

Quality improvement in sepsis care – Making a difference

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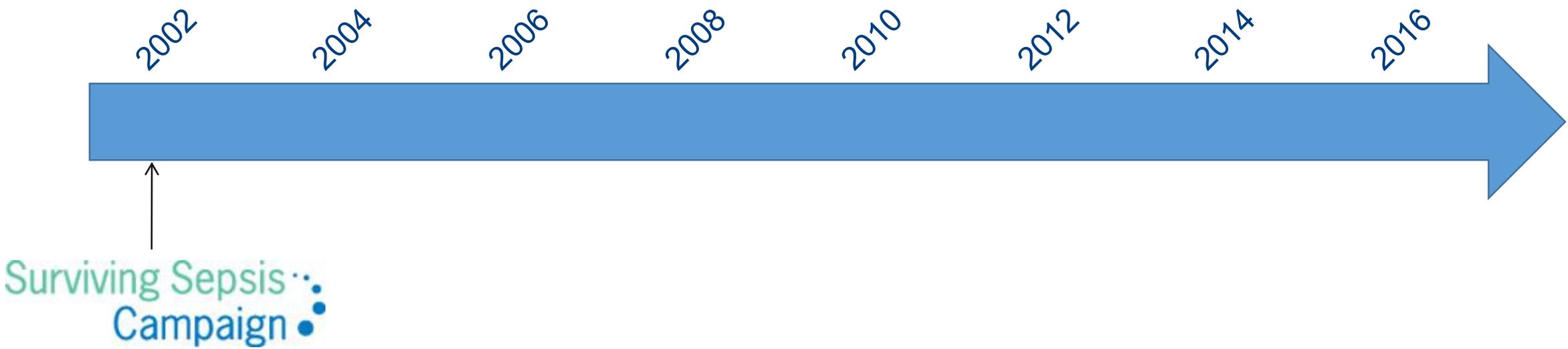
Pulmonary and Critical Care Medicine

University of Pennsylvania

STOPPING SEPSIS
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First, some history...



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The Campaign agenda

To reduce mortality from sepsis via a 7-point agenda

- Building **AWARENESS** of sepsis
- Improving **DIAGNOSIS**
- Increasing the use of appropriate **TREATMENT**
- **EDUCATING** healthcare professionals
- Improving **POST-ICU CARE**
- Developing **GUIDELINES** of care
- Implementing a **PERFORMANCE IMPROVEMENT** program

From <http://www.survivingsepsis.org/>

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Sepsis bundles and protocols arrive



Care bundles

- Identify and organize multiple care processes that improve care and outcomes together better than if implemented individually
- Simplify complex care processes, like sepsis care

Within 3 hours	Within 6 hours
<u>Lactate</u> measurement	<u>Vasopressors</u> if hypotensive
<u>Blood cultures</u> before antibiotics	Reassess <u>volume status</u>
Broad spectrum <u>antibiotics</u>	Re-measure <u>lactate</u>
<u>IV fluid resuscitation</u> for shock	

From www.survivingsepsis.org

▶ Protocols improve patient care

**2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction :
A Report of the American College of Cardiology Foundation/American Heart Association
Task Force on Practice Guidelines**

**Guidelines for the Early Management of Patients
With Acute Ischemic Stroke**

**A Guideline for Healthcare Professionals From the American Heart
Association/American Stroke Association**

*O’Gara PT Circulation 2012
Jauch EC Stroke 2013*

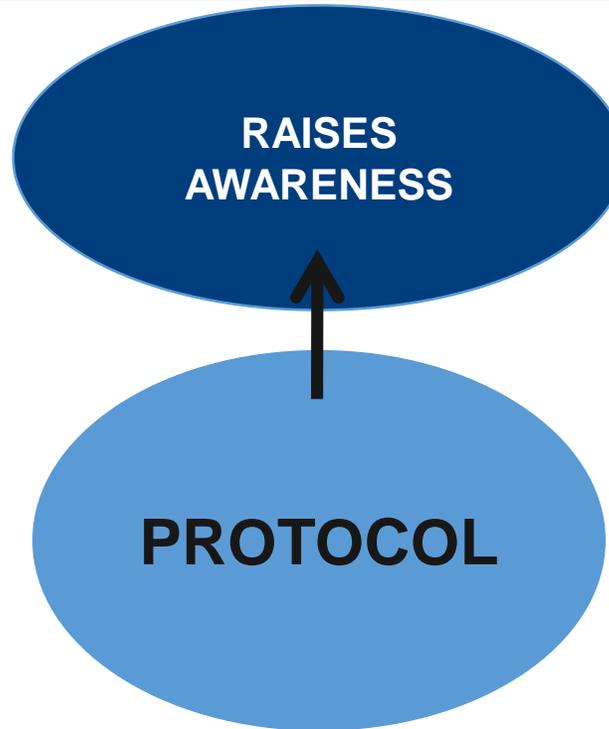
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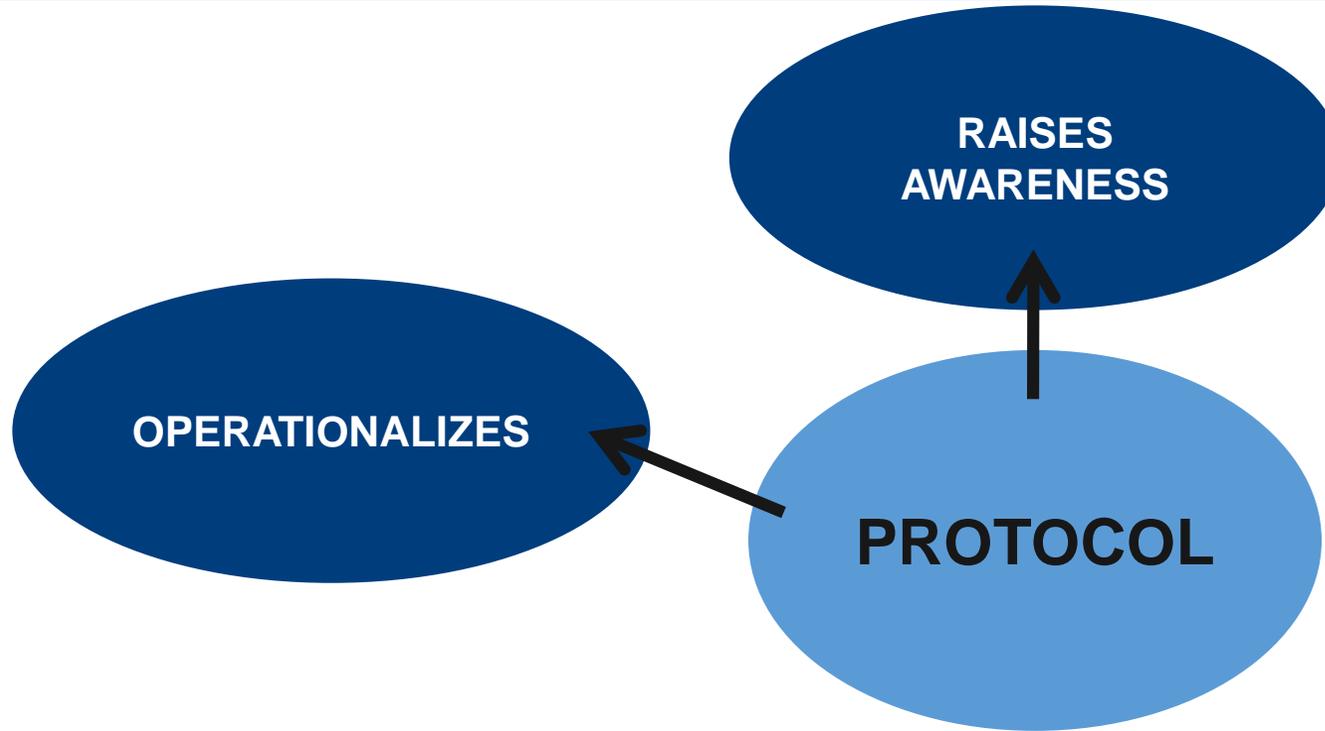
▶ How do protocols make a difference?

PROTOCOL

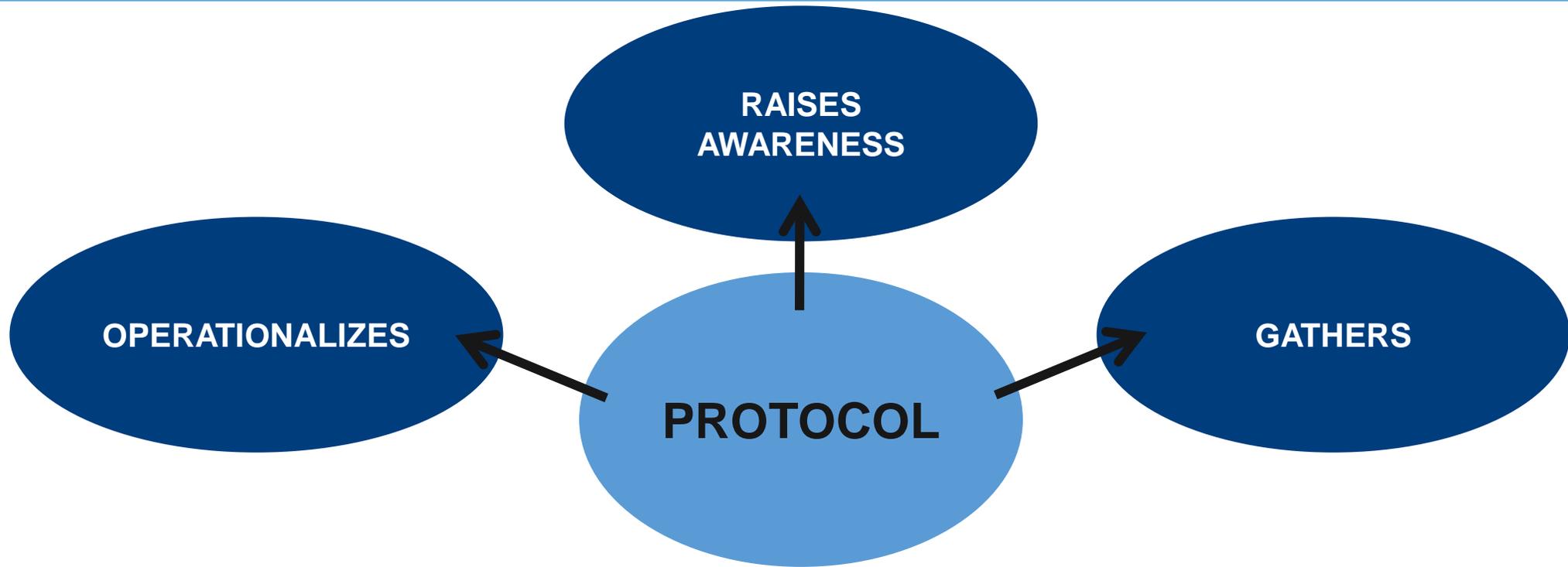
How do protocols make a difference?



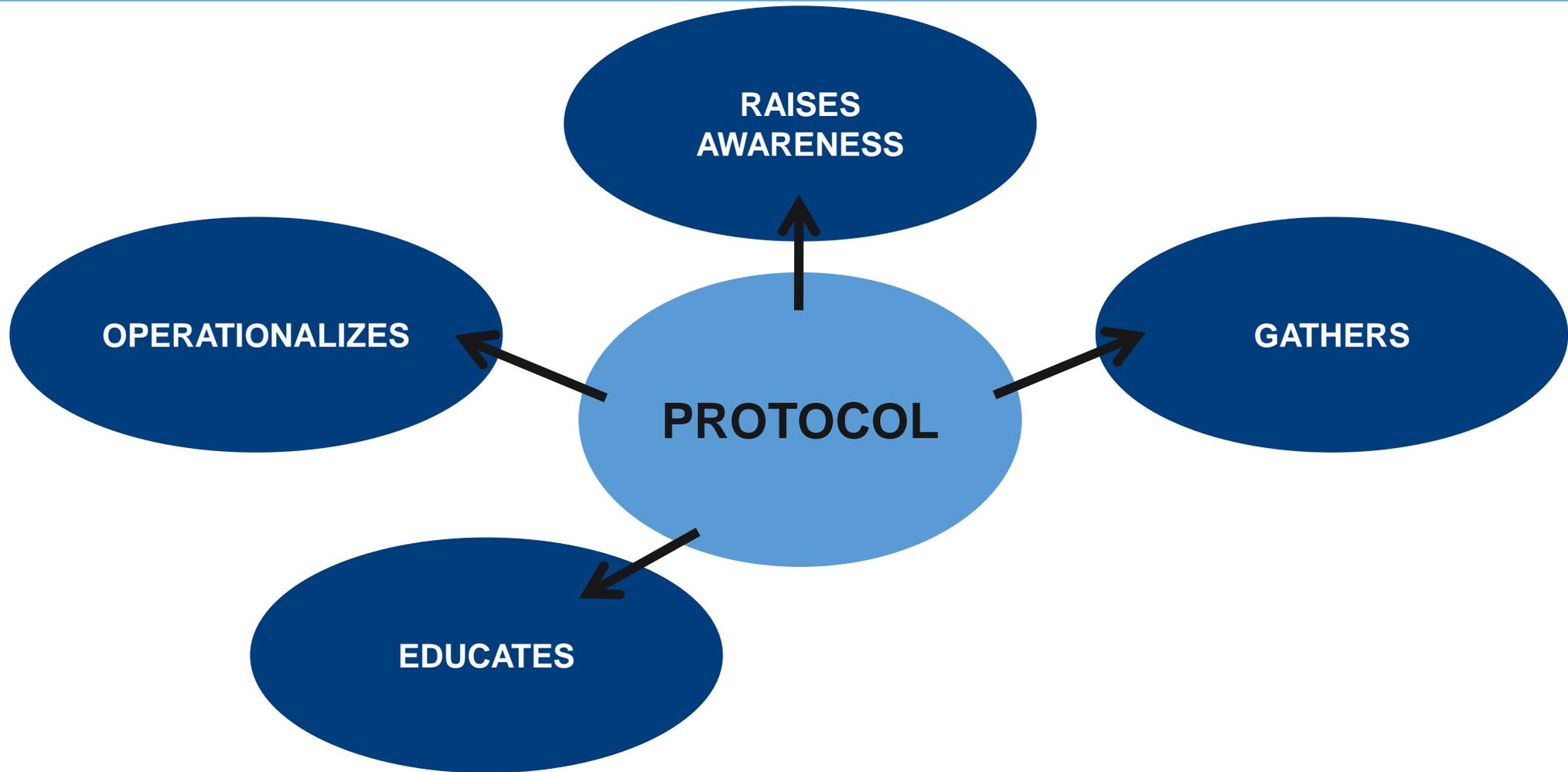
How do protocols make a difference?



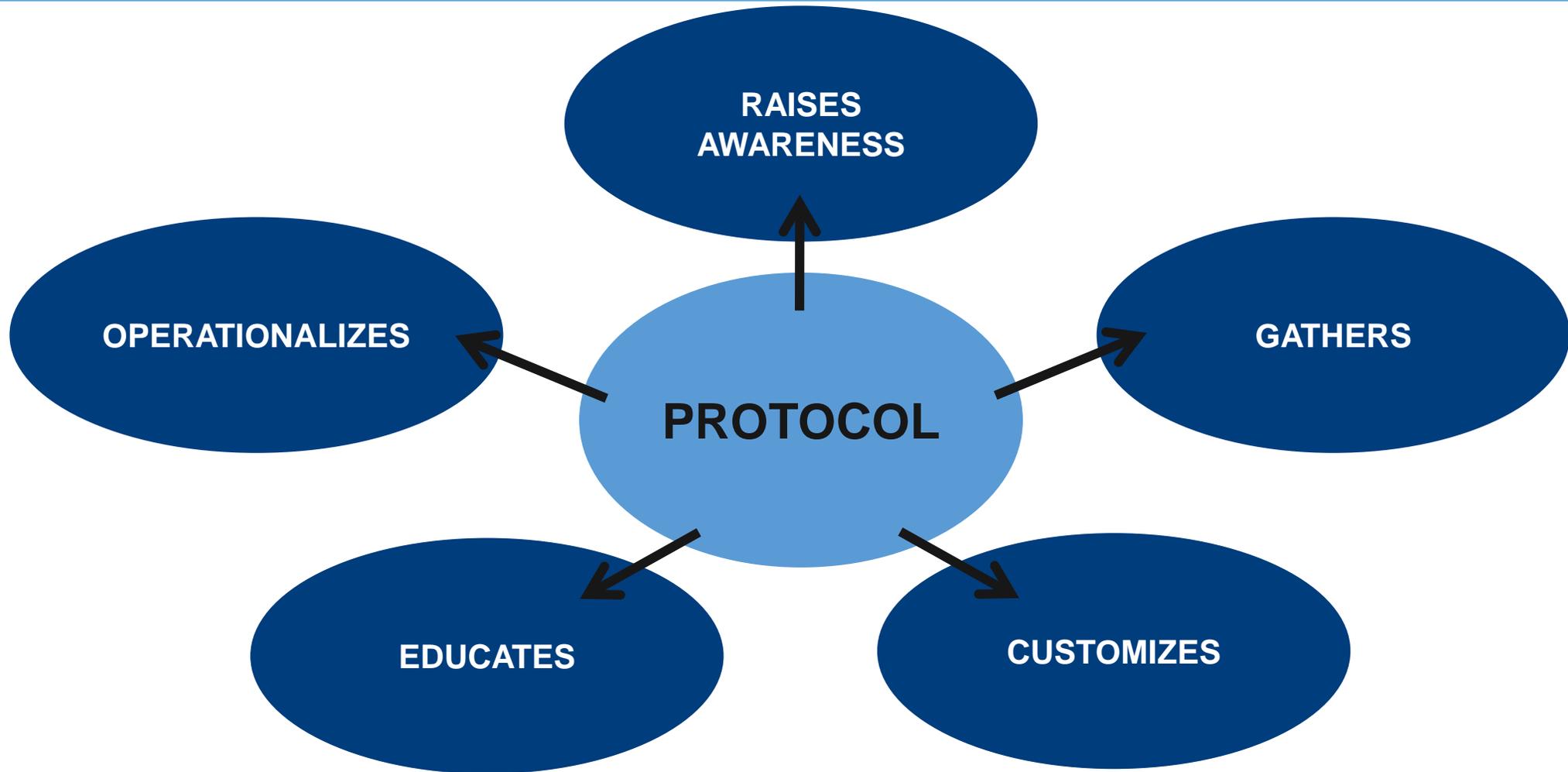
How do protocols make a difference?



How do protocols make a difference?



How do protocols make a difference?



Unintended consequences of protocols

Cookbook medicine

inhibition of individual thinking and practice innovation

De-skilling practitioners

reduced ability to deal with patient variability

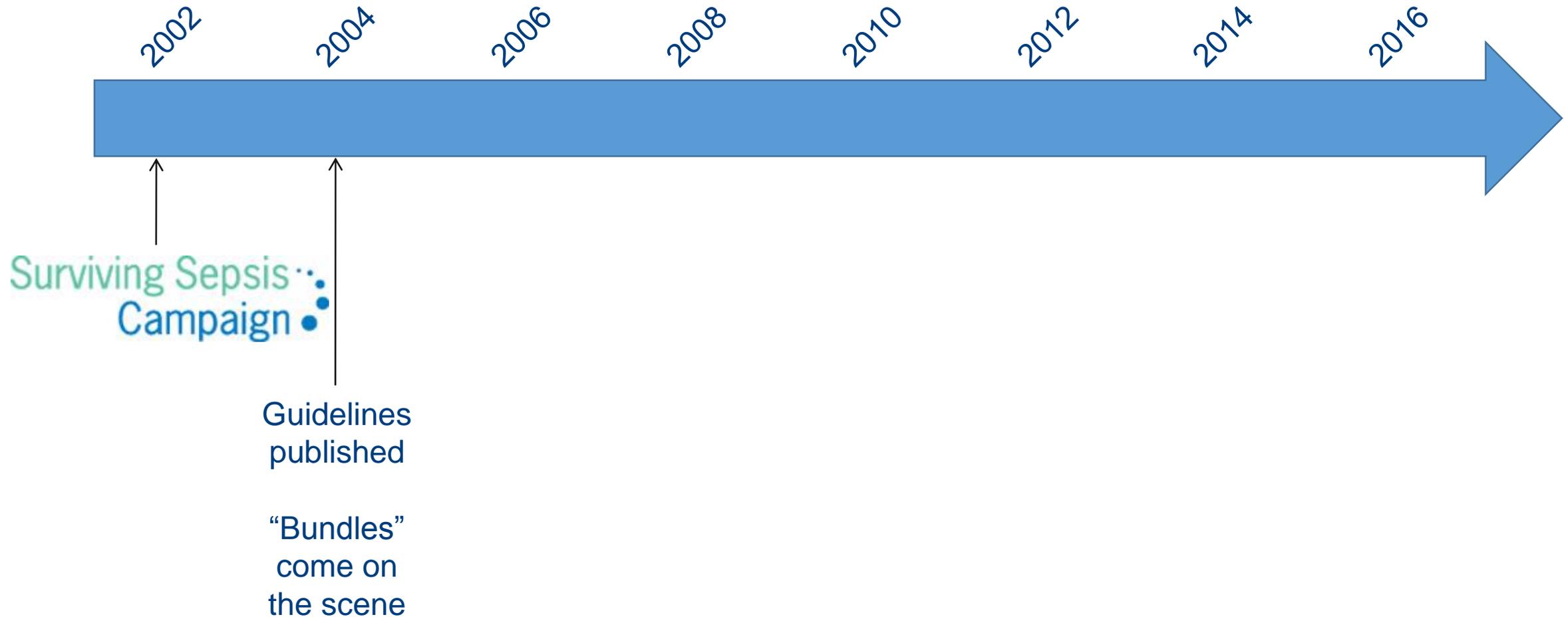
Depersonalization

treatment of patients interchangeably

Overutilization

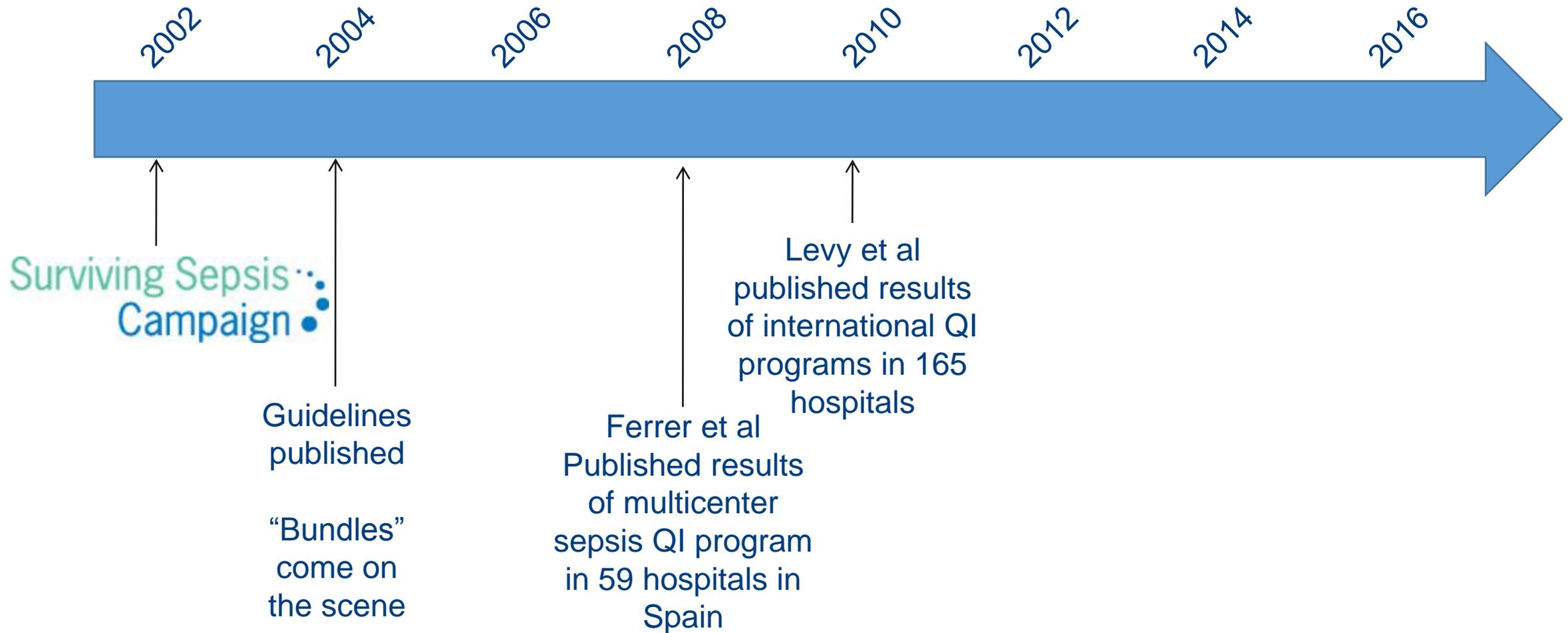
application of protocols too broadly

Next comes the evidence

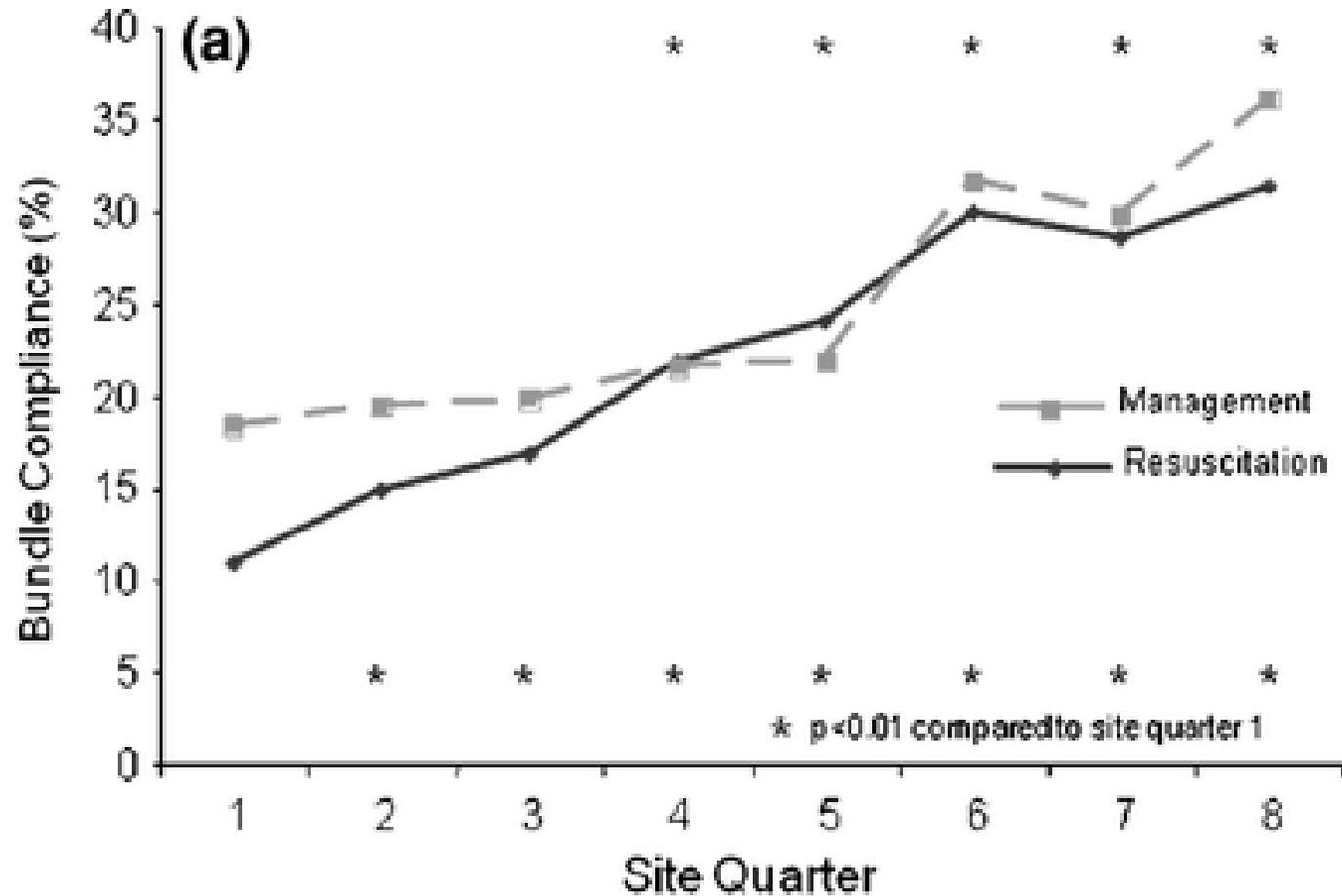


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Next comes the evidence

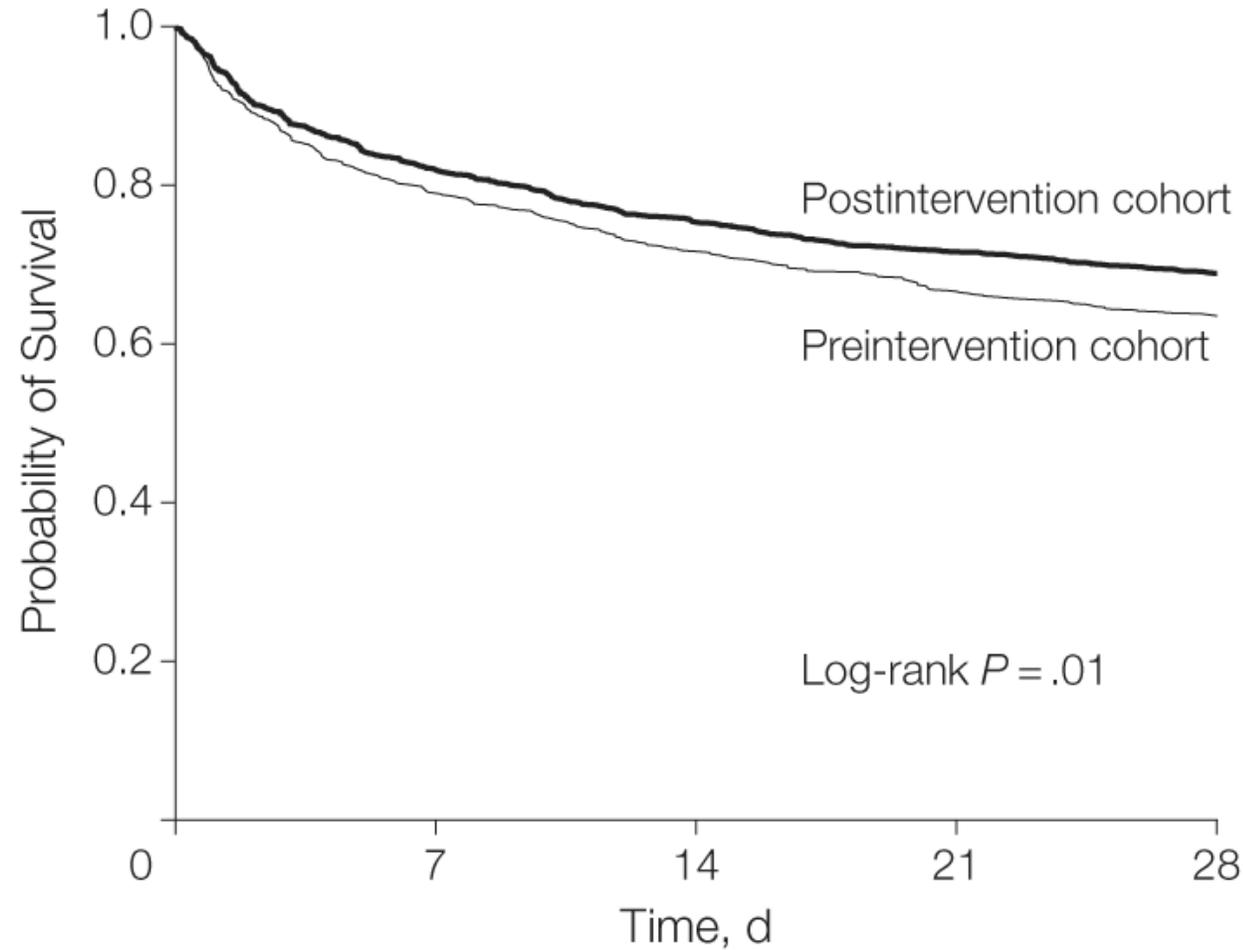


Improved adherence to bundle



Levy, MM. Intensive Care Med 2010

Reduction in mortality



Ferrer, R. JAMA 2008

▶ More support of QI programs for sepsis

STOP Sepsis Collaborative

GNYHA

- Launched 2009
- 57 member hospitals as of 2013
- Reduction in sepsis mortality of 23% within four years

IHI - North Shore-LIJ Health System

- Launched 2009
- 12 hospitals
- Reduction in sepsis mortality from 31% to 15% in four years

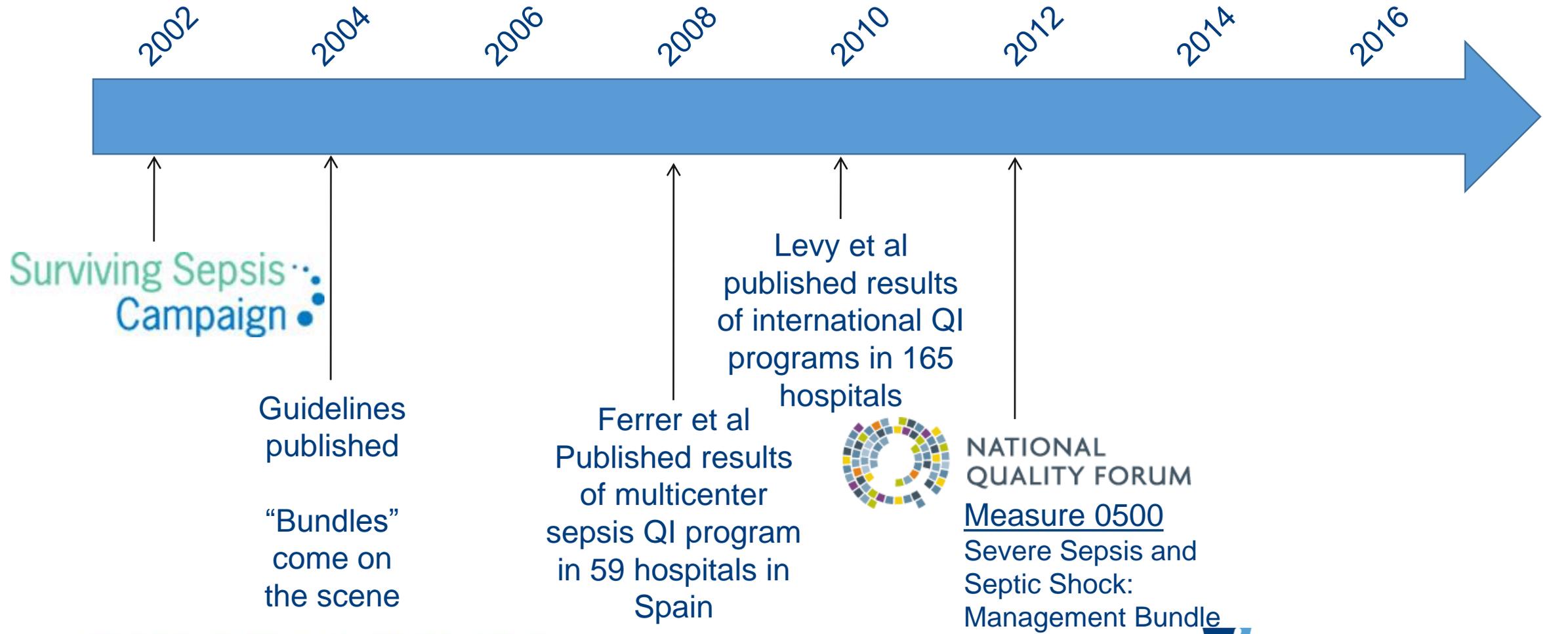
New Jersey Sepsis Learning Action Collaborative

- Launched 2014
- 73 healthcare organizations
- Reduction in sepsis mortality by 10.8%

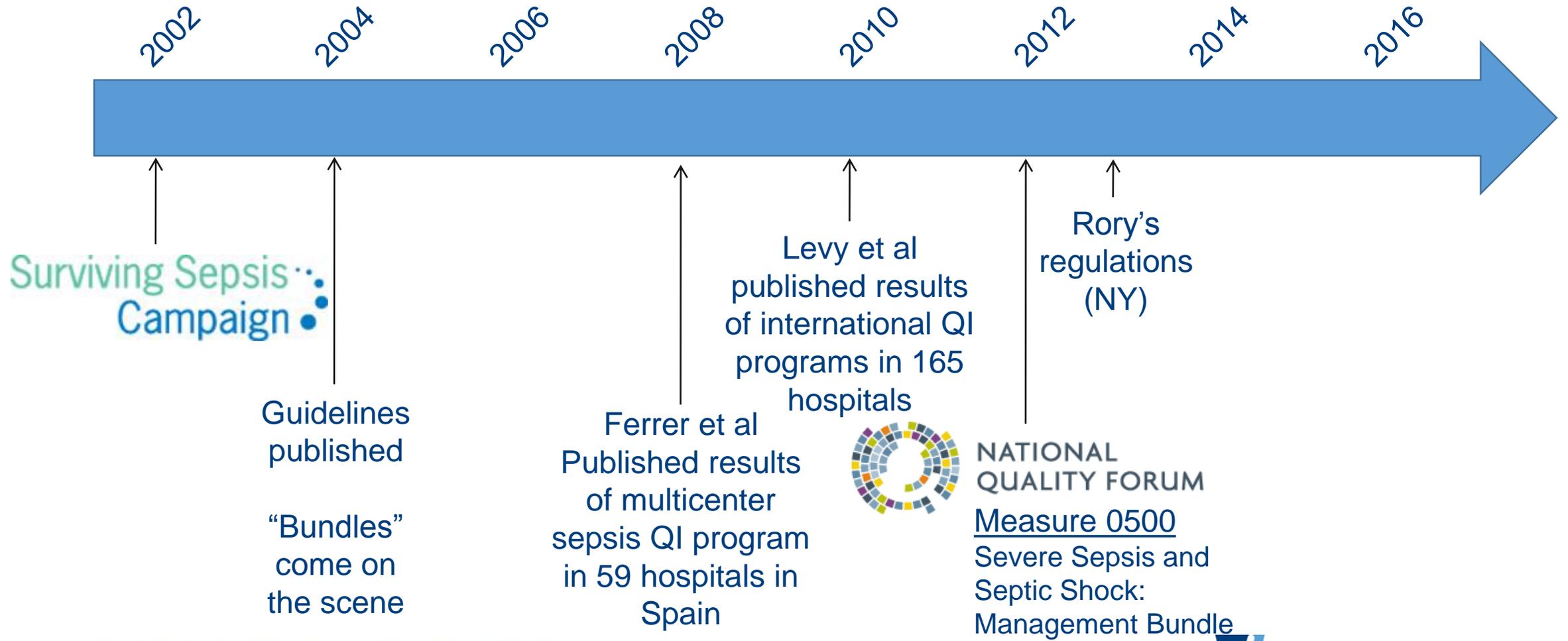
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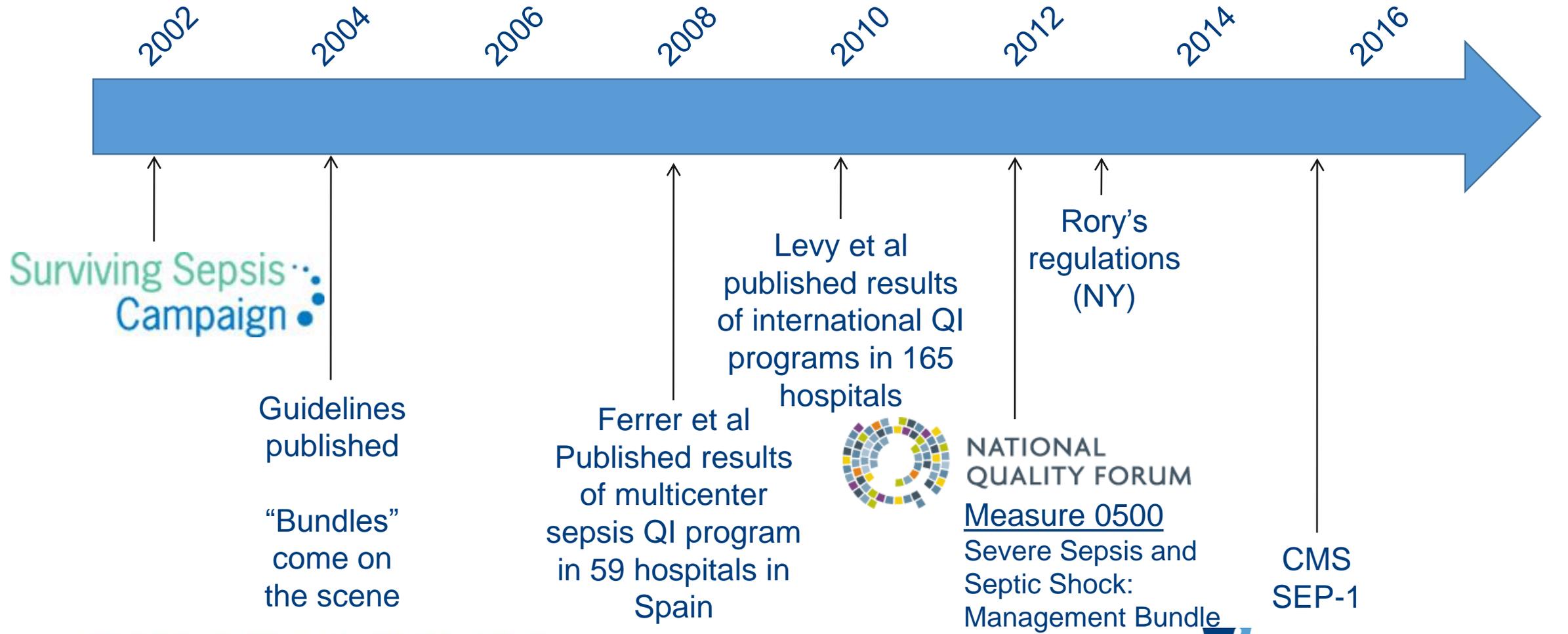
Changing health policy



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