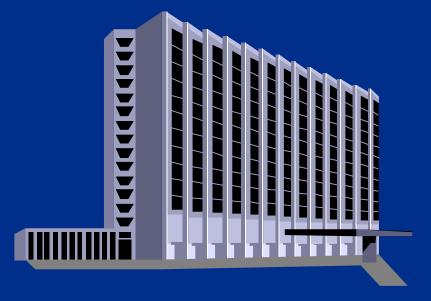
Data Quality Management Capabilities in Complex Organizations: The Health Care Case

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The Context Cedars-Sinai Medical Center

- Academic Medical Center/Health System
- Largest Non-Profit Hospital in the Western US
- 950 Beds, 10,000 employees, 2000 MDs
- Basic Annual Statistics
 - 55,000 inpatients
 - 280,000 outpatients
 - 55,000 ER visits
 - 7,000 deliveries





Data Management Implications

- Complex, information-intensive organization
- Distributed oversight responsibilities
- Transactional data systems populated as byproduct of patient care
- Information managed as departmental resource rather than as enterprise resource



Evolving from this view...

MISSION

- Patient care
- Teaching
- Research
- Community Service

RESOURCES

- People
- Money
- Equipment



...to this view, over the last 10 years

MISSION

- Patient care
- Teaching
- Research
- Community Service

RESOURCES

- People
- Money
- Equipment
- Information



The "long and winding road" (1)

- 1997
 - DPG convened to address data crises
- 1998
 - TDQM Summer Course
 - DQMWG Spun Off of DPG
 - IQ Survey, round 1
- 1999
 - DQ Concept Kick-Off
 - IQ Survey, round 2
 - DQM Objectives first appear in Annual Plan

- 2000
 - Big DQ Improvement Project
 - DQM Objectives appear again in Annual Plan
 - ROM Dept reorganization to capitalize on DQ framework
- 2001
 - DPG & DQMWG Charters renewed
 - DQM Objectives again in Annual Plan
 - IQ Survey, round 3



The "long and winding road" (2)

- 2002
 - DPG thinks about pro-active DQM infrastructure
 - ROM designated as data
 "clearinghouse" for approval of all clinical statistics
 reported out
 - JCAHO accreditation standards for MOI linked to DQM initiative
- 2003
 - Data crisis: No P&Ls for 8 months
 - Initiate Data Warehouse Improvement Project

- **2004**
 - Propose DQMU (x2)
 - Implement Data Warehouse Improvement Project
 - DQMU funded as part of ROM
 - IQ Survey, round 4
 - Data crisis: No Management Reports for 5 months following new PM system implementation
- **2005**
 - DWIP Objectives appear in Annual Plan
 - DQMU staffed and DQM Program initiated
 - DWIP Project Plan institutionalized as primary focus for DPG



The "long and winding road" (3)

- **2006**
 - DQ Objectives appear in Annual Plan
 - DQ Objectives linked to executive management incentive compensation
 - Development of Data
 Certification Program for
 "High Priority" data elements
 - Pilot estimation of DQ ROI
 - Development of explicit criteria for resolving "High Priority" Data Quality Incidents

- 2007
 - IQ Survey, round 5
 - 117 Data Quality Incidents logged since initiation in February 2005, of which 82 have been resolved and closed
 - Collaboration with Internal Audit department relative to minimizing risk due to defective data
 - Continuing challenge to frame strategic issues in context of "managing information as an enterprise resource"



What We Hope For

- Quick results
- Unflagging support
- Universal cooperation



What We Get

- Often painfully slow progress with regular periods of stagnation, if not reversal
- Occasional bursts of support with frequent periods of inattention, or forgetfulness
- Gradually enhanced, but intermittent, cooperation



What Does It Mean?

- Evolutionary process
- Limitations of hierarchical control
- Development of "shared mental models" = work

