Commentary on the Importance of Implementation Science to Complete Medical Advances

Larry A. Allen, MD, MHS
University of Colorado
Health systems (not individual providers) do not consistently deliver high-value care.

Americans receive ~half of guideline-indicated care.

Implementation Science

• “...The scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice... It includes the study of influences on healthcare professional and organizational behavior.”

Eccles & Mittman, 2006
Implementation Science

• “Making the right thing to do, the easy thing to do.”

Carolyn Clancy
What does real-world implementation look like?

• Most individual strategies result in modest care improvements
  • No “magic bullet”
• Passive approaches are generally ineffective
  • “Train any pray” is not a viable strategy
• Consensus seems to exist that effective implementation will involve **multifaceted, multilevel implementation strategies** to address the challenges of effective implementation
“Time is myocardium!”
Challenges in STEMI care – complex systems

• > 50% of patients do not use EMS
• Majority of EMS systems did not do 12-lead ECG
• Prolonged transfer time in rural settings
• Hospital EDs are frequently on diversion
Opportunities in STEMI care

• **Shift** the focus from hospital door (D2B) to **first medical contact**.
• **Emergency department** time is an important indicator of coordination of care between **paramedics** and hospitals.
• Requires **regional** STEMI care.
ACCELERATOR-2

A generalizable model of emergency cardiovascular care including:

- regional protocols,
- measurement and feedback in a single common national registry, and
- ongoing support by regional coordinators

at 12 metropolitan centers improved treatment and outcomes of STEMI patients.
To improve quality of care and patient outcomes, the American Heart Association provides medical professionals with tools and resources to help them achieve this goal. Learn how our quality programs can benefit your organization.