Health Care Facilities: Human Factors Analysis Patient Accounts

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Project Goals:

- Identify "**key**" risk factors
  - Use of existing work stations
  - Work Posture(s)
  - Current Equipment
- Reduce Risk
- Improve work environment
- Reduce Cost & Lost time

Patient Accounts at Present

- 21 female part & full-time workers
- Age range: mid 20's – mid 60's
- Job Description:
  - Data entry (computer)
  - Patient Follow-up (telephone)
  - Paper Handling
  - Filing

Current Health Issues:

- ***Catalyst*** – current workstation

- Work-related Complaints – *Sizable*
  - Wrist (3),
  - Upper back/neck - cervical (2)
  - Mid-back - thoracic (1)
  - Lower back lumbar/sacral (1)

- Acute work-related injuries – ***None***

- ***Mission:*** *Preventative v. Corrective*

Patient Accounts Analysis:

- Work station components:
  - Ergonomic Keyboard-Mouse Platform System Evaluation Form
  - Ergonomic Seating Evaluation Form

- OSHA's Visual Terminal Display Checklist

- Cornell Musculoskeletal Discomfort
  - Questionnaire: Sedentary Worker – Female version

- Cornell Hand Discomfort Questionnaire

- RULA Assessment – seated work

- REBA Assessment – standing work

Survey Results:

- Ergonomic Keyboard-Mouse Platform System:
  - Majority of workers did not use and/or understand proper setup and use

- Ergonomic Seating Evaluation:
  - Improper fit was the main complaint: *seat-pan* coupled with poor *lower back support* contributed an increased level of discomfort

- OSHA's Visual Terminal Display Checklist:
  - Elevation of computer screen above operators eye level has the potential to contribute to future neck and shoulder problems

- Cornell Musculoskeletal Discomfort:
  - Most frequent: back (lower/upper), neck, and wrist

- Cornell Hand Discomfort Questionnaire:
  - Three (3) employees complained of discomfort – one (1) severe

- RULA Assessment (seated work) / REBA Assessment (standing work)

Data & Findings:

RULA Assessment:

RULA is a postural targeting method for assessing the risks of work-related upper-limb disorders.

Data & Findings continued…

REBA Assessment:

REBA is a postural targeting method for the assessing the risks of work-related entire body disorders

REBA Score = 10

Recommendations:

- Results from RULA & REBA assessments:
  - Inform workers of correct posture – i.e. Instruction posters

- Use demographic data to provide correct anthropometric seating

- Inform and encourage proper use of keyboard-mouse platform

- Encourage less "stressful" layout of desk/workstation

- Provide & encourage use of headsets in lieu of handheld telephones and/or cradles