



# BARDA INDUSTRY DAY



## BARDA DRIVe Solving Sepsis Program

Kimberly Sciarretta, PhD  
Acting Program Manager – Solving Sepsis  
October 30, 2018



October 29-30, 2018 | Grand Hyatt • Washington, D.C.



# Why is DRIVE taking on Sepsis?

## MORBIDITY

**1.7  
Million**

each year in  
U.S.

CDC.gov

## MORTALITY

**~270,000**

Americans die  
each year

**>80,000**

are discharged  
to hospice

## MANAGEMENT

**1:3**

patients who die  
in hospital have  
sepsis

## ECONOMIC BURDEN

responsible for  
nearly

**\$24  
Billion**

Annually  
(6.2% of hospital costs)



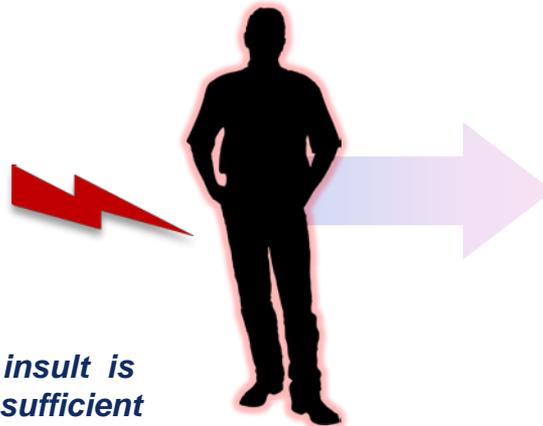
# Sepsis is a secondary confounder that arises from primary insults and threatens our ability to protect our Nation

## BARDA's Mission

Develop medical countermeasures against CBRN, influenza and emerging infectious disease threats, to minimize public health impact



*Targeting pathogen or insult is critical, but not always sufficient*



*Life-threatening organ dysfunction caused by a dysregulated host response to infection*



**SEPSIS**

**All Roads  
Can Lead to  
Sepsis**

*Accelerate the development of transformative technologies and approaches to protect Americans from 21st century health security threats, including reducing the:*



**Incidence**



**Cost**



**Morbidity**



**Mortality**



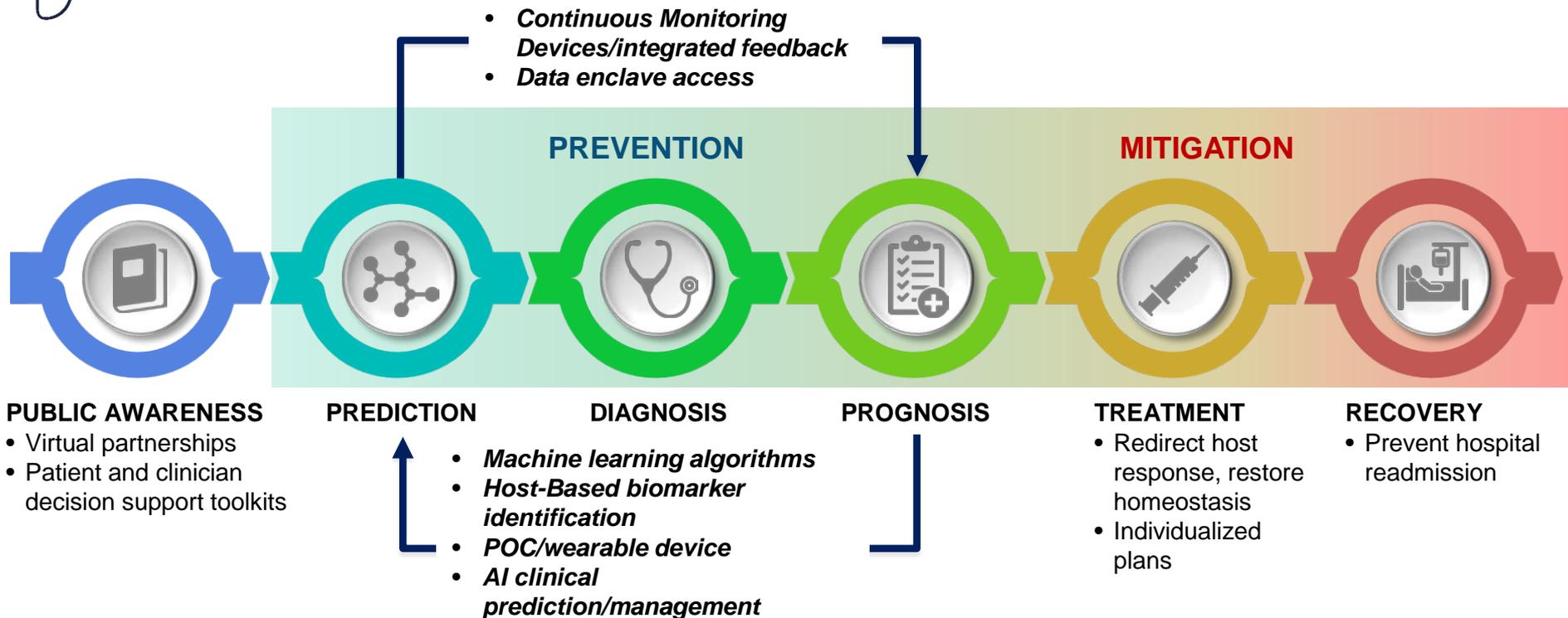
## Program Impact

Sepsis Incidence, morbidity, mortality rates & costs



*associated with sepsis by investing in key strategic areas.*

# Program Vision



# The Importance of Data

## Establish Sepsis Data Enclave



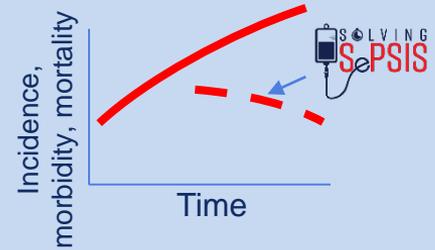
- Develop sepsis repository/distributed network
- Standardized, curated data
- Interrogate data with algorithms
- Exploit electronic health records

## Leverage Data to Enhance Care



- Develop decision support toolkits
  - Diagnostic
  - Prognostic: sepsis trajectory
  - RT feedback on SOC
  - Individualized treatment based on patient profile
- Discover Host-Based Biomarkers
- Determine factors that lead to survival based on care protocol
- Stratify patient populations

## Measure Improved Outcomes



- Develop sepsis metrics (incidence, morbidity, mortality, readmission) for baseline modeling
- Assess impact of prevention and mitigation approaches by monitoring changes over time

CMS.gov

# How can you help solve Sepsis?

Partner with us to Solve Sepsis  
Submit to the Broad Agency Announcement (EZ-BAA)  
Area of Interest #2



## Sepsis Interests

- Innovative solutions
- Proof of concept or pilot programs to demonstrate potential for future investment
- Sepsis relevant
- Means to improve access and collaboration across disparate data systems
- Not interested in targeted pathogen approaches
  - All roads can lead to sepsis
  - Pathogen-specific therapeutic or diagnostic approaches, not of interest at this time

**We are looking for catalytic not incremental approaches to Solving Sepsis!**

# SOLVING SEPSIS TOGETHER



Novel Public Private Partnerships with USG, HealthCare  
and Industry is critical to our success!



*Saving Lives. Protecting Americans.*

# How to Engage

- Start a conversation!
  - Dr. Kim Sciarretta, Acting Program Manager- Solving Sepsis  
**Kimberly.Sciarretta@hhs.gov**
  - Dr. Tim Buchman, Advisor to Solving Sepsis, **Tim.Buchman@hhs.gov**
  - Dr. Steve Simpson, Advisor to Solving Sepsis, **Steven.Simpson@hhs.gov**
- Present your technology
  - **<https://www.medicalcountermeasures.gov/home.aspx>** - Portal to BARDA: Register to request a TechWatch meeting
- Check out the DRIVe website for more information:
  - **DRIVe.hhs.gov**

