



# Illinois Manufacturing Extension Center

**Real World Lessons Learned**

**Case Study**

**John Deere Health**

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**18 SEP 03**



# What? Deere in health care?”

- 1972--Deere & Company health care costs rising faster than any other cost component
- 1980-82--Community-based HMOs in Quad Cities and Waterloo
- 1985--John Deere Health Care subsidiary of Deere
- Increasing at twice the rate of wages
- Account for 5% of the total cost of the tractor
- More than the cost of steel



# John Deere Health

- **Manager of health benefit services**
  - Owns John Deere Health Plan, a health maintenance organization
- **Headquarters - Moline, Illinois**
  - 11 Local Offices in 4 States
- **Approximately 3,400 Employer Groups**
- **540,000 Members**
  - 71,000 Deere Members representing 13% of total membership



# Six Sigma Tools

- **Tools Used from Rath & Strong's Six Sigma Pocket Guide:**
  - **Affinity Diagram, Brainstorming, Business Case, Cause & Effect Diagrams, Data Collection Plan, Charter, Flow Diagrams, Planning Tools (various), Prioritization Matrix, Sampling, SIPOC, Stakeholder Analysis, Standardization**



# John Deere Health Tools

- **Project Selection and Management**
  - **AIM (Align Customer/Business/Processes, Initiate Projects, Manage Performance)**
  - **IMPACT (IMPACT=DMAIC)**
- **Four Step Financial Analysis**
  - **Prioritizing (D)**
  - **Go/No Go – before Solution(I)**
  - **Results – at Implementation (I)**
  - **Sustaining – 6-12 Mo. Post Implementation (C)**



# Appeals

- **An appeal is a request to change a previous decision made by the MCO.**
- **Medical Necessity is (1) the most appropriate available supply or level of service for the individual in question, considering potential benefits and harms to the individual, and (2) known to be effective in improving health outcomes.**
- **Requests for benefits specifically excluded from the benefits package are not appeals.**



# Appeals Process Improvement

- **Required compliance with new DOL cycle times**
  - ❖ JDH process was non-compliant with new DOL
  - ❖ Cycle time variation by state and product line
  - ❖ Many parts of appeal process handled at **Local Offices**
- **Industry standards changed from multi-level to a more simplified process**
  - ❖ JDH used a multi-level process
  - ❖ JDH combined medical necessity and contract benefit reviews causing confusion



# Vision & Goals of Team

- **Develop/Implement new process**
- **Separate Medical Necessity and Contract Benefit Review to simplify and expedite the appeal process**
- **Revise the process to meet or exceed US DOL requirements (Cycle Time - meet or exceed). Process was 100% defective against new standards.**
- **Reduce Costs by 25%**
- **Reduce other than Cycle Time Defects by 25%**



# Time Frame Requirements

	<u>Description</u>	<u>Expedited</u>	<u>Standard</u> <u>Level I</u>	<u>Level II</u>
Old	DOL/NCQA	72 Hours	30c Days	30w Days
New - Pre	DOL/NCQA	72 Hours	15c Days	15c Days
New - Post	DOL/NCQA	72 Hours	30c Days	30c Days

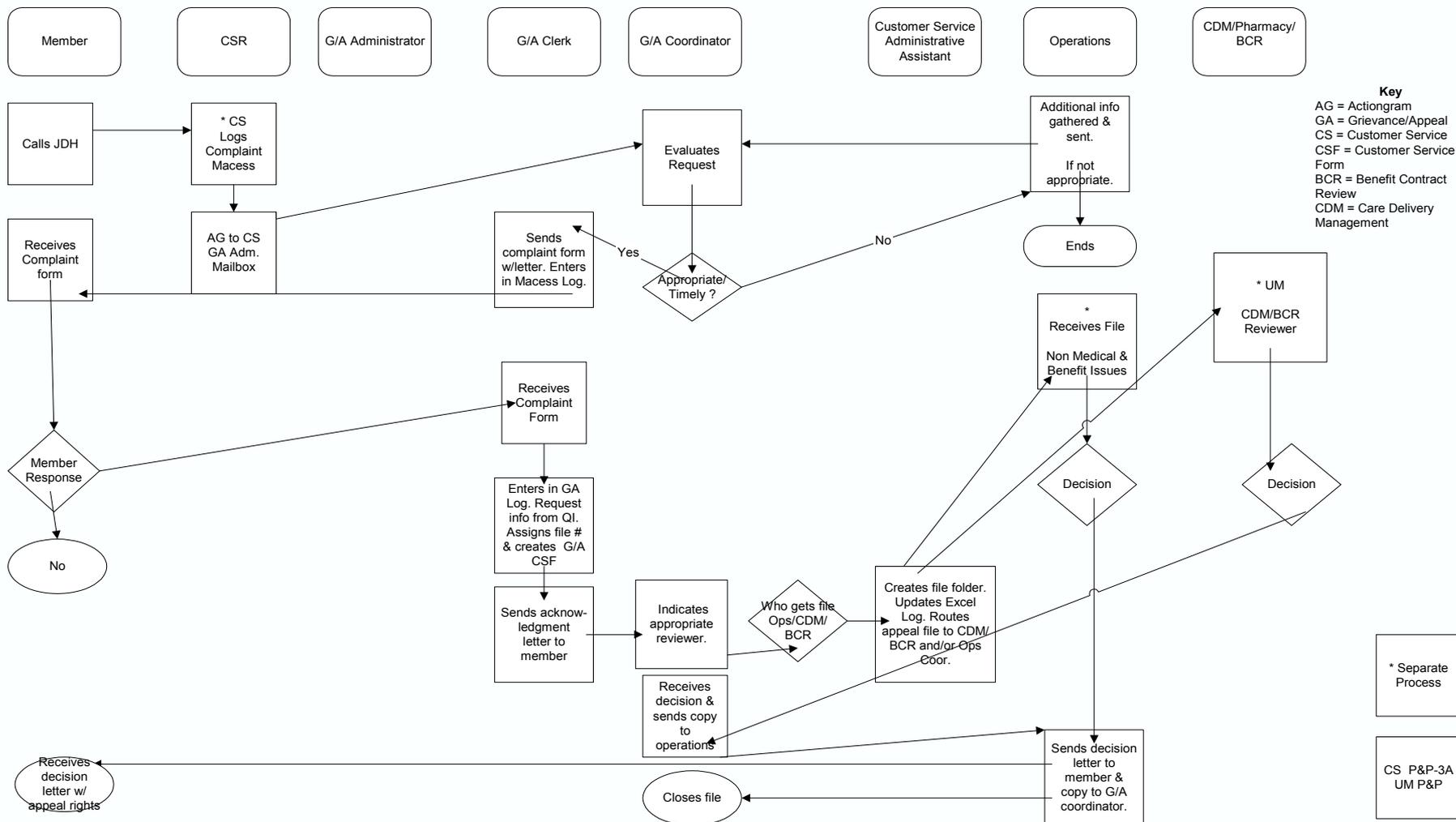
**State/plan variations (not shown) add increased complexity and opportunity for defects. Team developed Gap Analysis Matrix to sort through these variations, and incorporated the matrix into process.**



# Old Process

- **Multiple Layers**
- **First Level Appeal up to 30 Calendar Days**
- **Second Level Appeal up to 30 Working Days**
- **Extensions of timeframes allowed**
- **Multiple handoffs with multiple locations doing work**
- **Second Level Committee composed mostly by laypersons (BD)**
- **Second Level outside medical review (MN)**
- **Not compliant with new DOL regulations**

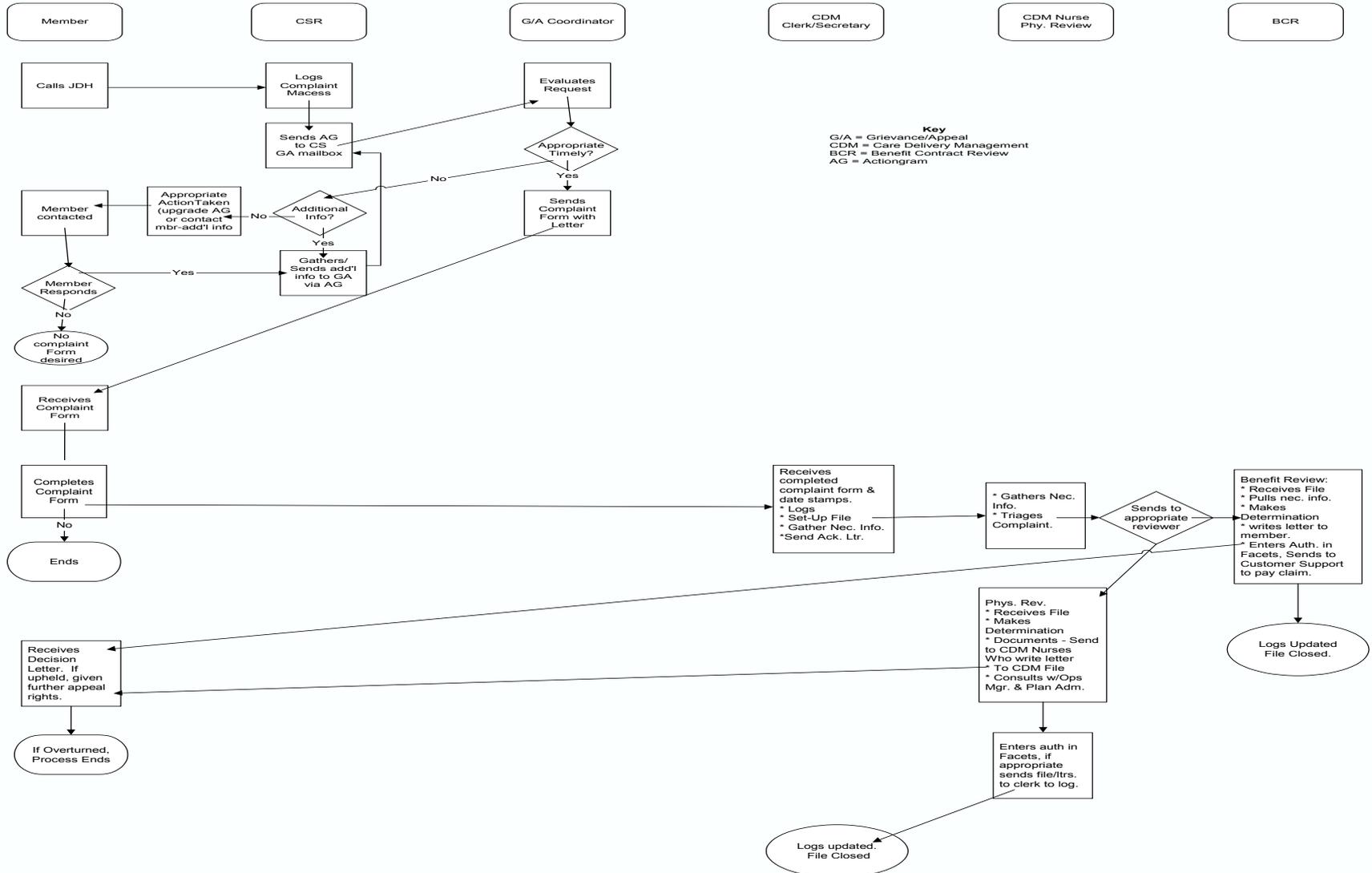
# Old Process I





# New Process

- **Compliant with US DOL/State/NCQA regulations/standards**
- **Fewer layers and handoffs, shorter timeframes, reduced cost**
- **Faster response, extension of timeframes not allowed**
- **Appeals divided into Medically Reviewable and Non-Medically Reviewable, Pre and Post Service**
- **Second Level Benefit Appeals decided by Reconsideration Committee composed of JDH employees**
- **Second Level Medically Reviewable Appeals to state external review or independent physician review**
- **67% of volume through new process**





# Process Performance Testing

Tested performance of new process

- **Selected most difficult cases from past six months**
- **Tested issues raised against new process**
  - Separation of issues
  - Documentation
  - Process component cycle times
  - Costs
- **Achieved validation that new process met cycle time demands**



# Approvals

- **Internal Legal**
- **JDH Executive Management**
- **Two Corporate Boards**
- **Deere & Company**
- **Large Employer Groups**
- **CMS (Federal – Medicare/Welfare agency)**
- **DHS (State Welfare Agencies)**
- **IA Division of Insurance**
- **IL Department of Insurance**
- **VA Dept of Health and Bureau of Insurance**
- **TN Department of Health/Commerce and Insurance**



# Communication to Stakeholders

- **Members**
- **Employers & Brokers**
- **Providers (Suppliers)**
- **Medical Directors**
- **The Organization (Enrollment, Customer and Provider Services, Marketing Staff, Medical, Operations Management, Product Delivery, Government Programs, Legal, Regulatory, Compliance, and Senior Leaders)**



# Metrics

## **Leading Measures**

- # Denied Pre-authorizations (Medical and Pharmacy)
- # Denied Referrals

## **Lagging Measures**

- Complaints/1000 Members
- Cycle Time
- Cost PMPM

## **Defect Measures**

- # Appeals Outside Required Time Limits
- Reversal Rate (Level I & II)
- # Cases (DOI complaints, Arbitration, Litigation)



# Results at Implementation

- **Team increased the scope from 67% of opportunities to 100%**
- **Implemented process that is 100% compliant**
- **Informs local operations of all activities on cases**
- **Component of Level I cycle time <ONE DAY – old process 5-7 days**



# Results Post-Implementation

- **Total volume of cases up  $\approx$  34% - no FTEs added**
- **Defects:**
  - 1 case outside Cycle time in 10 months 99.869% success – 99.865% = 4.5 Sigma (Remember: old process was ZERO Sigma on this measure)
  - 1 Arbitration/Legal case vs. 3 last year
- **Cost:**

<b>Prioritizing</b>	<b>Go/No Go</b>	<b>Results</b>	<b>Sustaining</b>
<b>\$1.00</b>	<b>\$0.46</b>	<b>\$0.43</b>	<b>TBD</b>

**Savings (After Tax) 5 year NPV = \$1.45**



# Key Lessons Learned

- **Follow project selection methodology process**
- **Maintain sponsorship/champion/team leader/members**
- **Leadership support is KEY**
- **Follow project management methodology**
- **Communicate**
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# Presentation Takeaways

- **Six Sigma Tools work in the transactional world**
- **Statistical analysis can be and is elusive**
- **Follow the steps of the methodology**
- **Communicate, communicate, communicate**