ## CMS penalties:
  - 2012 CMS penalized 77% of all safety net hospitals for excess readmissions of patients with heart attack, heart failure, or pneumonia.
  - Meanwhile a review of 70 studies found that unemployment and low income were tied to a higher risk of hospital readmission among patients with heart failure and pneumonia.*

- ## No shows or access in south-west region:
  - 25-55% of patients not showing up for visits to due transportation issues (DMV, social services data, and income data)

- ## Risk profiling in mountain state:
  - Combine data from DMV, IRS, and employment data to high risk profile patients and route through different care management process
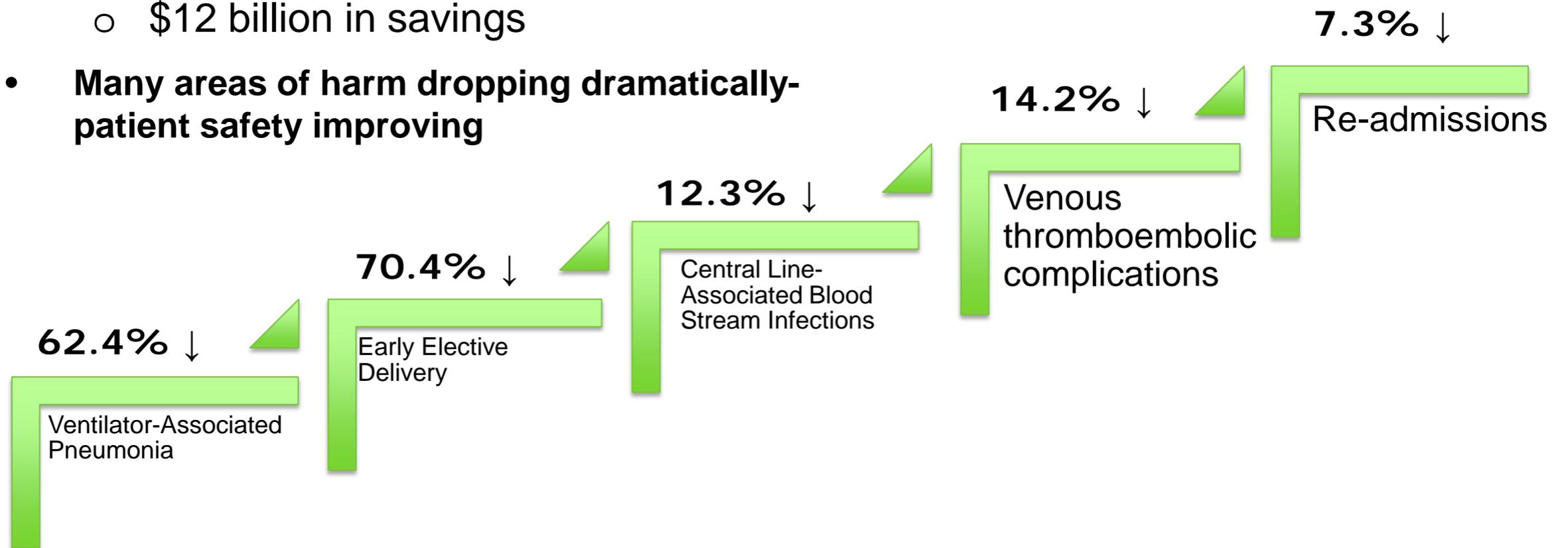
http://www.commonwealthfund.org/publications/fund-reports/2014/may/addressing-patients-social-needs
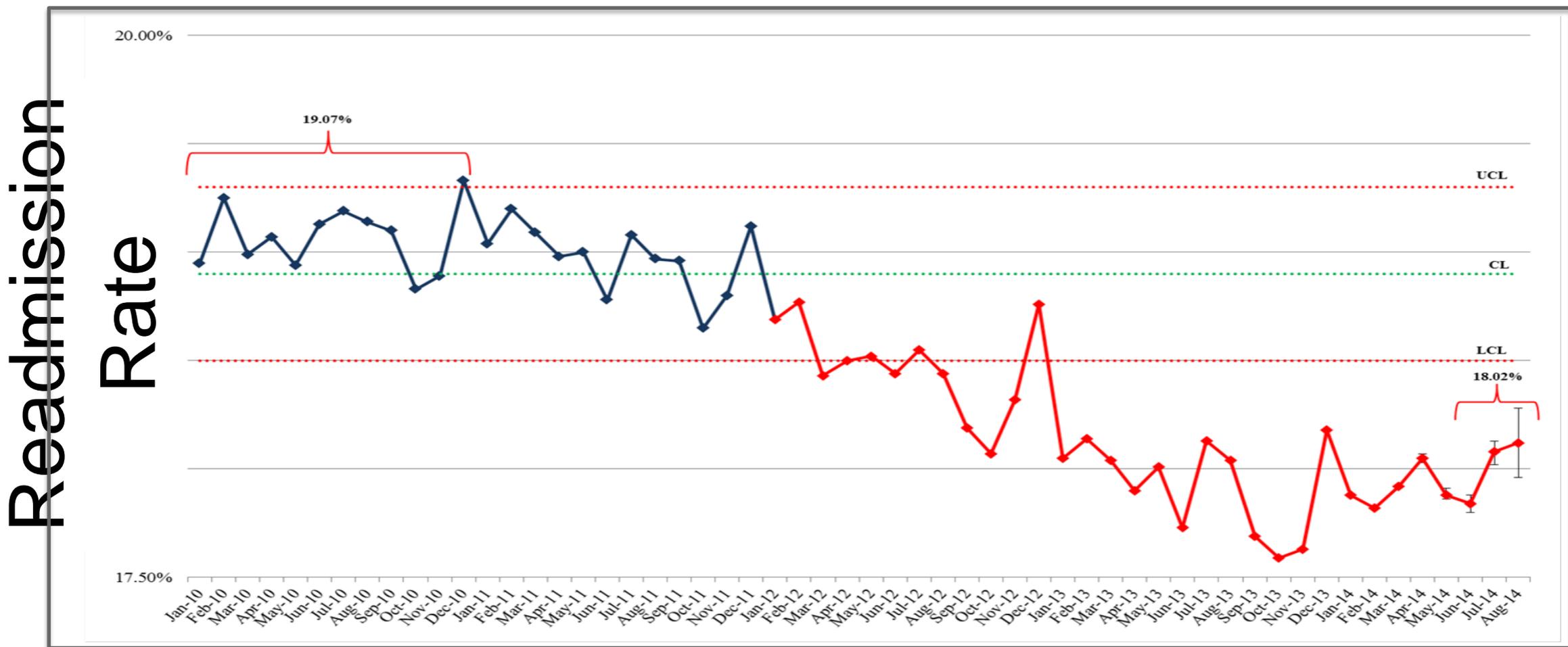
EARLY SIGNS OF SUCCESS

PARTNERSHIP FOR PATIENTS

- **Data shows a 17% reduction in hospital acquired conditions across all measure from 2010-2013**
  - o 50,000 lives saved
  - o 1.3 million patient harm events avoided
  - o $12 billion in savings

- **Many areas of harm dropping dramatically-patient safety improving**

62.4% ↓

Ventilator-Associated Pneumonia

70.4% ↓

Early Elective Delivery

12.3% ↓

Central Line-Associated Blood Stream Infections

14.2% ↓

Venous thromboembolic complications

7.3% ↓

Re-admissions

Medicare all-cause, 30-day hospital readmission rate is declining

Source: Health Policy and Data Analysis Group in the Office of Enterprise Management at CMS. April 2014 – August 2014 readmissions rates are projected based on early data, with 95 percent confidence intervals as shown for the most recent five months.

Legend: CL: control limit; UCL: upper control limit; LCL: lower control limit

NEW JERSEY'S JOURNEY

Focus Areas	Description

Incentives	▪ Promote value-based payment systems
	  – Test new alternative payment models
	  – Increase linkage of Medicaid, Medicare FFS, and other payments to value
	▪ Bring proven payment models to scale

Care Delivery	▪ Encourage the integration and coordination of clinical care services ▪ Improve population health ▪ Promote patient engagement through shared decision making
Information	▪ Create transparency on cost and quality information ▪ Bring electronic health information to the point of care for "meaningful use" ▪ Rapid learning environments

QUESTIONS OR COMMENTS?

Contact Information:

Jason McNamara

jmcnamara@mslc.com