Hamilton Health Sciences

Integrating Business Metrics and Analytics to Sell Your Case: A Healthcare Perspective

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Ergonomics at Work
PREVENTING INJURIES AND ENHANCING PERFORMANCE

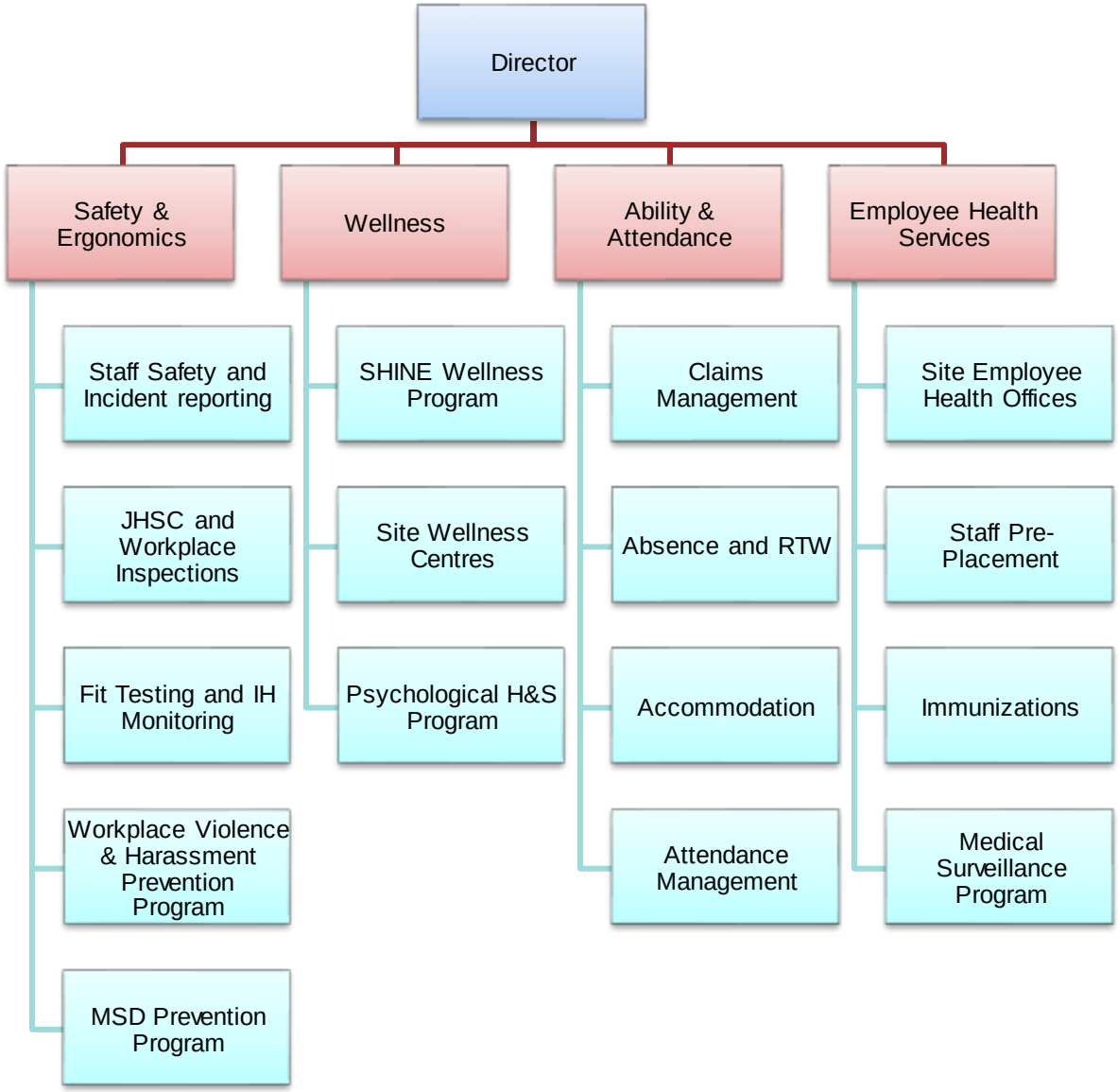
Objectives

- Identify key actions that support gaining buy-in from senior leaders
- Share examples of metrics used and how they were collected
- Recognize the benefits of organizational alignment
- Demonstrate advancements made in MSD Prevention and Psychological Health & Safety at HHS

Hamilton Health Sciences

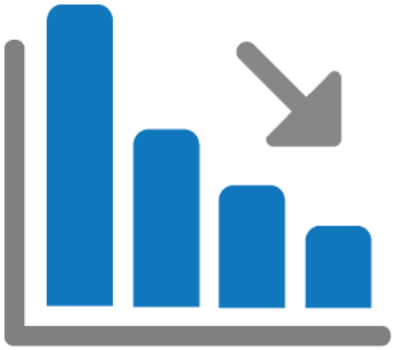
- Community of 15,000 staff, physicians, residents, learners, researchers, and volunteers
- Serve Southwestern Ontario residents; specialized programs serving the province
  - 5 main hospitals, 5 specialized centers, numerous clinics and support services
- Only hospital in Ontario that cares for all ages, from pre-birth to end-of-life

HSW Program Overview



Key Accomplishments

~4500 staff educated in safe patient handling

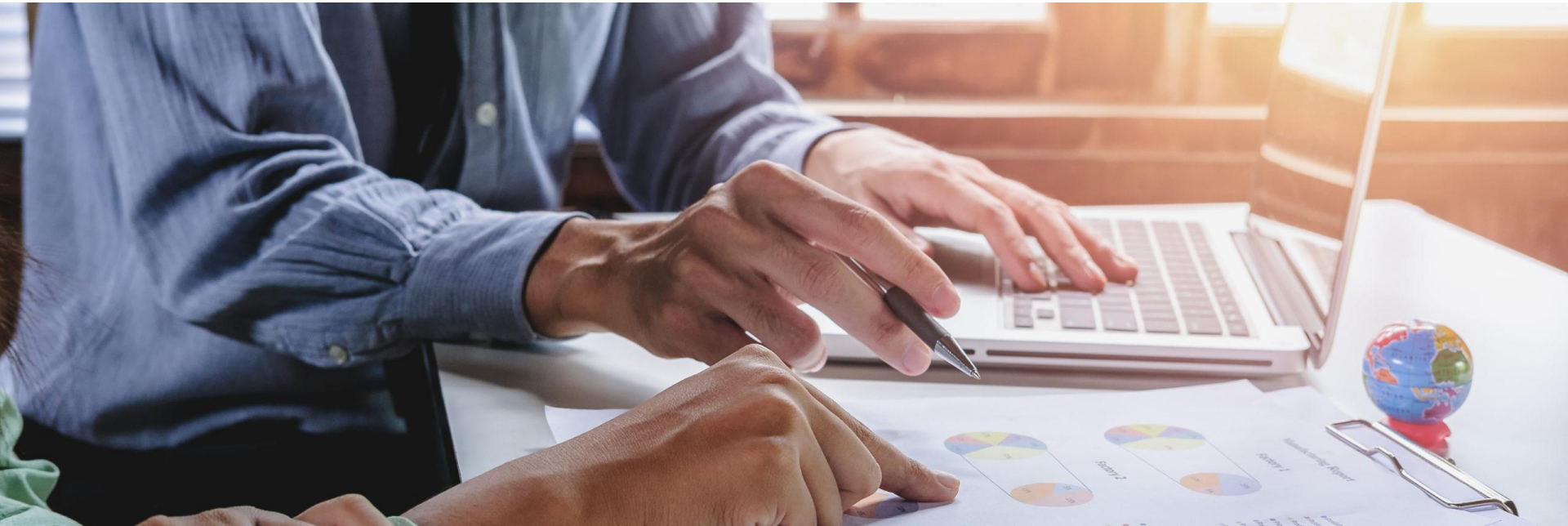


45% reduction in reportable MSDs

$4 million invested in equipment & education

4 completed HSEP topics in 2022-23

Gaining buy-in for MSD prevention and employee wellbeing is much more than signing a policy



The starting line . . .

the environmental scan

What is the current state in your organization?

What is going on in peer organizations / sector?

Environmental Scan

Root Cause

- Injury / Incident data
- Risk Assessments / Inspections
- Staff feedback

Needs

- Resources
- Infrastructure (design and/or space)
- Organizational readiness

Gaps

- Standards / regulations
- Literature / Leading practice
- Peer organization benchmarking

Metrics

- Understand organizational priorities and find alignment opportunities
- Quantitative vs qualitative data
  - Qualitative data is valuable
  - Look for themes
  - Quantify it

Safety

- MSD-specific injury rates
- WSIB claim type
- Injury severity; days lost / modified
- Nature of injury
- Perceived safety

Cost

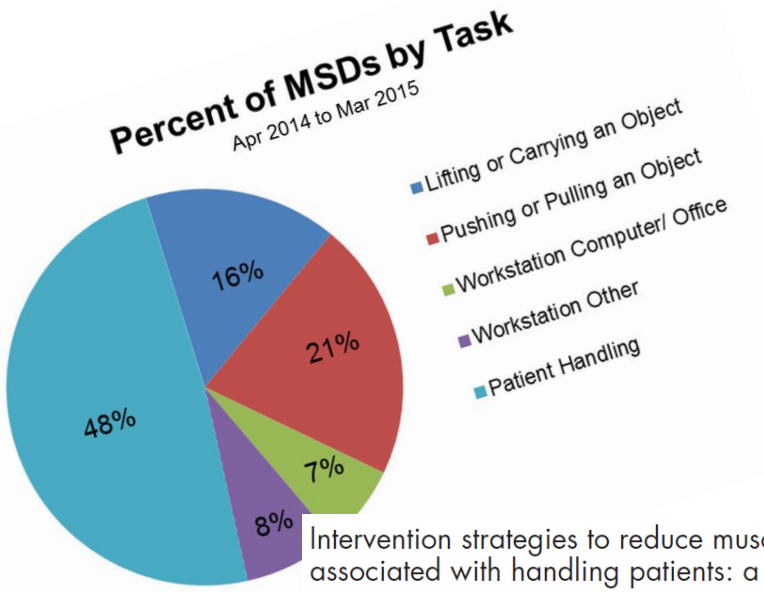
- Direct injury costs
- Cost of resources, i.e. equipment, education
- Projected cost savings, ROI

Productivity

- Workflow analysis (time)
- Perceived time savings
- Perceived ease of use
- Perceived accessibility

Quality

- Patient experience / comfort
- Perceived patient safety
- Errors in use
- Clinical outcomes (i.e. pressure injuries)



Phase I Project Charter:
MUSCULOSKELETAL DISORDER PREVENTION

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Intervention strategies to reduce musculoskeletal injuries associated with handling patients: a systematic review

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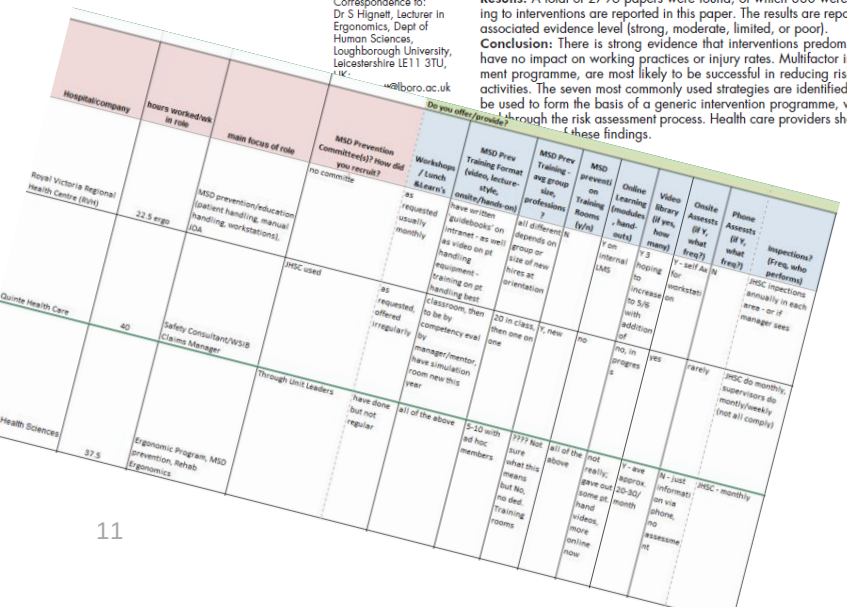
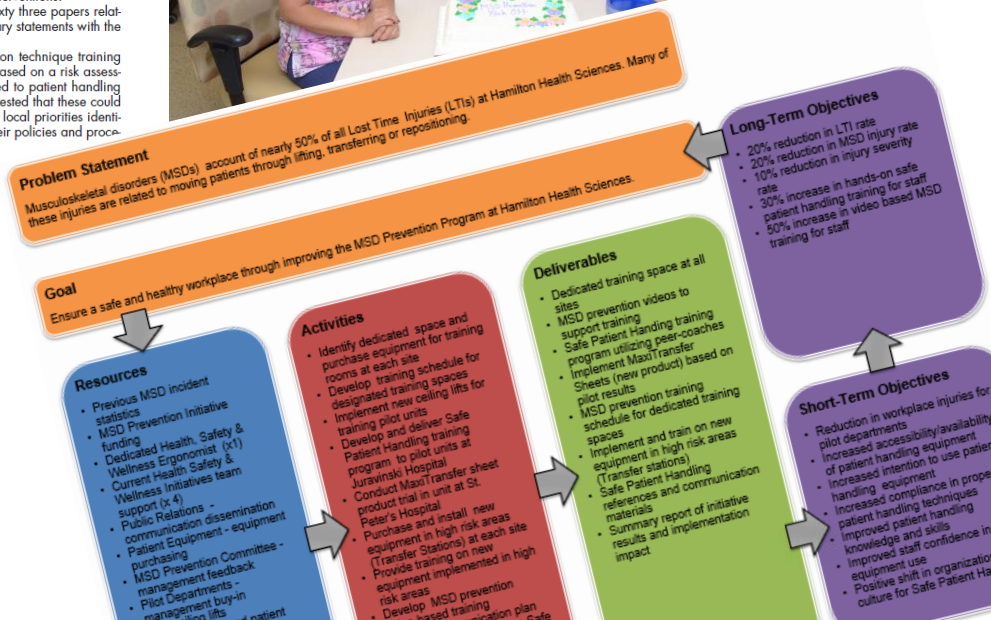
Occup Environ Med 2003;**60**:e6(http://www.occenvmed.com/cgi/content/full/60/9/e6)

Aims: To report, analyse, and discuss the results of a systematic review looking at intervention strategies to reduce the risk factors associated with patient handling activities.
Methods: A search strategy was devised to seek out research between 1960 and 2001. Inclusion/exclusion criteria limited the entry of papers into the review process. A checklist was selected and modified to include a wide range of study designs. Inter-rater reliability was established between six reviewers before the main review process commenced. Each paper was read by two reviewers and given a quality rating score, with any conflicts being resolved by a third reviewer. Papers were grouped by category: multifactor, single factor, and technique training based interventions.
Results: A total of 2796 papers were found, of which 880 were appraised. Sixty three papers relating to interventions are reported in this paper. The results are reported as summary statements with the associated evidence level (strong, moderate, limited, or poor).
Conclusion: There is strong evidence that interventions predominantly based on technique training have no impact on working practices or injury rates. Multifactor interventions, based on a risk assessment programme, are most likely to be successful in reducing risk factors related to patient handling activities. The seven most commonly used strategies are identified and it is suggested that these could be used to form the basis of a generic intervention programme, with additional local priorities identified through the risk assessment process. Health care providers should review their policies and proce... these findings.





Leadership Commitment

- Support to provide resources required
  - Fiscal budgets
  - Capital development
- Identified executive champions
- Leadership representatives in a multidisciplinary committee
- Alignment / inclusion in organization strategic planning

Hamilton Health Sciences

STRATEGIC PLAN

North Star Objectives

Patients

- Be a top ranking hospital for the quality of our care and the excellence of our patient and family experience.

People

- Create a safe work environment with highly engaged staff and physicians.

Sustainability

- Be responsible resource stewards.

Research, Innovation & Learning

- Be one of Canada's top research hospitals.

TRANSFORMATION PROGRAM

- Our Healthy Future
- Epic Optimization
- Post-COVID Recovery
- Workforce Planning

IN-YEAR OBJECTIVES

- Sepsis
- Hospital deaths following major surgery
- Pressure injuries
- Lost time injury
- Bar Code Medication Administration
- Hand hygiene

CORPORATE PROJECTS

- Equity, Diversity and Inclusion Plan
- Staff Wellness
- Clinical Services Review
- Epic Stabilization
- Scheduling and KRONOS Renewal
- Environmental Management Plan
- Clinical Program Review - NICU
- 2023 Accreditation
- Physician Feedback Process
- Research Strategic Plan

OUR VISION:

Best Care For All

OUR MISSION:

To provide excellent health care for the people and communities we serve and to advance health care through education and research

OUR VALUES:

Respect | Caring | Innovation | Accountability

Last updated: May 2023

Alignment

- At all levels, in all teams
- Drives engagement of stakeholders
- Supports and fosters collaboration
- Improves communication

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Program Plan on a Page
Version 1

Program

Director (Department)

Organizational Priorities (Transformation Initiatives, In-Year Objectives, Corporate Projects)

Program/Portfolio Specific Priorities (beyond operational responsibilities)

	#	Name	Impact
Transformation Initiatives	1		
	2		
	3		
In Year Objectives	1		
	2		
	3		
Corporate Projects	1		
	2		
	3		
	4		
	5		

#	Name	Impact
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Impact Assessment
3 – High Impact
2 – Moderate Impact
1 – Low Impact
0 – No Net New Impact

Factors affecting the impact on work effort / time
- Proportion of staff and physician impacted – are all staff and physicians in the area of impacted or only a subset?
- Will this require significant behavioural change?
- Is there a draw on resource time outside of operations for the purpose of participation (e.g. training, workshops, etc.)?

Individual Annual Objectives

Hamilton Health Sciences

Department	
1. Employee/Leader Information	
Employee Name	
Employee Position Title	
Leader Name	
Leader Position Title	
2. Review Period	
Review Period	
Employee Signature & Date (physical or digital signature accepted)	
Leader Signature & Date (physical or digital signature accepted)	

3. Annual Business Objectives

Annual Business Objective	Measure of Achievement	Outcomes

Project Name

Status Update

At risk · Risks present, but managed · On track · Not Started · Executing · Planning · Complete

Date:	**Overall Project Status (red, amber, green):**
Executive Lead:	**Status Explanation:**

Activities completed this reporting period	Activities planned for next reporting period
Key Activities/Deliverables	Key Activities/Deliverables

Project Deliverables

Deliverable	Est. Completion	Status

Risks

Risk	Description	Strategy to Address

MONTHLY SCORECARD WATCH INDICATOR PAGE (PDSA #1)

Watch Indicators: The Performance we are watching and may only respond to if the metric is changed to a DRIVER. COLOUR BOTH THE MONTH AND

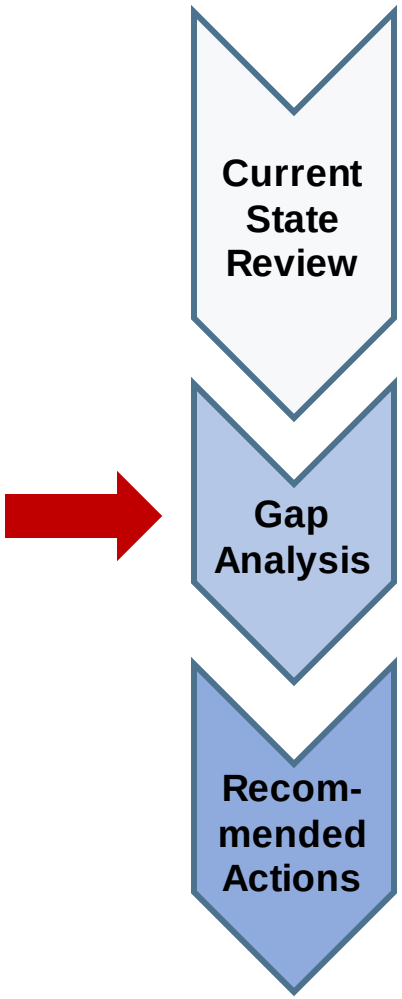
Category of Measure	Source TN, SD, HD, HI, HW	Watch Indicator	Owner	Target or Trigger (monthly/ quarterly)	Goal	Previous Fiscal Year or Baseline	Baseline Data Source	Apr	May	Jun	Jul	Aug	Sept

Psychological H&S

The goal of the Staff Wellness Corporate Project is to **achieve incremental progress on the nationally recognized standard for Psychological Health and Safety in the Workplace** through an assessment of HHS' current state and identification of short-term actions to support compliance with these standards.

- A long-term (3-5 year) goal is to achieve compliance across all 15 standards.

Staff Wellness Deliverables



- Assess HHS against psychological health and safety elements.
- Collection of operational data, communications, policies, procedures, survey results, and comparative data from external sources.
- Review of existing programs, structures, and services offered by HHS to address psychological safety in the workplace.
- Environmental scan of other organizations who have implemented the standard.

- Identification of factors where HHS is not in compliance and the gap between current state and achievement of the standard, in consideration of HHS' trauma-informed environment.
- Identification of any connections with existing work that will progress the factors and those that fall within scope of Wellness.

- Outline of short-term recommendations (12-18 months) to achieve greater compliance on the standard.
- Identify new corporate or department projects, or amplification/re-organization of existing programs, policies, and practices.
- Prioritization of recommendations for short- and long-term focus.

Information Gathering

Focus Groups

- Leverage MVM comments to validate input and themes already collected
- Separate sessions targeted at managers/leaders and frontline staff
- Utilize existing groups to engage frontline perspectives:
  - JHSC members
  - Wellness Champions
  - Professional Practice Council Members
  - HHS Affinity Groups
- EDI considerations incorporated into feedback collection approach

SME Interviews

Interviews with program leads to evaluate existing programs/policies:

Health, Safety & Wellness

- Program participation (Shine Wellness, lunch and learns)
- EFAP utilization
- Return-to-work data

Human Resources/Labour Relations

- Vacation and benefits utilization
- Complaints and grievances
- Performance evaluations
- Leader training completion
- SORs
- Compensation and collective agreements

Organization Development

- Course offerings and participation
- New Leader Orientation

Data Analysis

Review of relevant quantitative employee data, including:

- Staff on mental health LOAs
- Lost Time Injuries
- Absenteeism trends
- Overtime trends
- Sick time trends
- Turnover/exits

Review of relevant qualitative employee data, including:

- MVM comment themes
- Focus Groups

Protection of Physical Safety

Risk Level **67%**

Definition

A work environment where management takes appropriate action to address physical hazards in order to protect the psychological health and safety of workers.

Potential Benefits

- Fewer job-related errors, incidents, accidents, and injuries
- Reduced costs from work absence
- Improved physical and psychological health and safety of employees
- Reduced legal and regulatory costs and violations
- Improved labour-management relations

Current State

- Annual safety risk assessments conducted at department level
- Critical incident management services (EAP provider)
- Staff Safety Occurrence Reporting (SOR) system
- Annual Workplace Violence Prevention/Harassment e-learning
- Mandatory training – H&S awareness training (all staff) and Mandatory Competent Supervisor H&S

Opportunities

- My Voice Matters action plans
- *Scheduling* Corporate Project (review of scheduling practices)
- *In-year objective* – Lost Time Injury

Indicators

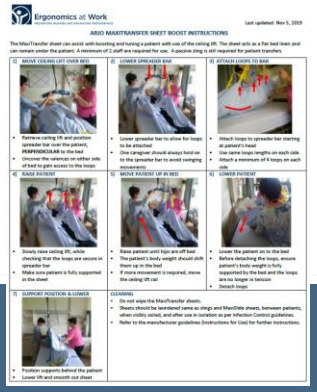
- Health and safety related documentation, including minutes from health and safety meetings
- Safety inspection reports
- Accident, workplace-related illness, and incident reports, including near misses
- Lost Time Injury IYO metrics

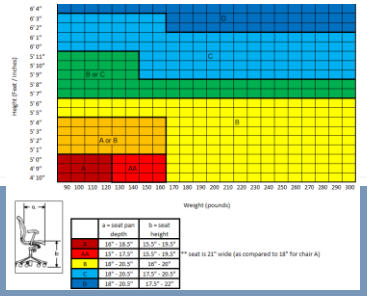
Enablers

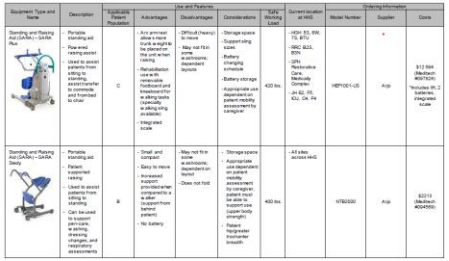
- Active health and safety committees
- Access to H&S representatives
- Documented workplace inspections
- Review of safety program and policies
- Incident investigation protocols
- Availability of support following critical incidents
- Employee training on physical hazards

MSD Prevention

- Strategic plan alignment in reduction of lost time injuries
- Historically, reactive
  - Workstation assessments
  - Incident investigation support / recommendations
  - RTW and accommodation consultation

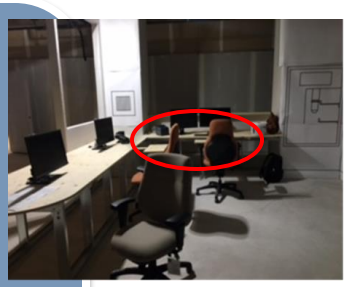






Education

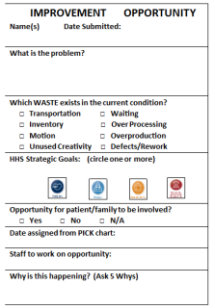
Design / Procurement

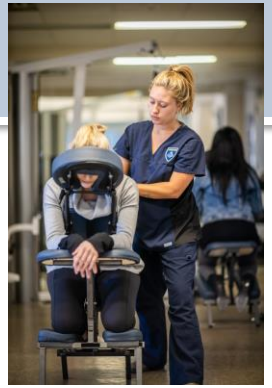


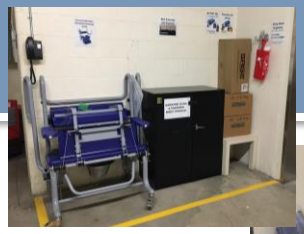
Prevention

Wellness

Continuous Improvement







Monitoring for Success

- Intentional, consistent, timely communication
- Monthly updates of MSD Prevention Scorecard
  - Policy, education, equipment, injury trends
  - Drives activity
  - Supports escalating recommendations to senior leaders

Hamilton Health Sciences — Strategy Pillar: People

Musculoskeletal Disorder (MSD) Prevention Scorecard

Metric		Definition	Data Source	Owner	Goal	Annual Target	Reporting Frequency	Reporting Period Target	Previous Fiscal Baseline	Baseline Data Source	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Calendar YTD	YTD % change vs. baseline
Policy	MSD Prevention Protocols Updated	**Computer Workstation:** Annual review (1 year	Policy Library	SJ/JJ	Posted on time	19-Jan-23	Annual	January	Overdue	Policy Library	**Posted Jan 19, 22**									Ergo Review	HC Review	JHSC Review	**Complete**	**Compliant**
		Safe Material Handling: Annual review (1 year from	Policy Library	SJ/JJ	Posted on time	22-Apr-22	Annual	April	Compliant	Policy Library		Ergo Review	HC Review	**Posted March 30,**									**Complete**	**Compliant**
		Safe Patient Handling: Annual review (1 year from posted date)	Policy Library	SJ/JJ	Posted on time	2-Jun-22	Annual	June	Compliant	Policy Library				Ergo Review/ HC Review	JHSC Review	**Posted June 17, 2022**							**Complete**	**Compliant**
Education	MSD Prevention eLearning Training Compliance	Number of staff completing eLearning annually	myLearning Activity Completion report	JJ	25% increase of baseline	574	Monthly	48	459	myLearning Activity Report - Quiz Results	41	29	50	48	40	52	48	69	92	89	84	69	711	55%
	MSD Orientation Safe Patient Handling Training Compliance	Percentage of new hires completing hands-on training in relation the number of new hires requiring training based on role/dept. listing.	Comparison of data from myHR and myLearning reports	JJ	100% trained	100%	Monthly	100%	45%	Combined myHR and myLearning reports	74%	79%	69%	78%	72%	83%	76%	90%	84%	73%	66%	31%	73%	62%

Take Home Message

- Understand your organizational mission, vision and values
- Use your organization's strategic plan and/or key priorities to guide your metrics development
- When quantitative metrics are challenging to collect, consider qualitative data to identify gaps or demonstrate impact
- Alignment to key deliverables fosters communication and collaboration which is integral to success

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