Toyota Integrated Medical Management
Presentation Overview

• Toyota Safety Overview

• Toyota Kentucky (TMMK) clinic Kaizen

• Toyota Texas (TMMTX) integrated medical
Employment: 38,340
Capacity: almost 2 million vehicles
Investment: $16.8 billion

Toyota clinics

San Antonio, TX
Huntsville, AL
Georgetown, KY
Erlanger, KY
Cambridge, Canada
Buffalo, WV
Princeton, IN
Vancouver, Canada
Freemont, CA
Long Beach, CA
Baja CA, Mexico
St. Louis, Troy, MO and Jackson, TN

Toyota Motor Engineering & Manufacturing North America, Inc.
# Toyota Safety House

## Team Member’s Individual Responsibility

### Injury & Illness Prevention
- Equipment Design
- Process Design
- Vehicle Structure Design
- T/M Education & Training
- Posture Confirmation
- Focus on Top 10 Risk Processes
- STOP 6 hazard identification
- Concern Registration Systems

### Early Symptom Intervention (ESI)
- Early Symptom Investigation
  - Investigation
  - Countermeasure Plan
    - Re-hab Consultants
  - Low-level Treatment
  - G/L Modified Duty
  - Follow-up

### Care Management
- State of the art clinics, evaluation centers, and diagnostic tools
- Care Managers
- Modified Duty
- Restricted T/M Utilization
- Repeat Injury Focus
- Workforce Review Meetings
- Complex Case Meetings
- Indefinite Restrictions
- Medical leave of absence
- Job Placement
- Work condition/work hardening
- Reintroduction
Toyota's Health/Wellness Vision:

**Old Vision**
- Occupational Health
  - *Safety/Medical Group*
- Personal Health
  - *Benefits Group*

**New Vision**
- Total Health/Wellness Care
  - *Health/Wellness Group*
Toyota Motor Manufacturing
Kentucky
Georgetown, KY
Toyota in Kentucky

Toyota Motor Manufacturing, Kentucky, Inc.

• Established 1986
• Production Start-up 1988
• Employment: Over 7,000 people
• Size: 7.5 Million sq. ft. under roof
  • 172 acres / equivalent to 156 football fields
Toyota Motor Manufacturing KY

• Toyota largest manufacturing facility outside of Japan

• Annual capacity 500,000 vehicles
Vehicles Built at TMMK

Solara

Convertible Solara

Camry

Avalon
Toyota Kentucky Clinics

- 2000 clinic-Occ health
- 601 clinic-Wellness clinic
- 800 clinic-Occ health
601 Clinic/Wellness

Kaizen Activity

• Wellness physicals
• Hearing test
• New hire physicals
Applying TPS to an Occupational Health Center:

Strategy Overview

• CHD Meridian onsite management participated in a 5 day training activity focused on Type III Standardized Work Assessment
• Participants were assigned a specific staff member to study
• Kaizen and counter-measures were implemented as a team
• Results were presented to Toyota & CHD Meridian management
Improving the Process: Kaizen Activity

- **Standardize**
  - Detailed process and script for each element of the required physical
  - Work Station
    - 5S (clean, sort, etc.)
    - Use Visual Controls
      - Label for supply location
      - Key Points for Work Process

- **Eliminate non-value added work**

- **Decrease Walk Time**
Standardization of Work & Eliminating Waste:

Activity Goals

• Learn how to make standardized work in off-line jobs
• Grasp current clinic situation
• Identify areas for standardization improvement
• Eliminate muda (waste) and free up resources to provide new services
• Target 450-minute reduction across all processes
The TPS Process

• Training on tools and methods
• Evaluate Initial Condition (Time Studies and Observation)
• Analyze Data
  – Identify Muda (Waste)
    • Wait time
    • Fluctuation
• Kaizen processes
• Develop and implement Standardized Work
Analyzing the Data

Before Yamazu

- Physical Assist.
- Physical #1
- Front Window 2nd shift
- Front Window 1st shift
- Physical #2 (1st shift)
- Physical #2 (2nd shift)
- Drug Tech.
- Administrative Assist.
- Supervisor

Legend:
- Fluctuation
- Wait
- Work
Kaizen Results

- Exceeded Target Reduction (450 minutes)
  - Overall reduction of 533 minutes of process time
- 41% increase in overall clinic capacity
- 45 minute average reduction of Mandatory Physical Exam process time
- 56 minute average reduction of Wellness Physical Exam process time
Kaizen Results: Reduction of Waste & Variance

After Yamaz

- Phy Assist
- Physical #1
- Front Window 2nd shift
- Front Window 1st shift
- Physical #2 (1st shift)
- Physical #2 (2nd shift)
- Drug Tech
- Administrative Assist
- Supervisor

Legend:
- Work
- Wait
- Fluctuation
Outcome

• There was no decrease in staffing. Staff was shifted so increased services could be provided.

• Some of the added services was Convenience Care Clinic

  Optometry Services
Convenience Care Clinic

- I.H.S. Clinics are offering treatment for acute personal health conditions.
- For example:
  - Colds, flu, sinus infections, pneumonia
  - Minor cuts and burns
  - Eye injuries
  - Lab work (will send to personal medical doctor)
  - Acute episodes of chronic diseases (high blood pressure, diabetics, heart conditions)
- TMMK added this service on 1/23/06.
- TMMK’s Clinic provides quality and convenient health care for team members.
- Additional service has no impact on other medical benefits.
Since Inception January 2006

**4315** Episodic Care Visits

**8630** Work Hours Saved
Toyota Manufacturing, Texas, Inc.

- Established 2004
- Production Start-up 2006
- Employment: Over 2,000 people
- Size: 1.5 million square feet
- Plant size 2,000 acres
- Annual production capacity 200,000
Toyota Manufacturing, Texas, Inc.

The Toyota Tundra

21 On-Site Suppliers
Toyota Family Medical Center: A Comprehensive Primary Care Facility

• **Built to Deliver**
  – Workplace Safety
  – Cost Savings
  – Quality Care
  – Employer of Choice Status

• **Services Offered**
  – Primary Care
  – Occupational health
  – Rehabilitation/return to work/physical therapy
  – Optical care
  – Diagnostic x-ray/ultrasound/laboratory services
  – Dental services
  – Pharmacy
  – High-performance specialty and hospital network
Toyota Production System

• Applying TPS / LEAN processing to a Health Center
  – Obtaining Efficiencies – Do we take the savings or do more?
  – Redeploying Resources – Moving beyond Occupational Health
  – Producing Savings – Health Care Costs & Productivity Savings

• The Toyota Family Health Center in San Antonio
  – Occupation Health
  – Comprehensive Primary Care
  – Full Service Pharmacy
  – High Performance Specialty Network & Hospital
Strategy

• Impact costs by improving quality
• Enhance quality through best practice guidelines and protocols
• Improve access by providing convenient, high quality facilities
• Gain appropriate access to health care data
• Achieve flexibility in benefit design
• Focus on wellness and prevention
• Data, systems and health care integration (occupational and non-occupational)
Integrated Medical Strategy

- Implement a comprehensive health care strategy that contains costs while providing high quality, accessible care by providing on-site primary care.

Care provided for:
- Team members
- On-site Supplier Employees
- Eligible Dependents

Healthier Team Members

Plan Design

Primary Care Clinic
- Family Practice
- Internal Medicine
- Pediatrics
- Dental
- Optometry
- Lab

Pharmacy
- Access to a Fitness Facility
- Physical Therapy
- Rehabilitation
- TPA Function
- Radiology

Occupational Medicine

Data

Direct Provider Contracting
Integrated Leave Management
Prevention and Disease Management
**Health Care Flow**

**Current Process**

- Pediatrics
- Primary Care
- Optometrist
- Dentist
- Lab tests, MRIs, X-Rays, etc.
- Hospitalization
- Specialists
- 3rd party claims administrator

**Integrated Model Process**

- On-site Primary Care
- In-network Specialists
- In-network hospitals
- 3rd party claims administrator

**Key Differences**:
- No utilization steerage
- Does not support consumerism
- Toyota is missing from process
- No control of price increases
- Current process leaves room for error
Direct Provider Contracting

Current System

- Price:
  - Toyota does not negotiate price
  - Toyota does not influence or even see price

- Quality:
  - Toyota’s influence on quality is limited

Direct Contracting

- Toyota manages price and quality in a manner consistent with Toyota Way and similar to our relationship with other suppliers
Data Integration

Medical, Dental, Vision & Rx
Worker’s Compensation
STD/LTD
Behavioral Health
Enrollment Information

Results:
- Coordination of Benefits
- Claims auditing
- Benefits simulation
- Predictive modeling
- IBNR/Reserve Analysis
- Vendor management tools
- Cost Driver Analysis
- I.D. areas for Disease Mgmt.
- Plan performance evaluation

Reduction in errors
On-site Pharmacy

**Question:** Why have an on-site pharmacy? How do they save money?

• *Only* One Restriction: “Closed Door”

• A Closed Door Pharmacy can only dispense prescriptions to those who are defined as beneficiaries of the client organization(s).
Wellness / Disease Management

Programs

- Wellness
- Gordian Get Healthy

- Weight Management
- Fitness
- Cholesterol management
- Acid Reflux management
- Migraine management
- Smoking cessation
- Stress management
- Bone strength management

- Disease Management
- Focused Health Solutions (for adults only)

- Back and neck pain
- Heart conditions
- High blood pressure
  - (for adults and children)
- Diabetes
- Asthma
- Clinical depression, anxiety or obsessive-compulsive disorder (with medication)
TMMTX Worker’s Compensation

- Developing provider network for worker’s compensation cases.
- Treatment available at on-site clinic and Family Health Clinic.
- On-site physical therapy services.
- On-site worker’s compensation adjusters.
Conclusion

We take what we learn from each start up or current operation and try to make the next one the best!!