CARES Registry Update

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CARES Funding Partners

- American Red Cross
- American Heart Association
- Emory University
- Medtronic Philanthropy
- Zoll Corporation
- CDC (2004-2012)

CARES Mission Statement

To help communities determine standardized outcome measures for out-of-hospital cardiac arrest allowing for quality improvement efforts and benchmarking capability to improve care and increase survival.

CARES Vision Statement

To become the standard out-of-hospital cardiac arrest registry for the United States allowing for uniform data collection and quality improvement in each state and nationally.
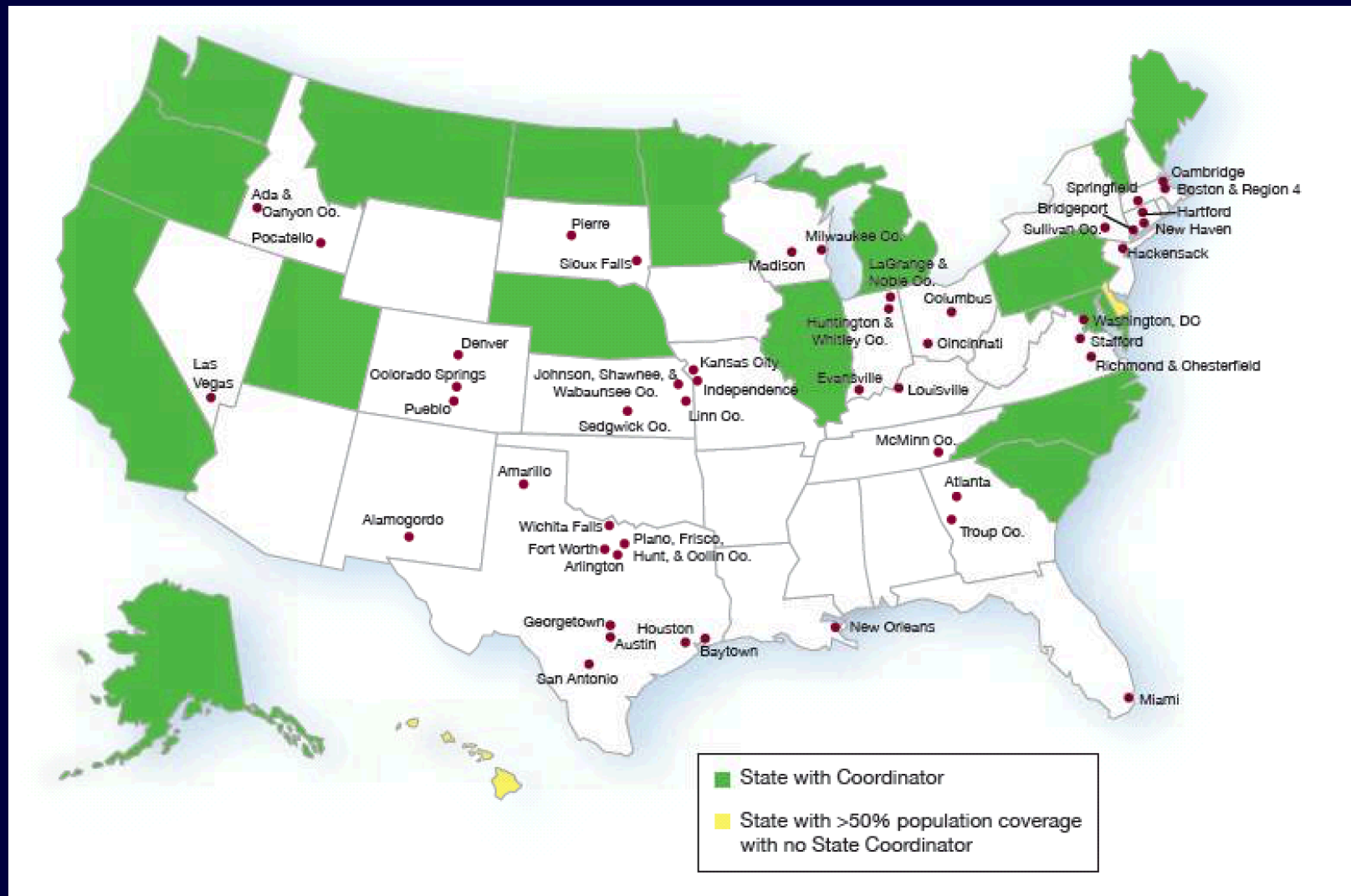
2015 Footprint

- Over 100 million

- 31% US population

- > 1,100 EMS Agencies

- > 1,500 Hospitals

- 50 communities in 22 states
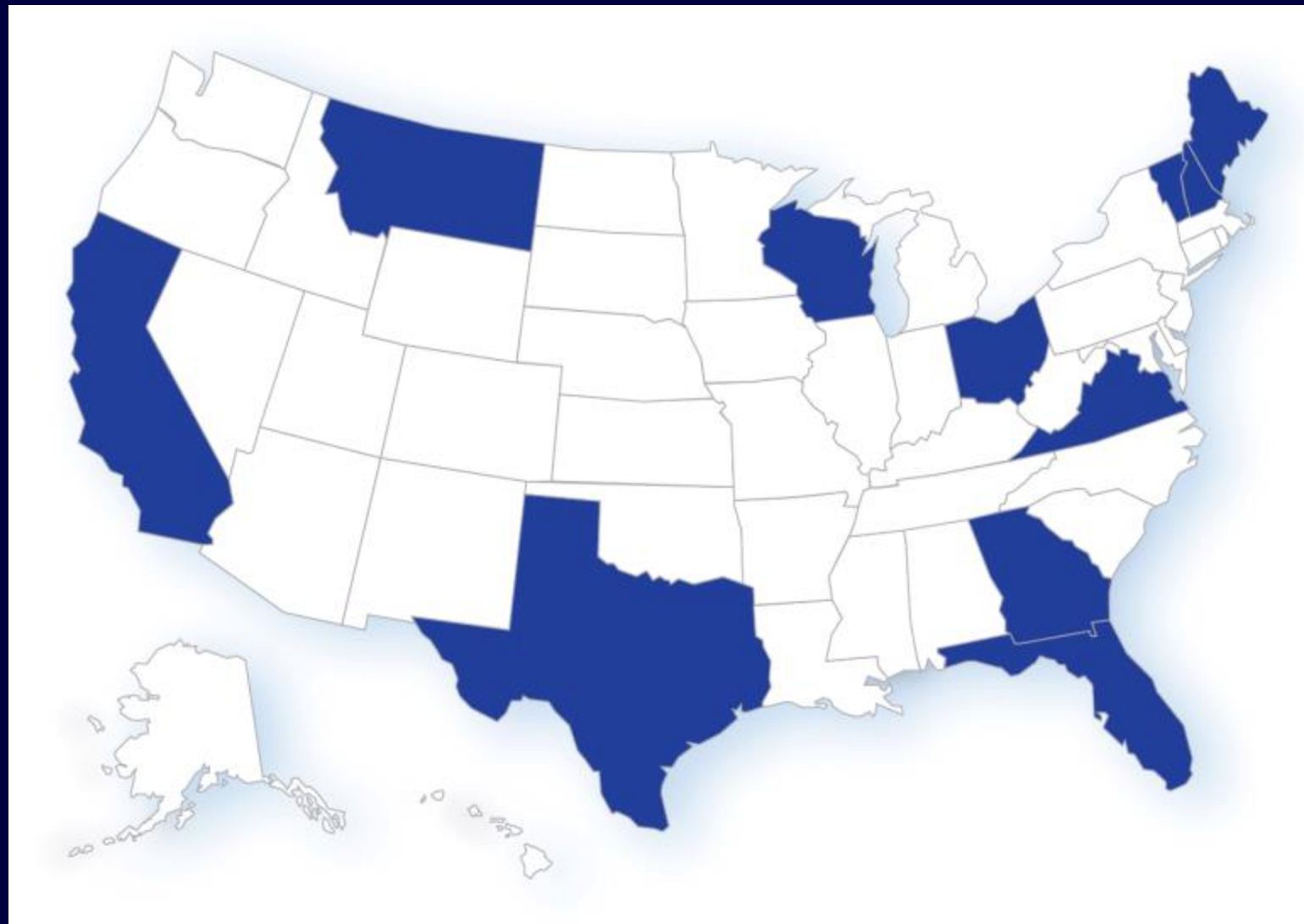
- 15 statewide participants

CARES Annual Call Volume

Legend:
- Non-Traumatic Etiology
- Presumed Cardiac Etiology
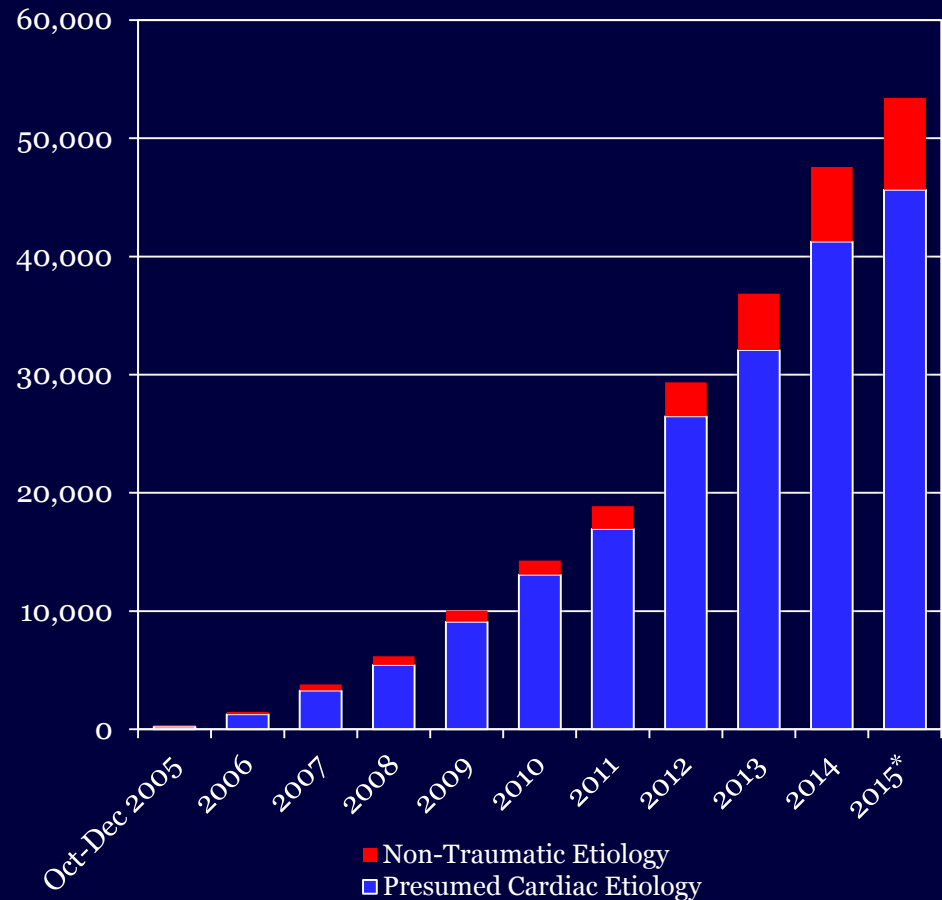
2016 CARES Participant Map

2016 CARES Focus States

State Benchmarking

2015 Oregon State Comparison Data

Who Initiated CPR?

National

Bystander 40.6%
First Responder 28.2%
EMS 31.1%

Legend:
- Bystander
- First Responder
- EMS

N=53,826

Oregon

Bystander 56.4%
First Responder 16.6%
EMS 27.0%

Legend:
- Bystander
- First Responder
- EMS
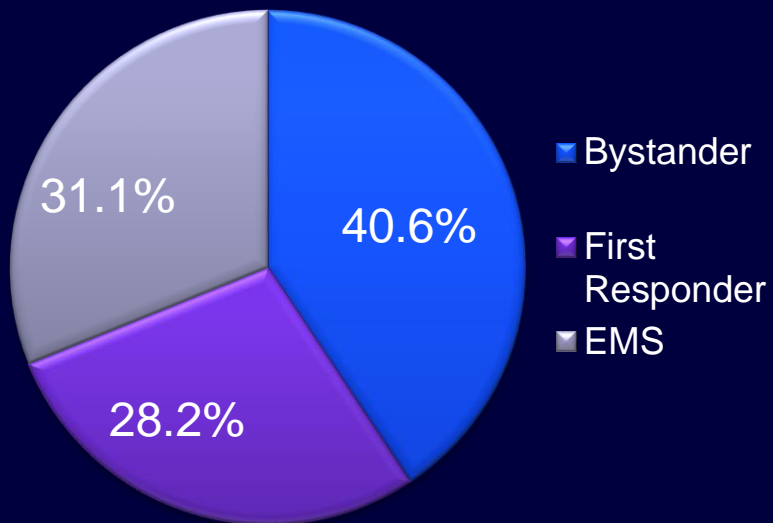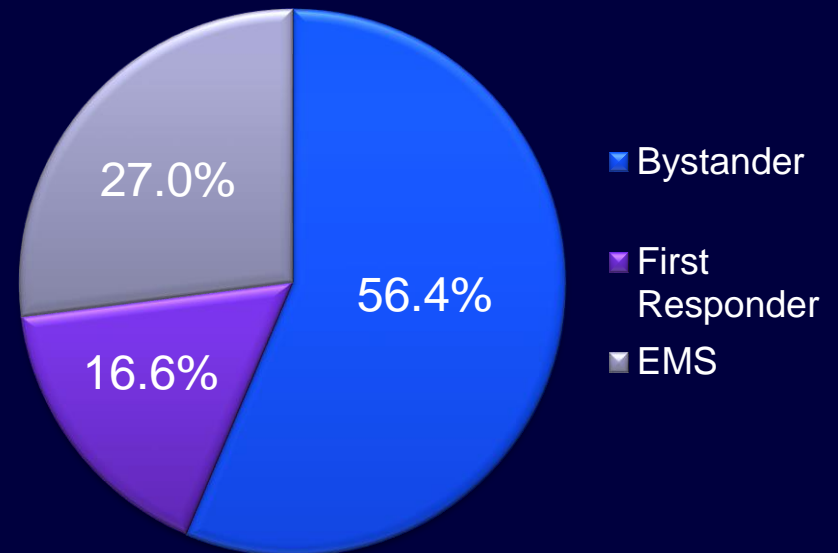
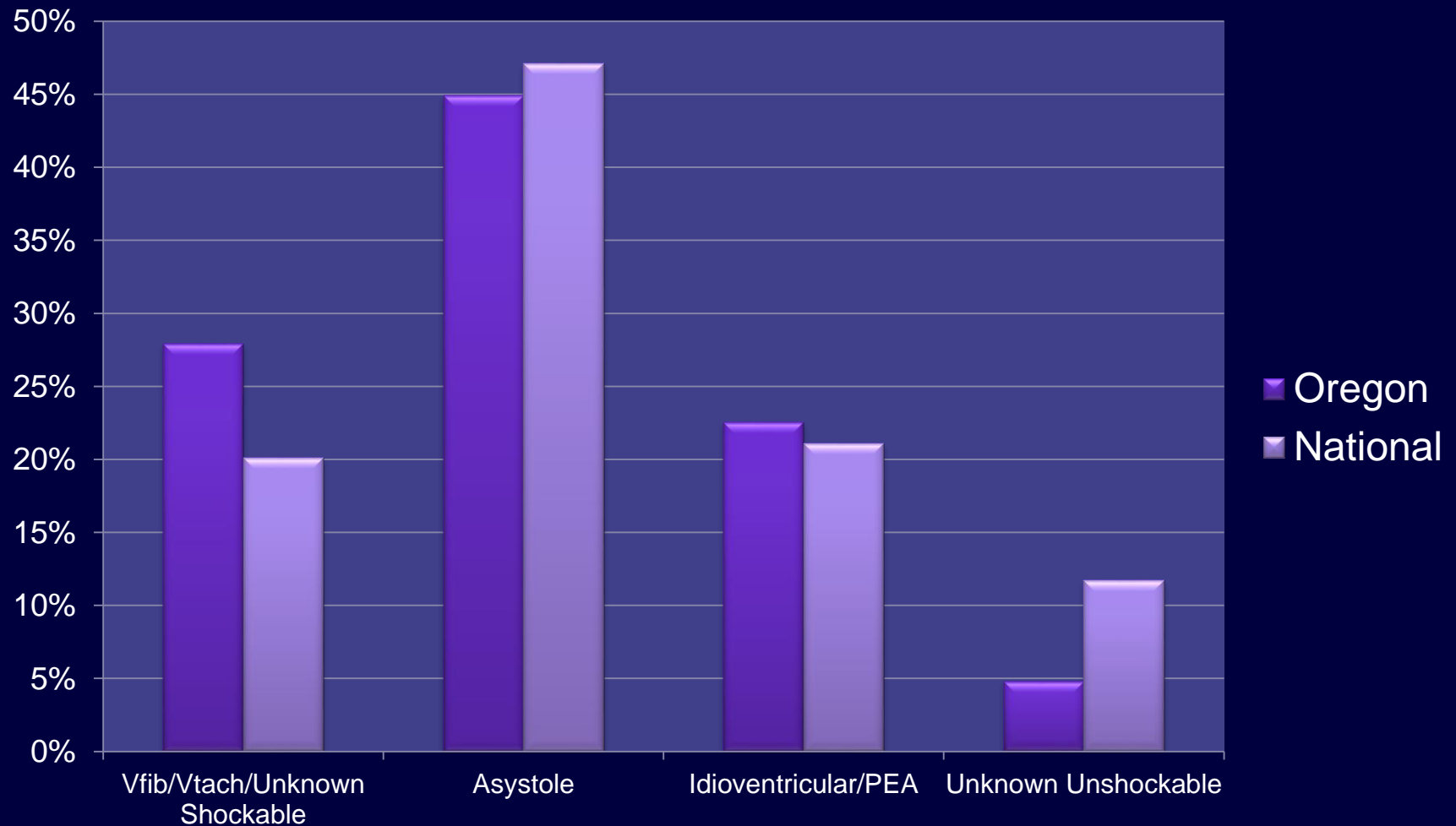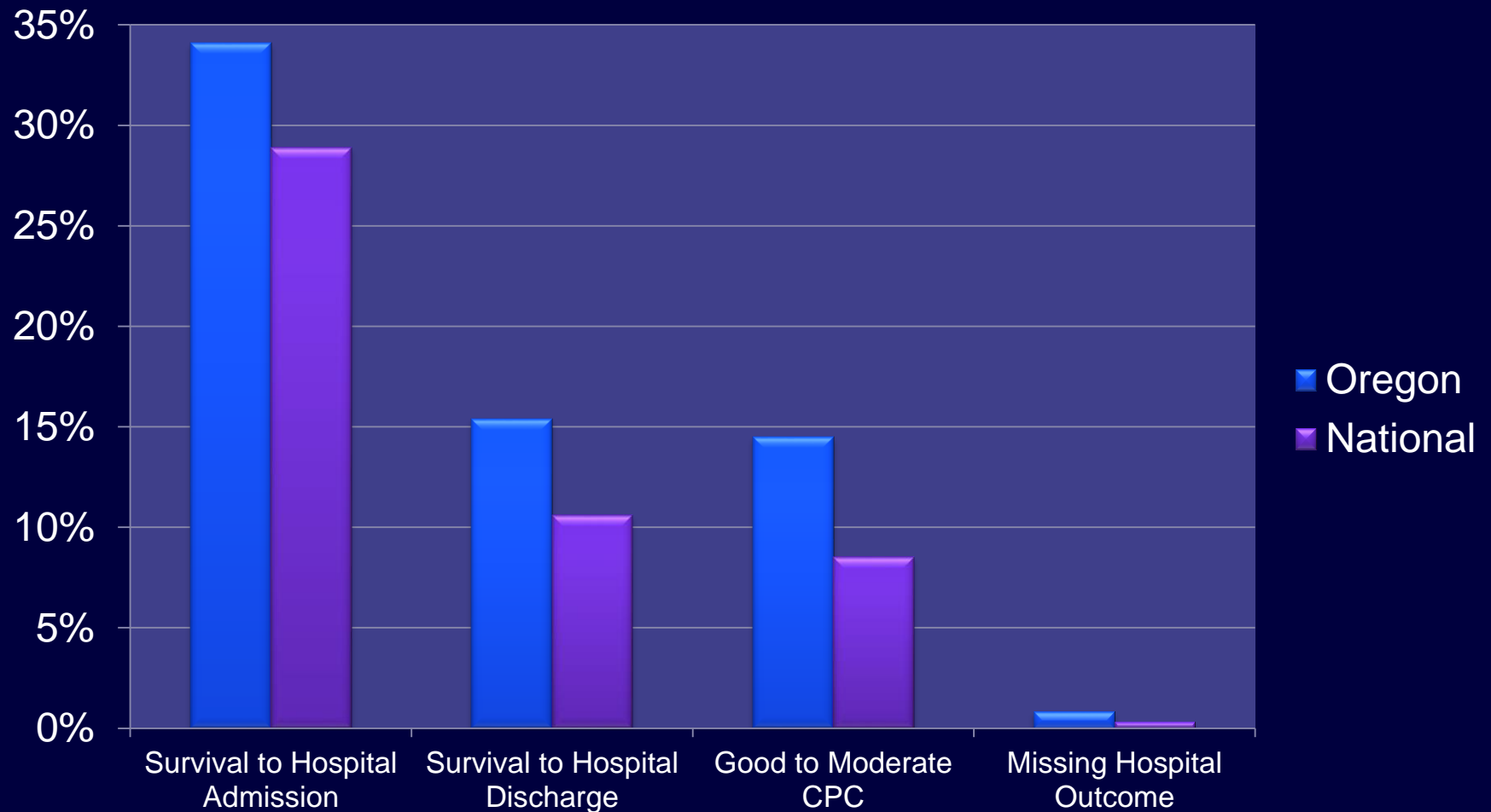*N=1,925*

First Arrest Rhythm

Survival Rates: Overall Survival

Survival Rates: Bystander Witnessed Shockable Rhythm
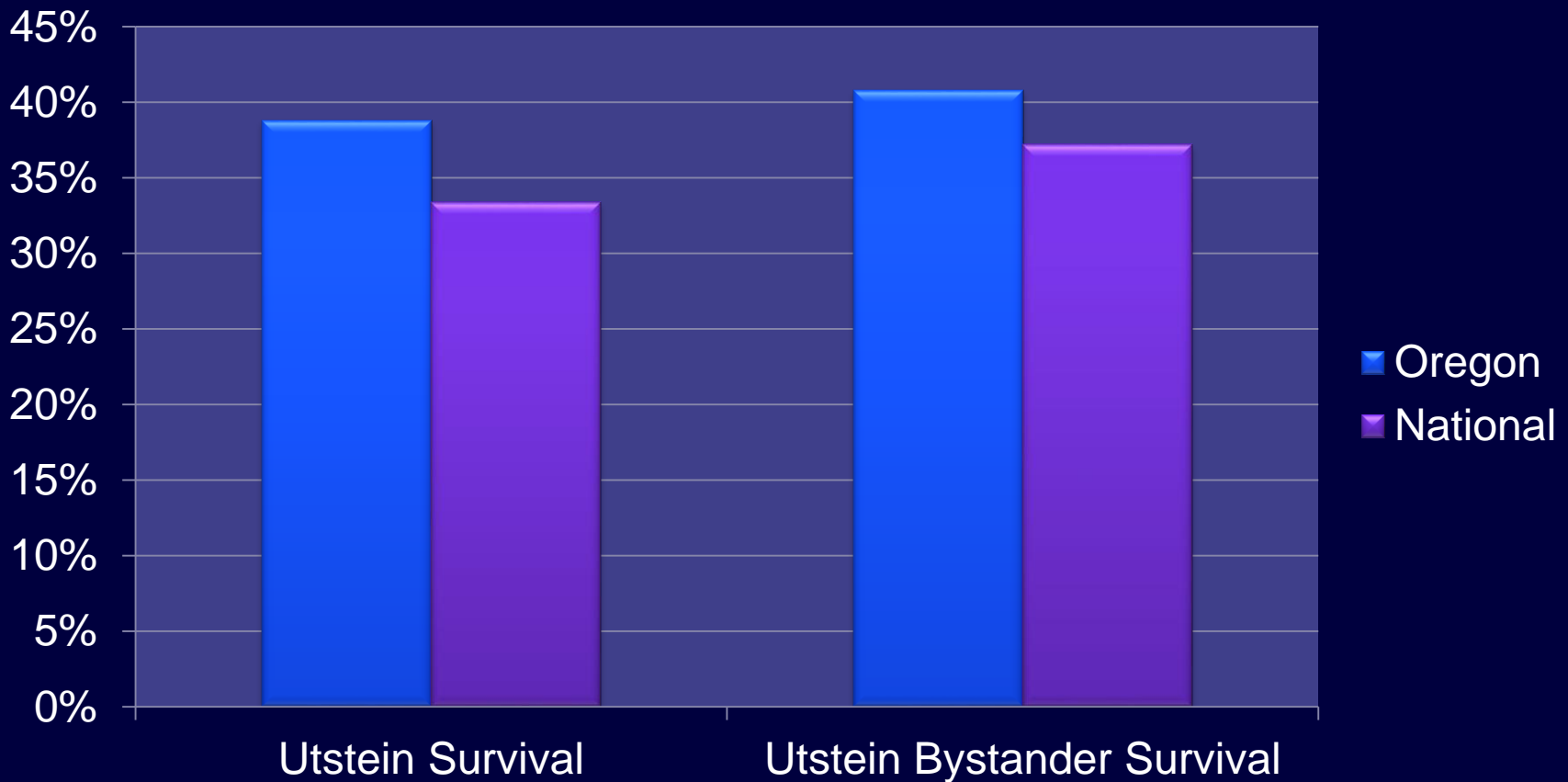
- *Utstein = Witnessed by bystander and found in a shockable rhythm*
- *Utstein Bystander = Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)*

ePCR Extraction

CARES Vendors

- AMR
- ESO Solutions
- HealthEMS
- Image Trend
- Intermedix
- SafetyPAD
- ZOLL

CARES XML Software Build

- Goal: To be more NEMSIS-compliant based on vendor user group feedback
- Transitioned 9 fields away from Custom
  - Incident #, First Arrest Rhythm, Mech. CPR Device Used, ITD Used, Field Hypothermia, Time of 1st CPR, 12 Lead, Incident City, Ambulance Times
- Requires NEMSIS 3.3.4 or 3.4.0 XSD Validation
- Built CARES Schematron and Upload Results Report
- Go-Live: September 14th
- Additional Goal: To move away from customization and towards standardization

Summary

IOM Recommendations

1. **Establish a National Cardiac Arrest Registry**
2. Foster a Culture of Action Through Public Awareness and Training
3. Enhance the Capabilities and Performance of Emergency Medical Services (EMS) Systems
4. Set National Accreditation Standards Related to Cardiac Arrest for Hospitals and Health Care Systems
5. Adopt Continuous Quality Improvement Programs.
6. Accelerate Research on Pathophysiology, New Therapies, and Translation of Science for Cardiac Arrest
7. Accelerate Research on the Evaluation and Adoption of Cardiac Arrest Therapies
8. Create a National Cardiac Arrest Collaborative

IOM Recommendation to Establish a National Registry

"The Centers for Disease Control and Prevention (CDC)—in collaboration with state and local health departments—should expand and coordinate cardiac arrest data collection through a publicly reported and available national cardiac arrest registry, including both out-of-hospital cardiac arrest (OHCA) and in-hospital cardiac arrest (IHCA) data, to help increase federal and state accountability for current system performance and promote actions to improve cardiac arrest outcomes."

Building a National Registry

Community
- Allows stakeholders to identify who, when & where of OHCA
- Provides measurement tool for quality improvement with minimal burden to local EMS agencies and hospitals

State
- Allows for additional benchmarking opportunities
- Local support from CARES-supported & trained coordinator

National
- Increased emphasis on OHCA data collection
- Need for a national registry

CARES-HeartRescue: US Consortium

- HRP-CARES collaboration since 2010
- Consortium goals:
  - To work with interested communities and states to improve care and outcomes for out-of-hospital cardiac arrest through the 'measure and improve' strategy.
  - To help communities and states measure cardiac arrest care through the use of CARES (cardiac arrest registry to enhance survival).
  - To help communities and states improve by use of the Resuscitation Academy model for educating providers and stakeholders on best practices in cardiac care.
  - To save lives and improve public health

Questions?

- Contact Information: https://mycares.net
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