An Integrated System for Execution in Healthcare Organizations

Daniel B. McLaughlin
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The challenge

*I’m sorry but you are going to have cut your budget by 15%*

We left $450,000 in Pay for Performances on the table.

*Our clinic ranked 37th in diabetes care – out of 45 in the state*

Why are we still treating patients with the same technology we used in 1995?
Why is Executing change hard?

- **Medicine**
  - Most intense science of all
  - 10,000 new articles a year
  - 17 years from research to practice (AHRQ)

- **Business Structures**
  - Predominately privately owned and operated
  - Still cottage industry in many places
  - Many interests don’t want change
  - Market failures abound

- **Health Professionals**
  - Hippocratic oath
  - Technological Imperative
  - Culture of professionalism and autonomy
The Execution project

- Health Administration Press - ACHE
- UST Healthcare leadership training experience
- Literature review – seminal books
- Interviews with leading organizations – best practices
  - Health Partners
  - SMDC (now Essentia)
  - Marshfield Clinic
  - Smaller clinics - MMGMA and MN ACHE
- Goal: Best business practices applied to healthcare
- Only portions exist today in leading organizations
An Integrated System - Overview

Strategic Planning

• Design and Planning schools
  – Formal Process
  – SWOT Analysis

• Learning school
  – “strategies grow like weeds”
  – Leaders organize into formal strategy
  – Twin Cities Orthopedics

• Scenario Analysis

• Data based planning

Scenario Cross - Quality

1. Outcomes for dollars
2. Quality!!
3. Who cares?
4. Marketers' Paradise

Payment is based on quality
Payment is fee for service
Reporting used by professionals
Reporting used by consumers

Scenarios

1. Outcomes for dollars
   - Payers unite with 20% - 30% bonuses for quality
   - Quality payments expand to all specialties
   - Only professionals use public quality websites

2. Quality!!
   - Payers unite with 20% - 30% bonuses for quality
   - Quality payments expand to all specialties
   - Everyone use public quality websites
   - Social networks discuss quality

3. Who cares?
   - Little change in reporting or payment
   - Emphasis on technical reimbursement maximization strategies

4. Marketers’ Paradise
   - Payment does not change but market share’s shift due to quality reporting
   - Marketing and Quality departments merge
   - CEO compensation now strictly based on quality

Payment is based on quality
Payment is fee for service
Reporting used by professionals
Reporting used by consumers

Data

- Advent of the Electronic Health Record
- Public reporting of quality
- Benchmarking
- Transactional data & Data warehouse

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Transactional data system</th>
<th>Data Warehouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data content</td>
<td>Current activities</td>
<td>Historical summary</td>
</tr>
<tr>
<td>Supports</td>
<td>Operational applications</td>
<td>Understanding of business area</td>
</tr>
<tr>
<td>Nature of Changes to the data</td>
<td>Dynamic updating</td>
<td>Static until reloaded or refreshed</td>
</tr>
<tr>
<td>Usage</td>
<td>Predicable and repetitive</td>
<td>Analytical, Ad hoc</td>
</tr>
</tbody>
</table>
Data Warehouse

Electronic Health Record

Financial Systems

Other Operating systems (e.g HR etc.)

ETL
Extract
Transform
Integrate
Cleanse
Load
Maintain

Data Warehouse

Data Mart

Data Mart

Data Mart

Performance Reporting

Data Mining

Automated Business Rules

Metadata

And Hundreds More...

Business Tools
Business Tools – Part of the System

- Strategy
- Balanced Scorecard
- Project Management
- Embedded change

Sensing

Data

Action

People
The Balanced Scorecard

What gets measured gets managed

Taking strategy to action


What’s on your desk today

- Last year’s initiative
- Employee turnover - recruiting
- 80 e-mails
- 20 voicemails - texts

- Urgent operating problems
- This year’s new initiative
- Financial performance pressure
The Theory of Management

Strategic Plan → Operations → Operating Statistics

Management Control

Financial Results
Traditional management tools

- Created by different departments
- Reviewed by different managers
- Reviewed in different time frames
- No connection to each other
The four perspectives

- **Financial**
  - To succeed financially, how should we appear to our shareholders?

- **Customer**
  - To achieve our vision, how should we appear to our customers?

- **Internal Business Processes**
  - To satisfy our shareholders and customers, what business processes must we excel at?

- **Learning and Growth**
  - To achieve our vision, how will we sustain our ability to change and improve?
Strategy Maps and Initiatives

- Method to execute strategic
- Set of linked initiatives
  - Can be small action or major project
  - If . . . Then . . . .
  - Links to top quadrant results (finance, customer)

- Metrics
  - Leading
  - Lagging
  - Dates
General Strategy Map

Finance

Business Processes

Learning and Growth

Customers

Provide employees with skills, tools and motivation

Improve Operations

Improved Financial Results

Improve marketing and customer service

Emergency Department

- **Finance**
  - Increase net revenue of ED product line
    - Goal = 10%

- **Customers**
  - Measure patient wait time:
    - Goal <30 minutes
  - Measure market share:
    - Goal = 5% increase

- **Business Processes**
  - Do project on patient flow – make changes
    - Goal = value stream increased by 30%

- **Learning and Growth**
  - Learn Lean Process Improvement tools
    - Goal = complete by Dec 1
Medical Home Strategy Map

Finance
- Increase medical home revenue
  Goal = 10%
- Increase net revenue due to growth
  Goal = 5%
- Increase profitability:
  Goal = 3%

Customers
- Negotiate Medical home payment with all payers
  Goal = 80% consistency
- Develop plan to market to new patients
  Goal = patient volume increase >5%
- Do Patient education current patients on new system:
  Goal = 80% of chronic patients participate.

Business Processes
- Do Process Mapping for new team based care:
  Goal = FTE/patients increase < 5%
- Do Lean project to increase patient flow in clinics:
  goal = value stream increased by 30%

Learning and Growth
- Chronic Disease team training
  Goal = complete by September 1
- Staff Retreat and Adaptive leadership in place
  Goal = complete by July 1

Increase net revenue due to growth Goal = 5%
Increase profitability:
Goal = 3%
Negotiate Medical home payment with all payers
Goal = 80% consistency
Develop plan to market to new patients
Goal = patient volume increase >5%
Do Patient education current patients on new system:
Goal = 80% of chronic patients participate.
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gold = value stream increased by 30%
Chronic Disease team training
Goal = complete by September 1
Staff Retreat and Adaptive leadership in place
Goal = complete by July 1
**Mission:** SMDC brings the soul and science of healing to the people we serve

**Vision:** SMDC, as a world-class organization, will be the best place to receive care and the best place to work

We will pursue our mission and vision through a focus on Service, Clinical and Operational Excellence

### Service Excellence
- C1 Quality Relationships
  - Patient-centered Care
  - Timely Care
  - Equitable Care
- P2 Provide easy, timely, coordinated access to health care services
- P4 Consistently demonstrate personalized, caring, attentive interactions
- P3 Investment emphasis to support clinical & financial outcomes

### Clinical Excellence
- C2 Clinical Expertise
  - Effective Care
  - Safe Care
- P1 Right patient, right care, right process, best outcome
- P5 Design & implement coordinated care models to effectively manage disease processes through teams
- L1 Develop a high performance culture that delivers world-class care through innovation
- L2 Grow & excel in research & education

### Operational Excellence
- C3 Customer Value
  - Efficient Care
- P6 Optimize physician & staff productivity
- P7 Excel in efficient & effective operations
- L3 Recruit, develop & retain talented people to outstanding levels of performance to support the Mission
- L4 Engage physician leaders & managers as partners in success

### Customer
- To achieve our focus on Service, Clinical & Operational Excellence
- How should we appear to our internal & external customers?

### Internal Processes
- To satisfy our customers, at which operational & quality processes must we excel?

### Learning & Growth
- How will we sustain our ability to change and improve as a system?

### Financial
- To financially sustain our Mission, on what must we focus?

- F1 Achieve a targeted Operating Margin to sustain our Mission and achieve our Vision
- F2 Grow key specialty services, programs & strategic partnerships
- F3 Optimize system investments
- F4 Be provider of choice in the Twin Ports
- F5 Achieve negotiated increasing amounts of financial risks for "covered lives"

- *Cancer, Cardiovascular, Digestive, Surgery, Children’s Specialty*
### Performance Measures

<table>
<thead>
<tr>
<th>BUSINESS AND DEVELOPMENT</th>
<th>Q4-01</th>
<th>Year End 2001</th>
<th>Detail</th>
<th>Trending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue Increase over Prior Year</td>
<td>15.3%</td>
<td>10.0%</td>
<td>GOAL -11% or more growth in net patient revenue measured against prior year; Specify factors that contributed to performance.</td>
<td><img src="image" alt="Trending Graph" /></td>
</tr>
<tr>
<td>Payor Mix: % Third Party (Non-Government)</td>
<td>33.0%</td>
<td>33.0%</td>
<td>GOAL - 48% or more gross revenue is from third party (non-governmental) payors; Specify factors that contributed to performance.</td>
<td><img src="image" alt="Trending Graph" /></td>
</tr>
<tr>
<td>Salaries as % of Net Revenue</td>
<td>35.0%</td>
<td>37.3%</td>
<td>GOAL - 35% or less of expenses are for salaries; Specify factors that contributed to performance.</td>
<td><img src="image" alt="Trending Graph" /></td>
</tr>
<tr>
<td>Net Days in AR</td>
<td>61.20</td>
<td>56.88</td>
<td>GOAL - 65 days or fewer for hospital to collect revenue; Specify factors that contributed to performance.</td>
<td><img src="image" alt="Trending Graph" /></td>
</tr>
</tbody>
</table>
Project Management - The Need

- Cedars Sinai example
- Now a defined science
  - Origins in DOD procurement
- Evidence based management
- Widely used product development, IT and construction
- Project Management Institute – PMI
- Competitive advantage
  - Honeywell example

Project Management Elements

- Initiation & Charter
- Scope – Requirements
- Project Plan
- Stakeholders
  - Scope management and Work Breakdown
  - Schedule management
  - Cost Management
  - Quality Control
  - Communications
  - Risk management
  - Procurement
  - Close out

The Bundled Payment (ACE) Project

- Medicare Pilot Project to demonstrate shared savings in bundled payments for all services – Ortho and Cardiac
- Bids to Medicare per DRG – 1 to 5% discount
- Hospital/MD goal cost reduction – 5%
- Medicare goals
  - Reduce cost of healthcare
  - Save money for patients & incentives to use ACE sites
  - Improved Quality
- Hospital Goals
  - Improve quality of care
  - Maximize net revenue to all providers
  - Improve provider cooperation and integration
- (Note – PPACA Bundled Payment demo starts 1-1-2012)
ACE project - Tasks

- Acquire external provider data and integrate into VVH data warehouse
- Do performance reporting and data mining on the appropriate DRGs and related bundled payment groups to understand current performance.
- Use medical staff, benchmarking, literature reviews and other sources to identify opportunities for improvement
- Solicit cooperation and new relationships with clinicians outside of the hospital system that were providing care for the hospital’s admitted patients
- Revise EHR to add clinical decision support modules as part for each bundled payment group and targeted DRG.
- Convene meetings to educate clinical staff (MDs, nursing, ancillary departments.) Modify care guidelines based on responses
Scheduling

- Develop network diagram of tasks
  - Which task must done before another
  - Maximize tasks to be done simultaneously (in parallel)

- Identify constraints
  - Date start, finish
  - Cost
  - Resource constraints (e.g. availability of staff)

- Find Critical Path and modify network or times if necessary

- Graph with Gantt Chart or diagram
- Project can be “crashed” by shortening the Critical Path
Network Diagram – Critical Path

Start Project

Acquire Data (20 days)

Acquire Data (20 days) -> Performance Reporting (24 days)

Performance Reporting (24 days) -> Integrate Existing Providers (48 days)

Integrate Existing Providers (48 days) -> Staff Education (15 days)

Staff Education (15 days) -> Revise EHR (40 days)

Revise EHR (40 days) -> Go Live
<table>
<thead>
<tr>
<th>WBS Task</th>
<th>Phyllis Colson</th>
<th>Dr. Terry McCollum</th>
<th>Karen Bluhm</th>
<th>Sameer Inampudi</th>
<th>Aaron Martin</th>
<th>Betty O’Neill</th>
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</thead>
<tbody>
<tr>
<td>Acquire Data</td>
<td>R</td>
<td>C</td>
<td>C</td>
<td>R</td>
<td>I</td>
<td>S</td>
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<tr>
<td>Performance Reporting</td>
<td>S</td>
<td>A</td>
<td>I</td>
<td>R</td>
<td>C</td>
<td>I</td>
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<tr>
<td>Literature Review</td>
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<td>C</td>
<td>I</td>
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<tr>
<td>Integrate existing providers</td>
<td>C</td>
<td>A</td>
<td>C</td>
<td>I</td>
<td>I</td>
<td>R</td>
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<tr>
<td>Revise EHR</td>
<td>A</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>R</td>
<td>I</td>
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<tr>
<td>Staff Education</td>
<td>R</td>
<td>A</td>
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Variations on Project Management

• IHI
  – Set Aims: “reduce incidence of Ventilator-associated pneumonia by 25 percent.”
  – Establish measures
  – Select Changes
  – Test changes

• Agile project management
  – Used when tasks are unknown or unclear
  – Close connection to the customer & frequent changes in requirement
  – Prototyping, testing, revising and then updating project plan
# Lean Six Sigma Tools

## DMAIC

<table>
<thead>
<tr>
<th>Improve Efficiency/Reduce Waste</th>
<th>Define</th>
<th>Measure</th>
<th>Analyze</th>
<th>Improve</th>
<th>Control</th>
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<tr>
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<tr>
<td>Process Map</td>
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<tr>
<td>Checksheet</td>
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<td>Pareto</td>
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<tr>
<td>Run Chart</td>
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<tr>
<td>C&amp;E Diagram</td>
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<td>Scatter Plot</td>
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<td>Statistical Tools</td>
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</tbody>
</table>

*Courtesy of Marshfield Clinic*
Selecting Project Management Methods

Initiate Project

- Complex & high risk
  - Yes
  - Final Product Known
    - Yes
    - DMAIC
    - No
    - Complex Process Improvement
      - No
      - Agile
      - Yes
      - PMI
  - No
  - IHI

The Project Management Office

- Managing shared resources across all projects administered by the PMO;
- Identifying and developing project management methodology, best practices and standards;
- Coaching, mentoring, training and oversight
- Monitoring compliance with project management standards, policies, procedures, and templates via project audits;
- Developing and managing project policies, procedures, templates and other shared documentation; and
- Coordinating communication across all projects.
Embedding change

• General systems theory and the role feedback
• Operating procedures and process maps
• Checklists
• Control charts
• Dashboard and scorecards
• Automated business rules
• Clinical decision support
• Huddles, transparency and direct accountability
Vanderbilt Medical Center Fault Tolerant Decision Support System

Results: In 2009 the hospital prevented 108 cases ventilator associated pneumonia, 16 deaths and saved over $4.3 million in hospital expenses by avoiding 1066 hospital days due to complications.
People
People – A key to the execution system

- Strategy
- Balanced Scorecard
- Project Management
- Embedded change

Sensing

Data

Action

People
**Structure**

**Traditional:**
- Emphasis on control
- Slow decision making
- Management structure is expensive

**Modern Firm** (Roberts)
- Highly metric goals (BSC)
- Agile decision making
- Shared horizontal knowledge
- Highly scalable
- Large MD practices

Compensation

- P4P on measurable systems (e.g. RVUs)
- Group payment for less measurable results
- Professional Service Contracts with MDs
  - System acts as manager and employer
  - MDs paid their revenue net of admin costs
- Physician Compacts
  - What does organization and MD “give” and “get”
  - Example - Organizational Gives: Involve and engage MDs, support the practice, responsible leadership
  - Example - Organization Gets: Excel in clinical expertise, support the group practice
Culture

"It’s just how we do things around here"

Artifacts
Espoused Values
Underlying Assumptions

Underlying assumptions:
• Has allowed an organization success in the past
• May need to change due to external variables

To change -
• Transparency
• Resource allocations
• Role model, coach
• Who gets promoted
• Crisis Management

Fire in the Bones

“Overall, the play was provocative, so we had real rigorous, emotional discussion afterward, which was not at all easy for us as leadership to hear. But clearly, it was necessary, and we are grateful for the feedback because it will allow us to make sustainable changes.” (Mary Brainerd CEO, HealthPartners)

Opus College of Business • University of St. Thomas
Employee Engagement

• Factors of Engagement
  – Capacity to engage
  – Motivation
  – Freedom and safety
  – Strategic Alignment

• Engagement Surveys
Survey Questions

• **Feeling and behaviors of Engagement**
  – I feel confident that I can meet my goals.
  – I am excited about how my work matters to our team and the organization.
  – Time goes by quickly when I am at work.

• **Capacity**
  – I have been adequately trained to do my job.
  – My supervisor sets challenging but achievable goals.
  – I have enough information to do my job.
  – I can count on the people I work with to help me if needed

• **Motivation**
  – My job makes good use of my skills and abilities.
  – The people who work here share common values.
  – The work we do is important

• **Freedom**
  – I feel safe to speak my mind about how things can be improved.
  – I can count on my supervisor to back me up on the actions I take to address a problem

• **Strategic Alignment** (Cost control strategy)
  – The people I work with maintain their focus on proposing new ways to reduce costs and to be more efficient even when they encounter potential distractions

Adaptive Leadership

• Developed at Harvard by Dr. Ron Heifetz
• Science based as opposed to the great person theories of leadership
• Works well for complex problem environments – particularly healthcare
• Adaptive vs. technical change
• Adaptive Responses
• Has been used for over 10 years in St. Thomas Physician Leadership Program

Technical vs. Adaptive

- **Technical** work uses existing knowledge and skills
- **Adaptive** work requires the group to generate new knowledge, skills and behaviors
- Adaptive problems cannot be solved by someone who provides answers based on authority structures
- Adaptive work creates and demands both independence and interdependence
- Many organizational problems arise when a technical fix is applied to an adaptive problem
Adaptive Challenge Responses

• Get on the Balcony
• Think politically
• Orchestrate the conflict
  – Create a holding environment
  – Adjust the heat
• Give the work back
• Hold steady
Servant Leadership

- The servant leaders vs. the power leader
- Characteristics of Servant Leadership
  - Self Awareness
  - Listening
  - Changing the organizational pyramid
  - Developing colleagues
  - Coaching subordinates
  - Empowerment of intelligence and energy
  - Foresight

An Integrated System

- Strategy
- Balanced Scorecard
- Project Management
- Embedded change

- Sensing
- Action

- Data
- People
Results

• HealthPartners
  – One of America’s best health plans (US news and World Report)
  – National Healthcare Award (2007 – NQF)
  – Best places to work (Modern Healthcare)

• SMDC
  – Growing profitability
  – Expansion across Dakotas, Montana, Idaho

• Marshfield Clinic - Model for Health Reform
  – Accountable Care Organizations
  – Chronic Disease Management

• Twin Cities Orthopedics
  – One of largest Ortho practices in the US and still growing
Thank You

“You give an order around here and if you can figure out what happens to it after that, you’re a better person than I am” – Harry S. Truman

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Key References


Key References - 2

Books by Dan McLaughlin
Health Administration Press

[Image of book covers]