Collaborative Thinking Process/A3

Kristin Hill, AIA
InsideOut Consulting, Inc.
June 19, 2010
Resource

“Managing to Learn”
Using the A3 management process to solve problems, gain agreement, mentor and lead

by John Shook
Collaborative Thinking Process A3

- Process for producing consensus & alignment
  - Status reports
  - Proposals/recommendations
  - Problem solving

- A3 format for documenting the process
What is an A3?

- “A3” refers paper size 11x17 (approx)
- Every organization issue - 1 page
- Follows a common logic
Effective A3 Process

- Effective Use of A3 Process
  - Can facilitate shift from **debate** about who **owns what** (authority-focused)
  - To **dialogue** around **what is the right thing to do** (responsibility-based)

- Creates a “pull-based” authority
Radical impact on the way decisions made

- Individuals earn authority to take action
- Leaders do not take a laissez-faire disengagement

Incorporate A3 into team activities:

- Learn to stop avoiding problems
- Recognize problems as powerful opportunities for learning and improvement
- Places responsibility on the author-owner
  - Not necessarily having authority over all aspects
  - Accepts responsibility to get decisions made and implemented
A3 – Storyboard

- The *underlying thinking* matters - not the *format*

- Visual manifestation of problem-solving thought process involving *continual dialogue* between owner of issue & other stakeholders
Story

- Should tell a *story* from the upper left to lower right

- Traces a journey from context/definition, to resolution & sequel
The Process

- A3 Process follows PDCA

- Plan – Do – Check – Act (Adjust)

- Fundamental approach to ALL work in collaborative/lean approaches
Elements

- Title
- Owner/Date
- Background
- Current Condition
- Target Condition
- Analysis
- Proposed Countermeasures
- Plan
- Follow-up
**Managing to Learn — Replacement Example A3 #5: Medtronic Credit/Returns Process**

**Credit/Returns Process**
- Date: September 1 - 9 2005
- Project Leader: Barney Carter
- Project Type: RIE

**DEFINE / BACKGROUND INFORMATION**
- Problem Statement: The Credit/Returns process is complex and not well understood by our customers and all internal departments.
- Scope: Credit and returns process from initial customer contact through disposition of product.
- Goal: Define, Simplify and Communicate the credit/returns process in order to reduce the lead time by 50%.

**MEASURE / UNDERSTAND**
- Where do we need to go?
  - Receiving Area
  - Customer Service
  - DC Inventory
  - Customer Loyalty
- What do we need to see?
  - Number of returns and why.
  - Lead Time from receipt to final disposition.
  - Rework items.
  - Receiving movement.

**ANALYZE / THINK**
- What areas should we focus on?
  - Receiving
  - Capital Equipment Returns
  - Customer Contact
- What should we do to fix the process and meet our goal?

**IMPROVE / IMPLEMENT**
- What did we do?
  - Create a customer contact flowchart.
  - Communicate process to Sales (via email, voicemail), Customer Service, Customer Loyalty and Service Reps.
  - Provide information to sales to be placed on Sales Portal.
  - Create a receiving flowchart.
  - Safety assessment of Cardiostim (receiving) work area.
  - 6S Receiving Area.
  - Reform Returns work area.
  - Enhance customer return form.
  - Update applicable SOPs.
  - Value resolution policy.
  - Create a Refurb weekly communication document.
  - Create and train on the "Return to Customer" form letter template.
  - Create a Loaner-Repair report for customer service.
  - Sort backlog of capital items waiting on disposition.
  - Color coded inventory of parts (House Janelle, refurbished).

**CONTROL / SUSTAIN**
- How do we sustain this new process?
  - Signals in place that will let us know if processes are not being followed.
  - Automatic systems in place to assist with consistent reporting.
  - Accountability being held by process owner.
Title: Describe problem, theme or issue
**Owner & Date:** Who “owns” the issue & date of current version
Background: Describe the business context & importance of the issue
**Current Condition:** Describe what is currently known about the issue

**Target Condition:** Identify desired outcome
Analysis: Analyze the current situation & underlying “root” cause creating the gap between Current Condition & Target Condition

Identify the “real issue”
Getting to the Real Issue

- Go to *Gemba* to fully understand the issue
  - The value-creating place the work actually happens to discover the “truth”

- “Root Cause” investigation
  - Perform “5 Whys” to get beyond the obvious symptoms
Propose Countermeasures: Propose corrective action or countermeasure

Gain consensus - *Nemawashi*
Nemawashi

- Refers to the consensus process of aligning organization around the countermeasure

- Approval at end of the process – formality

- Heart of Pull-based authority
Consensus/Agreement

- Does NOT mean giving up on one’s ideas or beliefs
- DOES mean that one will support the decision of the group
- Requires listening to other’s point of view
Set-based Decision-Making

- One of most important aspects of lean decision-making
  - Assessment of a “set” of countermeasures
  - “Just-in-Time” Decision-Making
**Plan: Describe the action or implementation plan**
Follow-up: Describe a review or learning process, anticipate remaining issues

“C” in PDCA
Caution!

A3 Pitfalls

- Making it about the “report”
- Not working until reaching consensus with key stakeholders – not collaborating
- Not identifying all/correct stakeholders
- “Jumping” to a solution or attaching to one course of action
- Arduous process – frustration
- Operating in-between “authority & responsibility based” approach
Executive Summary

ISSUE
Optimize a scalable medical campus supporting the UHS mission in Temecula, CA

BACKGROUND
• Validate the delivered price of a net new hospital (Future: 325 beds)
• Develop timeline of phased implementation schedule

CURRENT CONDITION
• Target total project cost is $125M
• Use the existing building pads
• Maximum of six (6) stories for the hospital and four (4) for the MOB
• Grading commences July 1, 2010 as promised to the City of Temecula
• Assume that one (1) MOB is developed separately

PROBLEM ANALYSIS
• Organizational silos/inefficiency
  • Time to market/profitability/phase by phase
  • Engage existing entitlements
  • Utilize existing building pads
  • Time and cost of long OSHPD reviews
  • Best practices and lean leadership capabilities

TARGET CONDITION
• Integrated team, including OSHPD, using lean processes to deliver the greatest value to UHS
• Deliver optimized design solutions (standardized efficient, patient-centered, adaptable, sustainable)
• Scalable market and service focused program
• ROI-focused phasing strategy and schedule
• Reduce areas of state agency review
• Building organization that minimizes OSHPD involvement and review

COUNTERMEASURES
• Four options for a net new hospital with a target total project cost of $125M (See reverse side for study sets)
  • 1 to 8 occupancy = 30% decrease in 1-occupancy
  - 3 = state-controlled protracted review
  - 8 = local agency expedited review
• Phased Plan Review (PPR)
  • Incremental OSHPD submittal (see implementation plan)
  • OSHPD on team and city engagement
  • No deferred approvals
  • 18% decrease in tdpf
• Efficient Flow and Organization
  • 30% > operational efficiency
  • 30% increase revenue in ED/ICU Urgent Care

IMPLEMENTATION PLAN

UHS Temecula Healthcare Facility Development

Mission:
To provide superior healthcare services that patients, families, friends, physicians refer for their patients, purchasers of healthcare wish for their employees and the employees are proud of, and members see as leading results.
• Service Excellence
• Continuous Improvement in Measurable Ways
• Employee Development
• Ethical and Fair Treatment of All
• Teamwork
• Compassion
• Innovation in Service Delivery

HMC Architects

Data: February 1, 2010

Writer: HMC/Turner Team

Sheet 1 of 1
PROJECT DASHBOARD

BACKGROUND
- Phase I Tower Addition includes a 4-story building connecting to the existing at the Inpatient Entry with the following program: Ground Floor (Administration/Conference/Support Services/Future Accounting), 2nd-3rd Floor (Med-Surg), 4th Floor (Shelled for future Med-Surg).
- Project is being designed and constructed using Lean principles, including A3 Learning, Full Planning, Responsibility-Based Design, and PDCA (Plan-Do-Check-Adjust).

RECENT DISCOVERIES
- No need for new chiller.
- No need for new elevators.

CURRENT INVESTIGATIONS
- Pharmacy layout with Lionville.
- Nourishment area and nurse station configuration.
- Piping support on the roof from existing Central Plant.

PLANNING SESSIONS
DD Planning Calendar Weekly sessions
Thursdays at 8:30 am PST
Week 1
- Plus/Delta on Design Cycle
- Detailed Planning Week 2
d two design cycles
- Update Pull Plan if necessary
Week 2
- Formal Retrospective on last Design Cycle Plan
- Update Design Cycle Plan
- Detailed Planning for next week
- Update Pull Plan if necessary

SCHEDULE
Overall Project Schedule
- Schematic Design (Oct-Mar)
- Design Development (Mar-Jun)
- Contract Documents (July-Aug)
- Agency Review (Sept-Dec)
- Construction (Jan-2010-Feb 2011)

Major Milestones
1. 100% Schematic Design
2. 100% Design Development
3. 95% Contract Documents
4. Agency Submittal
5. Ground Breaking

BUDGET

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Total
- $5,062,000
- $5,110,000
- $48,000

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ISSUE: Long “Patient To Bed” (P2B) times causing patient distress

BACKGROUND
once an ED patient has been admitted as an inpatient it takes time before that patient arrives in his/her room. When this time (P2B) is long it is causing added distress to patients.

CURRENT CONDITION

PROBLEM ANALYSIS
Problem: Takes a long time to determine room availability
   Why: Bed boards are inaccurate
       Why: Patient discharges / Room cleanup is sporadic
           Why: Partly because “out of hospital” doctors with variable discharge times
           Why: Unaware (for a time) that bed requires cleanup
Problem: Patient has to wait even after room assignment
   Why: “Advance Directives” does not start until after bed assignment
Problem: Patient has to wait even if a room is available
   Why: Nurse is not on duty or not ready to receive patient
   Why: Nurse can be on or near a break or be busy with another patient
   Why: Particular problem near shift changeover because it impacts a large number of nurses

(See P2B value stream map for details)
Managing to Learn — Example #3: University of Michigan Health System

Improving Patient Flow by Reducing Hospital Readmissions through Patient Involvement

Name of Project or Theme: LEAN Discharge Follow up Appointment Process

Brief History
Each year, the University of Michigan Health System (UMHS) treats more than one million outpatients, provides at least 36,000 hospital visits, conducts hundreds of scientific research projects and educates the next generation of medical professionals. UMHS has experienced high occupancy for the past 12 months with an average occupancy of 93%. In an effort to improve patient flow and increase capacity a lean project was commissioned to study the inpatient discharge process on a pilot unit. The time after discharge is considered high risk for patient care, often marked by patient re-admissions and/or re-visits. The follow-up appointment flow of discharge is hypothesized to be the source of the variability of patient care to prevent re-admission.

In 2006, prior to an intervention, 48,954 discharge follow-up appointments were scheduled primarily after the patient was discharged. Approximately 60% of patients arrived for their appointment, 15% were no-shows and 25% cancelled.

A 1st intervention on the Medical Faculty Hospitalist Service (MFH) was planned, scheduling appointments prior to discharge. Due to process issues, this change did not significantly affect the rate of no-shows and cancellations.

A separate ER pilot had been implemented to improve follow-up appointments from ER discharges. For the 2nd intervention, this process was adapted to include the patient in scheduling discharge appointments and online enrollment request test was developed and piloted.

Pre-Intervention Follow up Appointment Process

- Patient ready for discharge
- Discharge Navigator follows up, fills out discharge summary
- Patient is informed to check e-mail for the appointment
- Patient uses internet to call for their own appointment
- Patient reviews all future appointments
- Patient is scheduled
- Patient's appointment request sent to central area where staff request is then forwarded to clinic

Post-Intervention Follow up Appointment Process

- Pre-Intervention: 14 days
- Post-Intervention: 7.90% MFH Full Return: 7.00% MFH Full Return: 0.75%

Case Study Goals: Ensure that patients have a communicated follow-up appointment(s) at the time of discharge from the hospital, to prevent a smooth transition of care to the outpatient setting. A specific goal for the discharging physician is to focus on determining which follow up appointments are important as related to this hospitalization.

Appointment made prior to patient leaving, at least 24 hrs prior to discharge
- Appointment made with patient/family involvement
- U of M Attending Physician is notified that appointment is made
- Nursing includes follow-up appointment information during discharge instructions

When Involved? (Major stakeholders and players)
Lean Process Owners: Robert Chang, MD and Danita McClellan RN Lean Coaches: Katy Sommerich and Christopher Kim, MD, Public Relations and Marketing Communications: Janice Aguinig and Lauren Brown (Outpatient clinics staff, Patients and Families)

Lessons Learned:
- Multi-disciplinary team consisting of physicians, nurses, discharge planning, information technology, public relations and design an application that was user-friendly.
- The Michigan Lean System and the Lean Healthcare Method was an effective methodology. Small scale testing lead to rapid improvements in the workflow.
- Understanding physician workflow and needs can improve workflow.
- Taking advantage of pre-charting technology and expect on it. The exclusion of individuals from Information Technology is essential.
- Frequent, focused, and succinct communication was key. This included soliciting feedback from the faculty and staff.
- Involvement of patients and families was essential.
- Standardized training for the physician was essential. In order to be effective, the training needs to be focused and hands on.
- Matrix model for training kept focus on different patient's needs due to different phases and stages.

Next Steps:
- Patient satisfaction data collection
- Planning up to 6 times a week with the scheduler can handle per day and how long each call takes
- Developing automated appointment reminder tool is under development and above steps completed
- Hospital-wide will look at other services (i.e. surgery) after scheduling their first appointment in clinic prior to admission.

Return to ED ≤ 3 days
Pre-intervention: 3.96% MFH Full Return: 0.75%
Managing to Learn — Example A3 #4: Eric Ethington, lean manager, Textron Corp.

**Lean Boot Camp**

**2008 Vision**

**Background:**
- Our company requires leaders in all functions who:
  - Can deliver performance results
  - Can lead
  - Can utilize lean system concepts, tools, and practices yielding improved and sustainable processes

As an initial step, our lean steering committee sponsored the company Lean Boot Camp in 2007.
- 160 executives trained
- Very positive feedback

**Current State:**
- Reflecting on 2007 boot camp & planning 2008 approach
- Reaction to boot camp in '07

**Action Plan:**

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<th>Feedback</th>
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**Problem Statement:**
Maximize our company's leadership development & lean implementation w/ limited resources

**Recommendations:**

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<th>Market Size</th>
<th>Market's Current Lean Maturity</th>
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**VPs of Quality**
- 60
- Reaction to boot camp in '07

**A3 Stakeholders:**

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Reprinted with permission of Textron.
Learning to Learn

- Develop perpetual PDCA Thinkers
- Use A3 Thinking to document the process
- Become a continuous learning & improving organization – be lean
Let’s Try

- Break into groups of 5-6 people each
- Pick an “owner”
- Owner to pick from the following (no discussion – it is the owner’s choice)
A3 Topics

Propose: Going from sick/holiday/vacation structure to Paid Time Off (PTO)

Propose: Going to a 4 day work week in summer

Problem: People arrive late to meetings

Problem: People (mostly management) are not turning time sheets in on time

Propose: Free yoga classes at lunch
Start A3 Process

- Identify stakeholders – someone play the role
- Develop the title – remember it should state the real problem & not be offering the solution
Elements

- Title
- Owner/Date
- Background
- Current Condition
- Target Condition

- Analysis
- Proposed Countermeasures
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- Follow-up