Achieving Workplace Health through Application of Wellness Strategies

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April 3, 2008
Overview of JSC
NASA/Johnson Space Center

- NASA/Johnson Space Center was established in 1961.
  - Current Civil Servants
    - 3245 Civil Service employees
    - ~ 110 astronauts
  - Current Contractor Employees
    - ~ 50 companies provide personnel
    - ~13K employees

- Since Project Gemini, JSC has led and managed NASA’s human space flight programs
  - From 1961 through mid 1970’s JSC led and managed single programs
  - Currently JSC leads and manages 3 major programs and several major projects
Civil Service Education
8% doctorates
30% masters
52% bachelors
1% associates
9% no degree

Civil Service Average Age 45.7

Average Attrition: 4.1%
50% Retirement
50% Resignations

Civil Service Diversity
50% Non-minority male
25% Non-minority female
13% Minority male
11% Minority female

Civil Service Grade Distribution
2% @ executive level
20% @ Grade 15
22% @ Grade 14
36% @ Grade 13
9% @ Grade 12
4% @ Grade 11
7% @ Grade 9 and below
JSC Civil Service Population by Occupation

- **S&E**: 73%
- **Professional Admin.**: 21%
- **Clerical/Tech**: 6%
JSC Civil Service
Degree Fields

**Degree Fields**
- Aerospace Engineering  634
- Mechanical Engineering  530
- Electrical Engineering  354
- Other Engineering       221
- Computer Science/Math  237
- Life Sciences          100
- Physical Sciences      250
- Business Mgmt Related  565
- Other                  66
JSC Workforce by Major Program Activity

- ISS: 28%
- Constellation: 20%
- SSP: 21%
- CMO: 24%
- Other: 7%
Employee Services
Occupational Medicine/Health

**Occupational, Emergency and Preventive Medicine**

**Regulatory Functions**
- Work Related Physicals
- Fitness for Duty Exams
- Food Sanitation Program
- Employee Assistance Program
- Emergency Medical Treatment

**Non-regulatory Functions**
- Non-work related emergency treatment
- Periodic Health Screening Exams
- Public Health, e.g., Flu Shots
- AED Program
- Wellness Program

**Occupational Health Services**
- Industrial Hygiene field investigations
- Radiation Safety
- Hazard Communication
- Health Training
- Environmental Surveillance
Human Resources

- Provides a wide range of services to JSC employees to enhance the overall work experience
- Serve as both employee advocates and consultants to management
- JSC People Website
- Each Directorate Level Organization is assigned:
  - HR Representative
  - HR Development Representative
- Customer Service Desk is provided
Starport was established to contribute to the welfare and morale of the JSC workforce

Core Functions:

– *Exploration Wellness Program*
– Recreation Activities
– Cafes and Catering
– Gift Shops and Online Retail Services
– Employee Activities
Exploration Wellness Program

- Starport Fitness Facility
  - Personal training
  - Exercise classes (free enrollment for Yoga, Pilates, Hip Hop Aerobics)
  - Two outdoor running trails

- Specific Behavior Change Programs

- Access to a Registered Dietician/Nutrician Counseling

- www.explorationwellness.com
  - Wellness assessment
  - Health and wellness information

- Recreation Classes (Ballroom Dancing, Salsa, Tae-Kwon-Do)

- Sports Leagues (Volleyball, Softball, Basketball, Soccer, Flag Football)

- Massage Therapy
Tools for Employee Care

**Work/Life Balance**
- Exploration Wellness Program
- Employee Assistance Program
- Child Care Center
- Maxiflex & Variable Schedules
- Flexiplace & Telecommuting Options

**Benefit Programs**
- Insurance: Health, Vision, Dental, Life and Long Term Care
- Finances: Thrift Savings Plan, Flexible Spending Accounts
- Generous Leave/Leave Transfer Programs
- Online Benefit Services
- Recognition and Awards Program

**Training and Development**
- Onsite and offsite courses
- Online learning
- College courses
- Leadership development
Prior Assessments
Background

• NASA/Johnson Space Center, routinely conducts workplace surveys/assessments
  – to understand workplace climate and health
  – to apply wellness strategies, where applicable

• Such assessments are a collaborative effort between Occupational Medicine/Health and Human Resources.

• Assessments were done in 1999, 2000 and 2003

• 1999 indicators that assessment was required
  – 6-fold increase in EAP work stress cases over 10 year period
  – Job stress made up 18% of the presenting problems at EAP
  – HR noted increases in restored leave; overtime; comp time; voluntary time
  – Employee exit surveys cite job stress & workload as decision factors
1999 Study

- Conducted 6 focus groups (65 participants total) to collect data
  - Non-supervisory and Supervisory personnel
  - Administrative, S&E, Program Office, Secretaries
  - Data collected with 3 separate approaches
    1. Physical and Behavioral Stress Questionnaire (checklist)
    2. Coping and Stress Profile (assessing work, personal, and family stress)
    3. Group Discussions (facilitated by the consultants)

- Outcome of study
  - Successfully negotiated higher staffing levels with HQ
  - Raised awareness of stress-related issues through education
    - Stress education for managers and supervisors
    - Increased EAP awareness
    - Promoted Wellness program (nutrition, exercise, stress management)
  - Initiated intervention strategies
    - Expanded Wellness Program
    - Developed & offered new stress training programs
    - Provided information on community counseling and support organizations
    - Explored increased work schedule flexibilities

- Recommended doing a comprehensive stress assessment of JSC workforce (2000)
2000 Survey

- 2500 employees responded to 48 question survey

- Findings
  - Top 3 causes of stress
    - Work Conflict: competing requests, unnecessary tasks, lack of resources
    - Overload: too much pressure, too much to do
    - Organizational support: level of caring about opinions, lack of successful interpersonal relationships
  - Top 3 things that did not cause stress at JSC
    - Job ambiguity: clarity on assignments; known, acceptable performance expectations
    - Cognitive trust: high trust and management competence levels
    - Belonging to NASA: job fit into Agency/Center objectives, level of pride in job & JSC
  - Top 2 consequences of stress
    - Low job satisfaction
    - High psychological strain

- Outcome
  - Continuation of stress education programs, EAP awareness, intervention strategies
  - Implementation of systemic change in response to root causes defined by survey
  - Incorporation of best practices from high achieving organizations
2003 Survey

• 2530 employees responded to 96 question survey

• Findings
  • Greatest sources of stress
    • Workload - 57% pace of work / 42% quantity of work
    • Dissatisfaction with recognition
      • 52% cite promotions
      • 44% cite under-appreciated & under-rewarded
      • 40% cited that everyone gets same rewards
  • Greatest effects of stress
    • Physical and/or emotional – >50% reported stress related symptoms in last month
    • Physical Productivity – 33% agreed it is heavily impacted by stress
  • Areas of potential concern
    • Morale
    • Intention to Quit

• Outcome
  • Results reviewed with Senior Management, each directorate and communicated to JSC
  • Actions plan developed and implemented by individual organizations
  • Continuation and enhancement of earlier initiatives
Current Effort

• Purpose
  – Understand and measure JSC workplace health
    • levels, sources, indicators & effects of negative, work-related stress
    • define leading indicators of emerging issues
  – Provide linkage to outcomes
    • Focus application of wellness strategies & HR tools
    • Increase quality of work life and productivity

• Current effort will result in
  – Online assessment tool
  – Assessment of total JSC population (civil service & contractors)
  – Application of mitigation tools and strategies

• Product of the JSC Employee Wellness Program

• Collaboration with Corporate Health Improvement Program/University of Arizona
# Assessment Development

## Phase 1 Products

1. **Survey development**
   - Hybrid of existing instruments
   - Tailored using prior surveys
   - Identify specific concerns with onsite focus groups

2. **Review of assessment tool**
   - Interviews with employees
   - Assess understanding of survey items

3. **Test hard copy assessment tool**
   - Pilot assessment
   - 20 JSC employees to participate

4. **NEW survey: ~ 30 questions**
   - existing items from prior surveys
   - new items from focus groups

## Phase 2 Products

1. **Test & Refine Hard Copy Tool**
   - Pilot test(s) with TBD # employees
   - Refine tool based on pilot tests
   - Continue testing/refinement

2. **Develop On-line tool based upon hard copy results**

3. **Test & Refine On-line tool**
   - focus groups and/or
   - telephone debriefing

4. **Finalize on-line assessment tool**
Assessment Plan

• Assessment of total JSC workforce with new, online survey instrument

• Analysis of survey results

• Based upon survey results
  – Implement selected, available, wellness strategies
  – Implement available human resources tools and capabilities

• Assessment of the effectiveness of the interventions over a 3 year period