Session 18: Introduction to A3 Thinking

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Disclosures

Presenter has no financial interest to disclose.

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**Learning Objectives**

At the conclusion of this activity the participant will be able to:

- Understand A3 as a management system and methodology for problem solving
- Employ tools and techniques to determine the Voice of the Customer and Voice of the Business
- Use measures and metrics to review performance
1. What is A3 Thinking?
2. Seven elements of A3 Thinking
3. Examples of A3 Templates
4. A3’s Link to Lean Six Sigma
5. Template Box Explanation…One by One
6. A3 Problem Solving examples
What is A3?

• A Toyota invented problem-solving method
  – Executed on a single sheet of A3 sized piece of paper
  – “A3” is the name for a metric paper size, similar to 11” x 17” typically used

The essence distilled on to one A3 sheet
Key References

- *Managing to Learn – John Shook
- Getting the Right Things Done – Pascal Dennis
- A3 Thinking – Durward K. Sobek II & Art Smalley
- The Toyota Way – Jeffrey Liker
- The Toyota Product Development System – Morgan/Liker
- Decoding the DNA of the TPS – Spear/Bowen
- www.lean.org – webinars, excerpts, downloads
- Gemba Academy:
  - User ID: Army
  - Password: DoDLean
A3 Thinking

- A3 is a Management Process
  - Enables and encourages learning through scientific method
- A3 Thinking
  - Team or individual application
  - Fosters consensus building
  - Simple systematic methodology
  - Communication tool w/ logical narrative
  - Makes problem solving visual
  - Tells a story (on a single page)
Seven Elements of A3 Thinking

- Logical thinking process
- Objectivity-Presenting information in a nonjudgmental way
- Results achieved and processes used
- Synthesis, distillation and visualization - Using only critical information
- Alignment of the effort with strategy/objectives
- Coherence with and consistency throughout the organization
- Systems approach to problem solving
A3 work for all types of activities:

- Strategic Planning
- Problem Solving/Decision Making
- Sharing Ideas/Proposing Change
- Process Mapping
- Value Stream Analysis
- Rapid Improvement Events
- Personal Development Plans
- IT System Requests
- Capital Appropriation Requests

A3 can become a key tool of making improvement at any level of activity.
Goals of A3 are Guided by Set of Questions

- What is the problem or issue?
- Who owns the problem?
- What are the root causes?
- What are the possible countermeasures?
- How will you decide which countermeasure to propose?
- How will you get agreement from everyone concerned?
- What is your implementation plan --- Who, What, When, Where and How?
- How will you know if the countermeasures work?
- What followup issues can you anticipate? What problems may occur during implementation?
- How will you capture and share the learning?
Relationship: A3 Thinking - LSS and PDCA

A3 THINKING

1. Issue or Problem
2. Background
3. Gap/Current and Target Condition
4. Root Cause Analysis
5. Proposed Solution(s)
6. Implementation
7. Results & Follow up

PDCA

Plan – Problem perceived>grasp the current situation>identify the root causes>devise countermeasures and future state>create and implementation plan>create follow up plan>obtain approval while discussing with affected parties

Do – Execute the implementation

Check – Execute the follow up plan

Act – Establish the process standard

SIX SIGMA

Define
Measure
Analyze
Improve
Control

The A3 Thought Process Provides Complete Structure
Template Examples

Plan
Do
Check & Act

Plan
Do
Check & Act

Plan
Do
Check & Act
Example of A3 Template

1. Reasons for Action
   - The Reason for Action should answer the question: Why are we doing this project or improvement initiative?
   - State the business case
   - Background information
   - Expected business results
   - Justification for the project or improvement initiative
   - Where possible, include the "burning platform" (example: integrated "livesaving mission"
   - Initiate how staying where you are is not an option; doing nothing could result in disaster
   - Give a reason that you can highlight
   - State the chief complaint or issue
   - Document the problem
   - Define scope (if not readily apparent)

GO / NO GO: Is the Reason for Action clear/shared so that it can serve as a roadblock buster?

2. Initial State
   - Describe the baseline ("as-is") situation.
   - What is happening right now?
   - Qualitative (data-based) attributes are preferred
   - Express the situation in time and/or units (data that later "proves the case")
   - If current state data is not available, include qualitative attributes
   - Use graphs or charts or illustrations where possible
   - Consider including a well-defined problem statement

GO / NO GO: Confirmation of current state data and information.
   - Measures reflect business case from Box 1.
   - Measures correlate with target state from Box 3.

3. Target State
   - The Target State describes what "success looks like" when we are done.
   - (It does not describe how to achieve it)
   - Describe attributes of Target State.
   - - Include quantitative and qualitative attributes
   - Reflect on Initial State – what are the targeted improvement conditions?
   - Consider "Voice of the Customer."
   - Objectives should be Specific, Measurable, Achievable, Realistic and Time-bound (SMART).
   - Include graphical charts or illustrations (e.g., trend charts, Pareto charts, etc.)

GO / NO GO: Improvement objectives/metrics should have a direct connection to:
   - Box 1. Reason for Action
   - Box 2. Initial State
   - SMART objectives

4. Gap Analysis
   - Compare Target State to Initial State, and determine what is currently inhibiting our ability to bring at the Target State today.
   - What are the root causes of these roadblocks?
   - Use root cause analysis tools such as cause and effect (fishbone) diagrams and it whys when appropriate.

SOUND GO:
   - Root cause(s) identified.
   - Gaps are numbered and linked to Solution Approach.

5. Solution Approach
   - The Solution Approach defines the major enablers for achieving the Target State.
   - All high priority gaps should have countermeasures defined.
   - Express in form: "if we do this" (solution), then "we expect this" (expected outcome).
   - Where possible, assign a single point of accountability (owner) for each solution.

SOUND GO:
   - Does solution approach link well with the root causes identified in the Gap Analysis?
   - Does the Solution Approach express the hypothesis to be validated or adjusted through Box 8, Rapid Experiments?

6. Rapid Experiments
   - Expect the Solution Approach to be imperfect.
   - Consider plotting some aspect of the solution approach as a rapid experiment before implementing "across-the-board."
   - Express in form: "if we do this" (rapid experiment), then "we expect this" (expected outcome).

SOUND GO:
   - Was the expected result achieved?
   - Can any emerging roadblocks be removed?
   - Is the solution approach being followed?
   - YES to all questions – go to Box 7, Completion Plan.
   - NO to any question – go back to Box 4, Gap Analysis

7. Completion Plans
   - The Completion Plan defines the action plan for achieving the Target State.
   - For each solution approach and rapid experiment item, detail the required action plan (what, who, when).
   - The A3 owner is accountable for ensuring the Completion Plan status is updated as required. Use A3 format with green/red/amber ratings.
   - Management should review Completion Plan status on a systematic basis and resolve any timelessness or results issues.
   - Whether the completion plan on track?
   - What are we learning from delays or adjustments?
   - Have we achieved the desired outcome?

SOUND GO:
   - Action, owner and due dates defined.
   - Box 7 is complete, and desired results are achieved.

8. Confirmed State
   - The Confirmed State measures progress towards achieving the Target State objectives and metrics.
   - The briefing format should be tailored such that every Target State objective and metric can be tracked/trend charted for achieving the desired outcome.

SOUND GO:
   - Achieves Target State (Box 8 = Box 3) or the A3 Sponsor indicates the improvement is "good enough."

Qualitative Objectives

<table>
<thead>
<tr>
<th>Item No</th>
<th>Action</th>
<th>Owner</th>
<th>Due Date</th>
<th>Action</th>
<th>Status/Monitor</th>
</tr>
</thead>
</table>

Qualitative Objectives

Completed

| On-Time | (Y/N) | Red | Amber | Green | Notes |

9. Insights
   - Develop Lessons Learned Periodically Through The Lifespan of the A3

Recommendations

- What went well?
- What happened?
- What happened?

Develop Lessons Learned Periodically Through The Lifespan of the A3
**Example of A3 Template**

**INTRODUCTION/PURPOSE**
- Explain why the proposal/strategy is being introduced
- What is the reason to consider it now?

**CURRENT SITUATION**
- What is the organization doing now?
- What is happening outside the organization?

**PROPOSAL/ANALYSIS**
- What do you want to change, add, or delete?
- Will it be effective? Does it address the root cause? How will you know?
- Will it be efficient? Does it provide the best overall balance between cost and benefits?

**BENEFITS/EXPECTED OUTCOME**
- What will happen if the proposal or strategy is adopted?
- What benefits or results should the organization expect to see after implementation?
- How will it impact the organization and the various stakeholders?

**PLAN, TIMING, COSTS**
- What steps will be taken?
- Who will be responsible for implementation?
- When will the steps be taken?
- Is there costs associated with various efforts?

**OPEN ISSUES**
- Are there additional issues to consider?
- Have alternative options been considered?

**PROPOSAL/STRATEGY A3-EXAMPLE**
Main Objective: To provide information on a situation or event. Often used for reporting of meetings, conferences, site visits, or explaining new policies or regulations.
# Army Medicine A3 Template

**Champion**

**Team:**

**BOX 1 – ISSUE or PROBLEM**

- What are we trying to do?
- What is the issue or problem?
- Who owns the issue?
- What is the scope? (Who, Where, Process Start/End Points)
- When was the issue or problem recognized? What are the impacts if it is not addressed?

**BOX 2 – BACKGROUND**

- Background of the problem
- Importance of the problem
- What circumstances brought the issue to light?
- How does the issue fit in the context of the organization?
- What is the history? Is the history clearly understood?
- Is it clear why this problem is important to the organization and/or the patient?

**BOX 3 – GAP / CURRENT AND TARGET CONDITION**

- Diagram of current process (or situation)
- What is actually wrong with the current state or process?
- Can the issue/problem be quantified?
- What metrics indicate we are under-performing? What is target performance?
- How was the information obtained?

**BOX 4 – ROOT CAUSE ANALYSIS**

- List Problem(s)
- Most likely direct (or root) cause:
  - Why:
    - Why:
    - Why:
    - Why:
- Are the root causes directly related to the current condition identified?
- Are the root causes clearly and sufficiently identified?

**BOX 5 – PRIORITIZED SOLUTIONS**

- What are the prioritized solutions?
- What are the expected benefits?
- What are the measures of success? (%Yield, SQL, PLT, PCT, etc.)

**Financial:**
- Are there any cost savings as a result of the project (i.e. $ that can be diverted to another initiative)?
- Cost Savings = Baseline process cost - (Revised process cost + One-time implementation cost)
- Note: If the cost per unit decreases due to a more efficient process, it is NOT savings, rather cost avoidance

**BOX 6 – IMPLEMENTATION PLAN**

- Is a pilot needed?
- Please describe required resources

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
<th>Due Date</th>
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</thead>
</table>

**BOX 7 – RESULTS AND FOLLOW-UP**

- Operational and Financial Results
- How will gains be sustained?

<table>
<thead>
<tr>
<th>Target or Planned Result</th>
<th>Actual</th>
</tr>
</thead>
</table>
Box 1—The Issue or Problem to be Addressed

• Key Items for Box 1
  • What is the issue or problem?
  • Who owns the issue?
  • What is the scope?
    • Who, Where, Process Start/End Points
  • When was the issue or problem recognized
  • What are the impacts if the issue or problem is *not* addressed
Key Items for Box 2

- What circumstances brought the issue to light?
- How does the issue fit in the context of the organization?
- What is the history?
- Is the history clearly understood?
- Why is the problem important to the organization?
Box 3—Gap/Current State and Target Condition

• Key items for Box 3
  • What is actually wrong with the current state or process
  • Can the issue/problem be quantified?
    • What measures indicate we are under-performing
    • What is target performance?
  • How was information about the current state obtained?
    • Did you go to the Gemba?
      • Actual place
      • Actual work
      • Actual people who do the work
Box 4—Root Cause Analysis

• Key Items for Box 4
  • List the root causes of the issue or problem
    • 5 Why Analysis
  • Are the root causes directly related to the current state?
  • Are the root causes clearly understood?
Box 5—Prioritized Solutions

- Key Items for Box 5
  - What are the prioritized solutions?
  - What are the measures of success?
  - What are the costs to implement the solutions?
  - Are cost savings expected? How much?
Box 6—Implementation Plan

• Key items for Box 6
  • Are the solutions expensive or risky?
  • Is a pilot needed?
  • Describe the resources required

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
<th>Due Date</th>
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</tbody>
</table>
Box 7—Results and Follow Up

• Key items for Box 7
  • Compare the actual results with the expected results
    • Operational and Financial Results

<table>
<thead>
<tr>
<th>Target or Planned Result</th>
<th>Actual Result</th>
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</thead>
<tbody>
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– How will gains be sustained?
  • Monitoring, reporting frequency
  • Checklists, job aids, SOPs
A3 Example

ED Front End Triage Project

Project Lead: Gene St. Pierre
Project Champion(s): Janet Rimicci, Dr. McCullough
Date Updated: 5/14/10

Problem Statement:
Need for enhancing patient safety, quality, and service by decreasing time to care for those presenting as walk-ins to the ER/LA Emergency Department. Decrease time from door to triage nurse by 50% for each acuity level.

Current State:
- Door to Triage RN times vary for each patient, range from X to Y
- Lack of standardized work for tech/reg/RN
- Patient tells 3x their chief complaint
- Patient is waiting to see a triage RN
- Inconsistent flow path

Goals and Dashboard Metrics:
- Patient door to initial MD assessment ~ 42 minutes, target ~ 20 minutes.
- Patient door to triage nurse = 5 minutes; target = 1 minute

Potential Solutions:
Future State Process Flow Diagram for Triage and Back Reg

Action Plan:

Sustain the Results and Next Steps:

Dashboard Metrics

<table>
<thead>
<tr>
<th>Patient Door to RN Visual Assessment</th>
<th>Baseline</th>
<th>Target</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWBS Rate</td>
<td>3.5%</td>
<td>&lt;2.0%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

Reflections on ED RE (Kaizen)

Additional comments related to the process improvement.
Oracle/PeopleSoft HR System Proposal

**Introduction/Purpose:**
To purchase and implement an enterprise-wide (ERP) human resources information system that will serve as the central repository of all workforce data including affiliate groups. This will provide an integrated single solution to HR management that includes onboarding, compensation, performance management, training & development, and succession planning.

**Background:**
No Human Capital Management System (HCMS) currently in place.

The following are being used instead:
- **UCLA Payroll Personnel System (PPS)/Human Resource Development (HRD)**: system developed in 1982, designed to primarily serve as a Payroll system.
- **28 disparate HR applications developed in-house** to support compliance, competency tracking, training and development, disability management, worker's comp, turnover, payroll and seniority points, etc.
- **Salary History Card (PHC)**: provides salary information.
- **HRIS standalone web apps**

**Benefits — DIRECT & INDIRECT**
- **KPIs**: Eliminate waste (Muda), unnecessary work, and improve productivity for:
  - Manager/Performance Mgt.
  - HR EDB and payroll staff
  - HR Compensation
  - New Hire Processing
  - Limit Risk of Noncompliance
  - Reduce HR Material
- **Integrate 25 stand alone applications into single application**
- **Built-in error and warning messaging, pay eligible, reduce % of incorrect entry**
- **Improve data integrity, minimize complexity and build business intelligence**
- **Provide managers with single screen to manage their business unit**
- **Provide dashboard actionable data for leadership**
- **Make UCLA Health System one of America's Best Places to Work**

**Open Issues:**
- **Sign contract with Oracle PS prior to June 1st to save additional 4% on software pricing**
- **Payment of $599K deferred to Sept 2010**
- **Minimize MITS and Procurement involvement**
- **UCDP Sole Sourcing Agreements — Software and Implementation Vendor**
- **ASP hosting for first three to five years — evaluate process after year three**
- **DSOSM system replacement — consider after Hospital System is implemented successfully**

**Proposed System — 1 app**

**Plan / Timing:**
- HR Information Systems staff fully dedicated
  - 1.0 FTE Project Manager
  - MITS Support - 38 FTE for initial set up
  - Interface Review
  - AD Connectivity
  - Project Management
  - Procurement - 16 FTE
  - Contract Preparation

**Summary:**
- [Diagram and analysis of system implementation plan]

**UNIFORMED SERVICES UNIVERSITY of the Health Sciences**
## NRMC/Meade/Improve Coding Process

**Champion:** COL Armstrong/Col Jagbab  
**Team:** Ms Denise Schultz, Ms Reba Nelson, Mr Morales, LTC Hawkins, AOSIM Staff, Meade Coding Staff, Ms Laura Dance, LTC Jones  
**Belt:** Ms Donna Stitner, MBB  
**Start Date:** 5 Oct 12

### BOX 1—ISSUE

The coding process throughout the region is currently operating with a staff shortage of coders to support the full clinical needs. The shortage of coders has an effect on the coding accuracy and productivity of the clinics.

### BOX 2—BACKGROUND

The inefficiencies in the coding process affects the reimbursement (PBAM) for the facility, quality of medical documentation which affects patient care.

### BOX 3—GAP / CURRENT AND TARGET CONDITION

The goal of this project is to improve the Coding Process by increasing the number of records coded (6,594 in Sep 12); 86% overall coding compliance based on CARA audit results as of Jun 2012 to 95% compliance based on Data Quality Standards. ICD-9 compliance is at 93%; E&M compliance is at 79%; CPT compliance is at 76%; increase in RVU generation.

### BOX 4—ROOT CAUSE ANALYSIS

<table>
<thead>
<tr>
<th>Most likely direct (or root) cause:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why: Shortage of coders to review coding accuracy</td>
</tr>
<tr>
<td>Why: Providers’ lack of knowledge to fully document encounters</td>
</tr>
<tr>
<td>Why: Providers’ lack of knowledge to accurately code records</td>
</tr>
<tr>
<td>Why: Lack of staff to train providers</td>
</tr>
<tr>
<td>Why: MTF lack funding to hire qualified coders</td>
</tr>
<tr>
<td>Why: Coding Backlog (Dormant workload) prior to ICD 10 Implementation</td>
</tr>
</tbody>
</table>

### BOX 5—PRIORITIZED SOLUTIONS

- Fort Meade Virtual “GS” Coding Pilot  
- Regional Contract coders (Coders, Auditors and trainers)  
- Create a centralized regional coding hub  
- Establish Virtual (tele-coding/remote) process and standards  
- Establish staffing goals tailored to MTF capabilities- (GS coder staff (80%) and On-site GS coders/auditors 20%)

### BOX 6—IMPLEMENTATION PLAN

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief HQS CoS for approval</td>
<td>Ms Schultz</td>
<td></td>
</tr>
<tr>
<td>Develop standards/Processes</td>
<td>Ms Schultz/Ms Nelson</td>
<td></td>
</tr>
<tr>
<td>Utilize current coding contract</td>
<td>Ms Schultz</td>
<td></td>
</tr>
<tr>
<td>Manage current coding contract staff</td>
<td>Ms Schultz</td>
<td></td>
</tr>
<tr>
<td>Orient GS Staff</td>
<td>Ms Nelson</td>
<td></td>
</tr>
<tr>
<td>Establish IT Connections, Laptop imaging</td>
<td>Mr Morales</td>
<td></td>
</tr>
<tr>
<td>Tele-work process review/guidance</td>
<td>Ms Dance</td>
<td></td>
</tr>
</tbody>
</table>

### BOX 7—RESULTS AND FOLLOW-UP

**Operational and Financial Results**

**Financial** — Increase in PBAM reimbursement from approximately $29,000 (Sep 12) to approximately $99,000 (Sep 13)

<table>
<thead>
<tr>
<th>Base</th>
<th>After Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records Reviewed (Sep 12) - 6,594</td>
<td>Records Reviewed (Sep 13) - 15,211 (131% increase)</td>
</tr>
</tbody>
</table>
RIE #9: Lab Excluding Point of Care Testing
ED Value Stream
Dates of Event: 07/09/12 – 07/13/12

Problem:
- Patients experience delays as a result of compromised samples requiring redraws
- Placement of labels on specimens create a delay for patients
- Patient experience delays as a result of adding tests
- Patients wait due to delayed phlebotomist response time to gather samples

Root Causes:
- Delayed visual management due to automation line rejecting the sample
- Lack of education and following standard work of labeling tubes appropriately – Accountability
- ED does not have add on worklist
- Lack of staff to be located in the ED

Solutions Implemented:
- Eliminate double labeling
- Streamline communication
- Have a dedicated phlebotomist in the ED

Benefit:
- Decrease over processing
- Decrease patient waiting
- Decrease patient waiting and lab turn around time

<table>
<thead>
<tr>
<th>Metric</th>
<th>Initial State</th>
<th>Target State</th>
<th>Final Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Order to results PVH</td>
<td>55 min</td>
<td>49.5 min</td>
<td>53.5 min</td>
</tr>
<tr>
<td>Time Order to results MCR</td>
<td>57 min</td>
<td>51.3 min</td>
<td>48.5 min</td>
</tr>
</tbody>
</table>

* Metric last measured on 12/2012

Team Members:
Mike Apostle, Stephanie Bradley, Darrell Demeritt, Karen Getzy, Scott Horton, Sharon Knor, Ligita Kraemer, Robert Mitchell, Richard Nixon, Kelly Pautvein, Ramona Perkins, Dan Robinson, Dawna Tucker, Shannon Turley, Treena Dockery
A3 Example

RIE #1: Change RN Documentation Requirements for ESI 4/5 Patients
ED Value Stream
Dates of Event: 11/14/11 – 11/18/11

Problem:
- The content of fast track assessments require too much data, is duplicative, and inconsistently completed - 100% of the time.
- Documentation requirements: Weights/Heights, Content of Fast Track Assessment
- Staff are not consistently performing the work required to prepare the patient for medical providers. Incomplete standard work.
- Staff have implemented work arounds due to lack of real time communication/information.

Root Causes:
- Chief complaint documented in 4 areas, reason for visit needs to be more detailed than general Chief Complaint, ESI can be documented in 3 places
- Allow variability
- Lack seamless real time communication

Solutions Implemented:
- Streamline required documentation for ESI 4/5
- Define standard work to include parameters for data entry
- Define rapid treatment as a process not a place
- Define and optimize roles of all staff

Benefit:
- Decreased triage time and reduce average length of stay
- Decrease variability, increase quality, increase efficiency
- Increase accountability
- Increase throughput
- Decreased needed room and increase capacity

<table>
<thead>
<tr>
<th>Metric</th>
<th>Initial State</th>
<th>Target State</th>
<th>Final Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN Assessment</td>
<td>6 min 52 sec</td>
<td>6 min 11 sec</td>
<td>3 min</td>
</tr>
<tr>
<td>ESI 4/5</td>
<td>*Metric last measured on 12/2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Team Members:
- Mona Brewer, Cindi Brown, Lori Cameron, Jennifer Cobb, Chris Conlin, Debbie Delk, Rich Deitsch, Leanne Harpman, Michelle Himes, Robert Mitchell, Dan Robinson, Dr. Jamie Teumer, Shaun Wall, Trina Dockery, Jose Bustillo

Team members of the Health Science

UNIFORMED SERVICES UNIVERSITY
A3 Exercise

• Market Manager for the eMSM containing Valhalla, Olympus and Cisifus requested a Value Stream Analysis of three perceived problem areas in order to meet the eMSM goals.
  • Effectiveness of Care/Healthy Behaviors
  • Enrollment/Access to Primary Care
  • Recapture/Referral of Specialty Care
Voice of the Customer / Voice of the Business

• Important to understand how your customers, stakeholders, process owners define and prioritize needs and expectations of our products and services

  • Quality – features, attributes, dimensions, functions (VOC)
  • Cost – process cycle efficiencies, cost to consumer, repair cost, cost of poor quality (VOB)
  • Speed – lead times, set up times, process cycle time (VOC/VOB)
Customers Define Quality

- Timeliness
- Flexibility & Options
- Accuracy
- Aesthetics
- Cost
- Ease of use
Gathering VOC

- Gathering unbiased VOC is never easy or fast
  - Direct methods—focus groups, interviews, be a customer
  - Indirect methods – Surveys, customer observation, market research, customer complaints
- Translating VOC into "requirements"
  - Customer states “I hate filling out this form”
  - Clarifying the issue: The form takes too long to fill out
  - Customer Requirements:
Voice of Customer

- What does the Customer want from us?
- What are the key customer issues?
  - We need to identify those issue(s) that prevent us from satisfying our customers?
- What are the Critical Customer Requirements (CCR)?
  - CCR must be measurable and specific
Voice of Business

- What does the Business want from us?
- What are the key business issues?
  - We need to identify those issue(s) that prevent us from achieving our mission/goals/vision?
- What are the Critical Business Requirements (CBR)?
  - CBR must be measureable and specific
<table>
<thead>
<tr>
<th>Aim</th>
<th>Strategy Question (Market Level)</th>
<th>Management Question (Market Level)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>Are we effectively managing the cost of our enrolled patients?</td>
<td>Are we managing the total cost of healthcare per person?</td>
</tr>
<tr>
<td></td>
<td>Are we reducing the cost of our non-enrolled population?</td>
<td>Are we optimizing the use of Direct Care capacity (by providing appropriate services for non-enrolled patients)?</td>
</tr>
<tr>
<td></td>
<td>Are we reducing variation and eliminating waste?</td>
<td>Are we improving processes and driving down operating costs?</td>
</tr>
<tr>
<td><strong>Readiness</strong></td>
<td>Is the total force medically ready? (Medically Ready Force)</td>
<td>Are service members medically ready to deploy?</td>
</tr>
<tr>
<td></td>
<td>Is the medical force ready to deliver for the warfighter anytime, anywhere? (Ready Medical Force)</td>
<td>Are we increasing the readiness of our care team?</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>Are we improving the health of the population?</td>
<td>Are we promoting healthy behaviors and healthy lifestyles in our beneficiary population?</td>
</tr>
<tr>
<td></td>
<td>Are we optimizing the use of health services to promote health?</td>
<td>Are we reducing the prevalence and incidence of illness and injury in the population?</td>
</tr>
<tr>
<td><strong>Healthcare</strong></td>
<td>Are we providing safe healthcare?</td>
<td>Are we improving the safety of the care environment?</td>
</tr>
<tr>
<td></td>
<td>Are we providing timely and convenient healthcare?</td>
<td>Do our patients have access to timely and convenient services?</td>
</tr>
<tr>
<td></td>
<td>Are we providing effective healthcare?</td>
<td>Are we achieving better health outcomes by using evidence-based practice?</td>
</tr>
<tr>
<td></td>
<td>Are we providing a patient-centered experience?</td>
<td>Does the health delivery system provide a consistent patient-centered experience?</td>
</tr>
<tr>
<td><strong>Learning &amp; Growth</strong></td>
<td>Are we improving as a learning organization?</td>
<td>Are we identifying and spreading proven practices?</td>
</tr>
</tbody>
</table>
## Proposed Core and Driver Measures for Review and Development by Analytics Team

<table>
<thead>
<tr>
<th>Aim</th>
<th>Key Focus</th>
<th>Core Measure</th>
<th>Leading Indicator (Driver Measure)</th>
</tr>
</thead>
</table>
| Cost | Control costs and produce more work | Rate of Increase in Per Capita Cost (PMPM) | **Cost/Service**: cost/RVU, cost/RWP, cost/test; cost/script; available time for providers, ROFR rate  
**Utilization**: RWP/1000, RVU/100  
**High utilizers**: ER rate, # high utilizers, cost/high utilizer |
|  |  | Cost of Private Sector Health Services for Non-enrollees | **Enrollment**: Total enrollees, enrollees/FTE  
**Direct Cost Reduction**: MTF Admissions for non-enrollees, over 65 use of pharmacy home delivery, specialty care for non-enrollees |
|  |  | Total Operating Cost | **Civilian personnel costs**  
**Contract costs**  
**Admin cost efficiency (ACE)**  
**Variability in staffing, equipment, supplies** |
| Readiness | Improve medical readiness | Fully Individually Medically Ready Rate | % with non-deployable condition |
|  |  | Work RVUs Per Provider Per Month (not primary care) | **Number of readiness procedures (orthopedics, gen surgery, etc)**  
**CMI by specialty/provider**  
**% GME programs at or above 50th% for volume** |
| Health | Improve health of the population | • Tri-Service Workflow: "How has your health been last year?"  
• Index score of Health Behaviors (nutrition, sleep, activity, depression) | **Screening for breast, colon and cervical cancer**  
**Well child visits**  
**% counselled on healthy behaviors** |
|  |  | Adjusted Clinical Groups (ACG) Score for Selected Illness Category (e.g., Behavioral health and cardiovascular conditions) | **HEDIS measures for cardiovascular disease, diabetes, and mental health** |
| Healthcare | Improve safety | Partnership for Patients Safety Index | % use of patient safety bundles |
|  | Improve timeliness | Average Days to 3rd Available (Acute Primary Care) |  |
|  | Improve effectiveness | Clinical / Functional Outcomes for Behavioral Health (Depression, PTSD, EtOH Abuse) | % of patients that are seen 4x in 90 days  
# providers per patient  
3rd available appointment for behavioral health |
|  | Improve patient-centered-ness | Satisfaction with Healthcare (need single appropriate/actionable methodology) | Service Satisfaction Survey (APPLS, Monitor, SDA) |
| Learning & Growth | Continuously learn and improve | # of Proven Practices Submitted | # of proven practices that reduce variation, reduce cost and improve quality |
What is a Value Stream?

- Sequence of activities required to design, produce, and provide a specific good or service and along which information, materials and worth flows.
- A Value Stream Map (VSM) is a map of the sequence of activities. A VSM is a process map with data.
## A3 Title:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Countermeasures/Prioritized Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td></td>
</tr>
<tr>
<td>Gap/Current and Target</td>
<td>Implementation Plan</td>
</tr>
<tr>
<td>Root Cause Analysis</td>
<td>Results/Follow-up</td>
</tr>
</tbody>
</table>
**Issue:**

- What is the problem? Can you clearly and succinctly define the “presenting problem” — the actual business issue that is being felt.

- Have you gathered and verified facts – not just data and anecdotes to clearly understand the current state?

- Have you gone to the Gemba?
Background

• What is the background?
• Who is responsible?
• When did the problem start?
• What is the scope?
Gap/Current and Target

- What is the current performance?
- What is the target? Gap?
- What are the goals?
Root Cause

- Why:
  - Why:
    - Why:
      - Why:
        - Are the root causes analysis directly related to the current condition identified?
        - Are the root causes clearly and sufficiently identified?
Countermeasures/Prioritized Solutions

- Countermeasure vs Solutions. A3 owners seek countermeasures to problems instead of permanent solutions.
- Have you explored every reasonable alternative countermeasure?
- Can you show how your proposed actions will address the root causes of the performance problems?
- Have you continued to go to the Gemba in gathering new information and countermeasures?
- Can you justify why your proposed actions are necessary?
- What are the priorities of the Solutions/Countermeasures?
Implementation Plan

• How are you going to implement the countermeasures/priorities?
• Do you need a pilot?
• Are there any cost savings as a result of the project (i.e. $ that can be diverted to another initiative)?
• Describe the resources required.
Follow Up

• What follow up is required?
• What metrics or measures should be monitored? How often?
Session 17: Introduction to A3 Thinking

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