

Maximizing Potential

ADVANCEDTM WORKSITE SOLUTIONS

Cost Effective and Results Driven Ergonomics

Suzanne Fowler, MSM, ATC, CSCS
Advanced Worksite Solutions



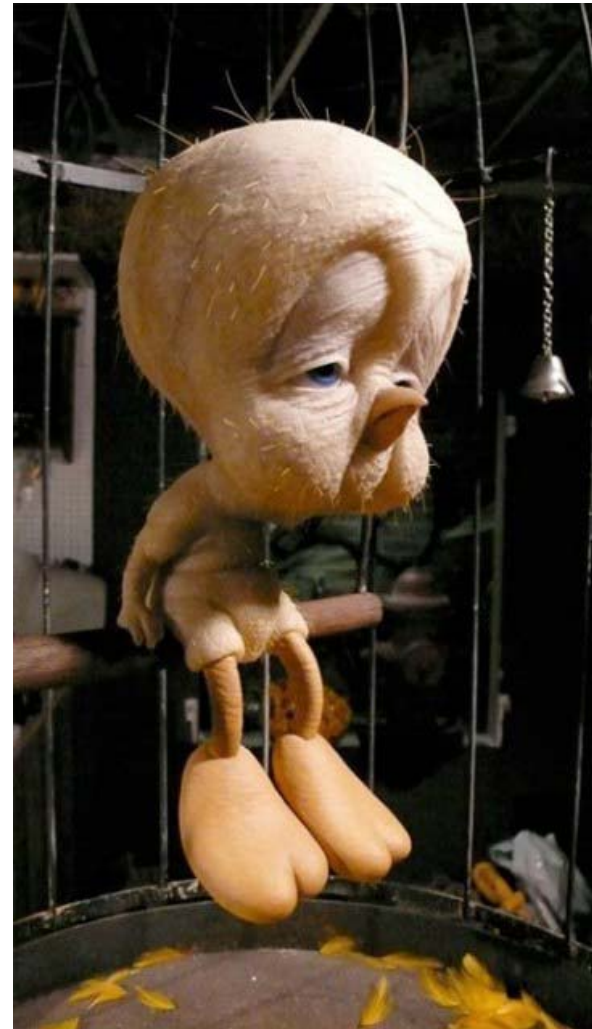
- White collar more common than blue these days:
 - In 1900 White Collar labor was 18% of the workforce. In 2002, it accounted for up to 60%.
 - In 1950 Blue Collar labor was 41% of the workforce. In 2002, it was less than 24%
- Where will it go in the future?

According to the BLS:

- Computer occupations will be the fastest growing in the economy. They account for 8 of the 10 occupations with the fastest rate of growth projected for 2010.
- By 2010, more than 8 of every 10 jobs in the U.S. economy will be in the service sector.

The Aging Workforce

- The only age group that increased incident rate was the 65 and older – but that increase was significant: 23%
- Additionally, absences were longer - median of 15 days



According to the BLS, although injuries decreased in 2008, there were some significant findings with regard to Musculoskeletal Disorders:

1. 65% of total injuries and illness with required days away from work had events or exposures consistent to the development of MSD's
2. Repetitive motion continued to be the event with highest days away from work for all private industries with 18 days
3. Sprains/Strains accounted for 39% of total injury and illness cases requiring days away from work

(OSHA News Release, USDL-09-1454, Nov. 24, 2009)

- **45%** were the result of overexertion
- **22%** more were the result of “bodily reaction” (bending, reaching, twisting, or slipping without fall)

By My Rough Math, that is **67% of injuries**

- Of that number, **23%** occurred to workers in **service occupations**
- Employees with **Carpal Tunnel** required a median of **28 days to recuperate**
- Sprains and strains required 9 median days

(OSHA News Release, USDL-09-1454, Nov. 24, 2009)

- **29%** of all workplace injuries and illnesses
- Required a median of **10 days** away from work

(OSHA News Release, USDL-09-1454, Nov. 24, 2009)

What are these Injuries?

“An injury or disorder of the muscles, tendons, ligaments, joint cartilage and spinal discs”

In other words, they are “soft tissue” injuries.

- Occur slowly over time (therefore preventable)
- Cost employers \$15 – 20 Billion / Year

For each MSD: \$22,500 in **direct** costs

- (OSHA National News Release, DOL 99-43, Feb. 19, 1999)

96% of Injuries and Illnesses
attributable to a **preventable**
circumstance!

**IS IT WORTH FINDING A PLAN
FOR PREVENTION?**

- We believed it SO strongly, that we developed our own software to assess and stratify risk, and help manage the process for large groups.

Advanced OfficeTracTM

- Developed by consultants, for consultants and/or ergonomic assessors
- This is not a “self-help” program to drive people to do their own assessments and adjustments
 - In a study by Amick et al it was determined that “unless workers are provided with the appropriate tools to easily implement knowledge obtained through training, the full benefits of training will not be achieved.”

Effect of Office Ergonomics Intervention on Reducing Musculoskeletal Symptoms
SPINE Volume 28, Number 24 pp 2706-2711

What Was Missing?

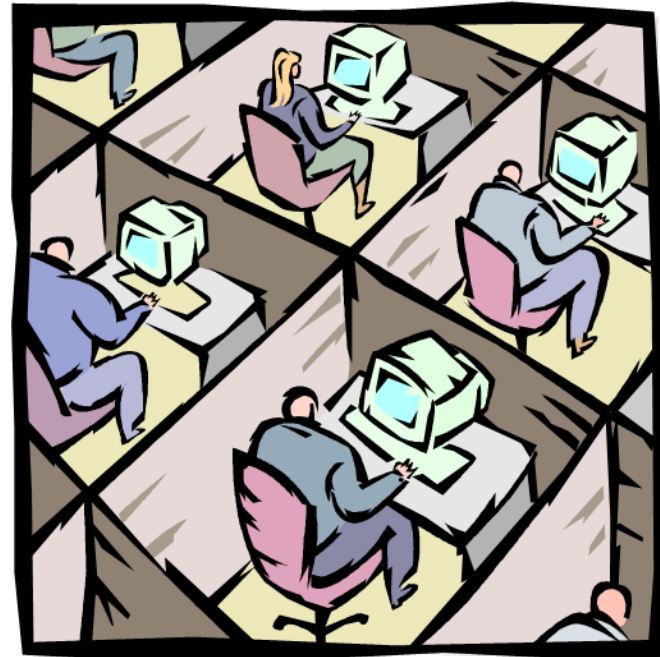
- ❖ Quick, user-friendly tool to assess and stratify risk
- ❖ Metrics to demonstrate that changes have made an impact
- ❖ A direct link between the consultants activity and procurement
- ❖ Targeted follow-ups
- ❖ A system that takes a complex process and simplifies it

Training Only

Amick et al....

Key Point:

Office ergonomic interventions that rely exclusively on training may not affect musculoskeletal symptom growth, especially when office ergonomic equipment is limited in adjustability.



Effect of Office Ergonomics Intervention on Reducing Musculoskeletal Symptoms
SPINE Volume 28, Number 24 pp 2706-2711

Admin Screen – Employer View

Advanced Physical Therapy

Organization Info Equipment List Generate Survey Employee Records Reports Active [Edit](#)

Organization: Advanced Physical Therapy **Phone:** 317 390-5590 **Website URL:** www.advancedpt.com
Address: 5949 W. Raymond St. **Fax:** **# of Employees:** 167
Indianapolis
IN
46241
United States

Contacts:

Type	Name	Email	Phone	Position
Primary	Daniel Black	dblack@advancedpt.com	317 408-6305Ext.	Ergonomic Consultant

Vendor: Staples **Procurement Contact:** WhitneyRohl
wrohl@advancedpt.com
390-5590 Ext.

Notes:

Date	Description
------	-------------

Advanced Physical Therapy

Organization Info | Equipment List | Generate Survey | Employee Records | Reports

Past Surveys Generated:

Date Generated	Survey Type	Login	Password
5/5/2010	General Office Pre-Survey	pradvancedphysicaltherapy	b0dxln3
5/5/2010	General Office Pre-Survey	pradvancedphysicaltherapy1	64mmfga
5/5/2010	General Office Pre-Survey	pradvancedphysicaltherapy2	dygxx4h

Generate New Survey: Step 1 Create Survey

Choose Survey Type:

Have different passwords for each department

This tool was designed to be expanded to other applications, i.e., laboratories and manufacturing

Generating Surveys

Generating new surveys, for additional departments within the business, is as simple as clicking a button – a unique Login and Password is automatically generated


Unique Equipment Lists

Consultant Dashboard > Roche Diagnostics

Roche Diagnostics

Organization Info | Equipment List | Generate Survey

Current Equipment		Add Equipment	
Ergonomic-style keyboard - Item: 617433	Remove	Wireless keyboard – Item: 759238	Add
Travel Keyboard - Item: 755949	Remove	Comfort-type keyboard - Item: 617407	Add
Soft-gel mouse rest - Item: 652595	Remove	Soft-gel keyboard rest - Item: 652589	Add
ErgoEdge (alimed.com 70459_AXDIMIVDN00018387)	Remove	Ergo beads mouse rest - Item: 659889	Add
Flat Screen monitor - Item: 812154	Remove	Ergo beads keyboard rest - Item: 659890	Add
Glare Screen - Item: 504999	Remove	Gel arm-rest covers - www.ergo-2000.com - SKU: CD10/ChArms	Add
Trackball mouse	Remove	Monitor stand/riser - Item: 891251	Add
Keyboard tray (corner mount)	Remove	Document holder (single page) - Item: 562401	Add
Footrest	Remove	Document holder (double page) - Item: 411327	Add
<input type="text"/>	Add	Privacy screen - Item: 792167	Add

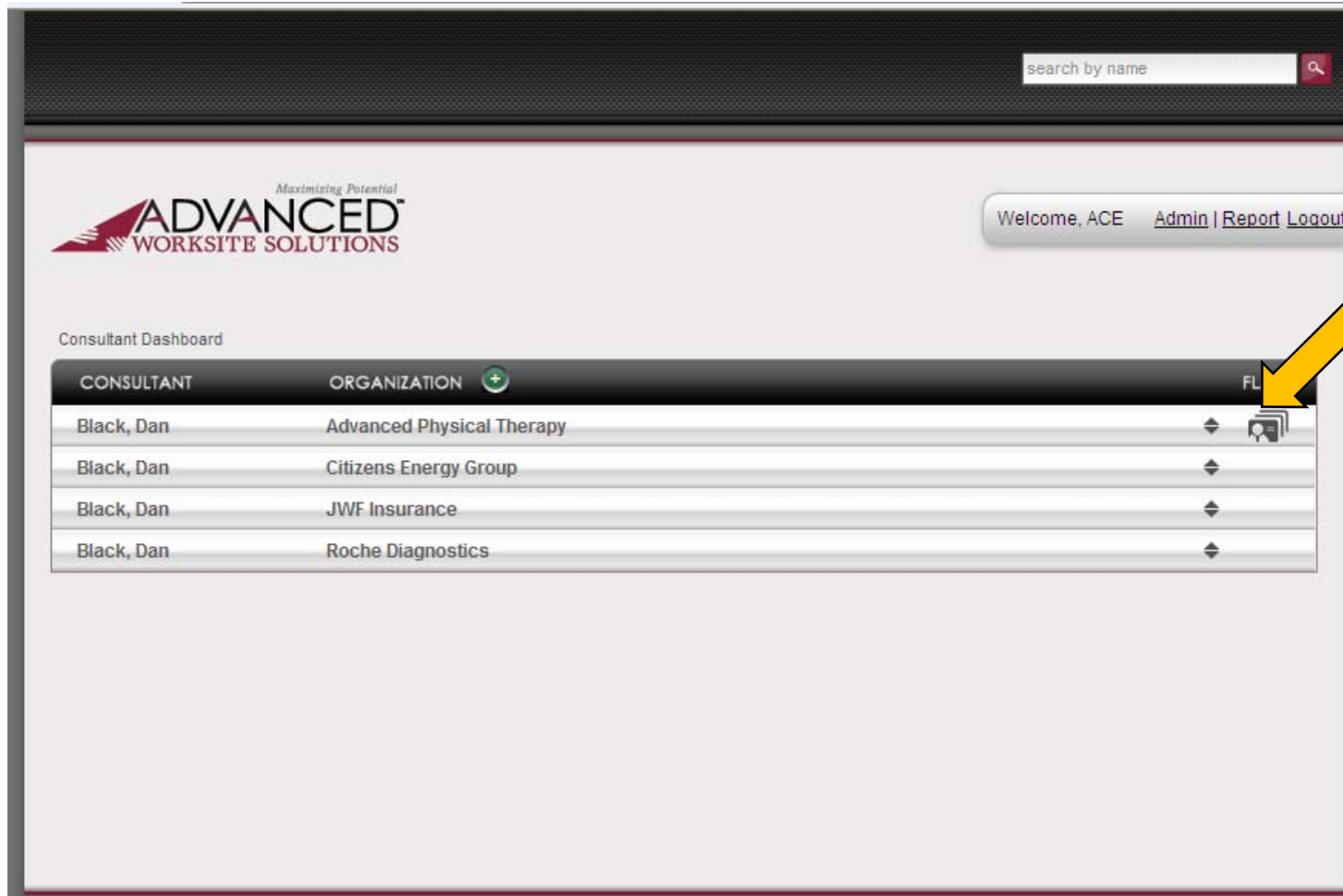


Easily Manage and Monitor the Process

danawesomeco				
Organization Info	Equipment List	Generate Survey	Employee Records	Reports
Name	Pre-Survey	Risk	Assessment	Post-Survey
Zabel, Melissa	4/14/2010	Low	3/16/2010	4/23/2010
Doe, Jane	4/15/2010	High	4/28/2010	Needed
Fowler, Suzanne	4/15/2010	Low	4/28/2010	4/28/2010
Black, Daniel	4/16/2010	Low	3/16/2010	4/16/2010
Smith, Mike	4/16/2010	Low	N/A	N/A
Clark, Kim	4/16/2010	High	4/28/2010	Needed
Testing, Lady	4/16/2010	Low	N/A	N/A
Fancy pants, Missy	4/16/2010	High	4/28/2010	Needed
DeLaVerqne, Mark	4/19/2010	High	3/19/2010	Needed
Test, Lady	4/25/2010	High	Needed	Needed
Roberts, Julia	4/25/2010	High	4/28/2010	Needed
Test, Test	4/27/2010	High	4/27/2010	Needed
Zabel, Melissa	4/27/2010	High	4/27/2010	Needed
Doe, Jane	4/28/2010	High	Needed	Needed
Jones, Sam	4/28/2010	High	4/28/2010	Needed
Denman, Sheila	4/28/2010	Low	4/28/2010	4/28/2010



Flagging Helps Manage the Process









search by name

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Welcome, ACE [Admin](#) | [Report](#) [Logout](#)

Consultant Dashboard

CONSULTANT	ORGANIZATION 	FL 
Black, Dan	Advanced Physical Therapy	
Black, Dan	Citizens Energy Group	
Black, Dan	JWF Insurance	
Black, Dan	Roche Diagnostics	

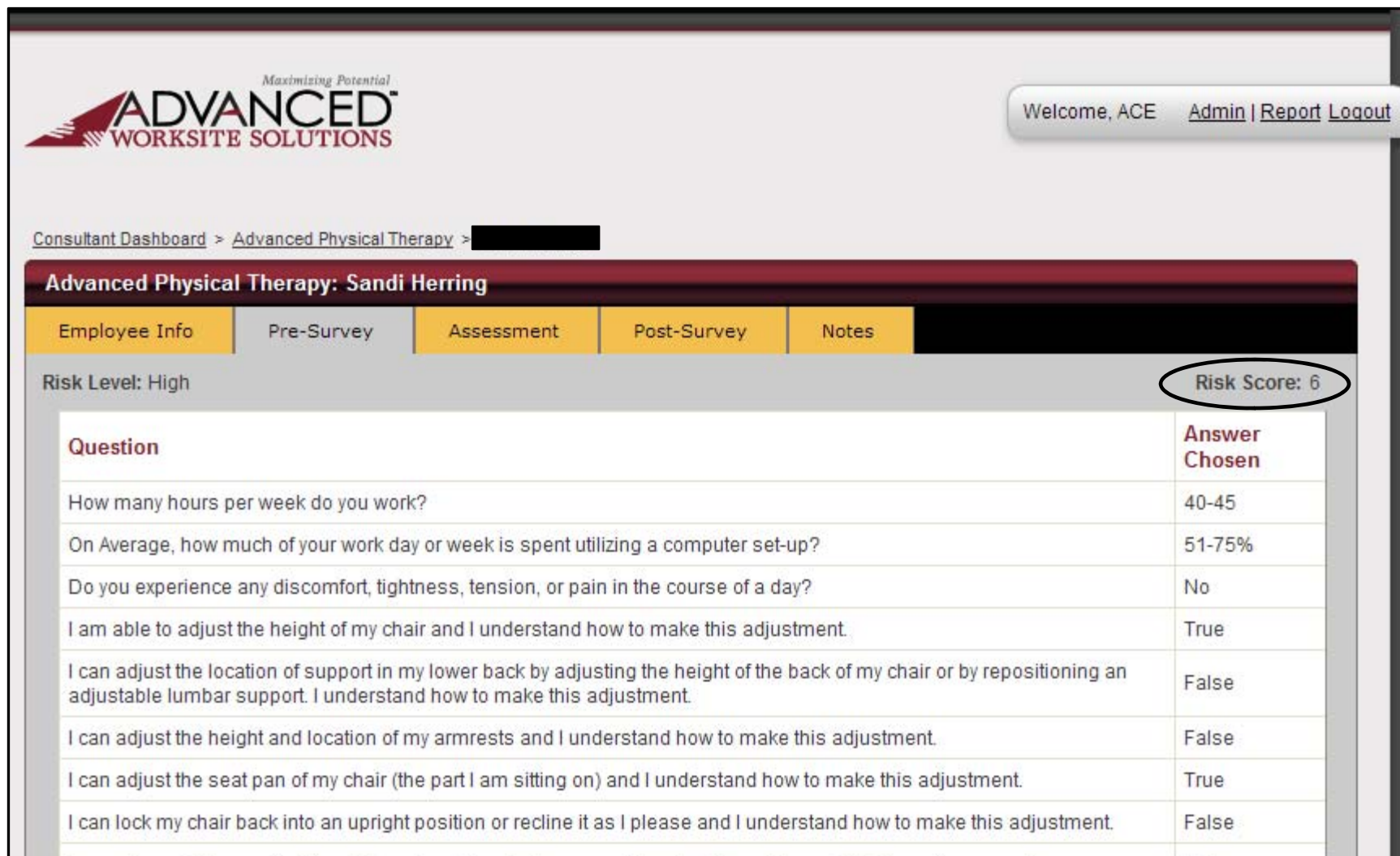
This Flag means there are more than 10 people who need assessments

Identify and Stratify Risk

danawesomeco

Organization Info	Equipment List	Generate Survey	Employee Records	Reports	
Name	Pre-Survey	Risk	Assessment	Post-Survey	
<u>Zabel, Melissa</u>	4/14/2010	Low	3/16/2010	4/23/2010	
<u>Doe, Jane</u>	4/15/2010	High	4/28/2010	Needed	
<u>Fowler, Suzanne</u>	4/15/2010	Low	4/28/2010	4/28/2010	
<u>Black, Daniel</u>	4/16/2010	Low	3/16/2010	4/16/2010	←
<u>Smith, Mike</u>	4/16/2010	Low	N/A	N/A	
<u>Clark, Kim</u>	4/16/2010	High	4/28/2010	Needed	
<u>Testing, Lady</u>	4/16/2010	Low	N/A	N/A	
<u>Fancy pants, Missy</u>	4/16/2010	High	4/28/2010	Needed	
<u>DeLaVerqne, Mark</u>	4/19/2010	High	3/19/2010	Needed	
<u>Test, Lady</u>	4/25/2010	High	Needed	Needed	
<u>Roberts, Julia</u>	4/25/2010	High	4/28/2010	Needed	←
<u>Test, Test</u>	4/27/2010	High	4/27/2010	Needed	
<u>Zabel, Melissa</u>	4/27/2010	High	4/27/2010	Needed	
<u>Doe, Jane</u>	4/28/2010	High	Needed	Needed	
<u>Jones, Sam</u>	4/28/2010	High	4/28/2010	Needed	
<u>Denman, Sheila</u>	4/28/2010	Low	4/28/2010	4/28/2010	

See How the Employee Responded



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Welcome, ACE [Admin](#) | [Report](#) [Logout](#)

[Consultant Dashboard](#) > [Advanced Physical Therapy](#) > [REDACTED]

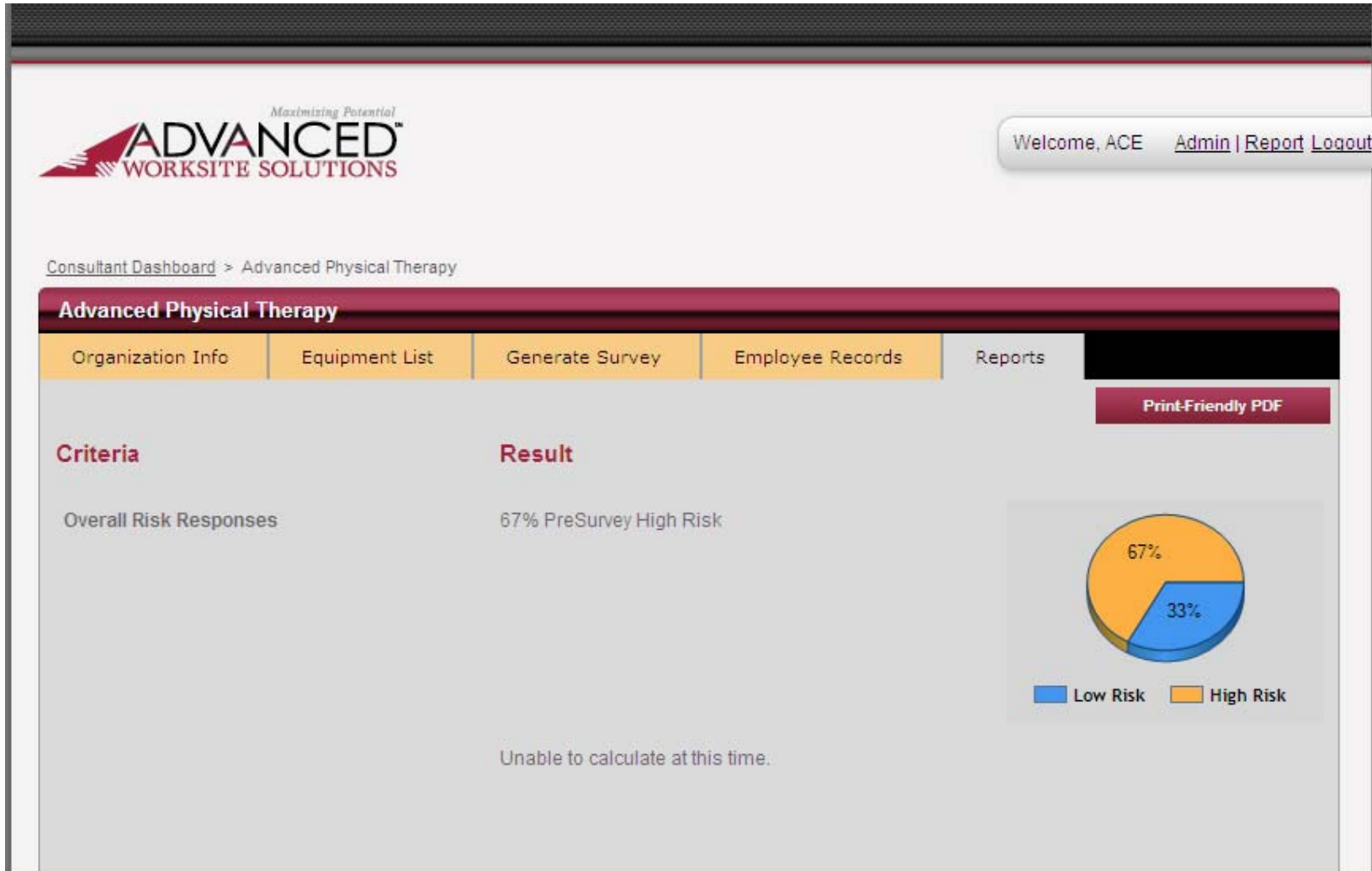
Advanced Physical Therapy: Sandi Herring

Employee Info | Pre-Survey | **Assessment** | Post-Survey | Notes

Risk Level: High Risk Score: 6

Question	Answer Chosen
How many hours per week do you work?	40-45
On Average, how much of your work day or week is spent utilizing a computer set-up?	51-75%
Do you experience any discomfort, tightness, tension, or pain in the course of a day?	No
I am able to adjust the height of my chair and I understand how to make this adjustment.	True
I can adjust the location of support in my lower back by adjusting the height of the back of my chair or by repositioning an adjustable lumbar support. I understand how to make this adjustment.	False
I can adjust the height and location of my armrests and I understand how to make this adjustment.	False
I can adjust the seat pan of my chair (the part I am sitting on) and I understand how to make this adjustment.	True
I can lock my chair back into an upright position or recline it as I please and I understand how to make this adjustment.	False

Real Time Reporting



The screenshot shows a web application interface for 'Advanced Physical Therapy'. At the top left is the company logo with the tagline 'Maximizing Potential'. At the top right, a user is logged in as 'ACE' with links for 'Admin', 'Report', and 'Logout'. The main content area is titled 'Advanced Physical Therapy' and contains a navigation menu with 'Organization Info', 'Equipment List', 'Generate Survey', 'Employee Records', and 'Reports'. A 'Print-Friendly PDF' button is also visible. The main data area is split into two columns: 'Criteria' and 'Result'. Under 'Criteria', it lists 'Overall Risk Responses'. Under 'Result', it shows '67% PreSurvey High Risk'. To the right of this text is a 3D pie chart showing 67% in orange (High Risk) and 33% in blue (Low Risk). Below the chart, a legend identifies the colors. At the bottom of the main content area, a message states 'Unable to calculate at this time.'

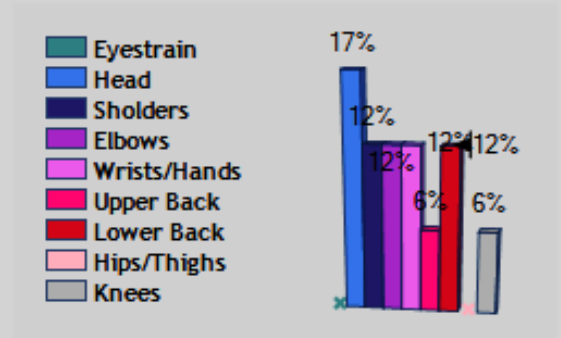
Criteria	Result
Overall Risk Responses	67% PreSurvey High Risk

Unable to calculate at this time.

Real Time Reporting

Total Anatomical Structure Discomfort

- 0% Eyestrain
- 17% Neck Discomfort
- 12% Shoulder Discomfort
- 12% Elbow Discomfort
- 12% Wrist/Hands Discomfort
- 6% Upper Back Discomfort
- 12% Lower Back Discomfort
- 0% Hips/Thighs Discomfort
- 6% Knee Discomfort



Change in Risk With Intervention

Unable to calculate at this time.

Potential Cost Without Intervention

\$75600 Savings

Purpose & Instructions

Recently an office ergonomics assessment was performed for the employee listed above. In addition to the changes made to the workstation, the following products are recommended to ensure the employee's area is set up properly according to ergonomic standards. These products, listed with the corresponding product numbers, can be obtained through the approved vendor(s) listed below. *Please note - If product numbers have been changed or products have been discontinued, please contact the Assessor for comparable equipment.

Product Recommendations

- Soft-gel keyboard rest - Item: 852589
- Ergo beads mouse rest - Item: 859889
- Footrest
- Standard Ergonomic chair (seat pan, arm rest, lumbar support adjustments)

30 days Post Assessment

It has been 30 days since you completed your initial risk assessment survey from Advanced Worksite Solutions. As a follow up, please login to the link below and complete another short survey. The purpose of this survey is to ensure that any modifications or equipment changes we made were effective and that risk has been effectively reduced.

The post-survey is located at: <http://wj09180.webizedev.com/postSurveyLogin.aspx>

Username: mezabell

Password: cy2wtdf

Sincerely,

Dan Black, CEAS

Advanced Worksite Solutions Consultant

- ❖ High risks are correctly identified and prioritized, and focus for applying additional resources is documented.
- ❖ Process is easy to oversee and manage
- ❖ Equipment can be ordered in real time with the direct link to procurement
- ❖ Automatically generates email to prompt employee to do a follow up survey 30 days after assessment

- ❖ Quantifiable
- ❖ Measurable
- ❖ User Friendly and Easy to Understand
- ❖ Systematic Approach
- ❖ Works well for any size organization
- ❖ Results Driven