

Discover What You're Missing – Applying Process Improvement Techniques to Claim Management

**Rene Hilgemann, MM, CSP, ARM, ALCM
Aon Global Risk Consultants
Minneapolis, MN**

**Joanne Tesch, CWCP
Snap-on Tools, Incorporated
Kenosha, WI**

Abstract

This paper will explain how the concepts of quality and project management principles can help claims management professionals realize sustainable claim cost reduction objectives for their workers' compensation insurance program.

Introduction

Leading edge risk management departments are shifting their claims related activities from transactions (e.g. number of closed claims) to projects impacting claim costs (e.g. increasing preferred provider organizations use, reducing lag time). The article, "What You Can Learn from Professional Project Managers," *Harvard Management Update*, 2001, supports the finding that all types of firms and departments are implementing project management concepts to improve their business. "Over the past decade non-project driven firms – especially those that see themselves as selling solutions rather than products to their customers – have gotten religion, too. As a result, project management has become increasingly important." This statement summarizes the need for claim management professionals to embrace these types of management techniques to remain competitive both internally and within the specific industry sectors in which they operate.

Applying the various methods used in other business disciplines such as quality and project management will help claim management professionals establish, measure, and track the tangible results of actions deployed. The approach links claim service delivery and claim reduction results to the business objective like reducing claim costs which aids in reducing the operating expenses of the parent company.

The benefit of using project management principles is understood within the claim management domain; however, little evidence exists demonstrating the application of the principles actually occurs. In an informal survey conducted in 2008 by the authors, the authors

wanted to know if risk managers used project management principles when establishing claim cost reduction goals. It was reported that this is not the case even though operational business units (e.g. manufacturing) were often required to draft process improvement plans at least annually. Administrative business groups like risk or claims management are often simply overlooked. First-rate claims professionals will look around their respective firms and mimic process improvement initiatives and apply the various tools to their business units.

What commonly happens within the field of claim management is a focus on a single claim and activities targeting the claim's closure. Rarely do claim professionals go beyond drafting department plans that include a set number of claim reviews, set number of claim files to audit, draft special handling instructions for carrier's or third party administrators (TPA) to follow when adjusting their claims, and establishing relationships with attorneys or occupational medical professionals. The plans are general in nature, rarely mention how the stated activity aligns with company or department goals, the financial impact, or apply quality or project management tools. Refer to Exhibit 1 to see an example of claim management alignment.

Quality Management Overview

What is quality? Simply, quality can be defined as conformance to requirements. It doesn't matter if the requirements are known or unknown. If service delivery does not fully satisfy the customer, it lacks quality in some regard according to the website www.isixsigma.com. The challenge for service providers is to define the attributes of quality the customers are looking for and expecting. Workers' compensation claims management quality requirements can be difficult to determine since there are several variables outside of the claim manager's control. For instance, variables around the injured employee include: medical history, injury severity, post injury physical capabilities, medical treatment outcome, work availability, labor agreements, and the like. All of the items listed may have conflicting quality related requirements depending upon the primary objective of the person involved – the claims manager or injured employee. For example, a labor agreement may indicate the injured employee must have a full medical release in order to return to work, yet at the same time there could be a variety of tasks available falling within the injured worker's medical restrictions. The employer is obligated by the labor agreement and must wait until there is a full medical recovery. This delay can contribute to WC claim costs and decreases production related efficiency.

Another approach commonly used in business today is the application of six-sigma concepts. Six-sigma can be thought of on three primary levels. First as a metric, 3.4 defects per million opportunities. Next, six-sigma can be thought of as a method to solve problems using a structured format. A commonly used format is called DMAIC. This is an acronym for Define, Measure, Analysis, Improve, and Control. Finally, six-sigma can be a philosophy applied to reduce variance in a business by using customer driven data to make decisions. Once identified, solutions are implemented to positively influence the process.

According to the Six-Sigma Academy on the website isixsigma.com, the average return on a formal six-sigma project is \$230,000; and four to six projects can be completed each year by staff trained in the six-sigma methods. During the first five years of General Electric's six-sigma initiative (begun in 1995) it is estimated that GE had \$10 billion savings. Exhibit 1 contains an illustrations describing how claims and risk managers can align their various tactics to their organizations overall goal.

Project Management Principles

In the book *Microsoft Project 2000*, project management can be described as the process of defining, organizing, tracking, and communicating information about a project in order to meet a specific goal. Projects have a life cycle and are predictable for success or failure. Experts in the field of project management offer the following characteristics of successful projects:

- Clear business case for undertaking the project
- Defined issue or problem to solve
- Project scope and limitations
- Assigned accountability to resolve the situation identified
- Measurable outcomes
- Results reporting scheme - financial benefit(s), operational benefit(s), duration, budget, human capital, etc.

Research suggests businesses that “sell solutions” versus making a product are gaining success (i.e. customer retention, increased profit margin, satisfied employees, etc.) when applying the concepts of project management to their business model. The various vendor literature offers proprietary approaches, yet the essence of project management can be defined as: the use and integration of planning, scheduling, and applying control tools (i.e. Gantt chart, Performance Evaluation and Review Technique, and earned value charts) to a problem or issue at hand.

A Gantt chart is a simple tool depicting tasks in relationship to target completion dates and task sequence. Having a picture of related tasks helps project team members prioritize their obligations. This is especially true if project tasks may need to be expended or contracted. The decision to expand or contract a project can be the result of learning new information, project team member changes, deadline compression, etc. Major set backs can occur if the unplanned events are not actively managed throughout the project life cycle. The use of a Gantt chart helps to manage the overall timeline of the project. Refer to Exhibit 2 which contains a sample Gantt chart.

To keep the project moving forward action item logs can be used. In the very simplest form, an action item log has three elements:

- Something (action)
- Is done by someone (responsible person)
- By a specified date (target to keep project moving)

Exhibit 3 has a sample action item log which can be used to assign owners to tasks listed on the Gantt chart. For less complex problem (i.e. less than 20 activities, small group of responsible parties, short lead time, etc.) the action item log may be substituted for a Gantt chart.

Besides using Gantt charts or action items to manage projects, metrics can be used to judge project success. In the article, “Measuring Project Health” from the Project Perfect White Paper Collection, six metrics are suggested. They include:

- Time: Comparison against stated project schedule
- Cost: Comparison against stated project budget
- Resource: Comparison of human capital against stated project demand
- Scope: Presence of scope creep
- Quality: Formal project review and corrective action planning
- Actions: Tracking corrective action completion

Shawn Adams writes in the article, “Financial Management Concepts, Making the Bottom-line Case for Safety” *Professional Safety*, August 2002, there are three widely accepted capital budgeting tools used by the risk management community to help determine project viability. Adams further recommends readers use these tools to justify projects and improvements.

The three tools recommended by Adams are:

- Payback Method: Determines time frame required to have initial cash inflow (savings) equal initial investment. The decision rule to follow is that the project should be accepted if the payback period is less than or equal to a specified maximum period.
- Internal Rate of Return (IRR): Expected cash inflows are made equal to the original investment using present values. This is similar to net present value (NPV) except the discount rate is unknown. The decision criterion for this metric is to accept the project with the greater IRR when compared to the firm’s cost of capital.
- Net Present Value (NPV) Method: Original cash outlays are subtracted from the present value of the expected annual cash flows. This is similar to IRR except that the discount rate is specified. The decision criterion for this metric is to accept the project if the NPV is greater than or equal to zero, and reject projects when NPV is less than zero.

Not all claim reduction initiatives will need financial analysis to justify their undertaking. However knowing how to use these tools will assist the claims professional when competing for finite company resources.

Putting It Together

Historically, claim management success has been measured by reducing the cost of the claim. Claim costs can be thought of as a severity metric. Repeatedly activities undertaken by claim professionals have focused tasks on reducing the cost of an individual claim or overall claim cost reduction. Using the overall goal of overall claim cost reduction the next section will highlight

the results obtained from a claim cost reduction initiative where formalized project and quality management principles were applied.

Here are the results when the DMAIC model is applied.

- **Define:** Achieve a 50% reduction in workers' compensation claims cost by 2009 when compared to 1999 values
- **Measure:** The data collection plan included gathering of historical information by site on the following points 1.) Claim cost by injury type, 2.) claim frequency by injury type, 3.) Number of litigated cases, 4.) TPA contractual cost structure and terms, 5.) Lag time, 6.) Medical cost breakouts of PPO use, services rendered and pharmacy prescription costs.
- **Analysis:** Findings from the data-gathering tasks were plotted using Pareto charts, ranking tools, and site interviews. This helped to validate what portion of the cost component to target. It was determined that projects related to the medical cost component and injury causation would have the greatest impact.
- **Improve:** Specific projects were deployed to reduce overall claim costs related to TPA cost structure, increase preferred provider use, and specific injury cause claim investigation process. During this stage Gantt charts were used to ensure the improvement plans were on track once started. Refer to Exhibit 2 for a Gantt chart. Exhibit 4 contains an incident investigation flow chart that was used to compare the current process to a more ideal approach.
- **Control:** Each week a "game sheet" was prepared and distributed to stakeholders. The "game sheet" listed all of the project metrics and up to date results. Exhibit 5 has a sample "game sheet" used to report on key metrics of the various tasks undertaken.

The data trends from the "game sheet" are trailing indicators. Trailing indicators were used because the claims had already occurred. Leading indicators are reporting on the "game sheet" when systematic or process related activities took place. Sustainable improvement is activity based – if the activities are completed, the results will be achieved. Here is a listing of the metrics reported on the "game sheet" to reduce claim costs:

- PPO penetration; also known as PPO utilization
- Number of litigated cases with attorney involvement by site
- Average number of days to claim closure and related cost
- Ratio of lost time claims compared to aggregate claim count
- Quality of claim adjustor files
- Number of Temporary Alternative Duty (TAD) cases by site

- Saving achieved from increased PPO utilization, bill review, and nurse case management techniques

Claim management professionals applying project and quality management principles will begin to experience a high level of success as more system-related elements are addressed. The key is to continually focus on the claim process, not just the individual claim files. Identifying the system-related defects having the greatest influence on the claim process was the key to the results achieved in the example presented. Specifically, the company has realized the following results as of December 31, 2008, since 1999:

- 63% reduction in TPA costs
- 64% reduction in total number of workers' compensation claims
- 82% reduction in lost time cases
- 67% reduction of litigated cases
- 56% reduction in the average closure days for lost time claims

Conclusion

When reviewing the concepts presented, it is clear the application of project and quality management principles benefit the claims professional by shifting-claim related projects to meaningful business initiatives while at the same time provide potential revenue savings for the claim professional's employer. In order to remain viable workers' compensation claims, managers must embrace quality and project management concepts. The literature reviewed for this paper indicates firms deploying quality management concepts on a formal level have outperformed their peers when comparing financial measures like return on assets, sales, and cost reduction figures. Additionally, the website www.isixsigma.com reports that Malcolm Baldrige quality award winners realize a 44% higher stock return, 48% higher growth in operating income, and a 37% higher growth in sales when compared to control groups. Many of the concepts practiced in the fields of quality and project management can be applied without formal corporate approval.

Localized approaches may not yield the stock returns reported by quality award recipients, however process improvements, no matter how small, can positively affect departmental results. During distressed times, business leaders will begin to decide what services, departments or employees will remain after reorganization and downsizing. The consistent practice of using project and quality management principles could tip the scales in favor of those claims professionals' using the tools of their operational counterparts that demonstrate results like reducing workers' compensation claim costs.

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Exhibit 1. Sustainable Claim Management Process Alignment

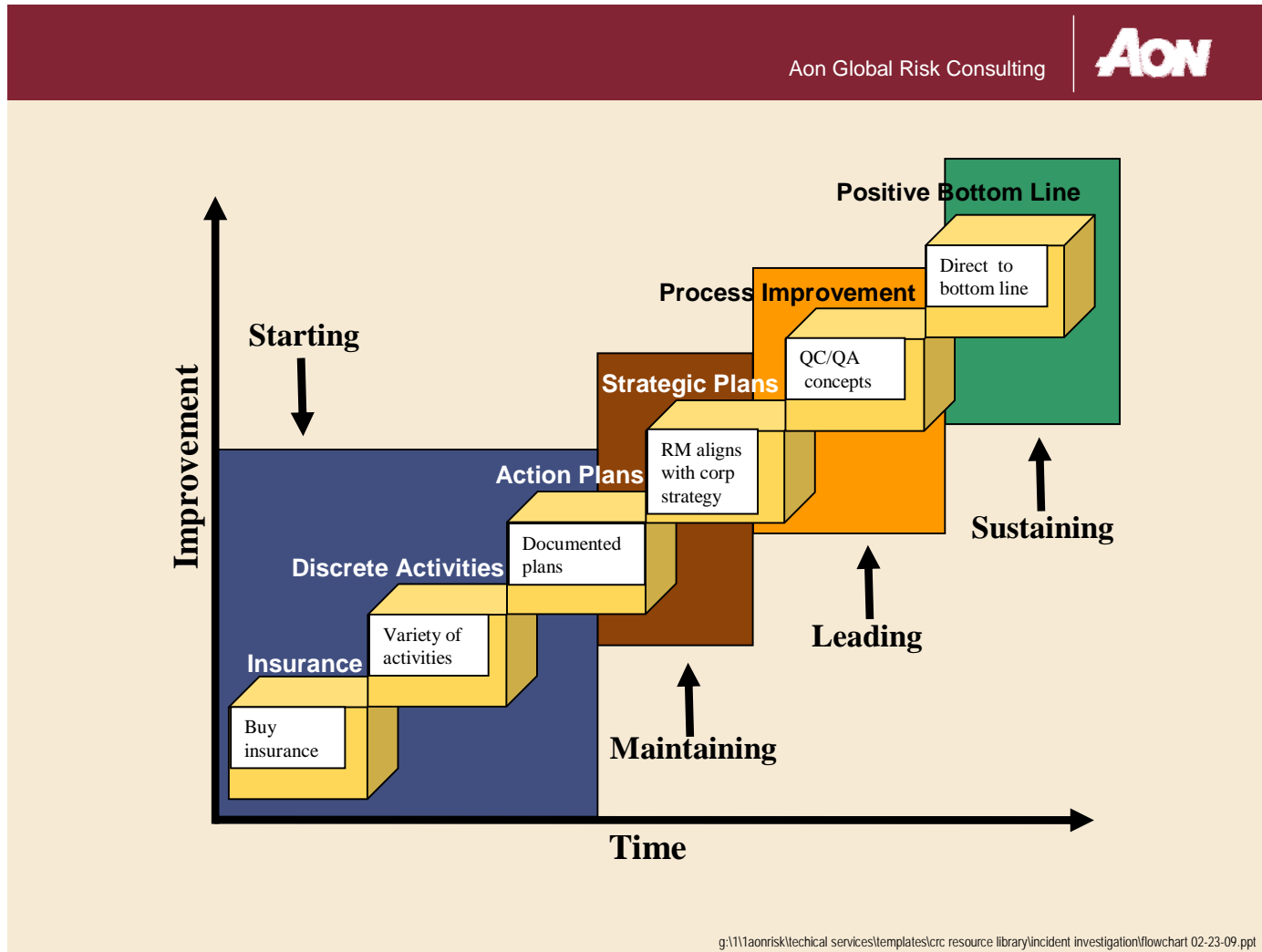


Exhibit 2. Sample Gantt Chart with Company and Department Goals

Corporate Mission	Snap-on's corporate mission is to be the most valued productivity solutions in the world. A core belief is that product and workplace safety is non-negotiable. Core values to reinforce mission are: 1) demonstrate integrity, 2) tell the truth, 3) respect the individual, 4) promote teamwork, and 5) listen.
Risk Management Department Mission	<p>Our strategy is to develop effective risk programs that support Snap-on and its' strategic partners in their business objectives, and provide profitable growth by pursuing opportunities from a customer driven perspective.</p> <p>We will accomplish this by:</p> <ul style="list-style-type: none"> • Providing a proven, sustainable framework to proactively understand and manage complex business risk by developing a risk discussion mentality among business unit management teams. • Fostering collaboration internally and externally with our strategic partners to drive innovative growth and profitability. • Strengthening and diversifying the communication links with our customers to provide products and services that exceed customer's expectations. • Exploring and implementing best practices and benchmarking against industry leaders. • Supporting and encouraging accountability by implementing standard reports/metrics within the Strategy Deployment and RCI framework.
Goals	<ul style="list-style-type: none"> ▪ Promote prevention and control of occupational CTD injuries and complaints ▪ Reduce total incurred WC claim costs by 50% ▪ Other agreed upon operational related metrics (e.g. claim frequency rate, number of claims per labor hour worked, etc.)
Deliverables	<ol style="list-style-type: none"> 1. Devise new approach for claim investigation and injury management targeting leading causes of loss (root cause analysis) 2. Implement data analysis platform to use for tracking, trending and results reporting of various goals (RMIS) 3. Assist with the implementation of various suggestions from WC Medical Const Containment project

Exhibit 4. Incident Investigation Flow Chart Used to Assist with Root Cause Analysis

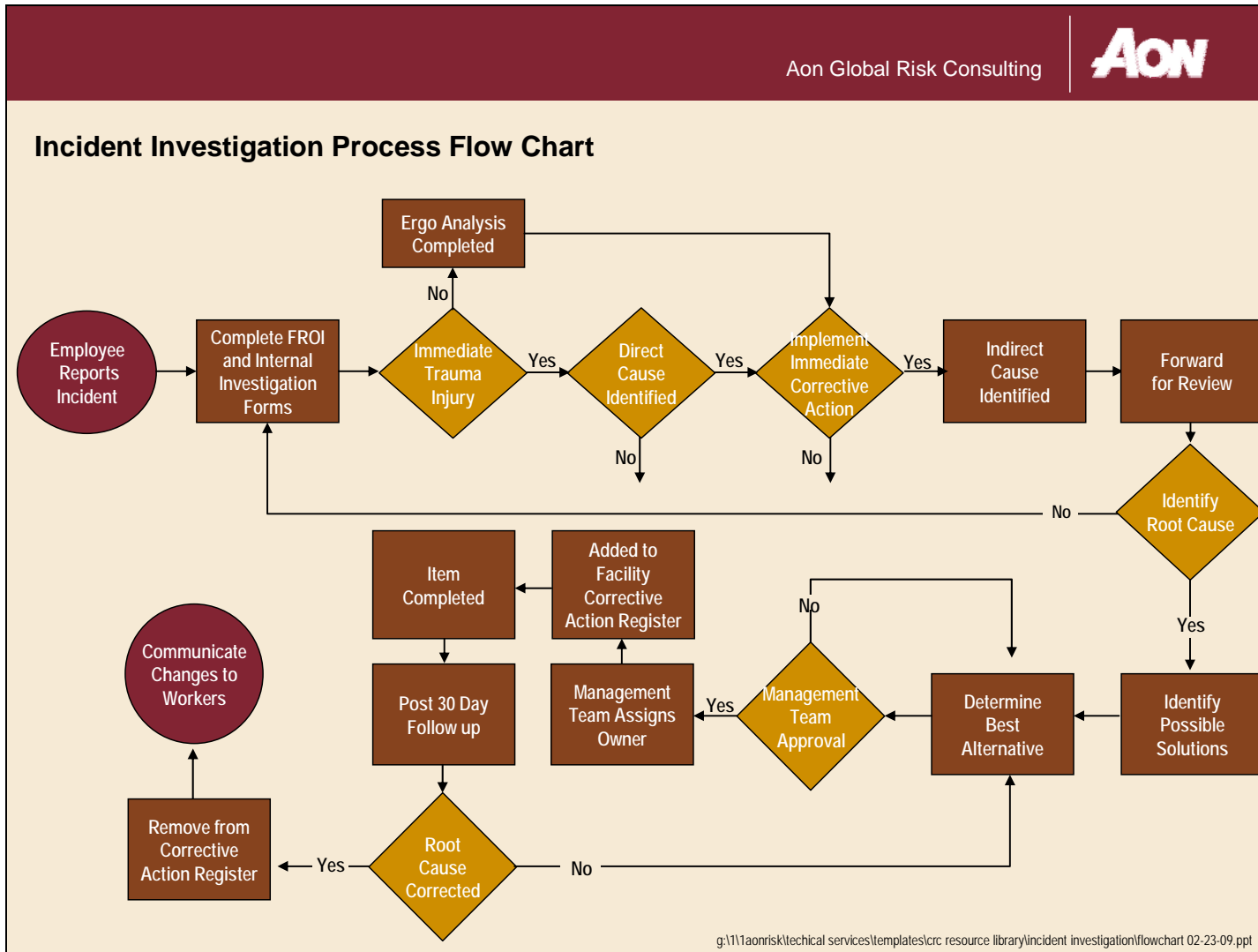


Exhibit 5. Sample Game Sheet

WEEKLY WORKERS' COMPENSATION GAMEPLAN – Week 19

Workers' Compensation Costs = Losses + Insurance Costs + Claim Administration Costs

Target # 1: Non-Adversarial Relationships

- Target Definition: To support and sustain this target an on-going communication and management program containing an informational DVD regarding WC benefits, employee and employer rights and responsibilities was provided before and after an injury was reported. This was implemented by the U.S. manufacturing and distribution locations:
- Results are measured by two metrics:
Metric A: Attorney Involvement (updated monthly)
Metric B: Average Days to Case Closures by Location and Claim Type (updated monthly)

Target 1 Metric A Results

- 2006 manufacturing locations with highest attorney involvement are: JC – 6 cases, CLPC – 5 cases, Algona – 5 cases
- 2007 manufacturing location with highest attorney involvement are: Milwaukee – 4 cases, Elizabethton – 3 cases,
- 2006 C&I locations with highest attorney involvement are: CLI – 5 cases, US Field Equipment – 4 cases
- 2007 C&I locations with highest attorney involvement are: CLI – 2 cases
- 2006 D&I locations with highest attorney involvement are: San Jose - 4 cases, Mitchell 3 cases
- 2007 D&I location with highest attorney involvement is Lincolnshire DSD -1 case

Number of Workers Comp. Claims w/Attorney Involvement by Business Unit							
Year	2002	2003	2004	2005	2006	2007	2008
Companywide	49	65	52	50	48	14	0
Manufacturing	21	30	22	28	28	12	0
C & I	16	13	11	10	12	1	0
D & I	1	0	2	7	7	1	0
Closed Locations	11	22	17	5	1	0	0

Target 1 Metric B: Results

Ratio of Closure Days by Business Unit (Lost Time / Medical Only)							
Year	2002	2003	2004	2005	2006	2007	2008
Companywide	458/141	478/109	508/80	572/73	413/72	324/92	328/127
Manufacturing	472/133	525/99	471/71	583/64	480/67	306/87	334/104
C & I	748/169	452/117	604/117	660/95	289/86	533/83	204/115
D & I	651/117	333/104	425/66	413/40	324/74	255/216	0/332
Closed Locations	306/146	449/120	266/65	1362/118	308/68	32/119	0/0

Note: Safety recognition programs implemented with support and assistance from Risk management department

Target #2: Identify Cause of Claims and Strategize for Closure with Facility

- Target Definition: To support and sustain this target a Temporary Alternative Duty (TAD) program was implemented or refined for each location.

- Results are measured by one metric:
Target 2 Metric A: Claim Cost by Claim Closure Date (updated monthly)

Target 2 Metric A Results

- 2007 16 Lost Time (LT) cases; 4 cases on TAD (associates have medical restrictions and working TAD assignment)

Claim Cost by Claim Closure Date Range

	< 1 Mos.	2 - 3 Mos.	4 - 6 Mos.	7 - 12 Mos.	13 - 24 Mos.	> 2 Years
	Avg Incurred	Avg Incurred	Avg Incurred	Avg Incurred	Avg Incurred	Avg Incurred
Companywide	\$389	\$648	\$2,250	\$9,814	\$22,562	\$74,293
Manufacturing	\$483	\$694	\$2,502	\$10,903	\$28,270	\$72,898
C&I	\$293	\$563	\$2,286	\$10,692	\$20,152	\$89,085
D&I	\$139	\$732	\$1,807	\$3,904	\$4,456	\$64,147
Inactive	\$325	\$583	\$1,880	\$8,262	\$17,554	\$61,982

Target #3: Claim Management Best Practices

- Target Definition: To support and sustain this target claim file audits will be completed
- Results will be measured by claim file closure (updated monthly)

Target 3 Metric A Results:

- 2007 Year to Date closed 251 WC claims
 - 133 indemnity claims- total, 31 indemnity claims closed which occurred in 2007
 - 39 indemnity claims which occurred in 2006 were also closed
- Performed claim review audits with U.S. locations (all to be completed by 12/31/08)
- Benchmarking programs reviewed:
Best Practices Benchmarking – LMSS

Explore use of MyDials for web data availability (preliminary meeting held on 10-22-07, quote to follow)

Target #4: Ensure Effective Communication for Optimum Medical Result

- Target Definition: In order to ensure the best results for both the injured associate and the company, medical costs will be reduced by use of the following methods:
 - Utilization review,
 - Onsite and/or telephonic nurse case management of the medical treatment regimen, and
 - Preferred Provider Organizations (PPO) bill re-pricing and state mandated re-pricing of medical provider charges.

Target 4 Metric A Results (companywide):

- 2007 gross percent of savings 44%
 - 2007 medical cost \$2,603,242 – gross savings \$1,144,024
- 2006 gross percent of savings 39%
 - 2006 medical cost \$2,407,848 – gross savings \$935,513
- 2005 gross percent of savings 32%
 - 2005 medical cost \$1,911,097 – gross savings \$610,496
- Joined MSC for reduced cost prescription program – anticipated savings of \$12,000

Future Activities Contemplated: Complete cost benefit analysis for telephonic case management

Target #5: Support Temporary Alternate Duty (TAD)

- Target Definitions: In order to ensure the lowest possible wage loss implications for the injured associate and the company, indemnity costs will be reduced by using Job Safety Analyses (JSAs) to modify existing jobs and TAD positions.
- Results will be measured by the ratio of LT claims and associates on TAD (updated monthly)

Target 5 Metric A Results

Number of Associates Losing Time / Number Associates on TAD

	All Years	All Years	All Years	All Years	All Years	Injury Date > 1/2006	Injury Date > 1/2007	Injury Date > 1/2008
Week #	15	16	17	18	19	19	19	19
Company wide	16/7	16/7	17/7	17/1	16/1	6/0	4/2	2/0
Manufacturing	7/5	7/5	8/4	9/1	9/1	5/0	2/1	1/0
C & I	7/2	7/2	7/2	5/1	5/1	1/0	2/1	1/0
D & I	1/0	1/0	1/0	1/0	1/0	0/0	0/0	0/0
Closed Locations and Corporate	1/0	1/0	1/0	1/0	1/0	0/0	0/0	0/0

Miscellaneous Targets and Metrics

1. Number of claims and total incurred by rolling 12 months and by Business Unit
2. Cost per Associate by rolling 12 months and by Business Unit
3. CPH (cost per hours) and CFR (claim frequency rate) by rolling year by location
4. Loss costs percentage Indemnity benefits (wage loss benefit either temporary or permanent) vs. Medical benefits (updated quarterly)

Loss Cost Ratio

Week 19	Indemnity Costs	Medical Costs
2004	51%	49%
2005	57%	43%
2006	44%	56%
2007	28%	72%
2008	26%	74%

5. Accounting – Business Unit Cost Allocation for Incurred WCI losses
 - Charge actual incurred to the location for 2007
 - General Approach: Beginning with losses incurred in 2007 locations will be charged for actual losses incurred each month rather than a budgeted allocation
 - Corporate will absorb the fixed insurance cost, TPA (transaction processing) costs, IBNR adjustments, and adjustments to reserves established in prior years for losses incurred in prior years as these factors are not directly controlled by the locations
 - What to Budget? 2-year TTM through 9-30-07 loss amount by location for them to budget for 2008. Remaining estimated expense (insurance, TPA) will be budgeted (& expensed on a monthly basis) at Corporate.
 - 2006 Loss Allocation total = \$5.76M 2007 WC Loss Allocation = \$4.4M
 - How to charge actual losses? A report will be generated each month summarizing incurred losses by location to be charged to expense.

- How to true-up the reserve? Will continue to adjust the total reserve balance quarterly based on the actuarial valuations. Any necessary adjustments will be absorbed at Corporate. This is the same as our current process.
6. Insurance Costs (WC Costs = Losses + Insurance Costs + Claim Administration Costs)
- Approved Self-Insured in the following states – IA, IL, WI
 - Large Deductible Insurance Plan
 - All Other States – current retention is \$500K - savings of \$33,521
 - Higher Self Insured Retention for Excess WC Policy - \$750K –savings of \$4,479 or 5%
 - Renewal process for 2007 completed: AIG is carrier, cost stayed flat compared to 2006
 - **Captive Utilization:** Deductible Reimbursement Program accelerates tax deduction for open reserves
7. Claims Administration Costs (WC Costs = Losses + Insurance Costs + Claim Administration Costs)
- 3rd Party Administrator(TPA) Request for Proposal (RFP) completed in 2005 (accepted lowest bid)
 - 2007 4 claims vs. 2008 11 claims

Third Party Administrator Costs

	4/30/2007	4/30/2008
Cost	\$31,271	\$22,319