Performing the Return on Investment Calculations Part 3 of 3

Liz Scott and Jeff Curtis

Abstract

In Part Two of this series on cost benefit analysis we reviewed the necessity of establishing goals based on the data and lining them up with the company's strategic plan and direction. In this part of the series we shall define how to perform the return on investment calculation. The presentation of a solid business case increases the likelihood of obtaining the leadership commitment and resources needed to successfully implement disability management initiatives.

Return on investment calculations is contingent on the accuracy of the calculation of the baseline referred to in the previous parts of this article. When performed diligently the return on investment will demonstrate not only the viability of the program but also the contribution that disability management programs can make to the bottom line of the organization.

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The baseline data that was collected included Workplace Safety and Insurance Board cost, including base premiums and experience rating adjustments, Short Term Disability costs, and Long Term Disability cost at a bear minimum. These are the hard quantifiable costs associated with disability. Additional data points may include replacement cost, retraining cost, productivity cost, and management / administration cost. There are also qualitative measures for consideration that can add to the return on investment case.

An important part of any disability management program is the measurement of employee satisfaction with the program.

Workplace Safety and Insurance Board

Most provinces have experience rating programs in place that disability management practitioners should be familiar with and use as a component of the cost benefit analysis. Workplace Safety and Insurance Board cost can be gained from the New Experimental Experience Rating (NEER) statement for Schedule One (1) employers and from the annual summary of costs for Schedule Two (2) employers.

Schedule 1

The WSIB Schedule One system is set up on a collective liability basis, where employers pay a premium based on every $100 of payroll. The premium rates are set in accordance with the type of industry that is in operation and the five year experience of that rate group.

The WSIB then has in place an experience rating system to recognize that not all employers in a rate group have the same experience. In simple terms experience rating rewards employers that perform better than the other participants in the Rate Group and penalizes / surcharges employers that perform worse than the other participants in the rate group. Surcharge penalties are driven by several factors but the most important variable is the duration / severity of the claims.

The NEER program takes into consideration the claims over a 3-year period with a one-year lag. So in 2004 the years 2004, 2003, 2002 & 2001 will be on the statement and the financial adjustments will occur for the 2003, 2002 & 2001 years. The WSIB issues reports on a quarterly basis with the September statement indicating the refund or surcharge adjustment for the employer. The front page of the NEER report will provide the summary standing. The following summarizes an example of the experience rating formula:

Rate Group xxx						
Year	Premium	Cost Factor	Expected Costs	NEER Costs	Rating Factor	Surcharge / Refund
2003	550,000	43.13	237,215.00	200,300.00	64.48	23,802.80
2002	500,000	40.34	201,700.00	245,238.17	62.77	-27,328.91
2001	475,000	37.31	177,222.50	531,667.50	61.61	-21,873.60

The formula: NEER Cost – Expected Cost * Rating Factor = Refund or Surcharge

Premium
This is the amount that the company has contributed to the WSIB based on the rate group premium rate.

Cost Factor
The WSIB holds a fairly significant level of funds for administration of the WSIB system. They use these funds to pay for administration, unfunded liability, second injury enhancement fund, safety associations, insurance limits, etc.

Expected Cost
These are the remaining funds that the WSIB indicates the employer can spend without incurring a surcharge. Cost below this amount will result in a refund. Cost above this amount will result in a surcharge.

NEER Cost
These are imported from the claim-by-claim detail statement. This is a summary of the cost, reserves and administration spent by the employer on WSIB claims in any given year.

Performance Index (PI)
The performance index provides a quick glance of how an employer is performing (1.0 being Expected cost = NEER cost). Refunds will result if the PI is under 1.0 and surcharges will result if the PI is over 1.0.

Rating Factor
The rating factor is an accountability factor that is set by the WSIB in recognition that not all employers are the same size and therefore may not have the financial or the human resources to control the WSIB costs. If you are a large employer your accountability level for your own cost "rating factor" will be higher. If you are a smaller employer your "rating factor" will be smaller. The WSIB recently changed this formula and the smallest rating factor is now 40% and the highest 100%.

In this example the 2003 year shows significant improvement that can be used in the cost benefit / return on investment calculation.

The WSIB statement has several pages that follow the NEER summary to break the cost out claim by claim. The information should be reviewed closely for opportunities to decrease cost on the claim-by-claim detail breakdown (WSIB, 2004).

Schedule 2
The WSIB system in Ontario has a separate Schedule reserved for "government/public" employers. An example of an employer in this schedule would be a Regional Municipality, Railway or a School Board.

In Schedule 2 employers pay directly for claim costs plus administration fees. The impact of lower claims will have an immediate and direct impact at this type of employer. A year over year comparison of costs is the best method to quantify cost savings at Schedule 2 employers.

Short Term Disability
There are many possible types of Short Term Disability programs. They encompass no compensation program for lost time, employer paid sick leave for specified periods of time contingent on seniority, full paid sick leave for specified periods of time, or insured short term disability programs through an insurer.

No Program
The return on investment at an employer that has no Short Term Disability program will rely on replacement costs and other less quantifiable measures. This will be addressed later in the article.

Sick Leave Programs
The baseline would have determined the cost of the sick leave absences. This should be compared to current cost and a saving projected based on the decrease in cost of the amounts paid out on sick leave. It is essential to record the sources of this data point. The recording of the hours related to sick time may reside in payroll or human resources but the data point should be documented by the disability management practitioner to ensure the source of the measure can be consistently replicated year after year.

Short Term Disability Programs
If the program is an insured program the best measure is not the premium, as the premiums are generally set by the insurer based on the last five years of claim history. The best method of projecting return on investment in short term disability programs is to look at the actual claims cost plus the administration fees and compared year over year to determine the savings. These detailed records are available from the insurer when requested.

Long Term Disability
Long Term Disability programs can have a wide variety of funding mechanisms. The premium is not the best measure of success in this benefit. Much like Short Term Disability the best method of evaluating success is to track the actual claims cost, plus administration, plus reserves.

Replacement Cost
In many industries when workers are absent from work they must be directly replaced, creating an expense for the corporation. Replacement cost should have been captured in the initial baseline and then be measured against.

Retraining Costs
In jobs that require technical skills or getting accustomed to the speed of production there is a high cost to training replacement workers. Retraining cost may be captured by Human Resources.

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Productivity Costs

The production team can assist in quantifying productivity cost of regular workers versus replacement workers.

Management / Administrative Costs

Management cost can be measured pre-program (baseline) and then on a regular basis following program implementation. These costs may include:

- Salary and benefits of the Occupational Health / Disability Management staff
- Manager and supervisor time
- Employee extended health care benefits
- Hardware and Software cost
- Supplies and other equipment
- Communication costs (telephone and email)
- Education information costs (developing information for supervisors, employees and service providers)
- Professional development (journals, updating)
- Infrastructure costs (cost involved in providing space, accounting, upper level management and supervision, human resources assistance with recruitment, legal support, etc.)
- Third party services – Functional Ability Evaluations, Independent Medical Examinations, Physiotherapy, other assessments.
- Assistive devices/technology
- Changes or renovations to the work environment or workstation
- Other (Curtis & Scott, 2004)

Calculating the Return on Investment

The actual calculation of the cost benefit would include the quantitative dollar variances in the Workers' Compensation, Short Term Disability and Long Term Disability data. Although the calculation may appear simple, as we discussed above, the accumulation of the data in an accurate manner is essential to the integrity of this calculation. The accuracy of the cost benefit calculation is contingent on the diligence of data collection. A simple cost benefit calculation can be conveyed as follows:

	Before	After
WSIB	250,000	200,000
Short Term Disability	250,000	200,000
Long Term Disability	300,000	250,000
Total	800,000	650,000
Savings		150,000

These metrics can be broken down in a number of different ways to make them meaningful to the organization.

- Cost per employee
- Cost per claim
- Cost as an average percentage of payroll
- Cost as it represents a unit of production

The calculation can also be more detailed and include other elements that have been tracked from baseline through program implementation. An example may be as follows:

	Before	After
Total hours lost	100,000	50,000
Average salary of workers	$10	$10
Cost of absent employees	$1,000,000	$500,000
Total hours replaced	100,000	50,000
Average salary of replacement workers	$10	$10
Cost of replacement workers	$1,000,000	$500,000
Total hours supervisors time	100	50
Average salary of supervisors	$15	$15
Cost of supervisor time	$1,500	$750
Total estimated cost	$2,001,500	$1,000,750
Savings		$1,000,750

Other elements can be incorporated into this chart including ongoing cost of benefits for the absent employees, production variances and training cost.

Qualitative
Another important part of any disability management program is the measurement of employee satisfaction with the program. Qualitative evaluations used before a program is implemented, then implemented periodically throughout the evaluation phase, can add credibility to the program.
Some sample survey questions may include:
- *Are employees familiar with the program?*
- *Did the program assist employees in returning to work earlier?*
- *Are employees still back at work?*
- *What type of assistance did employees receive?*
- *Was it helpful in maintaining employee job duties?*
- *Overall employee satisfaction*

(Curtis, 2003)

Before and after survey outcomes can be easily charted and improvement quantified in order to demonstrate employee satisfaction with the disability management program. Improvement of 15% in employee satisfaction scores on the survey shows the program is successful in improving the employee buy-in to the program components which will in turn have a positive influence on the outcomes.

Communication of Results
The communication of the results is imperative to the program's success. Many methods can be utilized to communicate results and demonstrate the achievement against the pre-stated goals discussed in part two of this series.
The results of a return on investment calculation include the quantitative cost benefit analysis and the qualitative aspects creating a good return on investment profile. The return on investment will assist in demonstrating the success of disability management programming in the workplace. These positive outcomes will also sell the program as a valuable component of the management strategy and ultimately assist in maintaining the program and its resources.

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