Evaluating Cardiac Care Systems: A South Dakota Perspective

Outline

• How do you evaluate a cardiac care system?
• SD examples
• Cardiac care system initiatives from other states based on true system philosophy
How do you evaluate a system?

- Need to incorporate Systems Thinking and System Theory.
Cardiac Care System

SD Mock Exercise

Using Systems Theory to Guide Lessons Learned

System theory: Feedback Mechanisms

Characteristics of Effective Feedback
- Specific
- Relevant
- Credible
- Sufficiently frequent
- Timely
Feedback Mechanism: Credibility of Incoming Data?

- Lack of consistency in data entry
- Admissions by some they “make it up”
- Some great SD examples where this is absolutely NOT the case

Solution: Education Surrounding Entering Data

- Analyses of EMS database “as is” compared to when data is cleaned
  - Understanding the consequences of entering poor data
Feedback Mechanisms: Not Closing Loops

- Relevant information not getting back to local level with sufficient frequency
  - This is one of the BIG problem with national registries
  - A poor fit for rural states like SD
  - Not meeting local CQI needs

- Deb Hamilton: Breakout session this afternoon

- Consequences?
  - Motivation
  - Patient Care

Solution: Close Feedback Loops
Feedback Mechanisms: Lack of Clearly Articulated Processes Within and Between Subsystems

Solution: Explicitly Stated Processes

https://ruralhealth.und.edu/projects/evaluation-of-cardiac-care-systems/portal
System Theory: Cascading Failure

- Significant system inefficiency due to lack of interoperability between different patient data platforms

Solution: SD Pilot
Minimizing Cascading Failures Using Near Real Time Data Flow

- Better data immediately
- Hospitals better prepared generally (extends Mission Lifeline concept beyond EKG data)
- Closing loops
- Increased motivation

Evaluating Effectiveness

- System principles of interdependence, holistic, & synergy come into play
- Makes no sense to engage in cause effect designs to evaluate a system
  - Can’t isolate effect of one system part
  - Isolation contradicts the system approach
Evaluating Effectiveness

System Theory: Boundaries Need to Be Extended: Especially in Rural States
Evaluating Cardiac Ready Communities (CRCs)

• Systems theory: systems must be competent and capable
  • Community-wide CPR effort
  • Self-assess then 3rd party validation using drills

• Systems theory: system must have necessary inputs: e.g., AEDs
  • Inventory assessment

• System theory: parts work together in a coordinated way
  • TTx
  • Full scale exercise

• Shila Thorson will be talking about CRC later this morning

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