

Model of Projected Cost Savings for Organizations Purchasing Goldtouch Desktop Solution Purpose of Cost Model

- To provide an estimate of cost savings that organizations can expect as a result of using Goldtouch Desktop Solution.
- Parameters of model are based on data from the scientific literature on the relation between carpal tunnel syndrome (CTS), work-related musculoskeletal disorders (WMSDs), and computer data entry tasks.
- Cost data associated with CTS are from information made available by Beacon Mutual Insurance Company.

Assumptions of Model

- Assuming a population of 100 workers who spend at least 25 hours/week working at a computer.
- Assuming that other aspects of their work environment are properly adjusted (seats, desk height, etc.).
- Incidence rates and cost data are for carpal tunnel syndrome only. — Although only one element in the overall WMSD problem, CTS is the most widely studied.

CTS Incidence Rates

- Stevens et al (2001) — Incidence of CTS in keyboarding population ranges from 3.5% - 10.5%.
- We have adopted the 3.5% estimate for purposes of model.

Costs Associated with CTS

- Direct Costs (e.g., wages, hospitalization, medication, physical therapy, etc) of CTS without surgery:
\$8,000.00 - \$12,000.00
- Direct Costs of CTS with surgery: \$30,000.00 - \$35,000.00

Costs Associated with CTS

- Indirect costs (e.g., lost productivity, overtime, training of temporary employees, temporary employee wages, etc.) of CTS without surgery: \$16,000.00 - \$48,000.00
- Indirect Costs of CTS with surgery: \$60,000.00 - \$140,000.00

Reduced Incidence of CTS Following Introduction of Goldtouch Equipment

- This portion of cost model is a conservative estimate based on two studies that have shown decreases of approximately 90% and 50% in pre-CTS symptomatology in computer users.
- Based on data from Stevens et al (2001) we estimate that approximately 10% of users will develop CTS.
- We project that use of Goldtouch equipment will reduce that estimated rate to less than 5%.

Based on consensus of scientific community that dysfunctional postures associated with standard keyboards and mice are a major source of CTS.

Cost Savings

- In an organization of 100 heavy computer users, 3-4 will be experiencing CTS symptomatology at any given point in time.
- Therefore, the organization's annual costs will range from:
\$84,000.00 - \$210,000.00 (for CTS without surgery).
\$315,000.00 - \$612,500.00 (for CTS with surgery).

Cost Savings

- Across five years, the organization's costs will range from:
 - \$420,000.00 - \$1,050,000.00 (CTS without surgery).
 - \$1,575,000.00 - \$3,062,050.00 (CTS with surgery).
- Average cost across five years: \$1,308,750.00

Cost Savings

- Given a reduction in CTS occurrence from 10% to 5% with use of Goldtouch Desktop Solution, costs associated with CTS would be effectively halved.
- Projected annual cost savings:
 - \$42,000.00 - \$105,000.00 (CTS without surgery).
 - \$157,000.00 - \$304,500.00 (CTS with surgery).

Cost Savings

- Across five years, the organization's cost savings will range from:
 - \$210,000.00 - \$525,000.00 (CTS without surgery).
 - \$787,500.00 - \$1,531,150.00 (CTS with surgery).
- Average cost savings across five years: \$763,437.00

Cost Savings — Return on Investment

- Average savings across five years: \$763,437.00
- Estimated cost of Goldtouch Desktop Solution: \$31,500.00
- Return on investment: 2,423%