Value Analysis: Models for Success

Cindy Christofanelli, RN, MSN, CMRP
Objectives

• Identify which value analysis models are being utilized on a national level.
• Explore the various components of several value analysis models.
• Identify what value analysis models are the most successful.
Value Analysis

What is it....
AHVAP: Healthcare Value Analysis

“A systematic process to review clinical products, equipment and technologies to evaluate their clinical efficacy, safety and impact on organizational resources”.

Source: Association Healthcare Value Analysis Professionals
Healthcare Value Analysis
A collaboration between Clinical, Finance and Supply Chain

VAT’s
(Review & Evaluation)

PRODUCT
USERS
(Product knowledge & evaluation)

FINANCE
(Cost-benefit knowledge)

Supply Chain
(Vendor management & contracting knowledge)

Source: Association Healthcare Value Analysis Professionals
VHA’s Clinical Quality Value Analysis™

Definition

Decision-making platform

VHA’s *Clinical Quality* Value Analysis™
An organized approach to decisions about products and services in the context of cost effective, safe and quality patient care that includes:

- A consistent decision-making process
- Interdisciplinary involvement
- Support by executives
- Involved physicians

Applied consistently across the organization
Premier’s Definition of Value Analysis

Value Analysis (n.) – a systematic, objective process for evaluating and reducing expenses by considering alternate products and practices which meet, but do not exceed, the need while maintaining or improving quality patient care.

Value Analysis is customer focused, process oriented, and data driven.

Source: Premier
## Consistent Attributes

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Stakeholders</th>
<th>Applied to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic</td>
<td>Clinicians</td>
<td>Review/Selection of:</td>
</tr>
<tr>
<td>Objective</td>
<td>Physicians</td>
<td>- Clinical Products</td>
</tr>
<tr>
<td>Data Driven</td>
<td>Administrators</td>
<td>- Equipment</td>
</tr>
<tr>
<td>Customer Focused</td>
<td>End-Users</td>
<td>- Technologies</td>
</tr>
<tr>
<td>Quality Driven</td>
<td>GPO Partners</td>
<td>- Services</td>
</tr>
<tr>
<td>Patient Centered</td>
<td>Vendor Partners</td>
<td></td>
</tr>
<tr>
<td>Promotes Safety</td>
<td>Payors</td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary Involvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Value Analysis

Why do it?
Benefits of VHA’s *Clinical Quality Value Analysis*™

- Takes product and service evaluation from subjective to objective
- Provides a formal, customized, collaborative approach to reduce and manage expenses
- Involves interdisciplinary teams
- Includes all supplies and services
- Ensures optimal benefits because of staff buy-in
- Integrates the Medical Staff into the ongoing process
- Supported by clinical documentation which maintains and/or improves quality and customer satisfaction
Value Analysis:
Hospitals Rising to the Challenges…

- Advances in Technology
- Drive for Standardization
- Lack of Data
- Minimal Transparency
- Bias in Decision-Making
- Duplication of Efforts

Financial Pressures

Source: Premier
MedAssets: Factors Driving Change in How We Control Costs

- Payment reform
- Enhanced collaboration between clinicians and finance
- Tough economic times
- Technology critical to efficiency and transparency
- Traditional strategies for controlling costs are no longer enough

Source: MedAssets
Value Analysis

How do you do it?
DO NOT DISTURB!
I'M BUSY REINVENTING
THE WHEEL!

zotzle.com/moncave"
Comparison of a few National Models

AHVAP
Healthcare Value Analysis

VHA
Clinical Quality Value Analysis

Premier
ValueAdvisor

MedAssets
Value Analysis Optimization
Product Opportunities

- New Technology
- Change in Vendor or Market Place
- Standardization Opportunity
- Change in Practice or Regulatory Issues
- Contract Price Change

Source: Association Healthcare Value Analysis Professionals
Gather Data/Structure

- Identify Key Issues with Current
- Define the Clinical *Need*
- Literature Review
- Data Analysis
- Know the Vendors
- Request for Information (RFI)
- Request for Proposal (RFP)

Source: Association Healthcare Value Analysis Professionals
Preliminary Negotiations

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review Data</td>
</tr>
<tr>
<td>• Engage Contract Agent</td>
</tr>
<tr>
<td>• Maintain Good Business Relationship with Vendors</td>
</tr>
<tr>
<td>• Identify GPO Affiliation</td>
</tr>
<tr>
<td>• Identify Distribution Relationship</td>
</tr>
</tbody>
</table>

Source: Association Healthcare Value Analysis Professionals
**Clinical Trial or Approval**

<table>
<thead>
<tr>
<th>Clinical Decision makers</th>
<th>Plan In-service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test of Change</td>
<td>Correlate Evaluation Data</td>
</tr>
<tr>
<td>Clinical Champion</td>
<td>Present Options</td>
</tr>
<tr>
<td>Evaluation Tool</td>
<td>Substitute Product Selection</td>
</tr>
<tr>
<td>Trial Product</td>
<td></td>
</tr>
<tr>
<td>Trial Areas and Trial Length</td>
<td></td>
</tr>
</tbody>
</table>
### Final Negotiations

- Contract Agent Completion Contract and/or Pricing Agreement Language
- Include Product Support during and after Conversion
- Shipping and Payment Terms

Source: Association Healthcare Value Analysis Professionals
## Implementation

- Assign Accountabilities
- Communication Plan
- Implementation Plan
- Pre-conversion Meeting
- Training Plan

Source: Association Healthcare Value Analysis Professionals
## Audit Process

<table>
<thead>
<tr>
<th>Measure Success!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Periodic Audit</td>
</tr>
<tr>
<td>• Report to Stakeholders</td>
</tr>
<tr>
<td>• Ongoing Vendor Alliance and Support</td>
</tr>
</tbody>
</table>

Source: Association Healthcare Value Analysis Professionals
## VHA’s Clinical Quality Value Analysis™ Methodology

### ASSESS
- Current use & process
- Identify:
  - Project team
  - Champions
  - Barriers
  - Best practices
  - Opportunities

### PLAN
- Initiative goals
- Project plan(s)
- Identifies & supports additional stakeholders
- Finance
- Bio-Med
- Other Depts

### DESIGN
- Develop objective criteria
- Support processes?
- Detail review of book of business
- Develop implementation plan
- Metrics

### IMPLEMENT
- Update item master
- Deliver training
- Provide support
- Evaluate & test processes
- Evaluate outcomes
- Modify as required

### SUSTAIN
- Reinforce outcomes
- Roll out to other facilities if applicable
- Set new targets

### PROJECT MANAGEMENT AND COMMUNICATION

VHA Inc. Confidential Information.
Value Analysis Success Factors

Critical Success Factors
- Effective Structure
- Representation and Commitment at all levels
- Accountability for results
- Standard Process
- Resources
- Centralized Data Management
- Clear Communication
- Formal documentation and tracking process

Best Practice
- Strategy and alignment around culture; assuring physician engagement
- Formal structure and process with Senior Executive leadership
- Successful outcomes and effectiveness: Measure cost reduction, quality, utilization, standardization

Technology Enabled
- Evidenced Based Comparatives
- Automation through IT
- Benchmarking Capability
- Measure Success

Pitfalls
- Lack of aligned incentives
- Physician and clinician accountability
- Decisions based on preference
Premier: Clinically Integrated Supply Chain

Continuous Improvement

Perspective
- Best Patient outcomes & experience
- Product performance requirements & practice protocols
- Service line optimization
- Sourcing, contracting, logistics decisions

Stakeholder Involvement
- Evidence-Based Medicine
- Comparative Effectiveness
- Reimbursement Implications
- Physician & Clinician Engagement
- Market Intelligence
- GPO Portfolio
- Contract Optimization

Processes & Metrics
- Clinical Performance
- Resource Utilization
- Harm Avoidance
- Comparative Effectiveness
- Resource Utilization
- Reimbursement Implications
- Physician & Clinician Engagement

Waste Reduction Opportunities

Value Analysis Process & Clinical Resource Teams
- Clinical Data
  - Charge Master/Item Master Linkage
- Spend Data

Source: Premier
Premier: ValueAdvisor
Automating Value Analysis

**ValueAdvisor™**
- Manages Value Analysis Process
- Facilitates Collaboration
- Promotes Informed Decision Making
- Tracks / Measures Results
- Promotes Accountability
- Drives Standardization

**REQUEST**
- New items
- Savings Opportunity

**ANALYZE**
- How will this affect patients?
- What savings are available?
- What is impact on contracts?
- How would we convert?
- Who else is using this item?
- What’s their experience?

**MONITOR**
- Did we achieve our goals?
- What was the actual impact

**DECIDE**
- What did the Value Analysis Committee decide?

Source: Premier
### 10 Projects found for 'My Projects'

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Department</th>
<th>Type</th>
<th>Sponsoring Facility</th>
<th>Requested</th>
<th>Committee</th>
<th>Latest Decision</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Valves</td>
<td>Cardiac Cath Lab</td>
<td>Product</td>
<td>Premier</td>
<td>03/01/2010</td>
<td>Angleton Project Review Committee</td>
<td>Need More Information</td>
<td>Under Review</td>
</tr>
<tr>
<td>Provide music in the contractor lab</td>
<td>Information Technology</td>
<td>Service</td>
<td>Premier, Inc.</td>
<td>12/4/2009</td>
<td>Premier, Contractor Request Review Committee - Charlotte, NC</td>
<td>Review Next Meeting</td>
<td>Under Review</td>
</tr>
<tr>
<td>Purchase Quick-Clot Emergency Dressing</td>
<td>ER</td>
<td>Product</td>
<td>Ligna Puertoquerena contra el Cancer</td>
<td>12/4/2009</td>
<td>Ligna Product Project Steering Committee</td>
<td>Review Next Meeting</td>
<td>Under Review</td>
</tr>
<tr>
<td>Request to purchase new Insulin pumps</td>
<td>ER</td>
<td>Product</td>
<td>Premier</td>
<td>12/1/2008</td>
<td>Angleton Project Review Committee</td>
<td>Approved For Use</td>
<td>Closed</td>
</tr>
<tr>
<td>New Biodegradable Stent</td>
<td>EP Lab</td>
<td>Product</td>
<td>Angleton Danbury Medical Center</td>
<td>12/1/2008</td>
<td>Angleton Project Review Committee</td>
<td>Approved For Use</td>
<td>Open</td>
</tr>
<tr>
<td>Annual Review of Value Advisor Project</td>
<td>Information Technology</td>
<td>Service</td>
<td>Premier, Inc.</td>
<td>12/01/2009</td>
<td>Value Advisor Business Review Committee</td>
<td>Project Created</td>
<td>Open</td>
</tr>
<tr>
<td>Hire a New Leaf Service</td>
<td>Housekeeping</td>
<td>Service</td>
<td>Universal Spend Access</td>
<td>12/6/2008</td>
<td>Operations Committee</td>
<td>One Time Use</td>
<td>Under Review</td>
</tr>
<tr>
<td>Purchase the Omni Cell System</td>
<td>Plant Operations/Facilities</td>
<td>Product Category</td>
<td>Universal Spend Access</td>
<td>12/6/2008</td>
<td>Supply Management Committee</td>
<td>Project Created</td>
<td>Open</td>
</tr>
</tbody>
</table>
MedAssets: A Holistic Approach

- Physician Preference Items
- Clinical Preference Items
- Commodities
- Aspen Healthcare Metrics
- Clinical Value Analysis
- Standardization

Source: MedAssets
MedAssets: Value Analysis Change Management

Proven, data driven, and evidence-based

- Extract data
- Analyze data
- Prepare analytics in rational format
- Present to stakeholders
- Discuss criteria for NOT implementing opportunity

- Decisions based upon evidence and data
- Executive leadership aware of criteria and decision processes
- Stakeholders action plan communicated
- Vendor impact review
- Staff impact review

- Develop and finalize implementation plan
- Implement opportunity
- Implement process changes
- Report progress to stakeholder committee and executive leadership

Source: MedAssets
Physician/surgeon approaches New Product

Elevate request for analysis and research
Team/Committee Review

Presentation of research to Committee

Approved

Tentative Yes

Determination made if a trial is needed

Yes

Decision forward to team/committee

No

Decision Decline

Inform Requester of Decision

Refer to Form Entitled, “technology Trial/Investigation Request”
*Note that we include two different style forms

Yes

Trial

Successful trial

No

Declined

Physician feedback obtained

Stock on shelf

Training Coordinated

Physician feedback obtained

Decision communicated to impacted physicians /item stocked on shelf

Source: MedAssets
MedAssets Pharmacy Analytics - Targeting Utilization

<table>
<thead>
<tr>
<th>Charge</th>
<th>Hospital Average Units</th>
<th>Hospital Average Cost</th>
<th>Physician Average Units</th>
<th>Physician Average Variable Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>VANCOMYCIN 1GM INJ</td>
<td>40.0</td>
<td>$588</td>
<td>40.0</td>
<td>$588</td>
</tr>
<tr>
<td>PIPERACILLIN-TAZOBACTAM 4.5GM</td>
<td>14.0</td>
<td>$526</td>
<td>14.0</td>
<td>$526</td>
</tr>
<tr>
<td>BUDESONIDE 0.5MG/2ML NEBU</td>
<td>40.0</td>
<td>$480</td>
<td>40.0</td>
<td>$480</td>
</tr>
<tr>
<td>DEXTROSE 5% 250ML</td>
<td>35.0</td>
<td>$280</td>
<td>35.0</td>
<td>$280</td>
</tr>
<tr>
<td>DEXTROSE 5% W 100ML ADDV</td>
<td>14.0</td>
<td>$67</td>
<td>14.0</td>
<td>$67</td>
</tr>
<tr>
<td>HYDROCORTISONE SOD SU 100MG/GM</td>
<td>11.0</td>
<td>$53</td>
<td>11.0</td>
<td>$53</td>
</tr>
<tr>
<td>ESOMEPZOLATE 40MG CAP</td>
<td>23.0</td>
<td>$37</td>
<td>23.0</td>
<td>$37</td>
</tr>
<tr>
<td>RFAMPH 300MG CAP</td>
<td>30.0</td>
<td>$24</td>
<td>30.0</td>
<td>$24</td>
</tr>
<tr>
<td>MORPHINE 1MG/30ML INJ</td>
<td>1.0</td>
<td>$15</td>
<td>1.0</td>
<td>$15</td>
</tr>
<tr>
<td>PROPOFOL 10MG/ML 20ML</td>
<td>4.0</td>
<td>$13</td>
<td>4.0</td>
<td>$13</td>
</tr>
<tr>
<td>HYDROPHILIC OINTMENT</td>
<td>1.0</td>
<td>$12</td>
<td>1.0</td>
<td>$12</td>
</tr>
<tr>
<td>SKIN EMOLLIENT 120GM CREA</td>
<td>2.0</td>
<td>$8</td>
<td>2.0</td>
<td>$8</td>
</tr>
<tr>
<td>ALBUTEROL 0.033% 3ML INH</td>
<td>26.0</td>
<td>$8</td>
<td>26.0</td>
<td>$8</td>
</tr>
<tr>
<td>GLOBETASOL PROPIONATE 0.05% 30</td>
<td>2.0</td>
<td>$5</td>
<td>2.0</td>
<td>$5</td>
</tr>
<tr>
<td>FENTANYL CITRATE 0.05MG/2ML</td>
<td>3.0</td>
<td>$5</td>
<td>3.0</td>
<td>$5</td>
</tr>
<tr>
<td>FUROSEMIDE 10MG/ML 4ML INJ</td>
<td>6.0</td>
<td>$5</td>
<td>6.0</td>
<td>$5</td>
</tr>
<tr>
<td>HYDROMORPHONE 2MG/1ML INJ</td>
<td>1.0</td>
<td>$5</td>
<td>1.0</td>
<td>$5</td>
</tr>
<tr>
<td>MIDAZOLAM 1MG/2ML INJ</td>
<td>3.0</td>
<td>$5</td>
<td>3.0</td>
<td>$5</td>
</tr>
<tr>
<td>AMINOMON LACTATE 12 % LOTN</td>
<td>1.0</td>
<td>$4</td>
<td>1.0</td>
<td>$4</td>
</tr>
</tbody>
</table>

Source: MedAssets
MedAssets: Linking the Item Master to the Charge Master

- Assuring all the processes and efforts are measured
- Ensuring defensibility, transparency and revenue integrity

Source: MedAssets
MedAssets: Supply Chain and Revenue Cycle Relationship

- **Problem**
  - Cost to Charge Transparency and Accuracy
  - PPI uncharged or pricing is wrong

- **Solution**
  - Linked Supply chain item file and Closed Receipts (purchase costs) to CDM using CrossWalk®

- **Benefit**
  - Client example: $300,000 net increase on strategic markups

Source: MedAssets
Successful Value Analysis

How do you know when you are doing it right?
MedAssets: Expediting Savings with Clinical Analytics

Physician, Case, Outcome and Reimbursement Measurement

A dedicated Aspen "coach" will routinely update each dashboard with higher impressions. The content management application will provide:

- Personalized messaging
- Key executive "take-aways" within each dashboard
- Guidance from an experienced supply chain leader
- Evidence of a complete analytic review by Aspen

Source: MedAssets Service Line Analytics
MedAssets: Categorization is Key to Advanced Analytics

Various Data Categories Decreases the Ambiguity

Source: MedAssets
## Premier: Specific Supply Utilization Analysis

### Low Molecular Weight Heparin Utilization and Outcome Comparison by Drug

<table>
<thead>
<tr>
<th>Premier Regional Medical Center</th>
<th>Facility Enoxaparin</th>
<th>Premier Overall Top Performer Enoxaparin</th>
<th>Facility Fondaparinux</th>
<th>Premier Overall Top Performer Fondaparinux</th>
<th>Facility Dalteparin</th>
<th>Premier Overall Top Performer Dalteparin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>2637</td>
<td>94,333</td>
<td>124</td>
<td>1903</td>
<td>0</td>
<td>5974</td>
</tr>
<tr>
<td>Total Variable Cost/Case</td>
<td>$4,187</td>
<td>$5,850</td>
<td>$8,073</td>
<td>$10,744</td>
<td>$0</td>
<td>$7,872</td>
</tr>
<tr>
<td>Pharmacy Average Variable Cost/Case</td>
<td>$864</td>
<td>$910</td>
<td>$841</td>
<td>$1,511</td>
<td>$0</td>
<td>$616</td>
</tr>
<tr>
<td>Lab Average Variable Cost/Case</td>
<td>$179</td>
<td>$257</td>
<td>$196</td>
<td>$284</td>
<td>$0</td>
<td>$273</td>
</tr>
<tr>
<td>Blood Bank Utilization Rate</td>
<td>20.5%</td>
<td>25.6%</td>
<td>49.9%</td>
<td>60.3%</td>
<td>0.0%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Blood Bank Average Variable Cost/Case</td>
<td>$147</td>
<td>$96</td>
<td>$248</td>
<td>$228</td>
<td>$0</td>
<td>$48</td>
</tr>
<tr>
<td>ALOS</td>
<td>5.7</td>
<td>5.9</td>
<td>5.9</td>
<td>6.8</td>
<td>0.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Bleeding Complications</td>
<td>91.0</td>
<td>8102.0</td>
<td>14.0</td>
<td>638.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Bleeding Complication Rate</td>
<td>3.5%</td>
<td>8.6%</td>
<td>11.3%</td>
<td>33.5%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>PE/DVT's</td>
<td>19</td>
<td>672</td>
<td>4</td>
<td>30</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PE/DVT Rate</td>
<td>0.7%</td>
<td>0.7%</td>
<td>3.2%</td>
<td>1.6%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mortality Rate</td>
<td>1.5%</td>
<td>2.2%</td>
<td>1.6%</td>
<td>2.7%</td>
<td>0.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>% of Total LMWH Cases</td>
<td>95.5%</td>
<td>92.0%</td>
<td>4.5%</td>
<td>1.9%</td>
<td>0.0%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Source: Premier
Assess perception of the maturity of the value analysis program across three major focus areas, and in aggregate

Show variation within and across departments and the organization, if it exists

Provide current state for future state planning purposes

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Capability of existing processes to support continued development of value analysis</td>
</tr>
<tr>
<td>Executive</td>
<td>Level of executive focus, sponsorship, and enforcement of value analysis</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Degree of stakeholder buy-in, ownership, and participation in value analysis</td>
</tr>
</tbody>
</table>
Organizational Current State Summary

Percentage rating is a relative measure of maturity with 100% being maximum

Organizational Mean = 75%

Range = 73% - 78%

Variance rating is composite of standard deviations
Premier: Value Analysis Assessment
Delivered with every ValueAdvisor implementation

Strategy and Alignment
- Strategy supports mission and vision
- Alignment of goals
- Executive and physician participation
- Key stakeholder engagement and accountability

Structure and Process
- Review team structure and effectiveness
- Assess for breaks and barriers in process:
  - Project planning and prioritization
  - Data collection
  - Decision-making
  - Implementation
  - Follow-up

Outcomes and Effectiveness
- Identification of goals; metrics
- Use of benchmark tools
- Timeliness of process
- Tracking / Documentation / Communication

Value Analysis Maturity

1. Little/None
2. Fundamental
3. Intermediate
4. Advanced
5. Best Practice

Source: Premier
Key Components to Successful VA Model

- Executive Engagement and Participation
- Physician Engagement and Participation
- Stakeholder Engagement and Participation
- Goal Alignment and Linkage to Strategy/Vision
- Structured process to secure data
- Project Management to define timelines
- Use of benchmarking tools and information
- Tool(s) to trend, track and document outcome
- Systematic process to communicate results to all levels of organization
- Access to staff with deep analytical and clinical skill sets
WEIGH the EVIDENCE,

Clinical Outcome

Financial Impact

Innovators

Technology Adoption Cycle

Laggards

- Evidence
- Safety
- Efficacy

Emerging Technology Review

Expense Management

- Contract Negotiation and Management
- Product Selection/Utilization
TIP the SCALE.

- Physician Satisfaction and Recruitment
- Marketing
- Clinical Preference
  - Evidence
  - Safety
  - Efficacy
- Emerging Technology Review
- Expense Management
  - Contract Negotiation and Management
  - Product Selection/Utilization
- Lack of Administrative Support
- Group Purchasing Commitment
- Perceived Complexity

Clinical Outcome vs. Financial Impact
OR….Create Balance

[Diagram showing clinical outcome and financial impact]

Emerging Technology Review

Evidence

Safety

Efficacy

Expense Management

Standardization

Contract Negotiation and Management

Product Selection/Utilization

Clinical Outcome vs. Financial Impact
Changing Culture

- Organizational Culture Change
- Individual Behavior Change
- Individual Attitude Change
- Education & Knowledge
Thank You

• Melanie Miller, RN, Past President, AHVAP
• Peg Tinker, Sr. Director, VHA Performance Services
• Gina Thomas MBA, RN, CMRP, FAHRRM Regional Vice President South Central MedAssets Inc.
• Dale Newman, RRT, MBA, Product Director, Premier, Inc.