

**Why Medical Education Programs  
Need Data:  
Partnerships for Competency Based  
Education**

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**Action without Theory is Chaos**

# Today's Objective:

- Why do medical education programs need data?
  - How have we survived without it this long?
  - Tail wagging the dog?

# A Brief History of MD Training

- Apprenticeship
  - Little standardization, coordination, or oversight
- University
  - AMA 1847
  - Flexner Report 1910
  - LCME 1942
- Competency-based
  - Harden 1999
  - ten Cate 2005

# Contemporary Context

- Dispersed instruction
  - Collection of events
    - Parade of all stars lectures
  - Rapid change in healthcare environments
    - Training venues
- Organizing principles for curricula
  - Discipline and specialty
  - Organ system
  - Patient type/condition/context

# Contemporary Philosophy of Education

- Competency based
  - Constructivist
  - Outcomes assessments
  - Learning centered
  - Humanistic
  - Empiricist
  - Pragmatic

# The Holy Grail

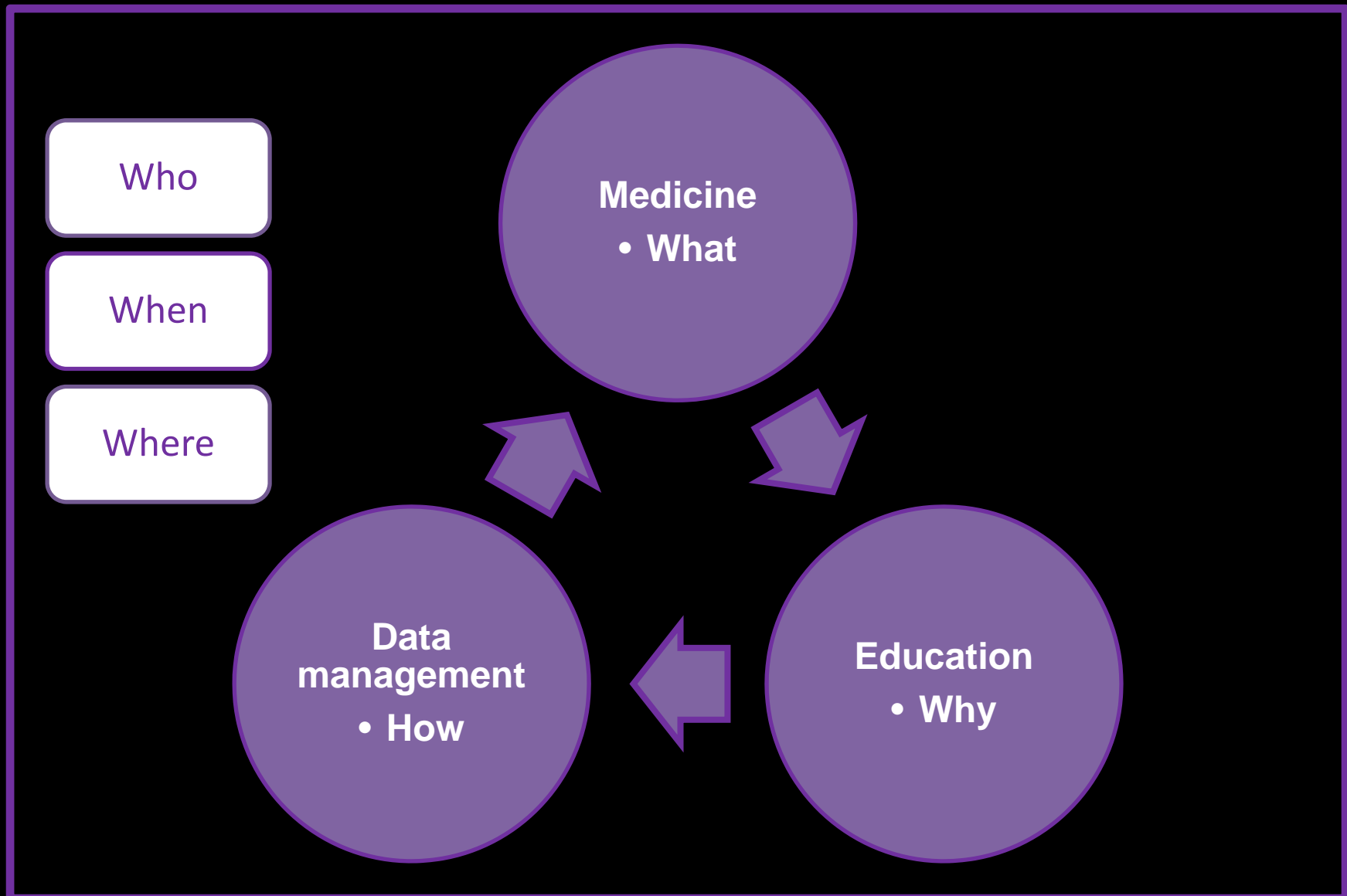
“Education exists only in terms of its impact on the learner”

# Educational Program Organization

- Not a static syllabus
- Curriculum is the aggregation (preferably organized) of student experiences



# Educational Program



Who

When

Where

Medicine  
• What

Data  
management  
• How

Education  
• Why

# Summary

- Medical education is undergoing a seismic paradigm shift
- The new paradigm requires 'big data'
- An IT infrastructure for education necessitates collaboration