BTE Technologies
Evaluation and Rehabilitation System Manual

BTE TECHNOLOGIES™

Customer Service

BTE strives to provide exceptional customer service. To access a Customer Service Representative:

Phone 800.461.6888 (9am-6pm EST Monday thru Friday)
Cell 416.717.5789 (After-hours service)
Fax 416.398.9108
Email service@bteco.com

Class A Digital Device

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Do Not Change of Modify Any Components

Any changes or modifications, especially to the wireless components, not expressly approved by BTE Technologies, Inc. could void the user's authority to operate the equipment.

Acceptable Antenna(s)

This device has been designed to operate with the antenna(s) listed below and having a maximum gain of 2.7 dBi. Antennas not included in this list or having a gain greater than 2.7 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

Acceptable antenna(s) include:
1. Linx Technologies 916MHz 1/4 Wave Whip Antenna (ANT-916-CW-QW)

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Preventing interference between the wireless components

Interference, which can result in an inability to acquire accurate data, may occur in the following scenarios:

a. The antennas of any wireless components are within 3 feet of each other (e.g. the antenna on the new DAQ Box is within 3 feet of the antenna on the Heart Rate Transmitter).

b. There is not a direct line of sight between the antennas of the wireless components. In addition, any metal that is between the antennas will cause interference.

You may prevent interference by maintaining your system in the following manner:

a. Do not allow the Heart Rate Transmitter to fall on the floor.

b. Regularly check the USB cable and power cable that are attached to the new DAQ Box.

c. Verify the antennas are in good working order and properly secured.

You may also prevent interference by using the following guidelines:

a. Place the new DAQ Box in a location that ensures the antenna of the new DAQ Box will always be at least 3 feet from the antenna on the Heart Rate Transmitter.

b. Verify there is a direct line of sight between the DAQ Box antenna and the Heart Rate Transmitter antenna.

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Important Information

BTE Technologies Inc. - Baltimore

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Hanover, MD 21076

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Facsimile:	(410) 850-5244

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Englewood, CO 80111

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Internet Support

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Customer Service

Telephone:	(800) 331-8845
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Copyright Information

Credits

The following individuals were involved in the development of this manual.

Elizabeth Chapman B.Sc.Kin.,CK	Customer Service Manager
Sarah Graham, B.Sc.Kin.,CK	Kinesiologist
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David Lithwick B.Sc., B.A.	Chief Technology Officer
Navin Ramrattan	Production Manager
Tobi Weightman B. HSC	Customer Service Representative
Paul Zhang M.Sc.	Electrical Engineer

Technical Specifications

The following outlines the electrical components of the BTE Evaluation and Rehabilitation System:

Input Voltage:
Europe - 220/230/240VAC
North America – 110VAC
50/60 Hz

Input Current:
Europe - 4 Amp
North America – 8 Amp

The BTE Evaluation and Rehabilitation System has been certified by Entela (File No. 8771). All the tools (applied parts) for the system are Type B. The system has been manufactured to be used in normal conditions. Do not use the system beside high magnetic fields, or x-rays. Cell phone usage within 30 feet of the system may have an impact on the accuracy of the heart rate monitor readings.

The BTE tools are to be used only in the ports and manner specified in this manual. Any modifications or use of non-BTE parts can cause damage to the product. Contact BTE Medical Inc for replacement parts if required.

Safety Considerations

BTE Medical makes every effort to design and manufacture products, which meet and exceed the highest safety standards. The following information provides recommendations for safe use of the equipment.

The BTE Evaluation and Rehabilitation System must only be operated on a level surface.

The recommended maintenance program for your system is outlined in a later section of this manual. This program will ensure your equipment will function properly and safely for many years. If at any time your system is not working safely, the evaluator should contact the BTE Medical Customer Service Department for assistance. Never attempt to repair the electrical components of the system. Disconnect the power source for any other repairs.

This equipment is to be used and/or supervised by qualified healthcare professionals who has knowledge in anatomy, exercise physiology, biomechanics, psychology, pathology, and an understanding of work, rehabilitation and disability management principles. Prior to use of this equipment it is recommended the evaluator read the information in this manual as well as obtaining certification from BTE Medical. Prior to testing any clients it is suggested a sample test be completed with a co-worker familiar with the system to improve your comfort with the system.

Prior to initiating system use with a client, it is recommended that the physical health questionnaire be completed with the client along with an intake interview to determine if there are any medical contraindications. Resting blood pressure and heart rate should be measured to ensure they are within safe limits for testing as per relevant research and guidelines. If any medical contraindications are identified clearance should be obtained from the client's primary care practitioner prior to initiating functional testing or rehabilitation.

During functional testing, the client's heart rate and other physiological parameters as appropriate should be monitored. Testing should be stopped if the heart rate is above safe limits as outlined in relevant research and guidelines or if other physiological parameters are above safe limits. Body mechanics are a good indicator when a client is performing an unsafe activity and is at risk of injury. It is the evaluator's responsibility to monitor the client's body mechanics and either alert the client to alter their movement or terminate testing.

The equipment has been designed with double locks on all the attachments to the Evaluation and Rehabilitation (ER) System arms. The evaluator must ensure that both the locking pin and the tightening mechanisms are secure before allowing a client to push or pull on an accessory attached to the ER arm. When using the weights for calibrating or for functional testing or rehabilitation, care needs to be taken to prevent injury. When stepping on and off the platform care needs to be taken to prevent tripping.

The information presented in this manual is given in good faith and is to the best of our knowledge accurate. However, anyone who uses this information in any way does so entirely at his or her own risk. Neither BTE Medical Inc., its officers nor their representatives can accept any responsibility for any damage or injury incurred as a result of information presented here except under the terms of the product warranty.

Conventions and Symbols Used

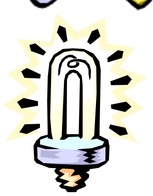
This instructional manual will use several common conventions to assist in the reading and understanding of the material presented. The following is a summary of the typographical conventions:

Words you type appear in "quotations".
Buttons you click on with the mouse appear in a bold font.
If a task requires you to choose from a menu, the manual separates menu commands with a vertical bar. Therefore, this manual uses File | Save As to indicate that you should open the File menu and choose the Save As command.

In addition to typographical conventions, the following icons are used to set off various pieces of information and to make them easily recognizable:

The New Term icon appears when a new term is addressed and will include a definition to help reinforce that term.

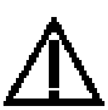
The Troubleshooting icon may appear at the end of some sections. This offers suggestions to help you through your troubleshooting. The majority of the troubleshooting tips can be found in the appendix of the manual.



The Tips icon will provide you with tips that offer shortcuts and quick solutions to common problems.

You will find the Important Icon when it is mandatory or strongly advised that you carry out an action before progressing to the next.

Type B Classification. This label indicates that the equipment provides a particular degree of protection against electrical shock, particularly regarding allowable leakage current and the reliability of the protective earth connection. The Hanoun Evaluation and Rehabilitation system meets or exceeds the IEC 60601-1, Ed 2:88 +A1:91 and A2:95, IEC 60601-1-1, CAN/CSA-C22.2 No. 601.1-M90/UL 2601-1(1997).



Attention, Consult Accompanying Documents. This symbol is located on the data acquisition box adjacent to the LED indicator.

Assembling the Equipment Upon Arrival

Your ER System will arrive on several skids. The shipping company will place the ER Platform (including the base and post) in the location you specify to them. The post is attached to the base by four screws with an Allen key. The Computer Management Stand is to be placed to the right of the system. The FROM pegboard may be placed anywhere in close proximity to the system (no more than 20 feet away). All the equipment must be assembled on a level surface.

The following is the recommended order in which to assemble your equipment:

Place the ER Stand where you would like to have it
Assemble the Computer Management Stand to the right of the ER Stand
Assemble the FROM pegboard
Assemble tools on Computer Management Stand
Connect the computer

It is recommended while unpacking the equipment that you review your packing slip, to make sure you have received all the required parts. If there is anything missing from the shipment please contact Customer Service immediately so replacements can be provided.

Computer Management Stand Setup

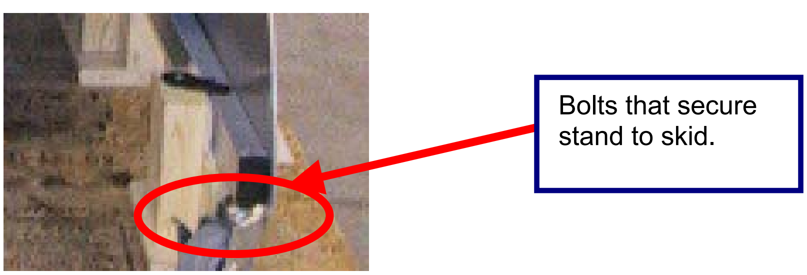
The computer management stand is partially assembled when you receive it. To complete assembly you will need to attach three shelves at the front of the stand and one shelf at the bottom back of the stand in order for it to be fully operational.

Required Tools and Equipment:
8 X 1” screws
Allen Key
Phillips or square head screwdriver

Dismount/Assembly of Computer Stand

To identify the front of the stand locate the Hanoun sticker at the top. The back of the stand is distinguished by a random series of holes.

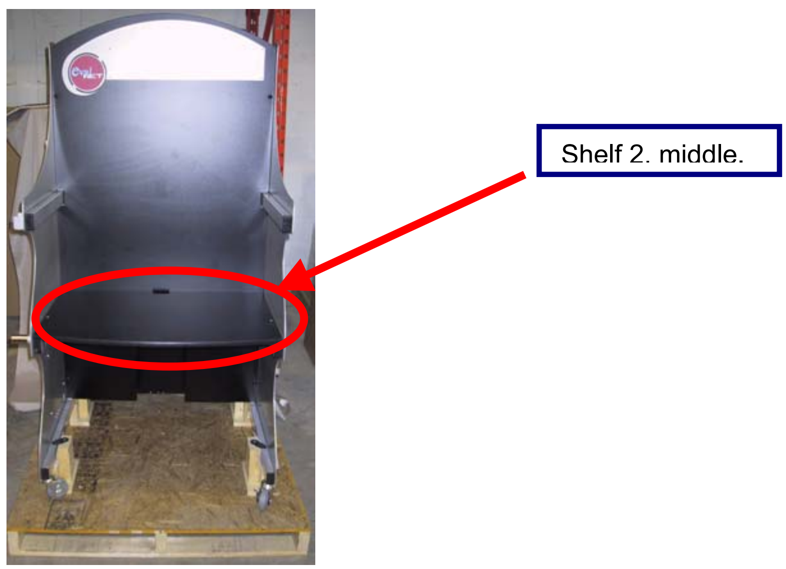
To dismount the Computer Stand from the skid unscrew and loosen the bolts near the bottom rails (as shown below). There is a bolt near each wheel. When the bolts are removed, slide the stand off the skid.



Shelf 1 is the shelf with the keyboard drawer attached to it. This shelf will support the computer monitor. It needs to be screwed to the top set of rails on the stand.

2 of the 1” screws are inserted into the rails along the inside of each side panel through holes in the holes in the top.

Shelves 2 and 3 are identical in nature. Shelf 2 is attached to the two rails in the middle of the front of the stand with 2 of the 1” screws. This shelf will support the computer printer.



Shelf 3 is attached to the bottom rails of the front of the stand with 2 of the 1” screws. This shelf will support the computer tower.

Shelf 3 (bottom, front).

Shelf 4, the smallest of the shelves, is attached to the bottom rails on the back of the stand with 2 of the 1" screws. This shelf will support all of the masked weights.

Shelf 4 (back).

Close up of back, bottom shelf.

The front of the completed Computer Management Stand with the 4 shelves attached should look like the following:

Shelf 1

Shelf 2

Shelf 3

The next step in the set up of the Computer Management Stand is the installation and mounting of all the other equipment. As mentioned earlier the computer monitor rests on the top shelf, the printer and computer speakers rests on the middle shelf, and the computer tower rests on the bottom shelf of the front of the stand. The back of the stand and both sides of the stand also hold numerous pieces of equipment.

The right side of the stand (when facing the front of the stand) holds the two FOCUS shelves as shown below. The shelf with the elbow attachment is mounted below the shelf with the straight pin attachment.

Shelf with straight pin attachment.

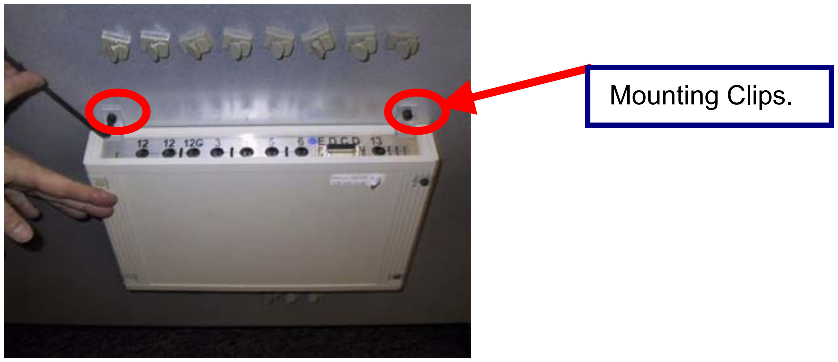
Shelf with elbow attachment.

The left side of the stand holds the Data Acquisition Box, the Inclinometer, the Goniometer, the Handgrip Dynamometer, the Pinchgrip Dynamometer, the Algometer, the Universal Task Master (UTM), the FOCUS load cell, and the Heart Rate Monitor. The first piece of equipment to be installed on the left side of the stand is the Data Acquisition Box. The one narrow end of the Data Acquisition Box with the power switch faces the ground.

Power switch.

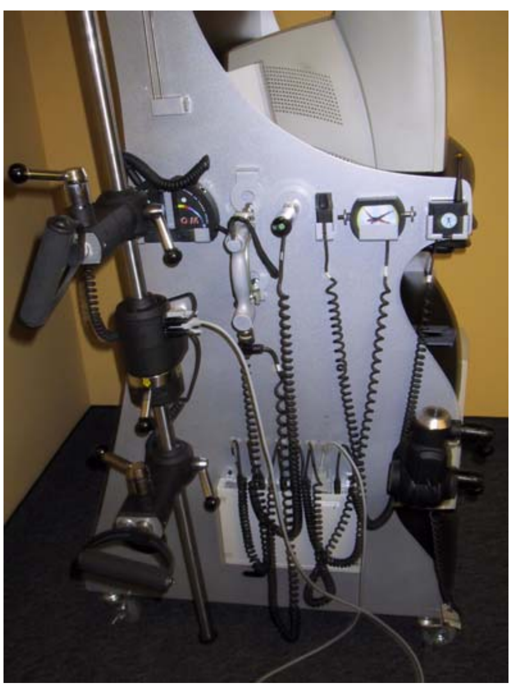
The Data Acquisition Box is secured to the stand by mounting clips and tightened with an Allen key. The Allen key is provided with your system.

The power cord for the Data Acquistion Box is fed through the side of the computer management stand to the power bar. The serial cord attaches to the back of the data acquisition box and is fed through the side of the computer management stand and connected into the serial port in the computer.



All the power cords for the testing equipment on that side are plugged into this Data Acquisition Box. As you will notice, each cord is labeled with a number and/or a letter, which corresponds to the same number and/or letter on the top of the Data Acquisition Box. Provided for you, and already mounted above the Data Acquisition Box, are clips for each cord coming out of the Data Acquisition Box. This prevents constant bending of the cords at the connection to the box and prevents wear and tear on the cords.

Each piece of testing equipment on the left side of the stand has its own specific mounting apparatus. Use the picture below as a guide to see where each piece of equipment fits. The coiled power cords for the equipment should be plugged into the appropriate location on the Data Acquisition Box. When plugging the equipment into the Data Acquisition Box make sure the pins are lined up properly to avoid damaging the connectors.



The back of the Computer Management Stand is designed to hold all of the attachments for the FOCUS and UTM. This includes all of the different kinds of handles (straight bar, wide handles, palmar handles, etc.) Use the picture below to see the optimum placement of the various attachments. The smaller shelf on the back of the stand holds the masked weights.

Connecting ER to the Computer Diagnostic System

In order to connect the ER to the Computer Diagnostic System you will need the following items:

ER Stand
Computer
3 Black Coiled two-way Connector Cables (labeled 3E, 1B and 2T)
One Data Acquisition Box
One Computer Serial Cable
One black AC power cord
One heart rate monitor cable (with one round and one square end)

When you are ready to begin, identify all of the above components, and then follow these steps:

Attaching the Upper Accessory Arm Cable

Upper Cable (2T) on upper arm

2T insertion on the base of the ER system

Base of the ER system

Attaching the Lower Accessory Arm Cable:

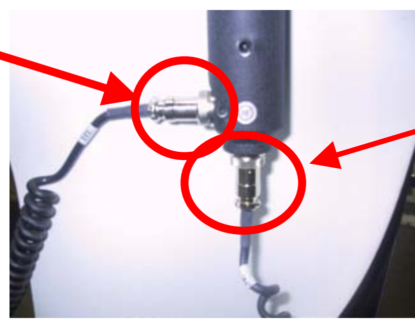
1B insertion at the base of the ER System

1B Cable for Lower Arm

Base of ER System

Connecting the FOCUS Load Cell Head to the Junction Box

Load Cell Head connects to the 3E port on the junction box



3E cord connects to port on the junction box

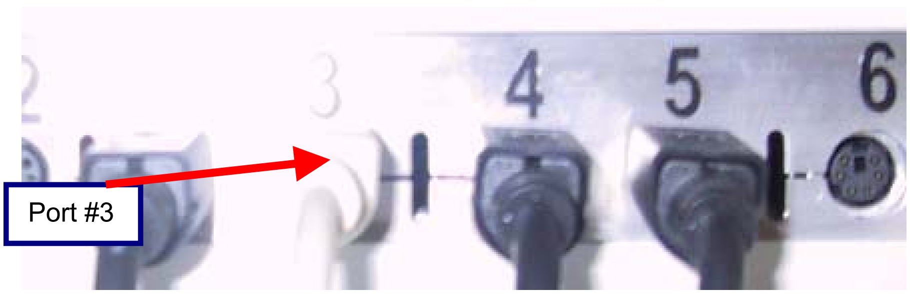
3E insertion on the junction box at base of the ER stand

Base of ER Stand

Connecting the Junction Box Components (Load Cell, Upper Shelf and Lower Shelf) to the Computer Stand

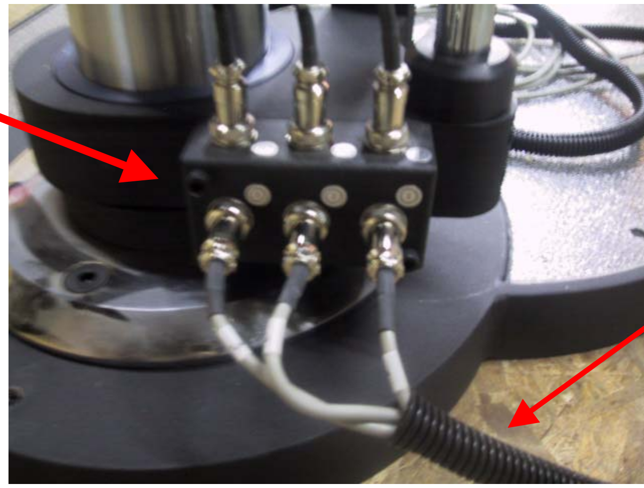
This is the #3 cable which is attached to the number 3 port on the Data Acquisition Box.

Port #3



This is the number 2 cable, which is plugged into the number 2 port on the back of the Data Acquisition Box.

This is the number 1 cable, which is plugged into port number 1 on the back of the Data Acquisition Box.



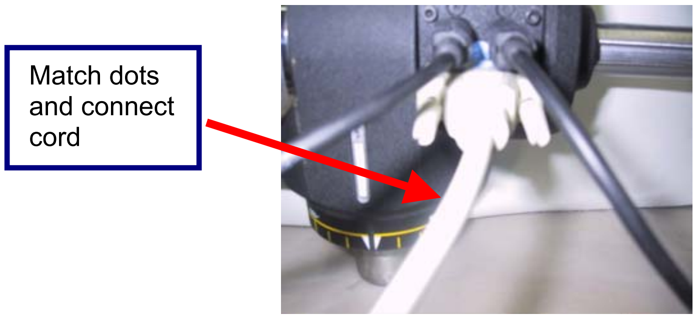
A black plastic wrap is then used to secure the loose wires.

Connecting the UTM to the Data Acquisition Box

Within the packaging of your system, you will find one more gray serial cord with blue markings on it. This cable will be used to connect the Universal Task Master to the front of the Data Acquisition Box.

Locate the back of the Universal Task Master (marked with a blue dot). One end of the serial cord is connected to this side of the UTM. To allow for communication between the UTM and the Data Acquisition Box, the other end of the serial cord (also marked with a blue dot) must now be connected to the 'TM' port on the Data Acquisition Box.

See below for the placement of the cables from the right and left load cells. Match the blue dots to attach the cable that connects to the Data Acquisition Box.



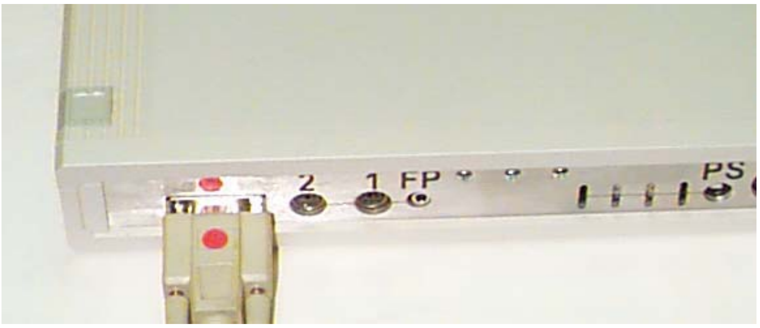
You have now connected the Data Acquisition Box to the computer stand. The Data Acquisition Box should now be in communication with the UTM.

Setting Up Your Data Acquisition Box

Take a moment to view the Data Acquisition Box. You will notice that the front of the box has nine outlets and a green light bulb.

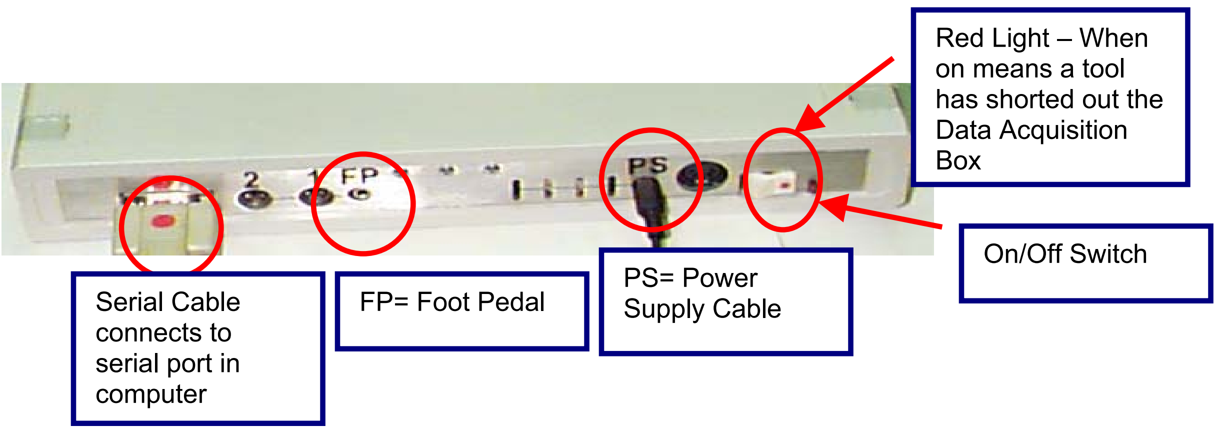
In order to use your ER System, connect the Data Acquisition Box to both the computer and the ER System. In order to do so, locate the gray serial cords marked with red dots and a black power supply cord supplied with your system.

The serial cord connects the Data Acquisition Box to the serial port on the back of your computer. Connect the female end of the serial cable to the back of your Data Acquisition Box. For your convenience, a red dot has been placed over the correct insertion for the cable -- simply match the red dots together.



The same is true on your computer tower. Simply take the opposite end of the serial cord and connect it to the proper port on the back of the CPU – this is also identified with a red dot for your convenience. Do not plug the serial cable into a converter and then into a USB port in the computer.

To connect the power supply to your Data Acquisition Box, insert the single prong or pin into the “PS” port located at the rear of you Data Acquisition Box. The opposite end of the power supply should be plugged into a power adapter. Switch the Data Acquisition Box on -- the green light on the front of the box will light up to indicate that the box is receiving power.



Attachments

The following is a list of ports that each integrated tool connects to:

1 – Bottom Shelf
2 – Top Shelf
3 – FOCUS Load Cell
4 – Hand Grip
5 – Pinch Grip
6 – Algometer
12 – Inclinometers
12G – Goniometer
12 – HR receiver
TM –Universal Task Master

You have now connected almost all of the basic components necessary for communication between the ER hardware and ODES software. The final step is to plug the power cord to the power outlet.

Functional Range of Motion (FROM) Pegboard

Assembly

List of Parts:
6 MTM Panels 1-6 (Each has Zone A, B, and C)
2 Brackets Top/Bottom
24-1/4” blk. washer
24-1/4 x 20 x 1 ¼ BHCS
30- Pin blk
1 5/32 Allen Key

Installation
1. Locate your 5/32 Allen Key, 24 black washers and 24 1/ ¼ screws.

Locate the top and bottom brackets

Top Bracket

Bottom Bracket

Arrange the MTM Panels on the floor in the proper sequence. The order is as follows (from left to right): Panel 6, 1, 2, 3, 4, and 5.

Place the top and bottom brackets so that the middle four MTM panels can be attached. You may want to move panel 6 and 5 aside for the time being.   Panels 1-4 need to be attached using the 5/32 Allen Key, the 1 ¼ screws and the washers. Attach the top bracket to the panels prior to attaching the bottom bracket.

Once the top and bottom brackets have been attached, you are now ready to attach panel 5 and 6. This should be done one panel at a time, starting with panel 6 on the left. Screw one bolt into the top bracket and one bolt into the bottom bracket in order to line up the panel with the bracket. You may then attach the second set of bolts in order to set the panel in place. Repeat this procedure for panel 5 on the right hand side.

You may now tilt the FROM board into an upright position and place the 30 black pegs in one of the zones to prepare for testing.

Once upright the FROM board can be located near the ER system, up to 20 feet away from the computer.

Once you have set up your system please complete the registration form and fax it to Customer Service at (416) 398-9108. If you have any difficulty assembling or using the system our Customer Service department can provide you with assistance by calling (800) 461-6888 X2.

Please take the time to review the rest of this manual to better understand the Hanoun hardware and software. It is strongly recommended that evaluators using this system receive appropriate training and get certified as Hanoun Evaluators. Information on training can be obtained in the appendix of this manual, by contacting your sales representative or by registering on-line at www.hanoun.com.

The Basics in Using the ER System

If your system was purchased with a computer, the ODES software comes pre-installed and all the required software components should be unlocked prior to shipping.

The following information will provide those evaluators with information on installing the software.

Instructions for Software Installation

Prior to loading the ODES software onto a computer please check to make sure your computer meets the minimum recommended software and hardware requirements.

COMPONENT	REQUIREMENT
Computer	500 MHz Processor
Windows	Window 98 Second Edition, ME, XP or 2000 is required to run the ODES program. We do not suggest XP Home Edition. Go to www.microsoft.com to get the latest service patches for your operating system.
Memory	256 MB of RAM is recommended
Disk Space	500 MB of free disk space
Components	800 x 600 screen An SVGA high resolution color monitor A PS/2 mouse or compatible pointing device USB port for the Data Acquisition Box A color ink jet or laser printer Speakers
Network	In order to connect your computer to other computers via a network, cables and a Windows-compatible network adapter (network card) are required.
Motherboards	**we prefer** Intel Chipset Motherboards Intel Pentium CPU’s

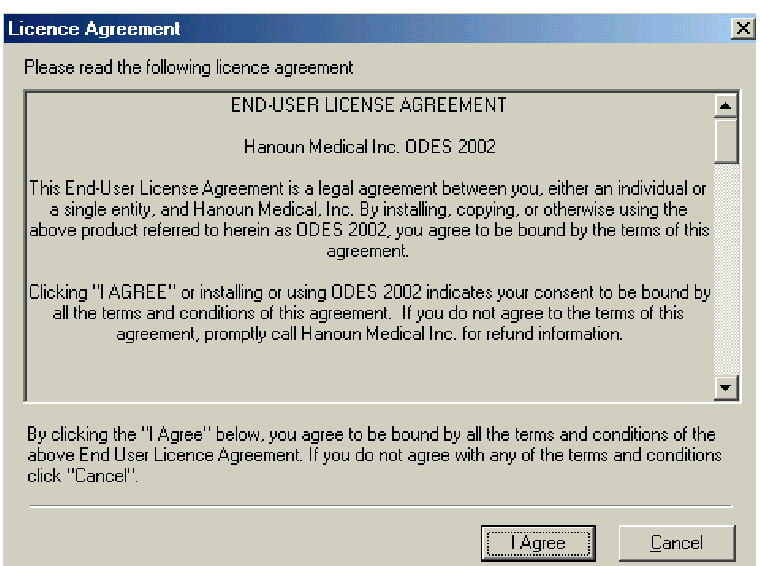
Please note that we do not provide technical support for USB
Palm Pilot type software will interfere with the data acquisition device

Installing

Please ensure that you have exited all programs prior to loading ODES 2004.

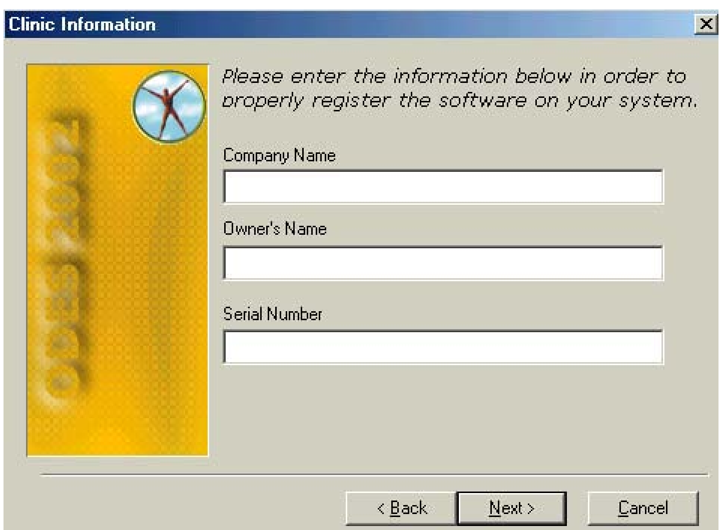
Insert the ODES 2004 disk into the CD-ROM drive and wait a few moments. A screen will appear giving you a variety of choices. You may view a PowerPoint presentation about our systems (Human Performance Programs), install ODES 2004, view the ODES manuals or visit our website. To install the software, click on **Install ODES 2004**

After choosing to install ODES, you must accept the license agreement to continue the installation process.

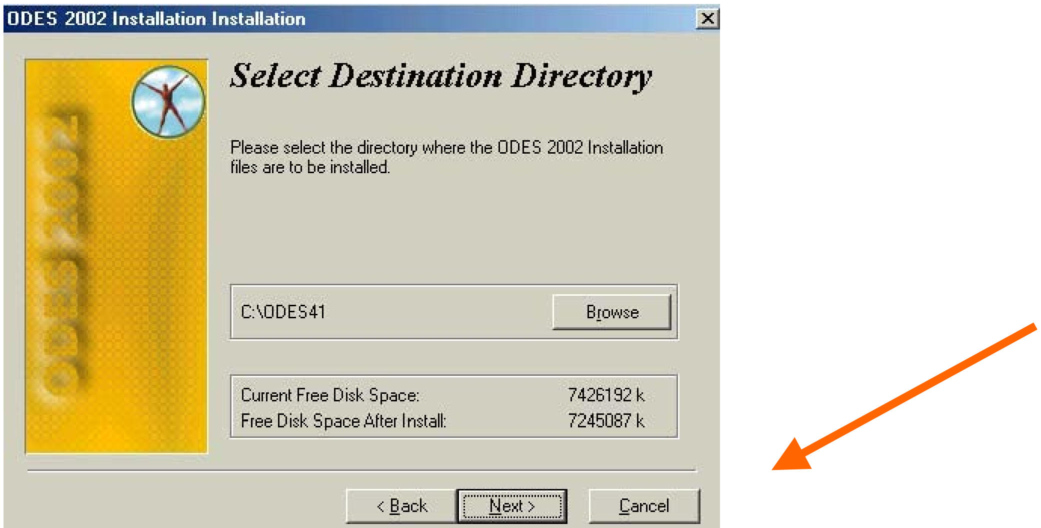


Click on **Next** to continue the installation process, or click **Cancel** if you need to close any currently running programs before continuing.

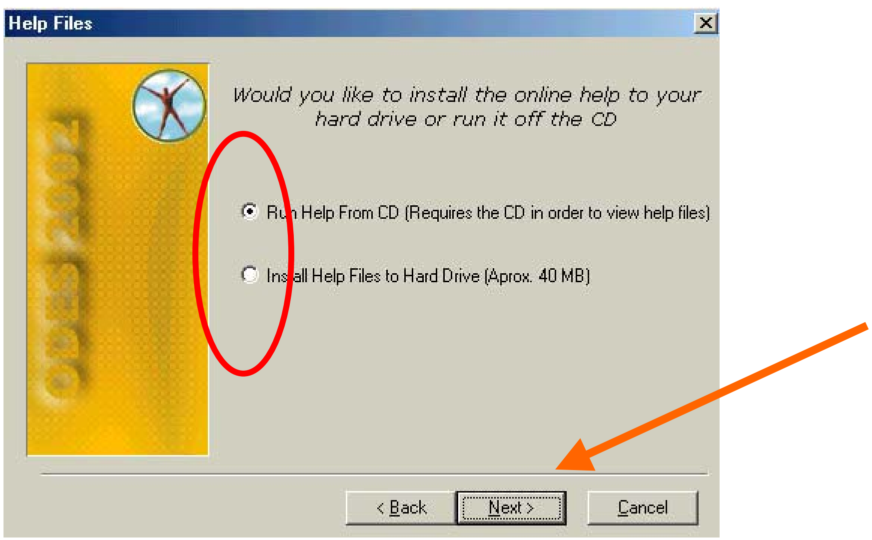
Follow the instructions on the page in order to complete the installation. Please ensure that the following form is filled out correctly. The serial numbers need to be typed exactly as they are seen on the machine (i.e. FCE…). You can locate this serial number on your registration form or packing slip. Please call our customer service department or your dealer if you have trouble locating the machine serial number for your unit. Click **Next** to continue.



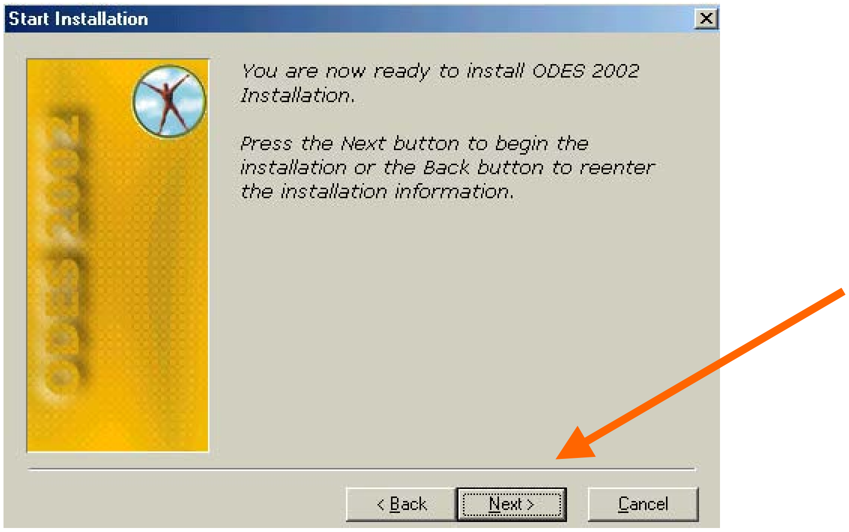
The next page allows you to select the directory on your hard drive into which ODES files will be installed. For most installations, click **Next.** Click on **Browse** if you wish to install the ODES41 folder somewhere other than the C-drive on your computer. If the indicated amount of free space that would be available after installation is low or even below zero (most computers require at least 500,000K for normal operation), **Cancel** the installation and create the necessary space on the drive you selected by removing files, or uninstalling unused programs.



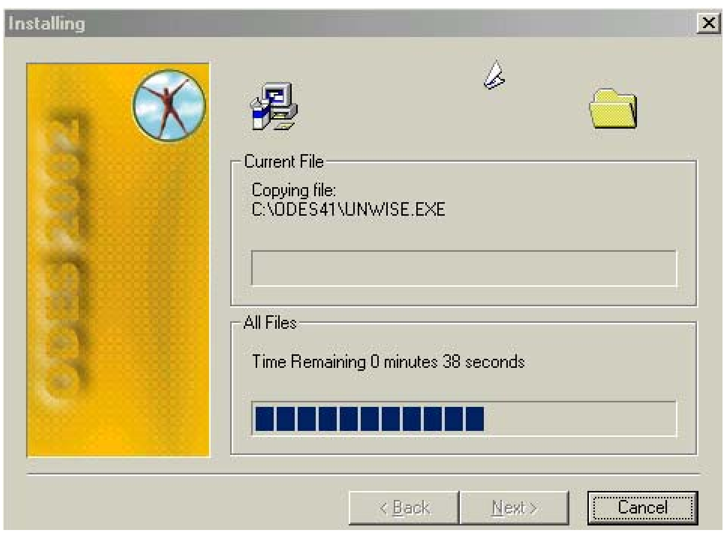
You may now choose to either **Run Help From CD,** or **Install Help Files to Hard Drive.** Generally, it is recommended that you select **Run Help From CD** to save hard drive space on your computer. The help files include a variety of manuals, marketing materials, and sample reports, which can help, get you started. Once you have made your selection click **Next.**



You are now ready to install ODES 2004 onto your hard drive. Click on **Next.**



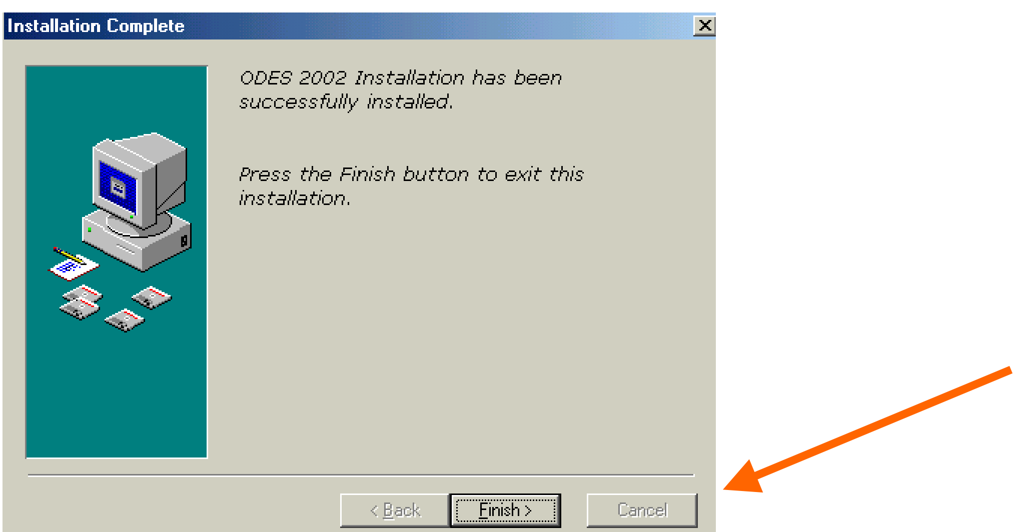
A page will appear which shows you how the installation is progressing.



During this process, a window entitled Hanoun Products will open. You may close this window – ODES will still continue installing in the background.

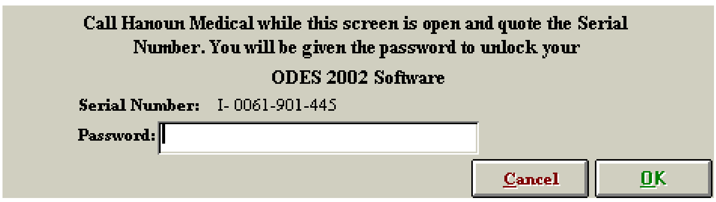
Once the installation process is complete, your system will update its system configurations. A pop-up window will appear to notify you of this.

After updating its configurations, a window will appear notifying you that the installation has been completed successfully. Click **Finish.**



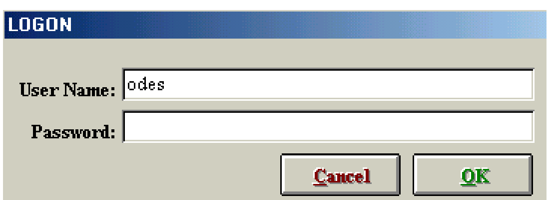
You will need to restart your computer before you can begin to use ODES. Click **OK.** Once your computer has restarted, a new icon will appear on your desktop. To access ODES, simply double click on the following icon:

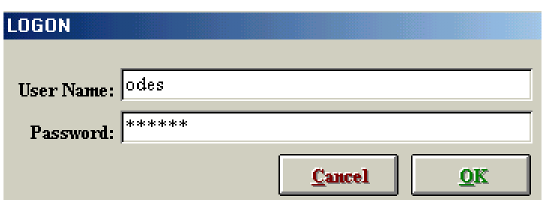
You will now be required to register your software with the Customer Service Department at Hanoun Medical Inc. A pop-up window will ask you to contact Hanoun Medical to receive your password. Call (800) 461-6888 X2 and a Customer Service Representative will assist you.



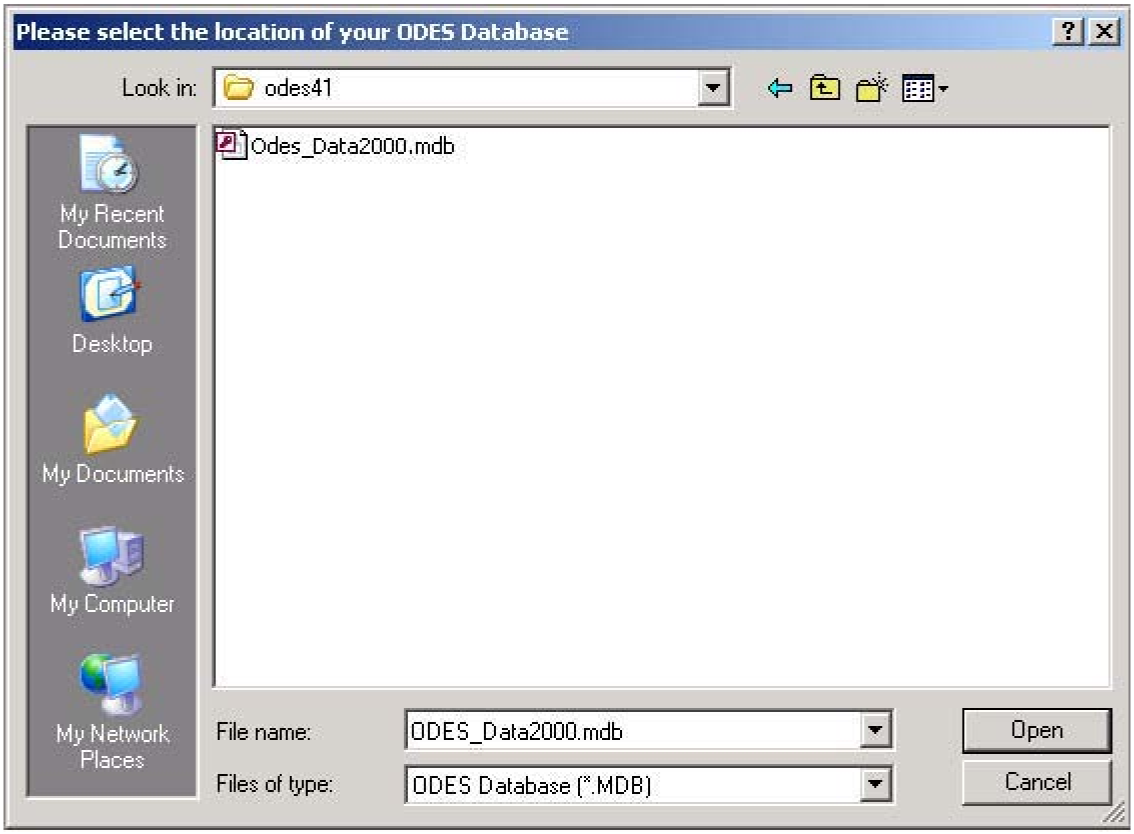
Once you are successfully registered with Hanoun Medical Inc., you may begin to use our software.

Upon entering ODES, a log-in window will appear, prompting you for a password for the user name "odes." This password is always the same ("hanoun"), but can be modified through the Administration Menu if you choose to do so later. **The password is <u>case sensitive</u> and must be entered in <u>lower case.</u>**





After the password (“hanoun”) has been entered, the program will launch. It will now ask you to confirm the location of your ODES database, “Odes_Data2000.mdb”. Double click on this icon in order to proceed.

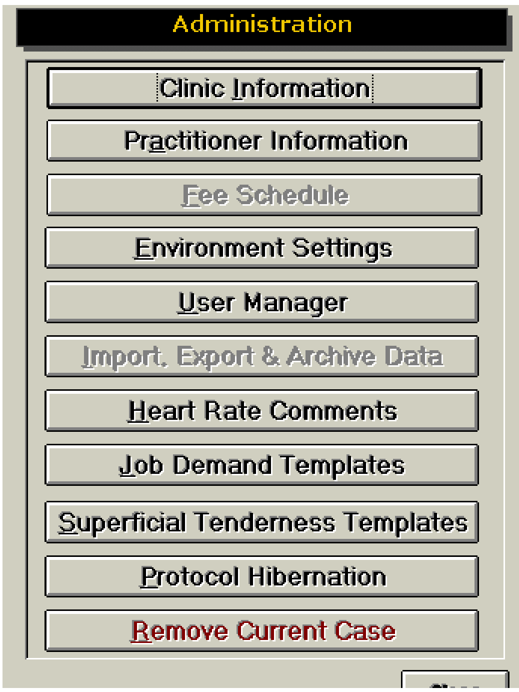


The following introductory screen will now appear welcoming you to ODES.

Once the program is initiated, the ODES main page will appear, which will allow you to access any feature of the ODES software.

The next step is to set up and become familiar with the Administrative features of the software.

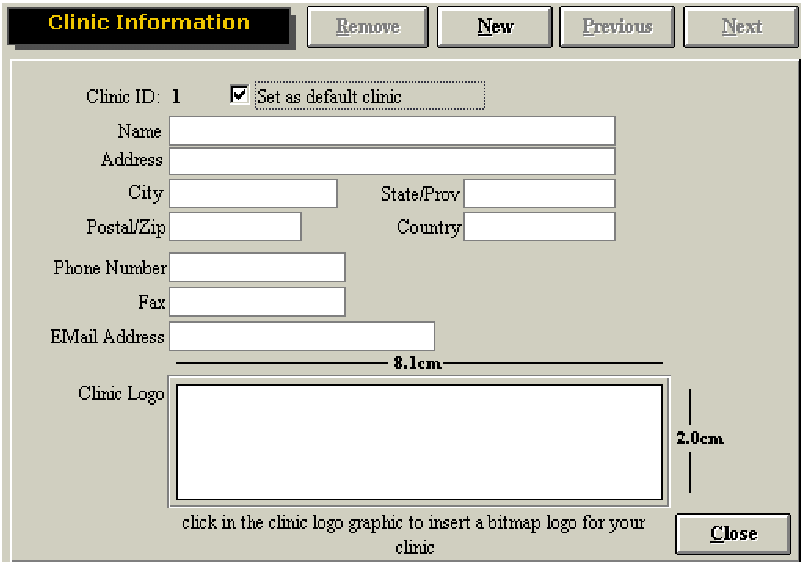
Administration Menu



Clinic Information

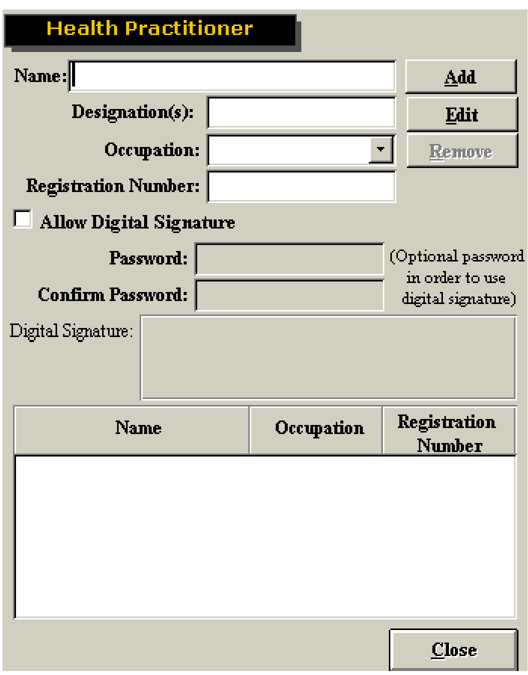
The ODES software allows an evaluator to store Clinic Information and Logos, in order to personalize reports. ODES also has the ability to save multiple Clinic ID's. To enter a clinic logo, double click on the Clinic Logo blank field. Locate the saved logo file on your hard drive. The logo can be in any graphic file format (.jpg, .gif etc.) and should be 8.1 cm x 2.0 cm, so that it doesn't become distorted when attached to a report.

To add a new clinic location, click **New.** When printing a report, the name and logo for the default clinic location will be included. To change the default location, click **Next** or **Previous** to select the correct location and check the 'Set as default clinic' box.

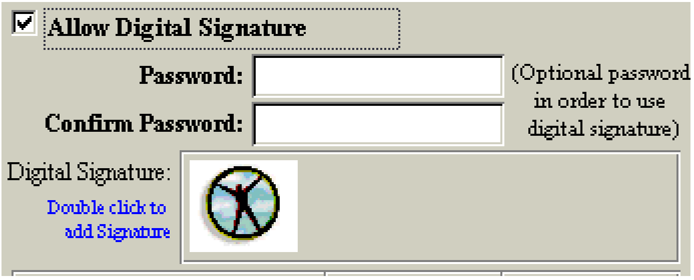


Practitioner Information

The ODES software allows an evaluator to store practitioner information and digital signatures, in order to personalize reports. To add a practitioner, you must fill out the following fields: name, designation, occupation, and registration number (if applicable). Then click **Add** to add the practitioner to the database (the name will now appear at the bottom of the page).

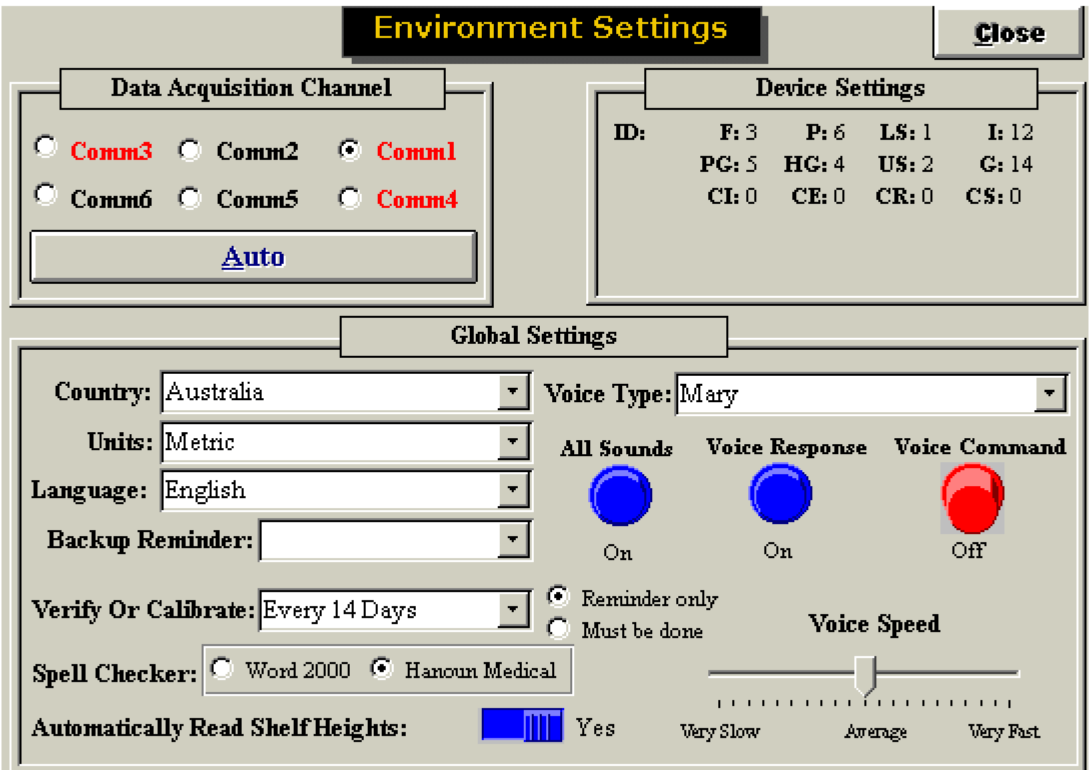


To add a digital signature, you must first scan the signature and save to your hard drive in a graphic file format (.jpg, .gif etc.). Then, check the 'allow digital signature' box, create and confirm a password (optional), and double click the Hanoun icon in order to locate the signature file on your hard drive and associate the signature with the practitioner.



To edit the health practitioner information, highlight the name to edit from the list and click on **Edit.** Once the changes have been made click on **Add**.

Environmental Settings



This page allows you to check communications between your Data Acquisition Box and your computer, change device settings, alter your voices, modify calibration options and turn on or off shelf heights.

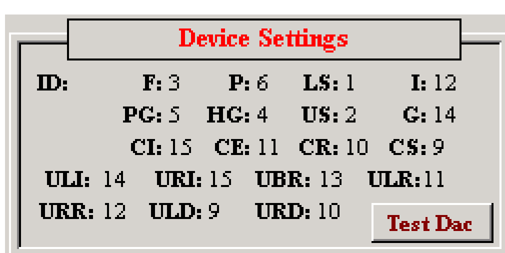
Clicking Auto will inform you whether the DAC Box is communicating with your computer or not. It is recommended you do this before first attempting to calibrate your tools. If the DAC Box is not communicating with your computer, refer to the Troubleshooting section of this manual.

The Device Settings section indicates which data acquisition box channel the various tools should be plugged into, based on the set-up of the software. The following settings are used in normal set-ups:

F >> FOCUS Load Cell = 3
P >> Pressure Algometer = 6
LS >> Lower Shelf = 1
I >> Inclinometer = 12
PG >> Pinch Grip = 5
HG >> Hand Grip = 4
US >> Upper Shelf = 2
G >> Goniometer = 14 (12G on the Data Acquisition Box)
CI >> Cervical Isometric = 15 (Multi-Cervical System)
CE >> Cervical Flexion/Extension = 11 (Multi-Cervical System)
CR >> Cervical Rotation = 10 (Multi-Cervical System)
CS >> Cervical Seat = 9 (Multi-Cervical System)
ULI >> UTM Left Isometric = 14
URI >> UTM Right Isometric = 15
UBR >> UTM Bar Rotation = 13
ULR >> UTM Left Handle Rotation = 11
URR >> UTM Right Handle Rotation = 12
ULD >> UTM Left Handle Distance = 9
URD >> UTM Right Handle Distance = 10

Evaluator systems should change the F and P settings to 6 so that the algometer will not need to be shifted between the two ports. The software looks for the Algometer in Port 6 for the Superficial Tenderness Protocol, Fibromyalgia Protocol, and any new tests created under the strength or work simulation section of the ODES software where the Algometer was chosen as the tool. The static muscle strength tests and any pre-programmed work simulation tests (i.e. static push and pull) are looking for the single FOCUS load cell, which is normally plugged into Port 3.

Evaluator system users should change their device settings in Administration | Environment Settings so that both the FOCUS and Pressure Algometer settings are set to Port 6. This will prevent the Evaluator from having to calibrate the Algometer in Port 6 and Port 3 (as the FOCUS). To do this open Administration | Environment Settings and double click on the word Device Settings until it turns red.



Using your mouse click the number 3 beside ‘F’ until the number displayed is 6. Once you close the Environment Settings page your settings will be saved. When you calibrate your equipment, you will notice the button for the Algometer is missing and you will only be required to calibrate the Algometer as the FOCUS.

The Global Settings section allows evaluators to specify the country they are in, and the units of measurement to be used in printed reports. Currently the only available language reports may be printed in is English.

The Backup Reminder should be set to 7 days for a stationary system, and 1 day for a portable system. The backups should be saved on floppy disks (or, in the case of very large databases, a CD or ZIP disk) and kept separate from your system in case of fire, theft or other equally damaging events.

The Verify or Calibrate Reminder should be set to 7 days. It is recommended that you calibrate your Hanoun system once a week, and verify it before each day of testing. This will ensure your tools are accurate in their measurement. The accuracy of your equipment is extremely important, particularly if your report will be used in a litigious case. The Reminder can be set up as ‘Remind only’ or ‘Must Be Done’.

If you have Microsoft Office or Works Suite installed on your computer, you may wish to use the Word Spell Check function on your reports. You also have the option of using the Hanoun Medical Spell Checker, which is installed with ODES.

The ER and UE systems are the only Hanoun systems that automatically read shelf heights. All other systems should have the Shelf Height switch set to ‘No’.

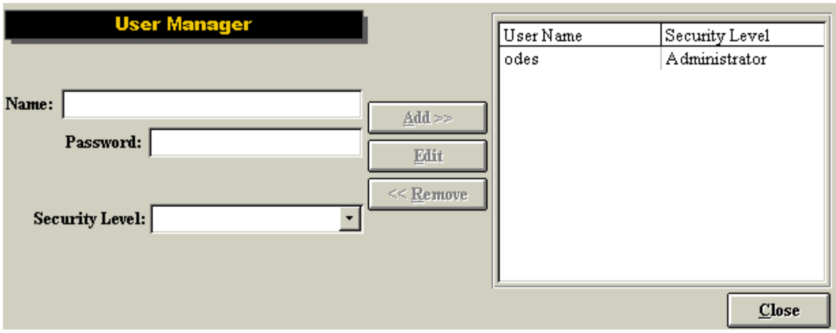
ODES features different voices (Mary, Mike and Sam) to provide variety for the evaluator, handle cultural issues related to gender, and distinguish between computers in environments with multiple testing stations.

The evaluator has the option of turning off All Sounds by clicking the left-most button. The center button controls Voice Response, which refers to the computer’s announcements of the client’s name, shelf heights for tests etc. Note that turning off Voice Response does not affect the computer’s ‘Start Test’ announcements, or count downs for rest periods. The Voice Command button is currently inactive at this time. Voice Speed can also be changed by adjusting the dial beneath these buttons.

User Manager

You may add multiple users to the ODES software, with a variety of security levels. Enter a user’s name, password and select a security level from the dropdown menu, then click **Add.** Available security levels are:

- Administrator (Has full use of system);
- High (No access to User Manager);
- Medium High (All screens but User Manager and being able to remove cases);
- Medium (All screens but Administration);
- Low Medium (All screens but Administration and Reports. Also unable to remove assigned protocols to a client or delete tests)
- Low (All screens but no access to client notes, Administration or Reports. Also unable to edit, delete or create tests.)
- Lowest (Only access to client information and client case information)

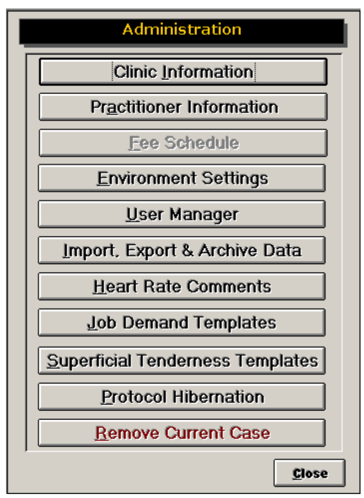


To edit the users security level, highlight their name on the right hand side of the screen and click on **Edit.** Once the changes have been made click on **Add.** To delete a user, highlight their name and click on **Remove.**

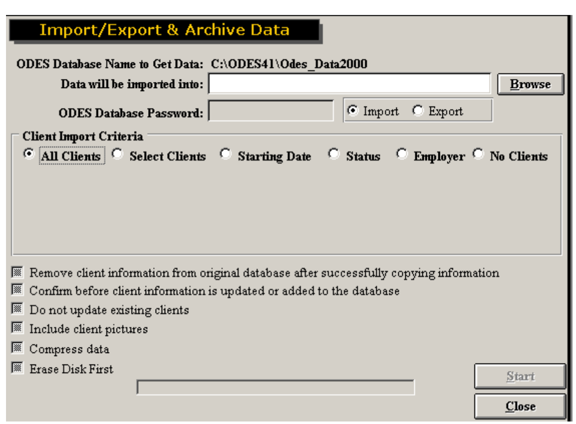
Import and Exporting in ODES

The ODES software allows you to import and export data from one database to the other through the import/export function. This feature is useful for those companies that have multiple evaluators who may be providing services off-site or wish to complete reports at home. This allows the company to keep a central database.

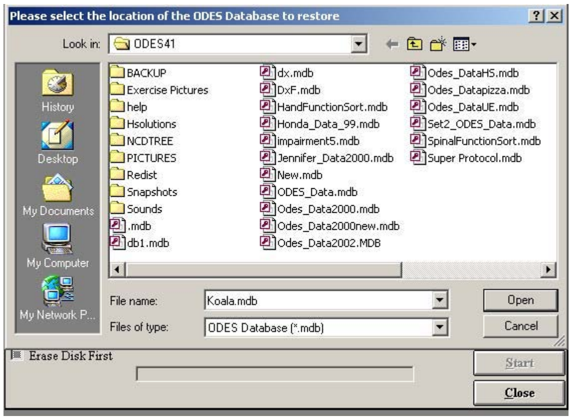
To access the Import/Export functions go to Administration/Import, Export & Archive



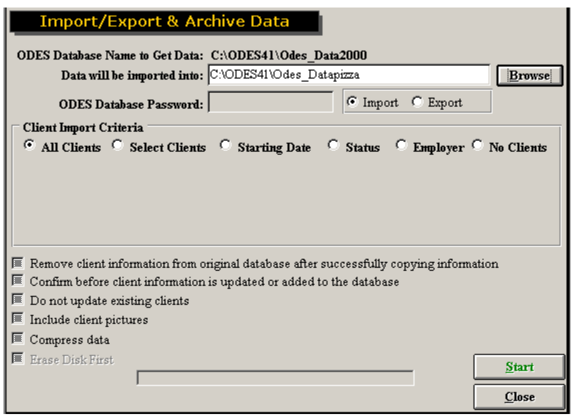
The following screen will appear



First select whether you would like to import to your current database or export data from your current database to another one. To import or export data from another database, select import. Click on the "Browse" button to locate the database you wish to import or export the data from.



Highlight the database you wish to import or export the data from and click on the "Open" button. The database information will be now listed.



You will be required to include the ODES Database Password if you are importing/exporting from an ODES database that is in a zipped format.

Select the Client Import Criteria from the selection provided:

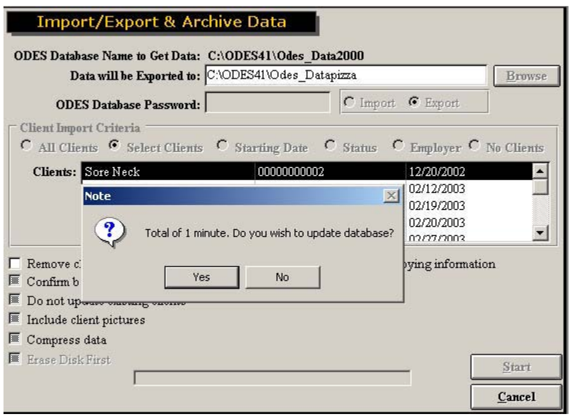
- All Clients
  - This will import/export the clients as well as all new templates, custom tests, and super protocols.
- Selected Clients
  - A list of clients will appear and you will be required to highlight which ones you would like to import/export. These clients will be imported/exported as well as all new templates, custom tests, and super protocols.
- Starting Date
  - A date from and to will need to be entered. This will import/export all the clients with the starting date (which is outlined in case information) in these date ranges. It will also import/export all new templates, custom tests, and super protocols.
- Status
  - A list of the different status options will be available for you to choose from. Status is selected for each client through case information. It will also import/export all new templates, custom tests, and super protocols.
- Employer

- A list of employers will be provided for you to select from.
- No Clients
  - This selection will allow you to import/export all templates, custom tests, and super protocols.

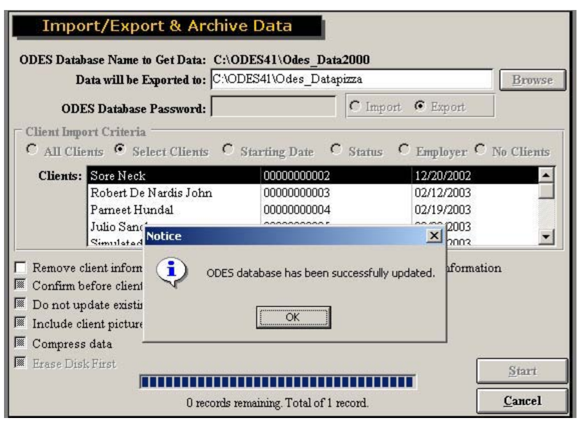
Next provide details on how you want this data handled:

- Remove client information from original database after successfully copying information
- Confirm before client information is updated to the database
- Do not update existing clients
- Include client pictures (from case information)
- Compress data (if you are saving it to a floppy or e-mailing the database afterwards)
- Erase Disk First (available only if you are exporting to a floppy drive)

Once all the parameters are set up click on the "Start" button. A screen will come up to give you the time to complete the task.



At the bottom of the screen a progress bar will give feedback on the progress of the update.



The software will indicate if it was success or not.

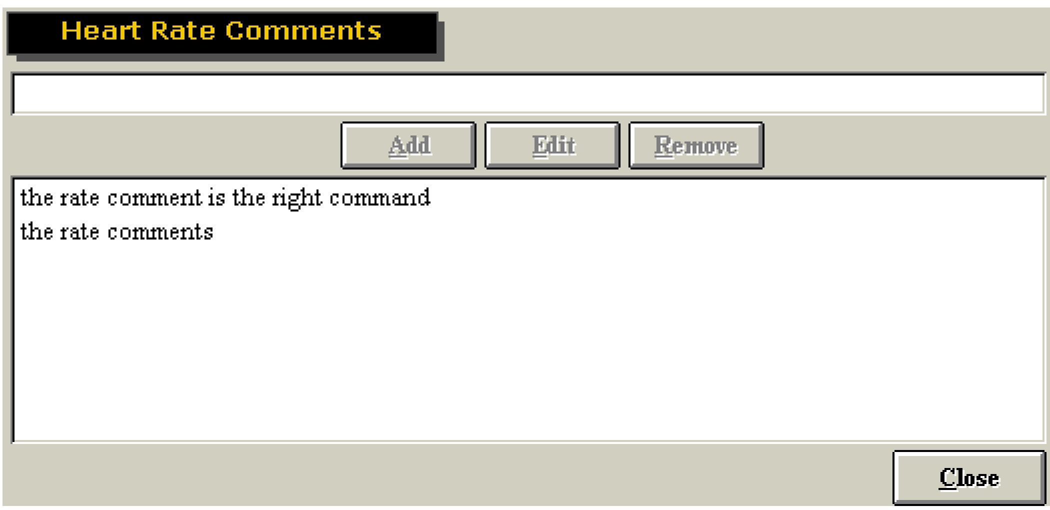
It is important to note that with importing and exporting the software will check the tests and if you have made any changes to the standard tests (i.e. changed test or report descriptions or any other parameters) it will considered this a new test and you will find duplicates of tests in your system. If this happens simply put the duplicates under protocol hibernation or delete them, providing you are certain the one you are deleting is the duplicate. Deleting tests means also deleting any test data in client's files so be sure before you delete.

It is recommended if you are going to be importing data obtained off-site to your main database that you export the main database (no clients) to the local database you will be using. When you import the data from your local database to the main database there will be no duplicates, as the software will recognize it as the same database.

Heart Rate Comments

This feature allows you to save common heart rate comments for later use.

To add a comment, enter it in the blank field at the top of the screen and click **Add.** The comment will then be listed on a dropdown menu when the heart rate is captured during testing. To edit a comment highlight it, then edit the text as it appears in the top field and click **Edit.** To remove a comment, highlight it and click **Remove.**



Job Demand Templates

From this page, you may add new Job Demand Templates, and import, export, edit or remove existing templates from ODES.

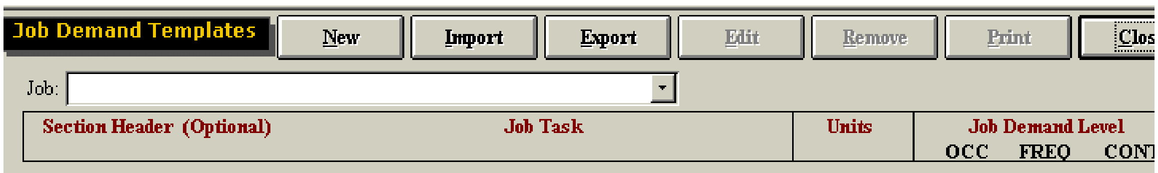
To add a new Job Demand Template, click **New.** Enter the job title and source of the information (i.e. job site analysis, Dictionary of Occupational Titles, self report etc.)

The Section Header is optional. If Section Headers are used however, the Job Demand Templates will be grouped by Section Header (i.e. lifting, positional tolerance, mobility) when the templates are printed. Include details on job tasks, units of measurement, and the job demand level (**OCCasional** – 1-33%; **FREQuent** – 34-66%; **CONstant** – 67-100%). Click **Save** once you have added all the needed information.

Job Demand Templates can be exported for use on another computer with ODES installed, or imported from another computer with ODES. This reduces the need to re-enter data previously collected. To import templates, click **Import** and select the location on the computer from which you will be receiving the templates, and well as the location on your computer where the imported templates will be saved. You must also indicate whether you will be importing all the templates in the source ODES database, or just the current template.

Print the Job Demands Templates by clicking **Print.** The report can also be printed by clicking **Export** to create the report as a Word document (if you have Microsoft Office installed on your computer), or by creating a report Snapshot (see the Snapshot section of this manual).

To edit a Job Demand Template, select the job from the dropdown menu, click **Edit** and make any required changes. To remove a Job Demand Template, select the job from the dropdown menu and click **Remove.**

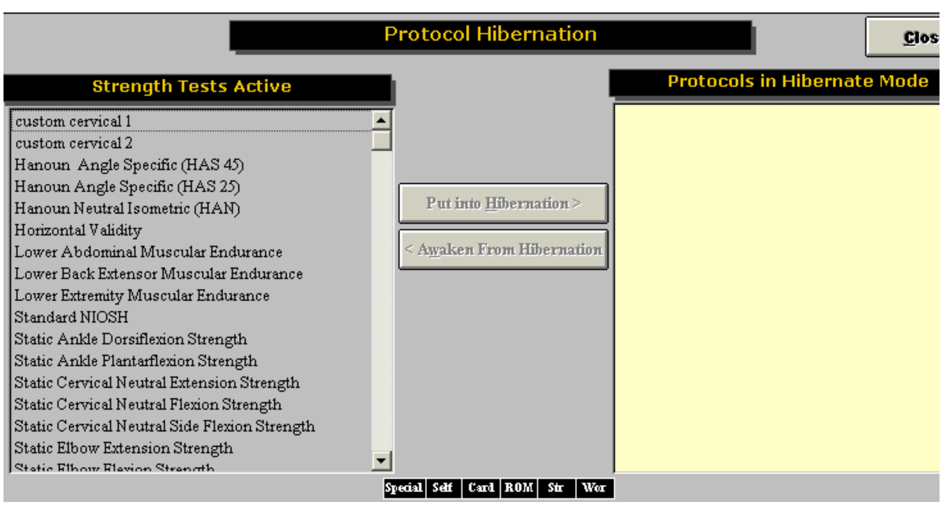


To use a Job Demands Template, from the Job Demands screen in ODES for a paryicular client, select the job from the dropdown menu and click **Populate.** This will add the Header, job task, job demand level, units and information source to the appropriate fields. Complete the Ability Demonstrated fields, and determine whether there is a job match or not.

To add a Job Demand template from the Job Demands screen, click on **Add to Template**.

Protocol Hibernation

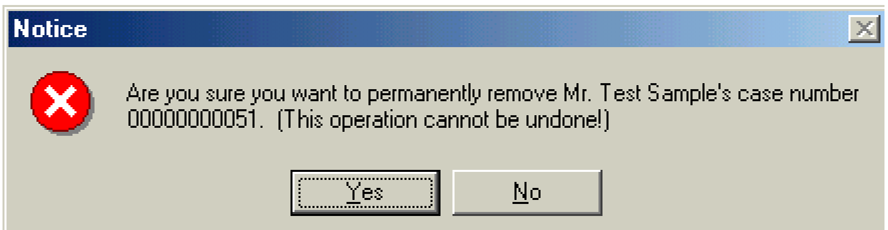
This feature allows you to place existing protocols, which you may not use often, into a separate folder thereby allowing you to free space within the protocol pages. You can add and remove protocols from this feature without losing data or deleting testing information. Protocol hibernation can also be accessed through the protocol pages.



To hibernate a test, highlight the test on the left hand side of the screen and click on **Put into Hibernation**. To bring a protocol back into the normal list of tests to slect, highlight the test from the right hand side of the screen and click on **Awaken FromHibernation.**

Remove Current Case

You may delete client cases by selecting the client/case that you would like to delete, and then clicking **Remove Current Case.** This information cannot be retrieved. A warning will appear prior to deleting data.



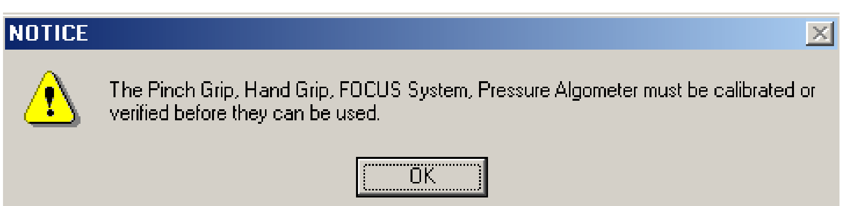
Calibrating the Equipment

Before you will be able to use your system you must calibrate and verify the equipment.

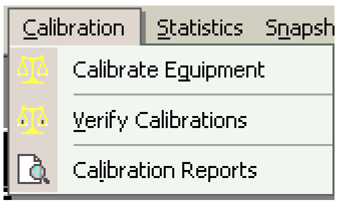
Prior to calibrating any device, please ensure that the Data Acquisition Box has been set up successfully and is communicating with your computer. You can check to see if this is the case by going to Administration | Environment Settings from the ODES main menu.

It is important to note that calibration should be performed on a weekly basis and verified daily . Prior to an assessment that may be challenged legally, both calibration and verification of all devices being utilized for the assessment should be performed.

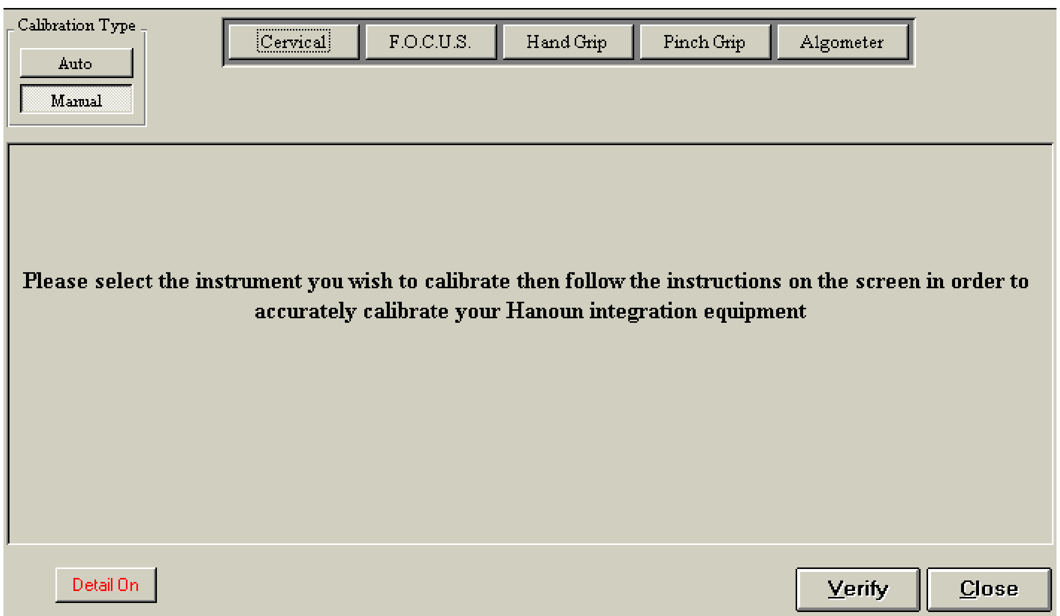
If the following message appears when ODES is launched, the pinch grip, hand grip, FOCUS System, and Pressure Algometer must be calibrated or verified before testing. The message will alert you as to which tools need to be calibrated.

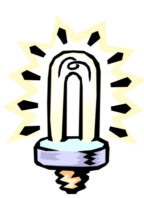


Please note that NO testing can be performed unless the equipment is calibrated and verified. This is especially true if you select the **Must be done** option in Administration | Environment Setting. No tests can be performed until the calibration is complete.



To calibrate your equipment, go to Calibration | Calibrate Equipment (If there is more than one type of Hanoun system used with this database, go to Calibration | Calibrate FOCUS). Calibration should take place once every week.



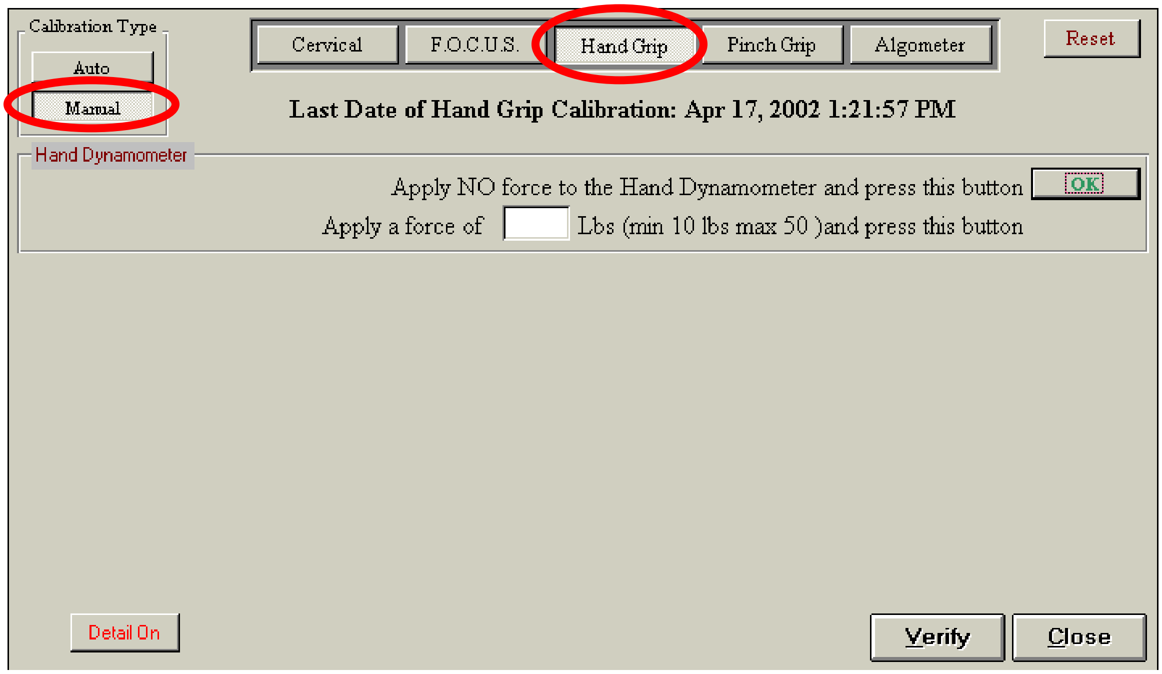


Tips for Manual Calibration
Ensure that the weights are stable and do not wobble.
Ensure that the device is in a safe area away from the computer to prevent accidents (i.e. – weight falling on the computer)

Calibration of the Hand Grip

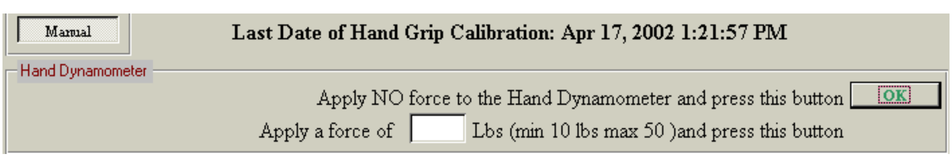
Please ensure that the Hand Grip is plugged into PORT 4 on the Data Acquisition Box.

After selecting the manual calibration option and the tool you wish to calibrate, the calibration page will display as follows.



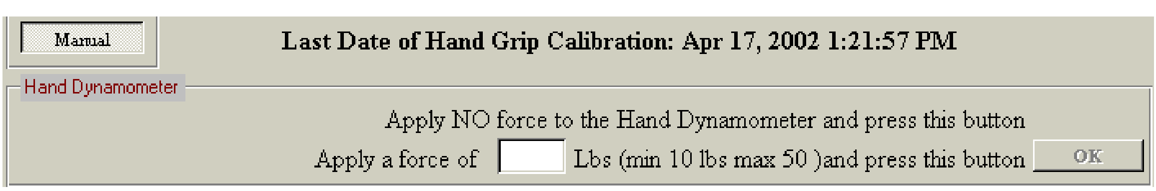
The above screen shows the last day of successful calibration (in this case it was April 17th), the type of calibration and the directions involved in manual calibration. In order to calibrate, first locate the correct attachment for the Hand Grip.

The first step in manual calibration of the Hand Grip is to place the tool in the square base attachment.Click **OK** in order to zero the Hand Grip.
Next, attach the ring-shaped calibration tool to the rungs on the Hand Grip dynamometer (leave the hand grip handle attached) while the tool is lying on its back. Notice that the attachment connects to the top rung of the Hand Grip on one side and the second rung from the top on the other. This creates a flat surface for weight to be placed upon. The calibration tool weight s 0.3 pounds.



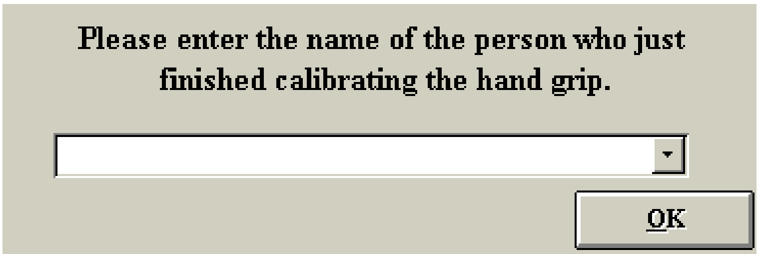
To finish calibrating, locate a weight in order to complete this portion of the calibration process. Use a minimal weight of 10 lbs in order to calibrate the device.

Enter the amount of weight you have chosen in the blank field. Make sure to add in the weight of the calibration tool.



Once the weight is steady, click **OK** to begin the calibration. Do not hold the weight. It must be free standing.

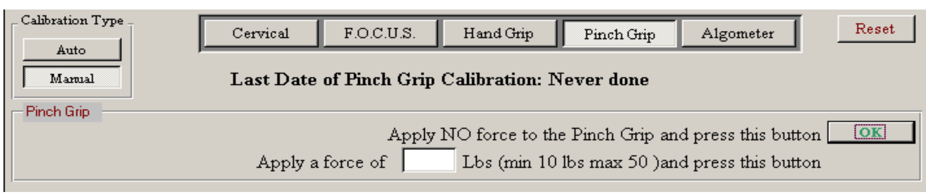
Once the device has been successfully calibrated, a page will be displayed requesting that the individual who completed the calibration enter their name. This can be done either manually or, if your name exists as a supervising practitioner in the database page, it will appear in the drop down menu.



Pinch Grip Calibration

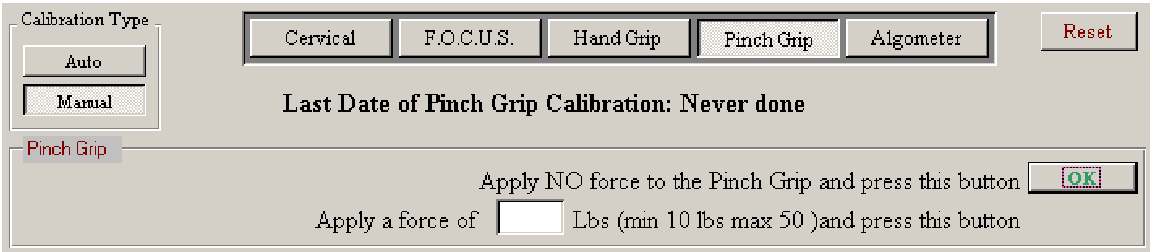
Please ensure that the Pinch Grip is plugged into PORT 5 on the Data Acquisition Box.

After selecting the manual calibration option and the tool you wish to calibrate, the following page will appear.



This page allows you to calibrate the Pinch Grip manually. It lists the last day of successful calibration (in this case it was never done), the type of calibration and the directions involved in manual calibration. In order to calibrate, you must first locate the correct attachments for the Pinch Grip.

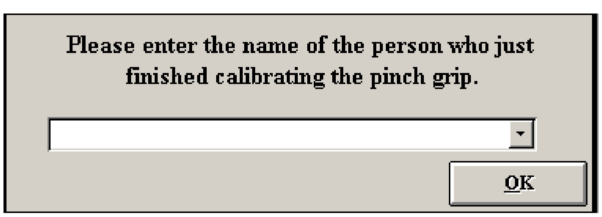
The first step in manual calibration of the Pinch Grip is to place the Pinch Grip inside the calibration block as above. Click **OK** to indicate that no force is being applied. Place the calibration tool through the block, as above, and apply a minimum weight of 10 pounds.



You should also note that the calibration tool for the Pinch Grip has a weight of 0.3 lbs. This weight must be taken into consideration when calibrating the Pinch Grip.

Once the weight is steady, click **OK** to begin the calibration.

Once the device has been successfully calibrated, a window will appear requesting the name of the individual who just completed the calibration. This can be done either manually or, if your name exists as a supervising practitioner in the database, it will appear in the drop-down menu.



Algometer Calibration

Please ensure that the Algometer is plugged into PORT 6 on the Data Acquisition Box (unless you have changed the device settings to Port 3. Refer to the algometer section for further details).

This page allows you to calibrate the Algometer manually. It indicates the last day of successful calibration (in this case it was never done), the type of calibration and the directions involved in manual calibration. In order to calibrate, you must first locate the correct attachments for the Algometer.

The following are the attachments necessary for manual calibration of the Algometer:

Flat Round Pad:

Calibration Tool

Bolt:

Algometer and bolt:

Attach the flat round pad to the base of the Algometer. Once attached, the Algometer can now stand on this round pad.

The extra bolt located with your attachments can now be added to the top of the Algometer Attach the second calibration tool. Once the bolt is inserted and tightened you may click **OK** on the screen to signify that no force is being applied to the Algometer.

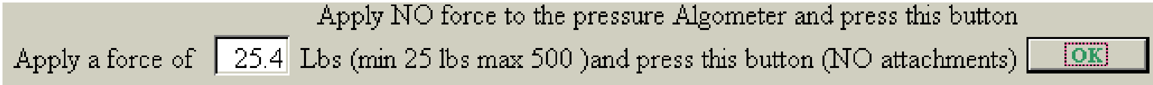
You are now ready to attach the calibration tool in order to finish manually calibrating the Algometer:

Calibration Tool

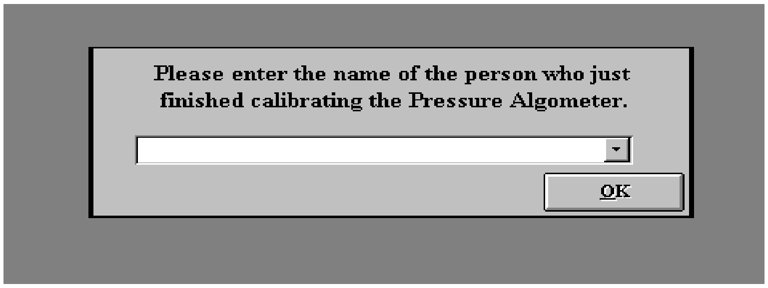
The calibration tool (above) has a weight that needs to be taken into account. The Algometer calibration tool weighs 0.3 pounds. Add this value to the total amount being applied to the tool. For example, the Algometer requires that a minimum of 25 pounds be used. If you choose to calibrate with this weight plus the calibration tool, the total amount of weight to enter in the blank field would be 25.3 lbs.

Place the weight being used on top of the attachment.

Once the weight is steady, click **OK** to complete calibration.

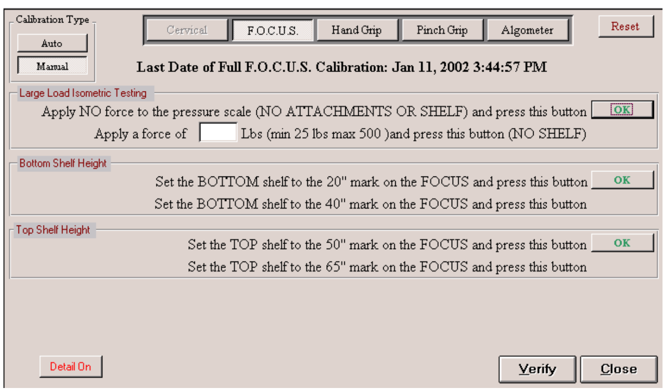


Once the device has been successfully calibrated, a screen will come up requesting the name of the individual who just completed the calibration.



FOCUS Calibration

Please ensure that the FOCUS Load Cell is plugged into PORT 3 on the Data Acquisition Box.



To calibrate the accessory arm heights and the FOCUS Load Cell, select the “FOCUS” icon from the main calibration page.

This page allows you to calibrate the FOCUS load cell and accessory arm heights manually. It indicates the last day of successful calibration (in this case it was last done June 11, 2002), the type of calibration and the directions involved in manual calibration.

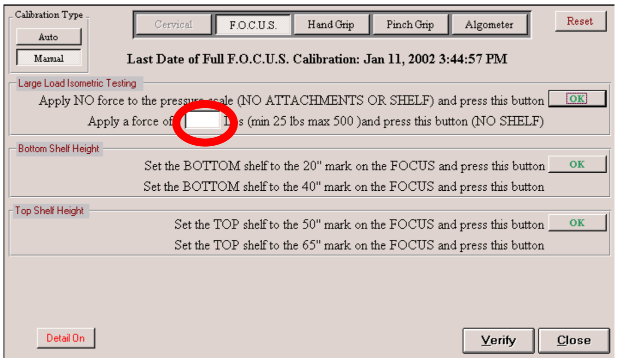
Follow each step in progression and click the corresponding **OK** button.

Begin by attaching the Multiplanar Accessory Housing Joint. Ensure that no accessories are attached to the Multiplanar Accessory Housing Joint.

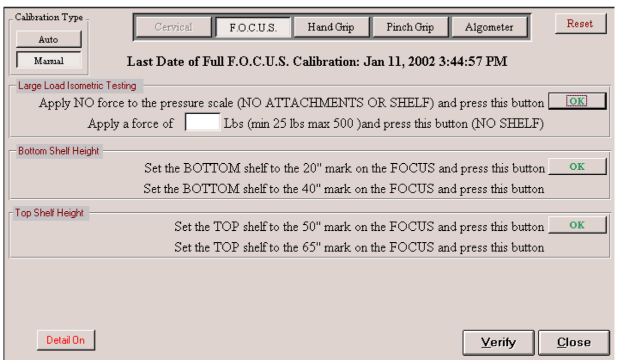
When you calibrate the load cell, you must place your calibration weight on the Multiplanar Accessory Housing Joint while no accessories are attached to it and it is positioned up.

Enter the amount of weight in the blank field on the FOCUS calibration page.

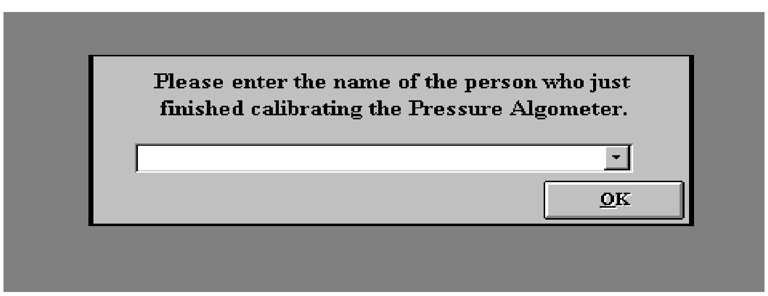
Click **OK** adjacent to the Load Cell Calibration instructions.



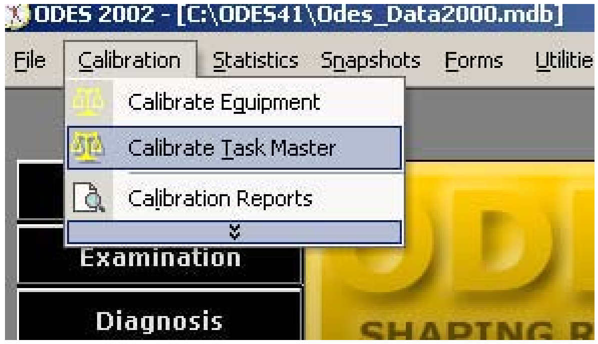
Each of the two ER accessory arms is calibrated separately.



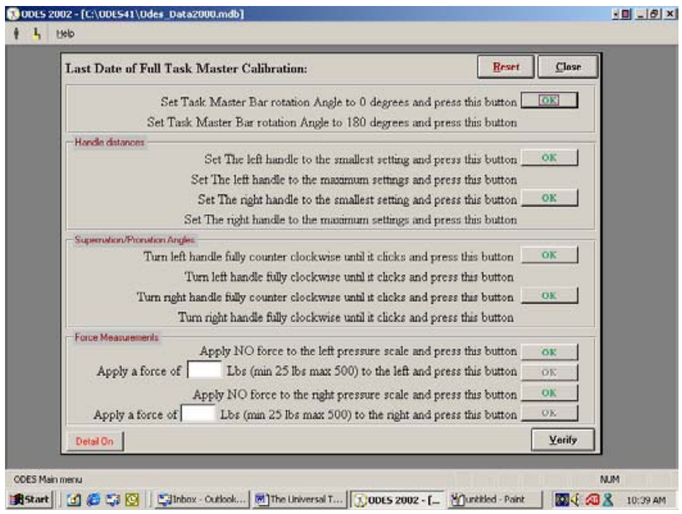
Follow the instructions listed under “Bottom Shelf Height” or “Lower Accessory Arm” to calibrate the lower accessory arm, then click **OK.**
Once the device has been successfully calibrated, a screen will come up requesting the name of the individual who just completed the calibration.



Universal Task Master Calibration
Please ensure the Universal Task Master is plugged into TM on the Data Acquisition Box.
From the ODES main menu on the top menu bar, go to the Calibration | Calibrate Task Master.



ODES will display a sequence of tasks for calibrating the UTM. The UTM rotation is to be calibrated first.

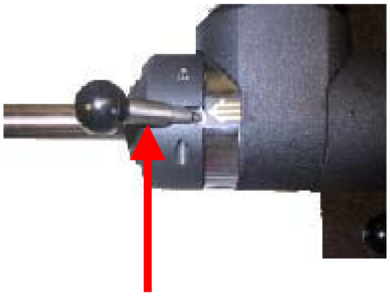


Follow the instructions on each line and click **OK** once the task has been performed. This moves the **OK** button to the next instruction line.

Step #1: Set Bar Rotation Angle to Zero Degrees (Handles are closer to the ceiling)

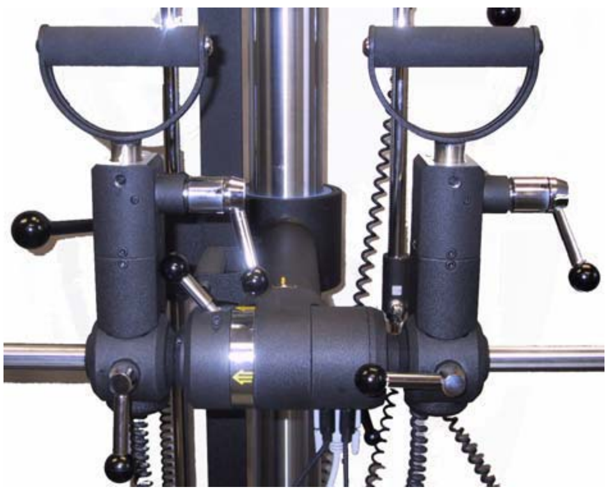
View from top of UTM.

Step #2 Set Bar Rotation Angle to 180 Degrees (Handles are closer to the floor)

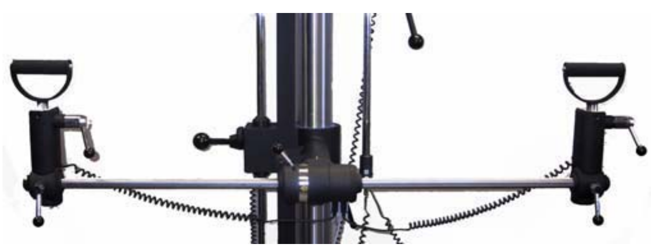


Use this locking mechanism to rotate the bar. The bar rotates forward and down.

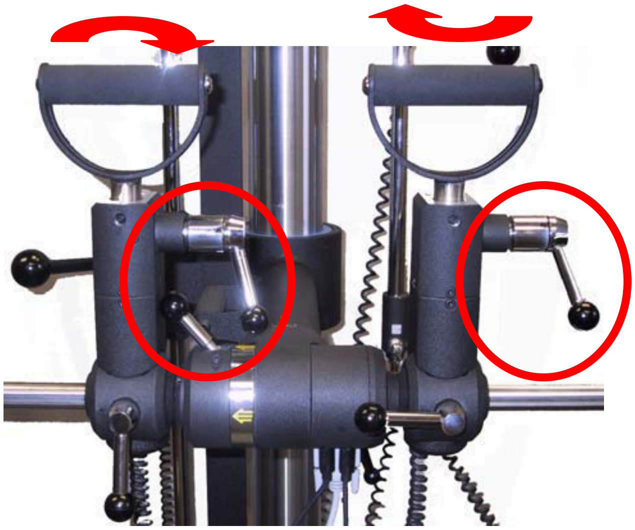
Step #3 and #5: Set the Left Handle to the smallest setting. The same picture illustrates the right handle to the smallest setting.



Step #4 and #6: Set Left Handle to the largest setting. The same picture illustrates the right handle to the largest setting.

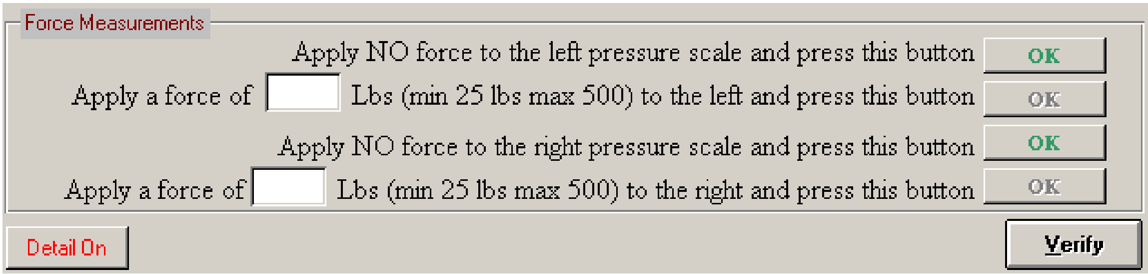


Steps #7-#10: For supination/pronation: use the locking mechanism on the side of the load cells in order to move the handles into either supination or pronation positions.



Remove the handles and click **OK** for NO force on the pressure scale.

Just before calibration of the Force Measurements, shown in the screen below, make sure to remove the left and right handles from the UTM.

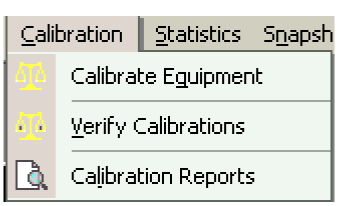


Enter the amount of weight that will be used to calibrate the left and right force scales in the appropriate fields before you click **OK**. You must use a minimum of 25 pounds and for convenience use the same weight for the right and left side. Calibrate one load cell, and then the other.

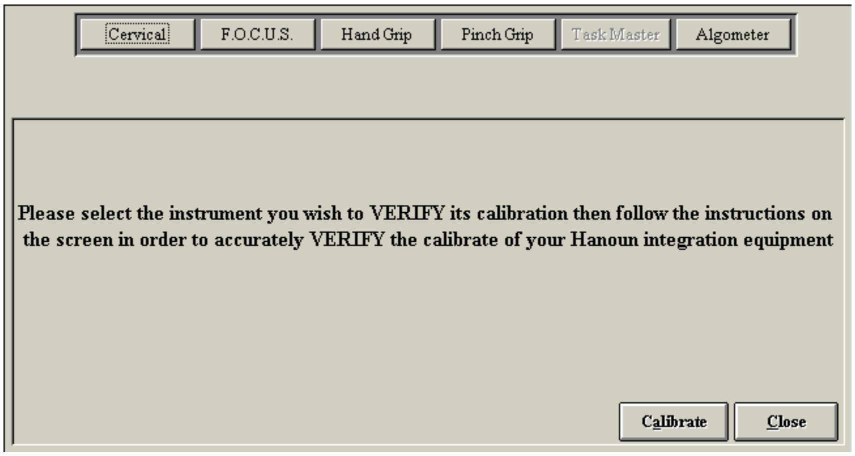
Once all of the tasks in the calibration have been completed, and no problems arose, the software will ask you to enter the name of the individual who performed the calibration.

Weight Verification

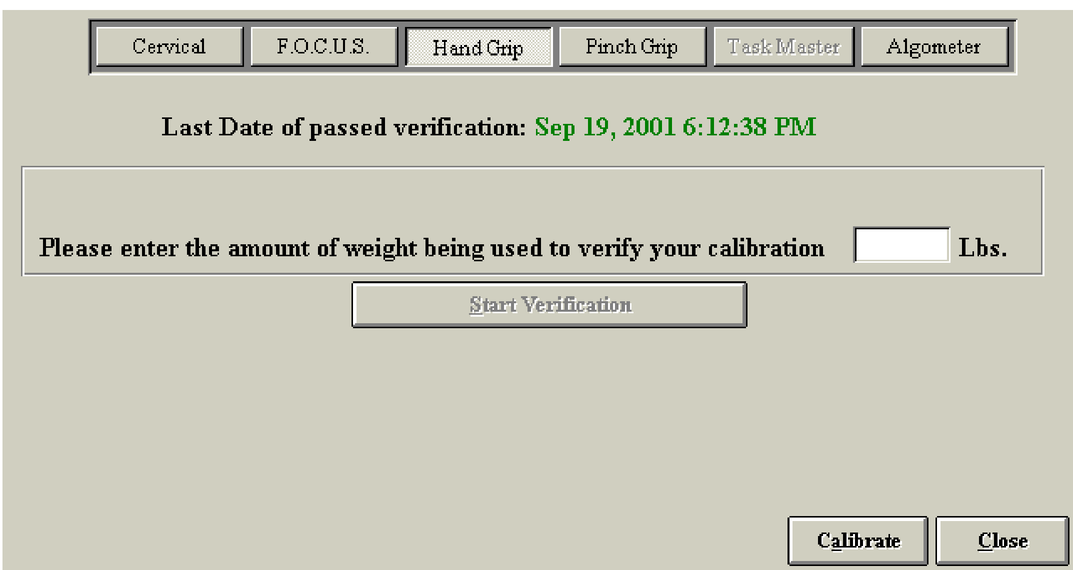
After calibrating the tool through either automatic or manual calibration, it is recommended that the accuracy of the device be verified. Verification should be completed prior to testing each day or after the equipment has been set up. To verify go to Calibration | Verify Calibrations in the top task bar; or from **Verify** in the bottom right-hand corner of the Calibration page, after calibration has been completed.



Whichever method is used, the same page will appear:

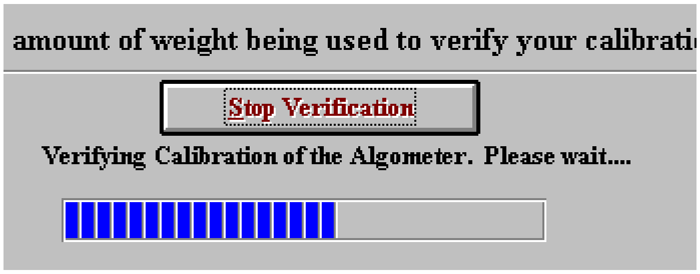


From here, select the tool to be verified (in this case the Hand Grip) and you will be brought to the verification page. This page allows you to select the equipment being verified, shows the most recent date of passed verification and allows you to conduct the verification procedure.

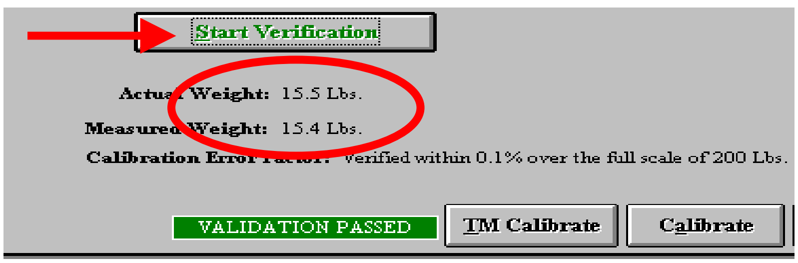


It is important to note that when verifying, a weight different than what was utilized for calibration be selected. For example, if a 15 lb weight was used to calibrate, use 10 lbs to verify.

The verification page on your computer will now ask you to enter the amount of weight you are using for verification. A different weight should be used and entered into the blank field on the page. Make sure to add in the value for the calibration tool if applicable. Set up the tool as you would for calibration. Click on **Start Verification** to start the process.



Once the verification has taken place, the computer will notify you if the verification has been passed or failed. Regardless of passing or failing the verification, the computer will provide you with the difference between the actual and measured values. In order to be successful, the actual and measured values need to be within 0.2% over the full scale of 500 lbs (FOCUS Load Cell, UTM or Algometer) or within 0.1% over the full scale of 200 lbs (Hand grip, Pinch grip).

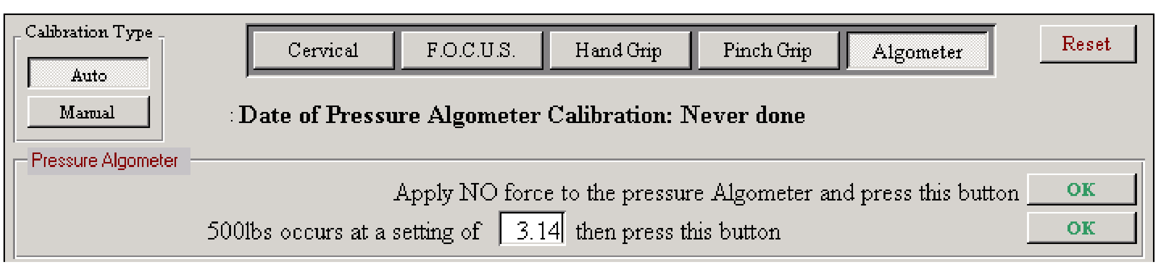


If the tool does not verify, click on **Start Verification** again. If the tool still does not verify on the second try, re-calibrate the tool.

Auto Calibration

For Evaluator and CIRES systems, auto calibration can be set up. A floppy disk will be provided with the system for this purpose. Follow the instructions on the disk to install this feature. Depending on how the system is utilized, auto calibration will be effective for up to 3 months. Following this time period, the factory settings are no longer accurate and manual calibration should be done.

To auto calibrate, click **Auto,** then click the tool you wish to calibrate and follow the instructions. When auto calibration is set up it will include the voltage reading based on the tool you selected. Once you have completed calibration, a window will prompt you to enter your name. If your name has been entered under Administration | Practitioner Information, you will be able to select it from the drop down menu.

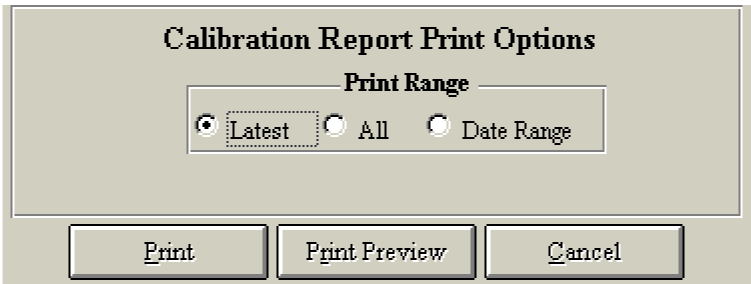


Calibration Reports

To print or view the calibration and verification reports go to Calibration | Calibration Reports. Printed reports include the following information:

- Name of person who performed calibration/verification
- Date when the calibration/verification occurred
- Actual weight, measured weight and deviation from accuracy of each device calibrated

You may specify the print range for this report.



CALIBRATION & VERIFICATION REPORT 24-Jul-02 3:20:20 PM

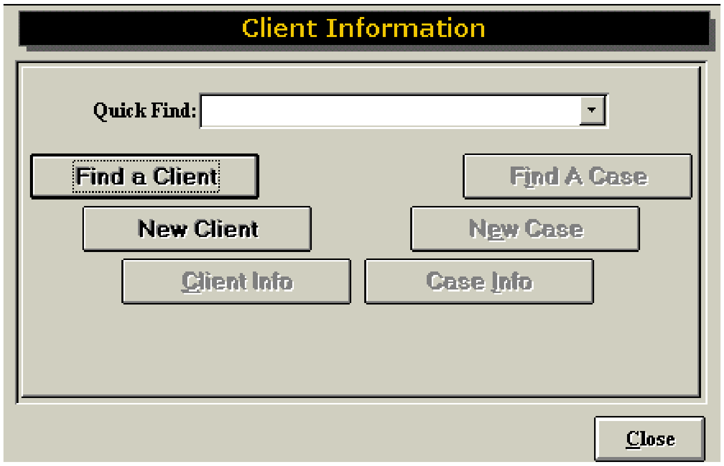
F.O.C.U.S.

Date	Name	Actual Weight	Measured Weight	Deviation from Accuracy
Jun 20, 2002 1:52:38 PM	Angelique Clark-Miller	25 Lbs.	25 Lbs.	0.1%

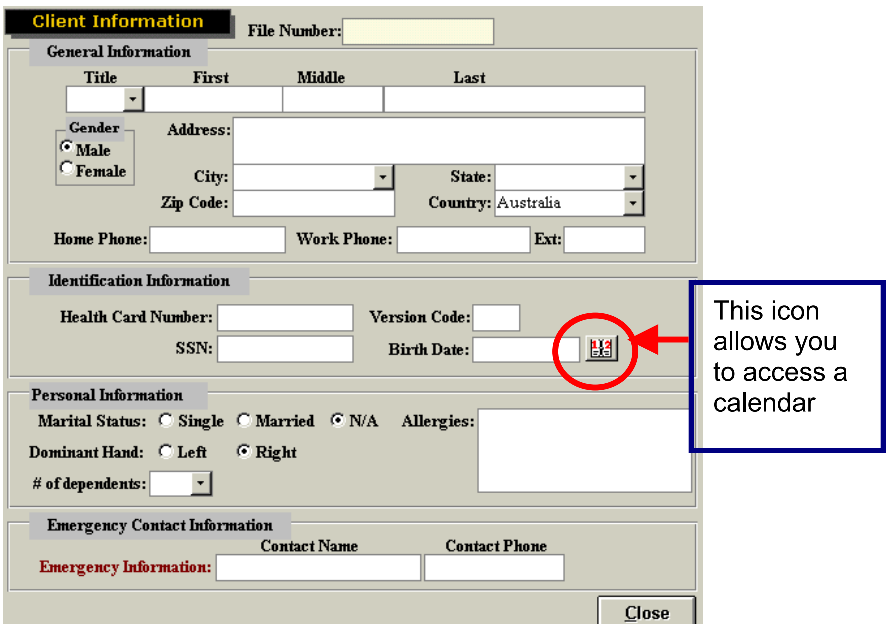
Adding a Client

In order to utilize the software, a client must first be entered. It is a good idea to create a sample client to start with. To do so, simply double click on **Client Information** located in the center of the main screen of ODES.

This will then take you to the Client Information page where you can find an existing client or case, or create new clients or cases.

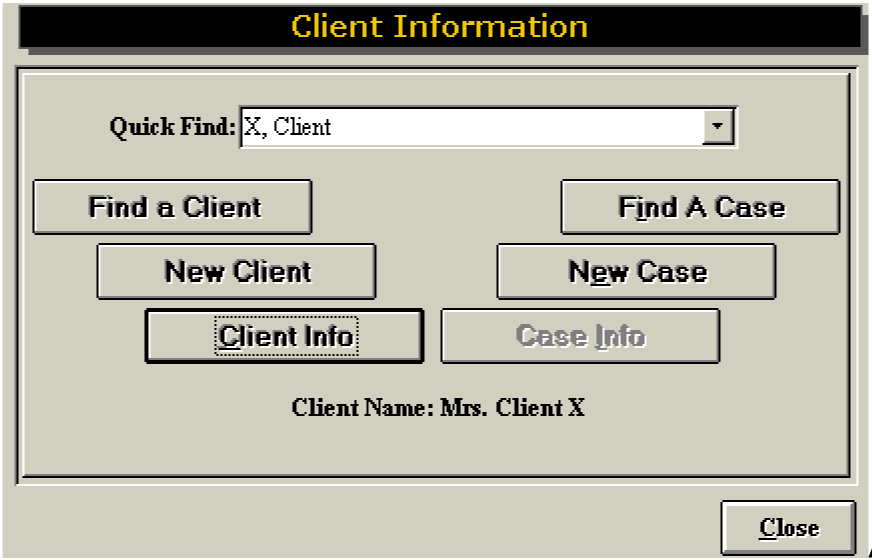


Click on **New Client** to create a new client file. Enter a client's general information into the form.



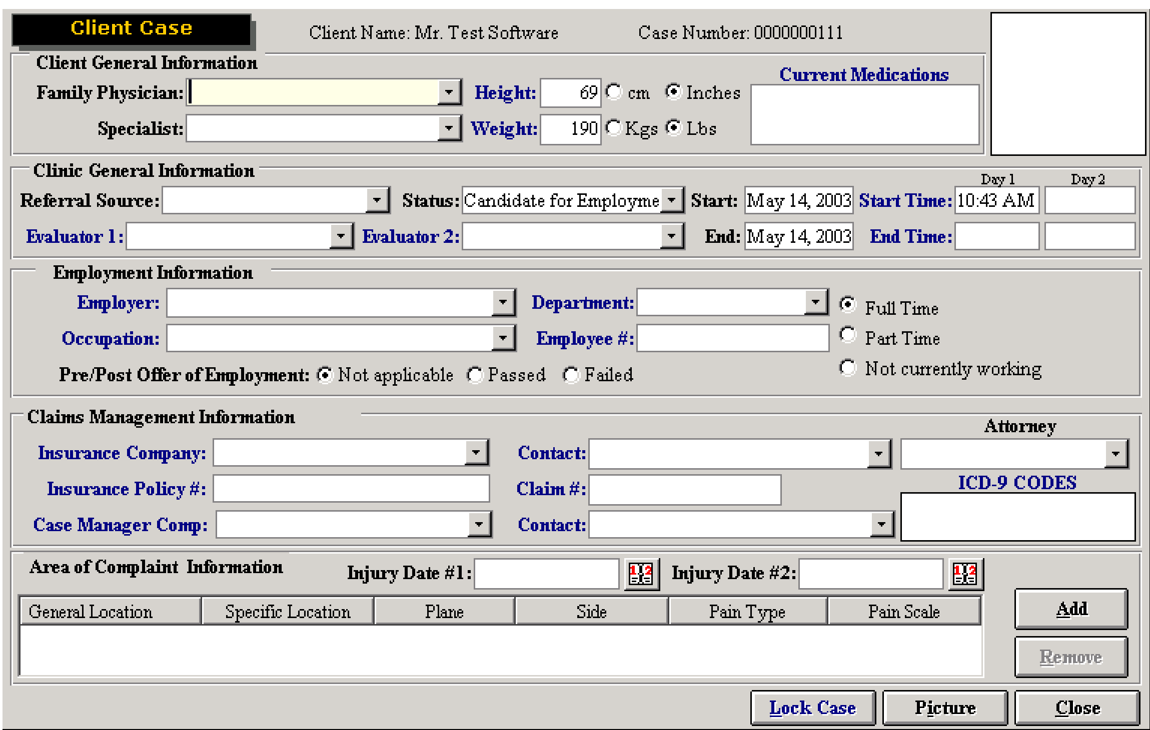
Once all of the client's general information is entered, click on **Close,** located in the bottom right hand corner. The minimum information required includes name, gender, birth date (click on the calendar icon to the right of the birth date to access a calendar) and dominant hand. This data is required for tests that compare the client's objective measurements with a normative database.

You will be returned to the client information page where you will now see the name of the newly entered client.



Adding a Client Case

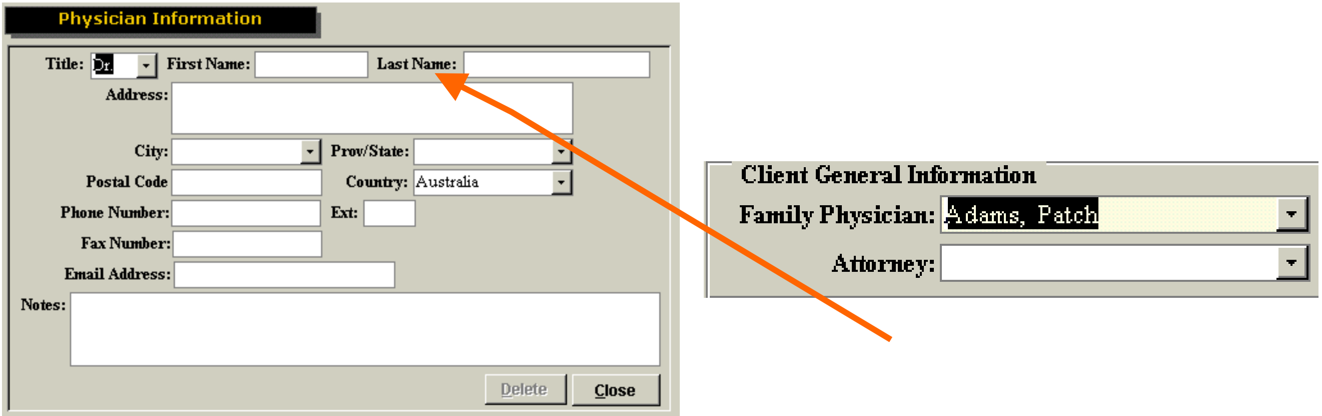
You will now need to create a new case for your client. Click on **New Case.**



Within the client case screen you can enter information regarding ICD-9 codes, referral source, family physician, current medications, employer, insurance company, etc. Check in the drop down menu to see if the contact has been added previously.

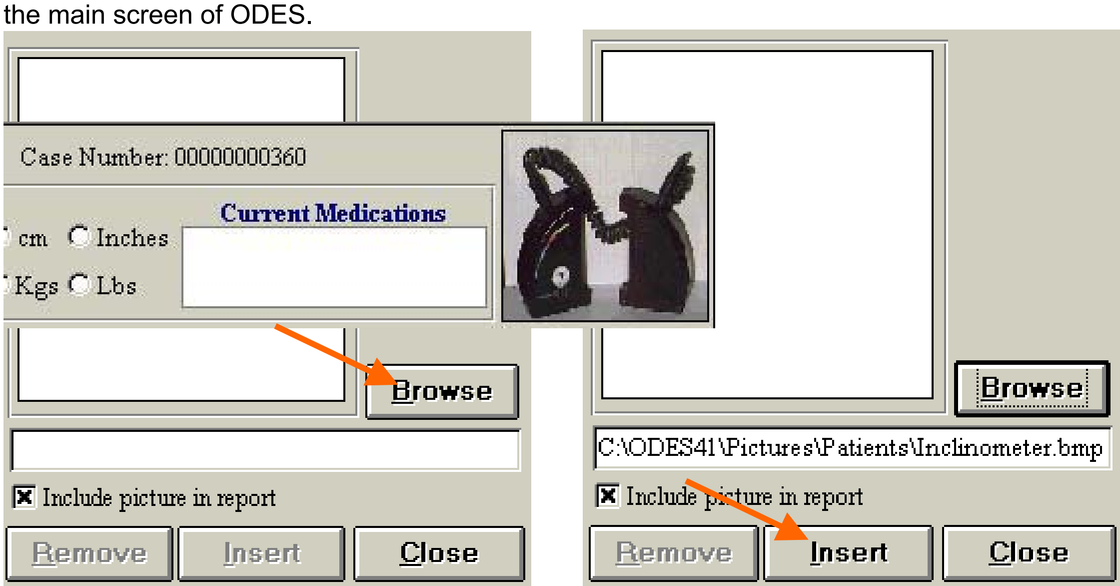
Adding in Family Physician/Specialist/Attorney/Referral Source/Insurance Company/Employer

To enter in a new contact, double click onthe white box. A new window will appear which will allow you to add in contact information. The contact's name will appear in the drop-down menu for that particular contact type. This data will be saved in your database so the information will only have to be entered once.



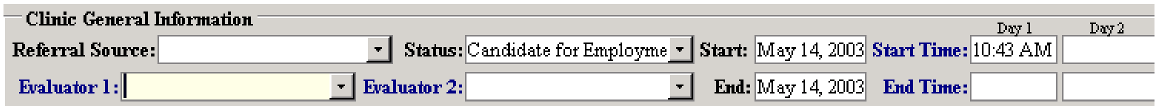
Client Photos

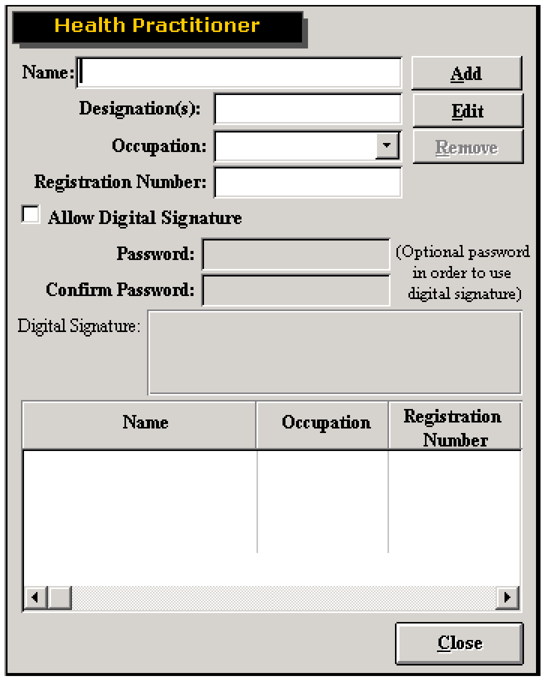
ODES has the ability to store and incorporate client photos into reports. After a picture has been taken using a digital camera and saved to your hard drive, you may click on the large white box in the upper right hand corner of the Client Case page, or click on **Picture** at the bottom right hand corner of the page. This will allow you to find the client photo you wish to insert. Click on **Browse** and locate the picture through Windows Explorer and then **Insert** the photo into ODES. The picture of the client will be seen in the top right hand corner of the Client Case page (in this example a picture of the inclinometers) and on the main screen of ODES.



Evaluator 1 and 2

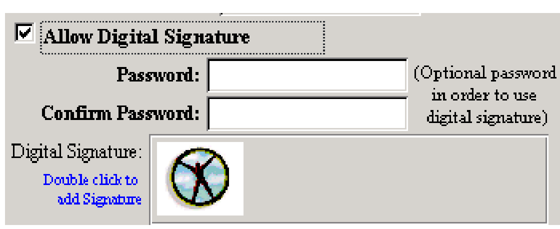
The Evaluator 1 and 2 fields allow the evaluator(s) to enter their name and credentials into the Client Case page. Check in the drop down menu to see if the evaluator's name has already been entered. To enter a new Evaluator, double click in desired field.





Enter in the Evaluator's name, designation, occupation and registration number. This information will be included in the front of the report, and beneath the signature sign-off line (if a signature is requested when printing the report). Please note this is not a feature of all reports printed in ODES.

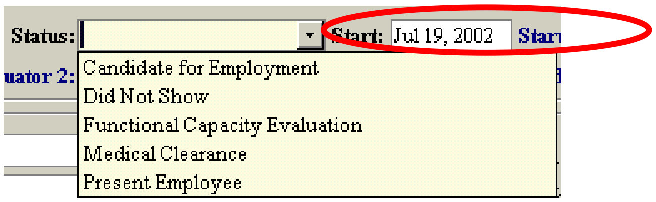
Click the Allow Digital Signature checkbox if you would like to add your signature to the software. This is a useful tool if you are anticipating e-mailing reports.

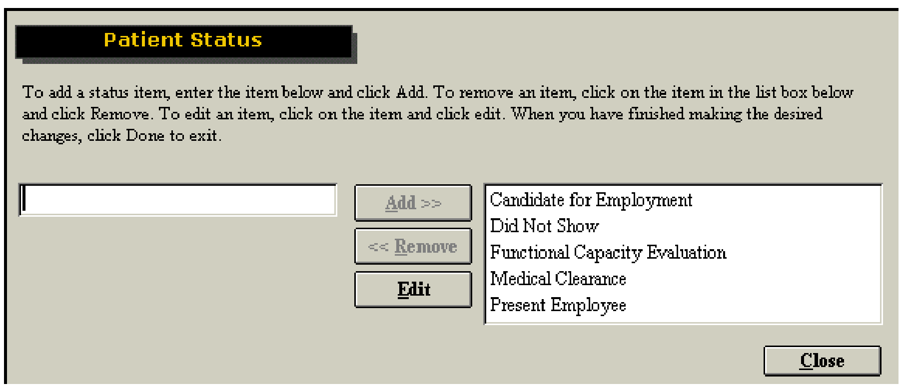


Double click on the Hanoun logo and locate your scanned signature on your hard drive. The file must have been saved as a bitmap (extension .bmp). A password can be added to this section to prevent unauthorized use of the evaluator's signature. To add a password, enter it in the Password field, and again in the Confirm Password field. If you do not wish to add password protection, leave these fields blank. Click on **Close** to return back to the client's case information screen.

Client Status

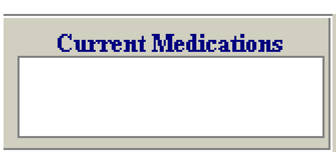
The client status field is useful for keeping track of the number and type of assessments you have completed. Client status can be used as a criterion under Statistical Queries. From the drop down menu a number of selections are available. To add, edit or remove status information, double click on the blank Status field. You may now add, remove or edit client status information. On the Client Case page this information will be available in a drop-down menu.

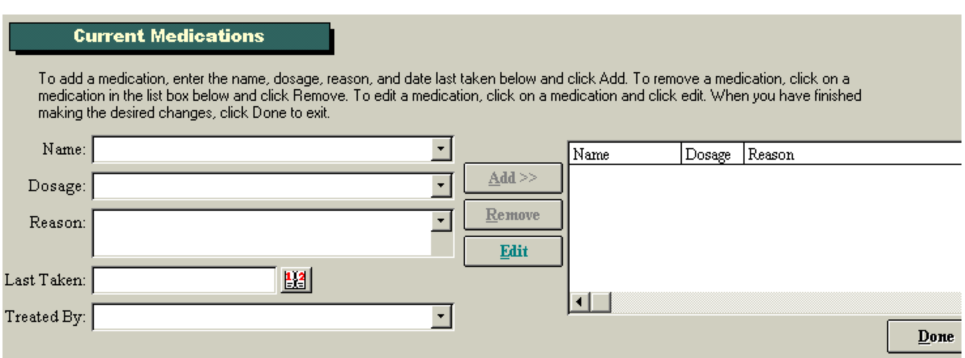




Medications

A list of client medications can be added to the Client Case page by double clicking in the white box below the Current Medications field. A new Current Medications window will appear. Enter the medication information into the appropriate fields and click **Add** to associate medications with your client. If the client is taking a medication that has previously been entered, select the name of the medication from the drop-down menu and enter the remaining information by either typing it or selecting it from a drop-down menu. Click **Add** in order to associate the medication with the client.

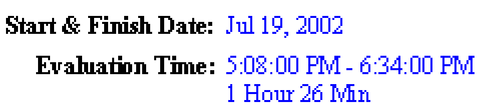




Start/End Time

The assessment start time and date are automatically logged on the Client Case page when you click on **New Case.** In order to record an end time, simply double click in the corresponding blank field once the assessment is completed. The current time will be entered into the field. You may also manually enter a time.

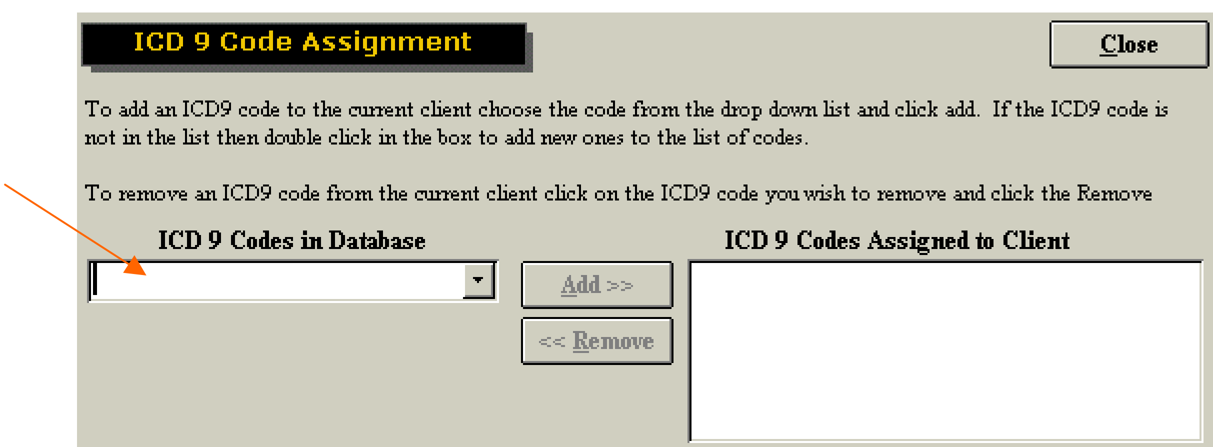
Once this is done the evaluation time will be displayed on the cover sheet of your report.

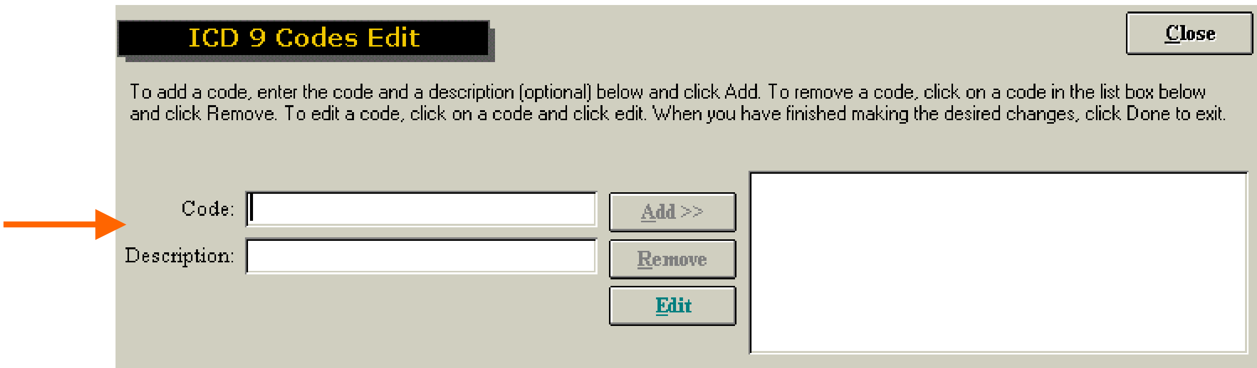


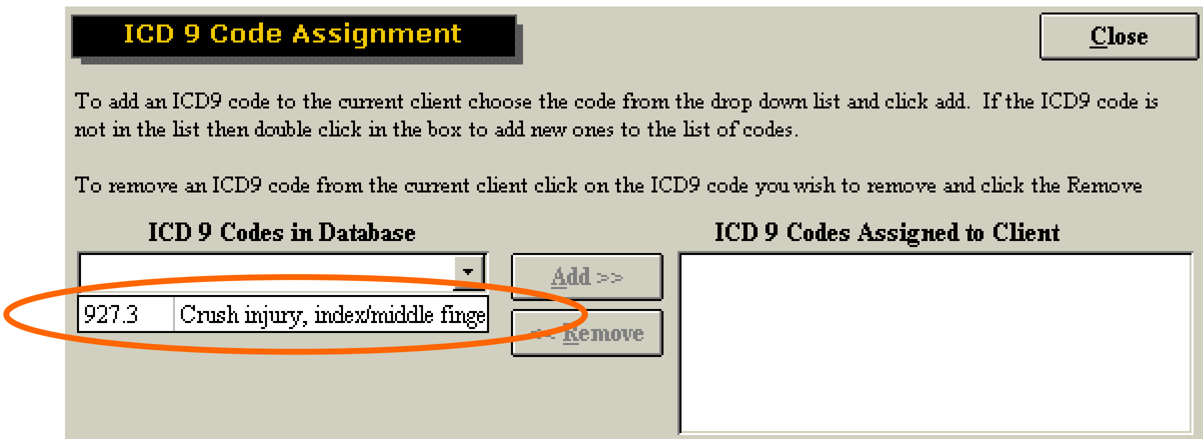
Adding in ICD-9 Codes

ICD-9 codes can be stored within ODES for later use. Double click the blank ICD-9 Codes box on the Client Case page. The ICD-9 Code Assignment window will appear. To add a new ICD-9 code, double click on the ICD-9 Codes in Database field, add the code and description into the appropriate fields in the Codes Edit window, then click **Add.** Once the ICD-9 code has been added to the database, it will be saved and available from the drop-down menu for future clients. Once entered, the ICD-9 codes are also available for use in the note templates.

To assign an existing ICD-9 code to your client, select the code from the Codes in Database drop-down menu and click **Add.**

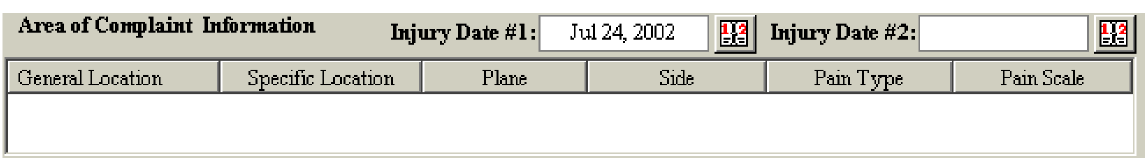




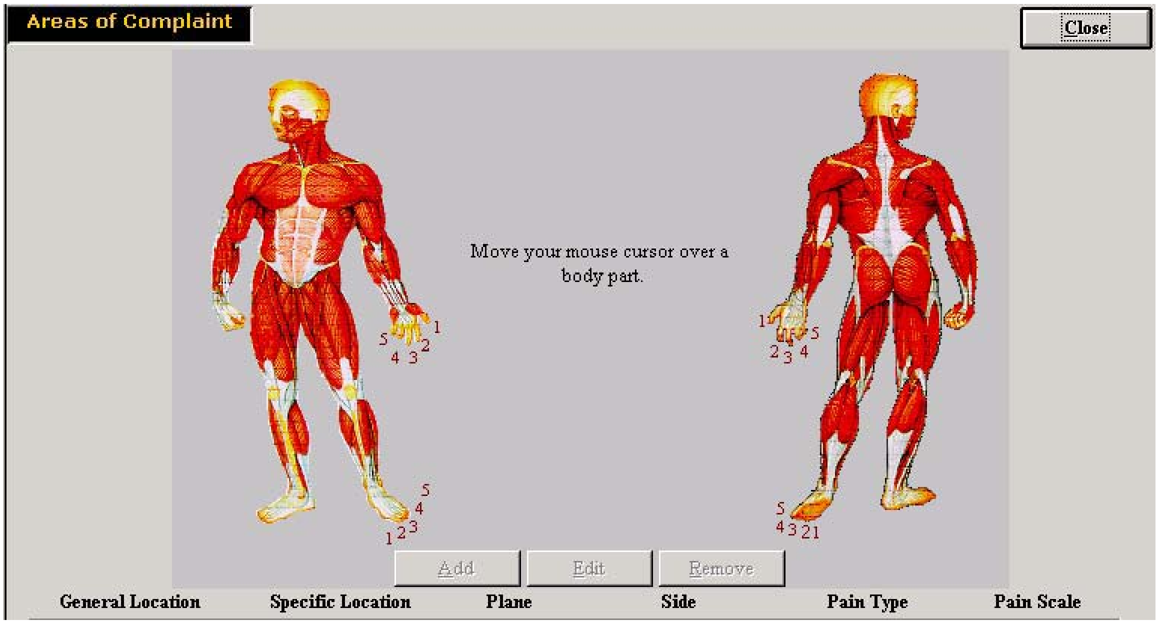


Areas of Complaint

A client's areas of complaint may be obtained by having the client complete the Pain Diagram or the Ransford Pain Diagram. To enter this information into the database, double click on the large Area of Complaint Information box or click **Add** in the Area of Complaint Information section of the Client Case page.



A pain diagram will be displayed, which will allow you to enter in location information and pain descriptions.



After clicking on the diagram location where the client presents a complaint, complete the chart below.

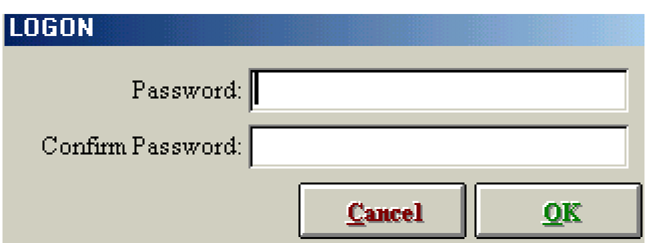
General Location	Specific Location	Plane	Side	Pain Type	Pain Scale
Chest	Pectoralis Minor	Frontal	Right	Sharp	4 - Low Moderate

Once you have entered the information click **Add,** and it will appear on the Client Case page.

General Location	Specific Location	Plane	Side	Pain Type	Pain Scale
Chest	Pectoralis Minor	Frontal	Right	Sharp	4 - Low Moderate

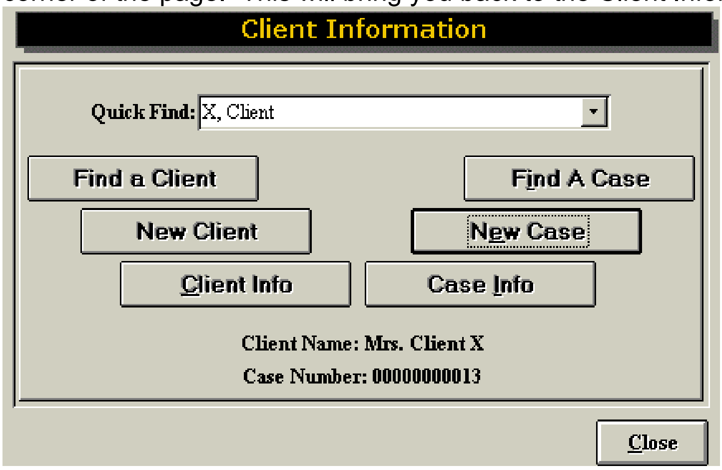
Locking Cases

This feature allows the evaluator to prevent other individuals from modifying a case. In order to utilize a locked case, a password must be entered. Please note that it is your responsibility to remember this password. If forgotten, our technical support/customer service staff at Hanoun Medical Inc. will **<u>not</u>** be able to help you retrieve it. Click **Lock Case** at the bottom of the Client Case page and you will be prompted to enter and confirm a password. Click **OK** when you are done.

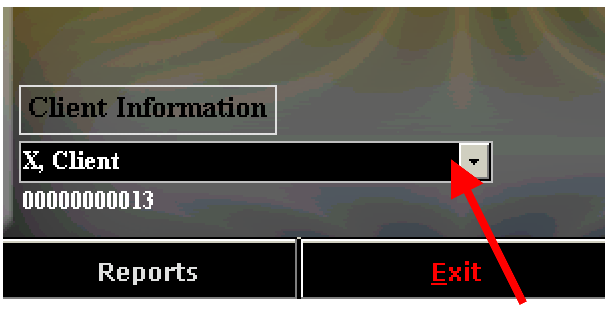


Once locked, you will see the **Lock Case** button change to **Unlock Case.**

Once the Client Case page is completed, you may click the **Close** button located at the bottom right hand corner of the page. This will bring you back to the Client Information page.



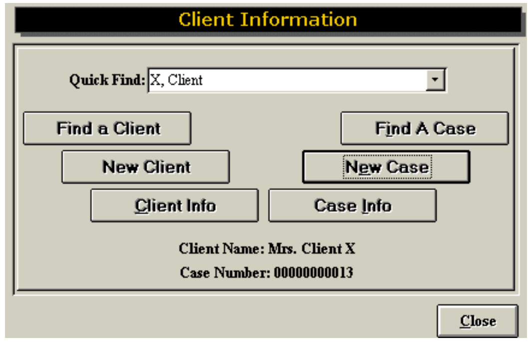
A case number will now be associated with your client. Click the **Close** button at the bottom right hand corner of the page in order to return to the main menu.

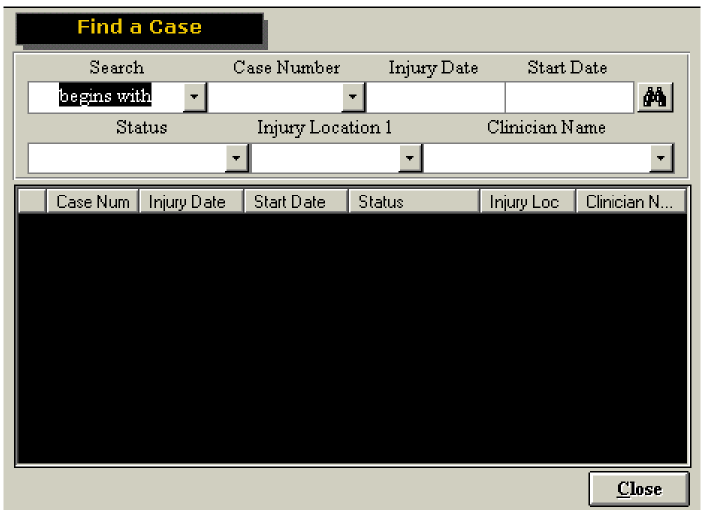


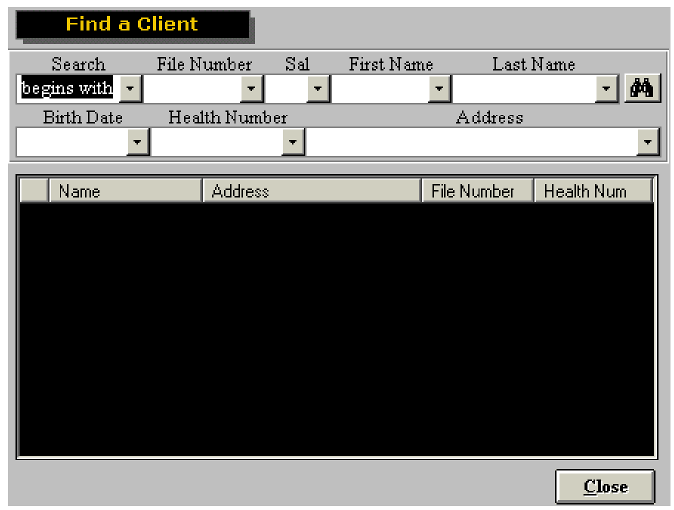
Your client will now be listed in the drop-down menu underneath the Client Information button. To quickly get into the client information screen, double click on the client's name. To quicker access the client's case information, double click on the case number.

Finding a Client/Case

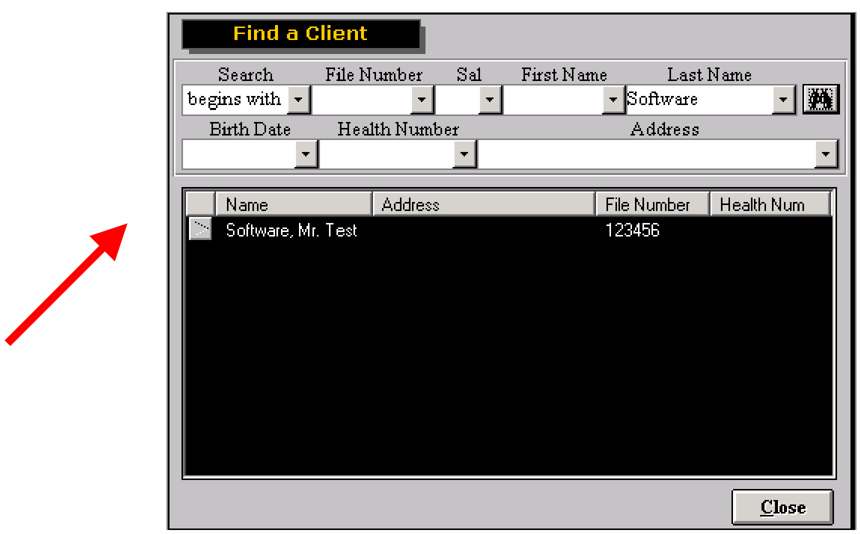
ODES allows you to search by client name or client case. Click on **Find a Client** or **Find a Case** to access these options.







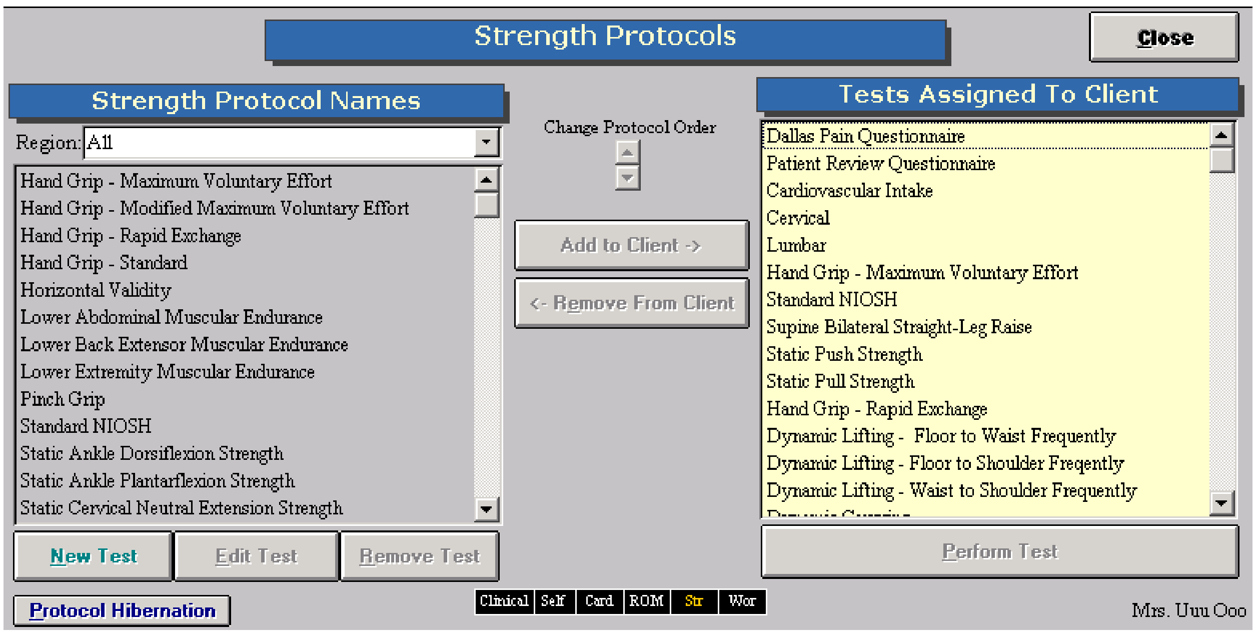
You may search using any of the fields. To see the search results, click the binoculars icon located at the upper right hand corner of the page. Click on the arrow button to the left of the client's name to open their file.



Adding a Test to a Client

Once you had added your client into ODES you can assign tests to the client. From the main screen of ODES click on either **Self Reports, Cardio, ROM Tests, Strength Tests, Work Sim Tests, or Clinical Test.** You can either highlight the test on the left hand side of the screen and click on **Add to Client** or double click on the test on the left hand side of the screen and it will be automatically assigned to the client. Once the test has been assigned to the client it will appear on the right hand side of the screen under the heading Tests Assigned to Client. To change the order the tests will be completed in, highlight the test on the left hand side of the screen and use the up and down arrows under the title Change Protocol Order.

To perform the test assigned to a client, highlight the test on the right had side of the screen and click on **Perform Test** or double click on the test on the left hand side of the screen and the test screen will open.



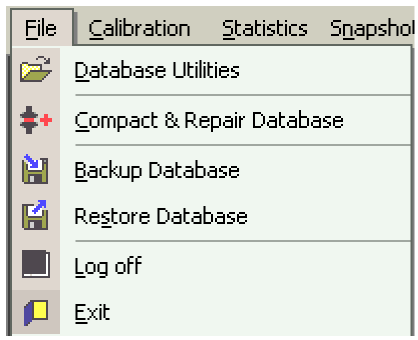
Removing a Test from a Client

To remove a test from a client, highlight the test on the left side of the screen and click on **Remove From Client**.

Additional ODES 2004 Software Features

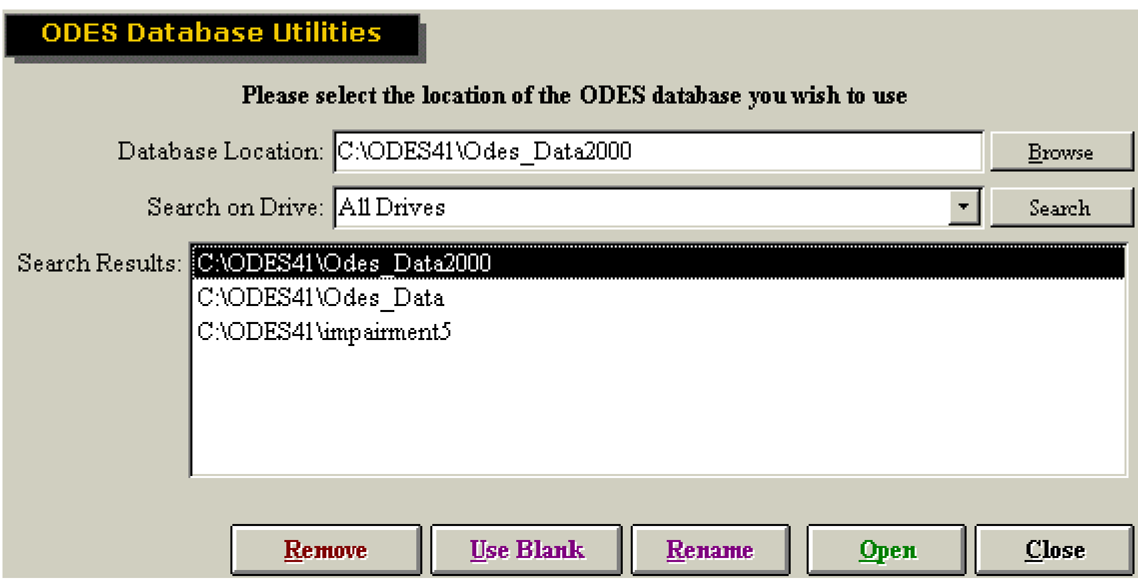
Exploring The ODES Taskbar:

File Menu

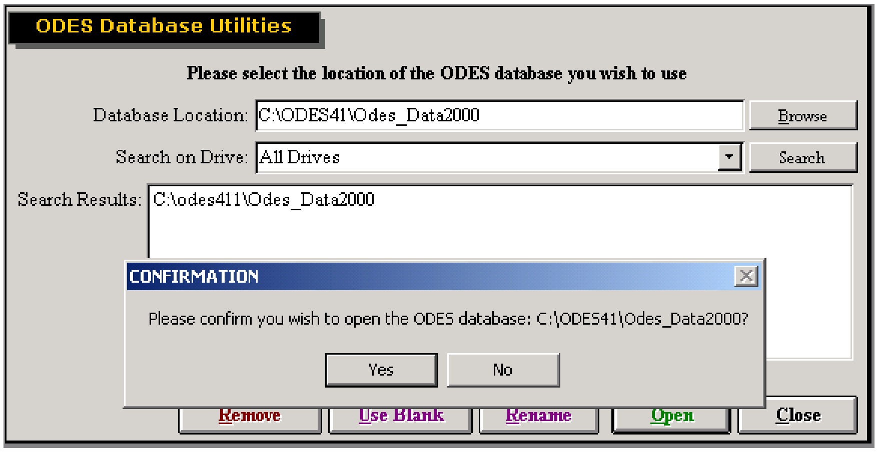


Database Utilities

This function allows you to switch between active databases, create a new database or rename an existing database.



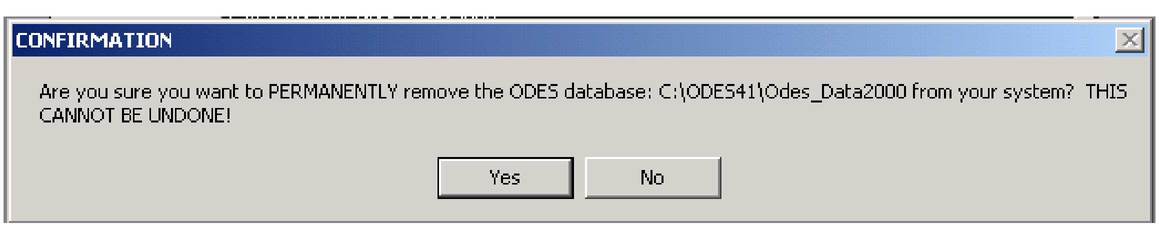
To open an existing database, go to File | Database Utilities, locate the correct database in the search results section, either by Browsing or Searching. To open the database, double click it so that the name appears in Database Location, and then click Open. A window will appear asking you to confirm that you have selected the correct database.



To rename a database, locate the database and double click it in the Search Results. The name of the database will appear under Database Location. Change the name here, then click Rename. The following window will appear to confirm the change.

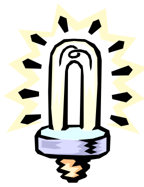
To create a blank database, change the name of the database in the database location field. This will be the name of your new database. Then, click Use Blank and confirm that this is the database you wish to create.

If you choose to remove a database, it will not be recoverable by you or BTE Medical Inc. All information will be eliminated. If you still wish to proceed, double click the database you wish to remove and then click Remove. You will be asked to confirm this action.



Compacting and Repairing A Database

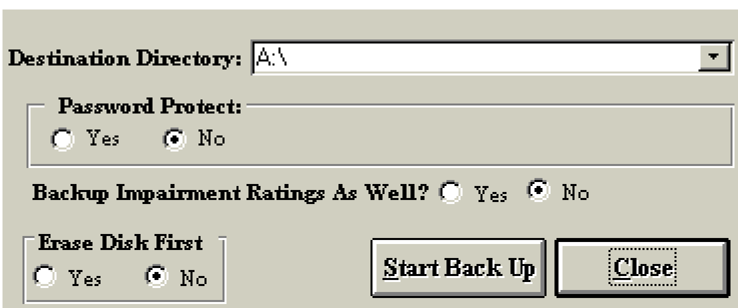
This feature repairs any small errors that may occur due to networking. Go to File | Compact & Repair Database to use this feature.



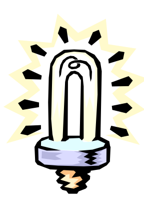
It is recommended you compact and repair your database every one to two months.

Backing Up Your Database

To back up your database go to File | Backup Database. This feature ensures that if your computer is stolen or the hard drive fails you will be able to recover your client information and testing data. We suggest backing up at the end of each day. This feature allows you to back up all impairment ratings once selected, all client information and protocol information. This feature will back up all client files. You may also associate a password with the back up – please note that BTE cannot help you if the password is forgotten.



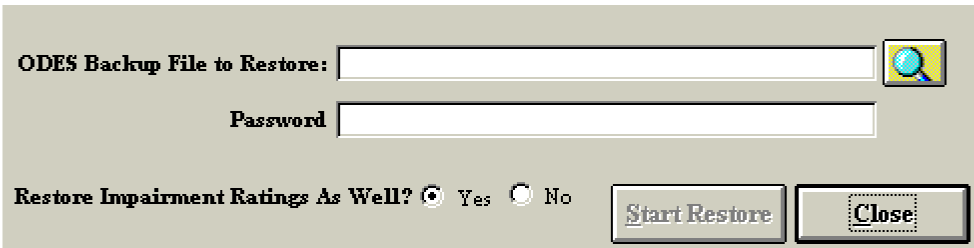
It is recommended you back up your database to floppy disks at the end of each day. If you are using a laptop or will be transporting your computer, back up prior to moving the system.



A back-up reminder can be set in the Environmental Settings Menu to remind you to perform this function.

Restore Database

To restore a previously backed up database go to File | Restore Database. This feature allows you to restore a database that has been backed up to a floppy disk or hard drive. It will replace databases of the same name, however, so it is important to know what you are restoring before you overwrite any information. After you restore a database, you must use the Database Location field to find the newly restored database. Impairment ratings can be included in this process. Passwords are only required if you indicated so at the time of data backup.

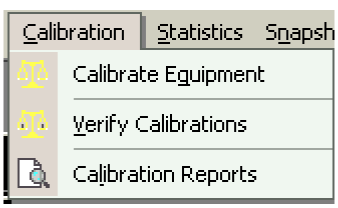


Log Off and Exit

The Log Off option is to be used if you are going to be using ODES on and off throughout the day. By logging off rather than exiting, the speed of ODES will be enhanced. To exit the software either click on exit from this menu, click on Exit from the main screen of ODES or click on the "x" at the top right hand corner of the screen.

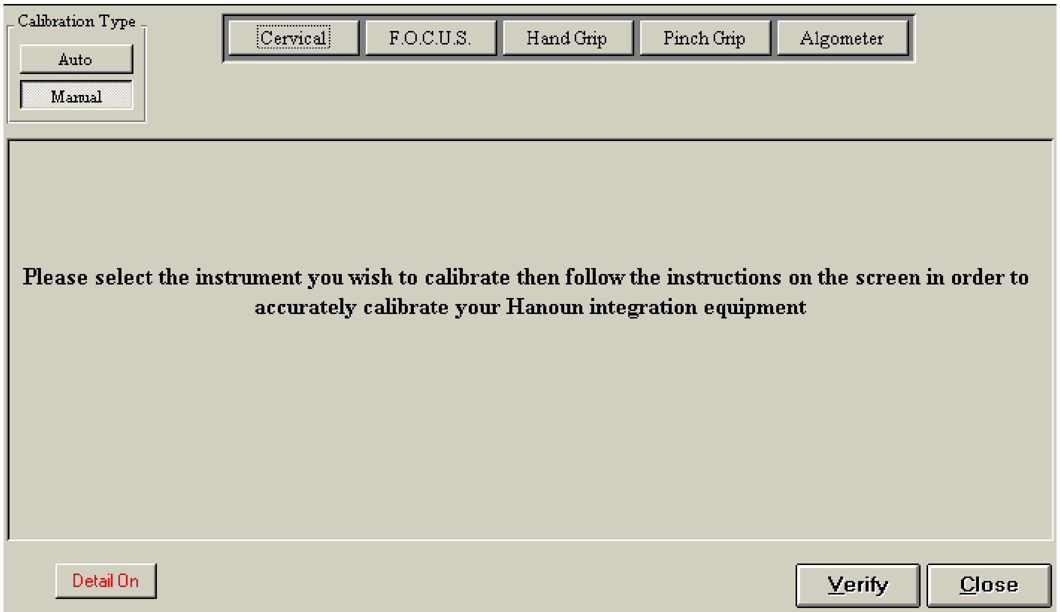
Calibration Menu

For calibration of each tool, please see the Getting Started section of the manual.



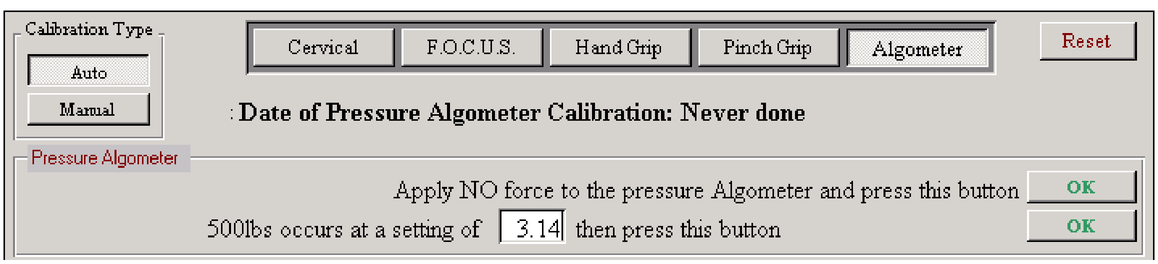
Calibrate Equipment

To calibrate your equipment, go to Calibration | Calibrate Equipment (If there is more than one type of BTE system used with this database, go to Calibration | Calibrate FOCUS). Calibration should take place once every week.



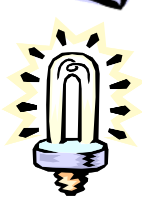
For Evaluator and CIRES systems, auto calibration can be set up. A floppy disk will be provided with the system for this purpose. Follow the instructions on the disk to install this feature. Depending on how the system is utilized, auto calibration will last up to 3 months. Following this time period, the factory settings are no longer accurate and manual calibration should be done.

To auto calibrate, click Auto, then click the tool you wish to calibrate and follow the instructions. When auto calibration is performed it will include the voltage reading based on the tools you selected. Once you have completed calibration, a window will prompt you to enter your name. If your name has been entered under Administration | Practitioner Information, you will be able to select it from the drop down menu.



For all other systems, manual calibration is always used. Click Manual, select the tool you would like to calibrate, and follow the instructions.

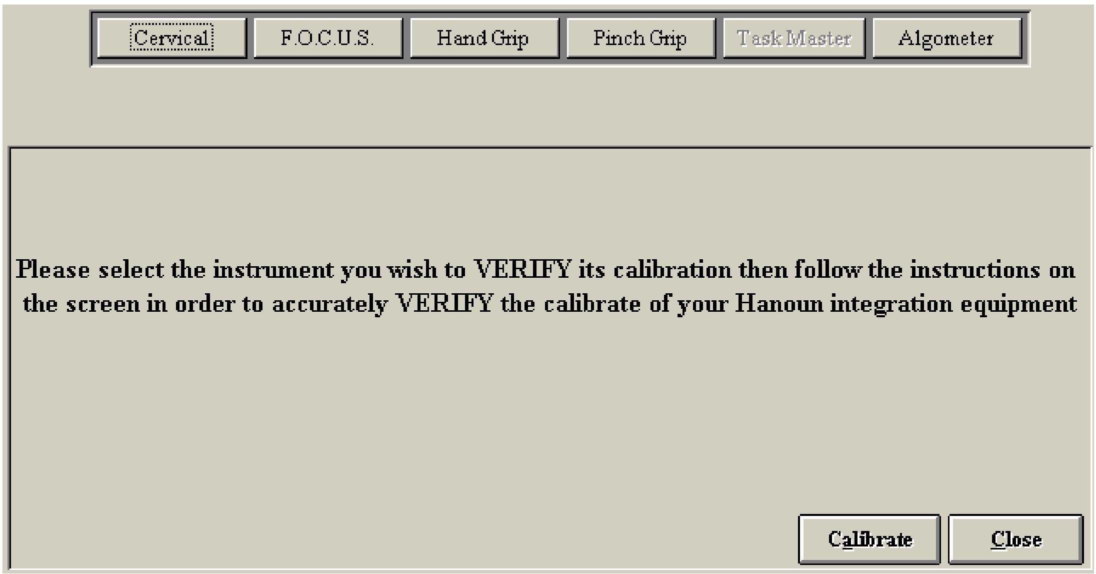
It is recommended you calibrate your system once a week.



A reminder to calibrate may be set through Administration | Environment Settings.

Verifying Calibration

To verify your calibrations, go to Calibration | Verify Calibrations (If there is more than one type of BTE system used with this database go to Calibration | Verify FOCUS). Verification should take place at the beginning of each day in order to make sure that the results are accurate. Click the tool you wish to verify and follow the instructions. Once you have completed verification, a window will prompt you to enter your name. If your name has been entered under Administration | Practitioner Information, you will be able to select it from the drop down menu.

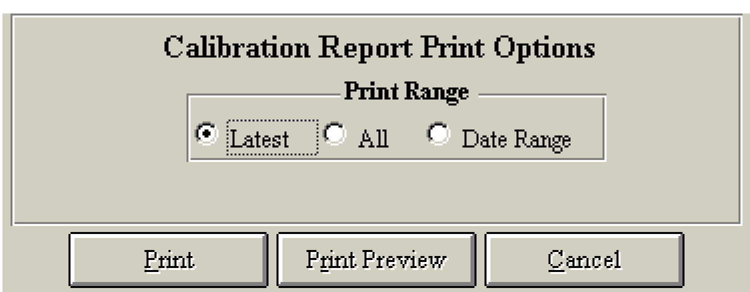


Calibration Reports

To print or view the calibration and verification reports go to Calibration | Calibration Reports. Printed reports include the following information:

Name of person who performed calibration/verification
Date when the calibration/verification occurred
Actual weight, measured weight and deviation from accuracy of each device calibrated

You may specify the print range for this data.



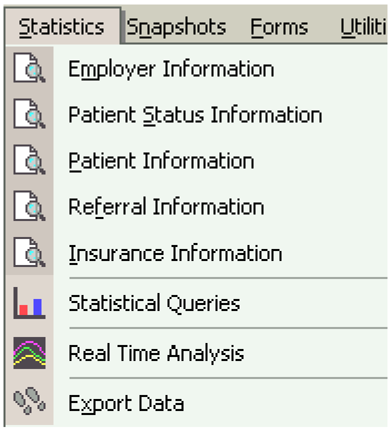
CALIBRATION & VERIFICATION REPORT

24-Jul-02 3:20:20 PM

F.O.C.U.S.

Date	Name	Actual Weight	Measured Weight	Deviation from Accuracy
Jun 20, 2002 1:52:38 PM	Angelique Clark-Miller	25 Lbs.	25 Lbs.	0.1%

Statistics Menu

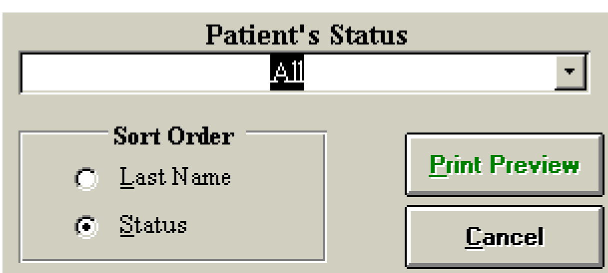


Employer information

Statistics | Employer Information provides a summary of all Employers that are stored within the Case Information section of the ODES database. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).

Client Status Information

Statistics | Client Status Information provides a summary of all Client Statuses. If the status of a client has been added to the database in the Client Case page, the client will be added to this report. You may sort by last name or by the status of the client. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).



Client Information

Statistics | Client Information provides a summary of all client information that has been added to the database. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).

Referral Information

Statistics | Referral Information provides a summary of all referral sources that have been entered into the database. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).

Insurance Information

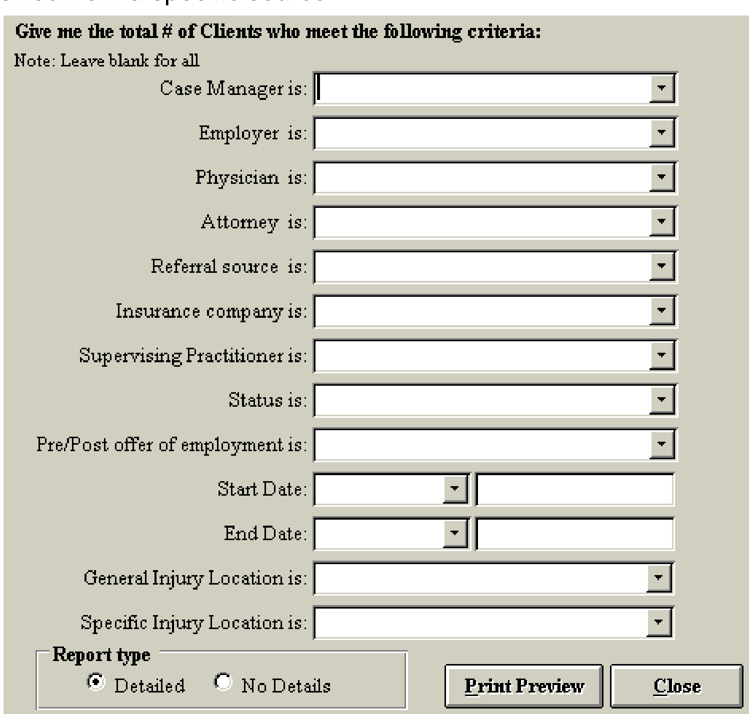
Statistics | Insurance Information provides a summary of all insurance companies that have been entered into the database. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).

Statistical Queries

This function is located under Statistics | Statistical Queries. The ODES software allows its users to query for information regarding existing clients in each of the following headings:

Case Manager	Insurance Company
Employer	Supervising Practitioner
Physician	Status
Attorney	Pre/Post Offer of Employment
Referral Source	Start and End Dates
Insurance Company	Injury Locations

This provides detailed information on length of treatment, common injuries and the number of clients being referred from a specific source.

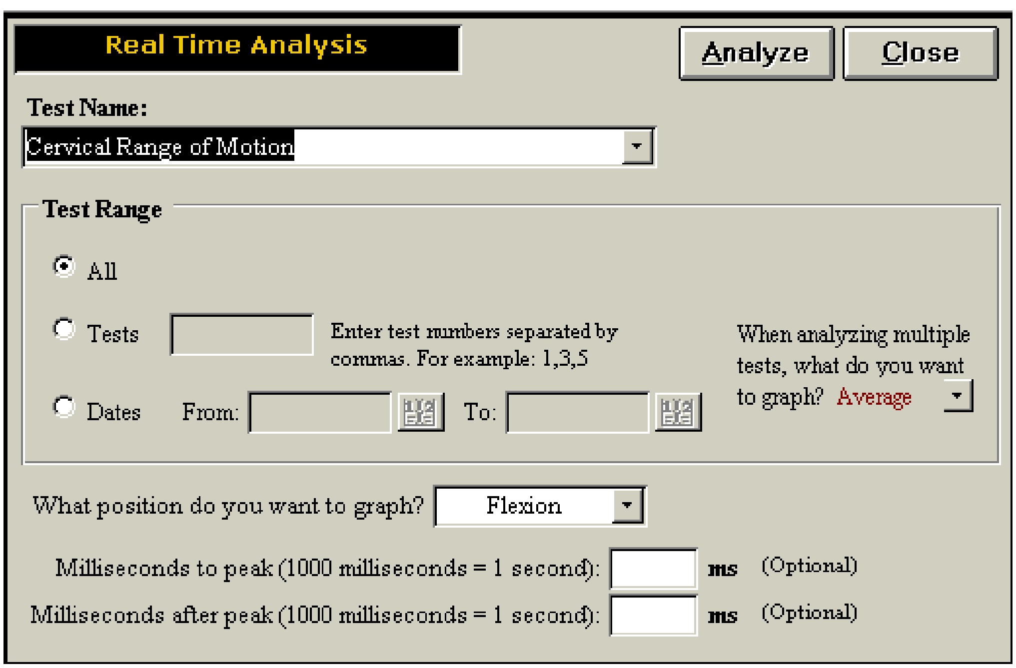


Under report type, select Detailed to obtain a list of the clients, and select No Details to obtain the summary without client names.

You may also choose multiple criteria to make your search more specific. The report can be printed, exported to a snapshot file format or exported to Microsoft Word (if Word is installed on the computer).

Real Time Analysis

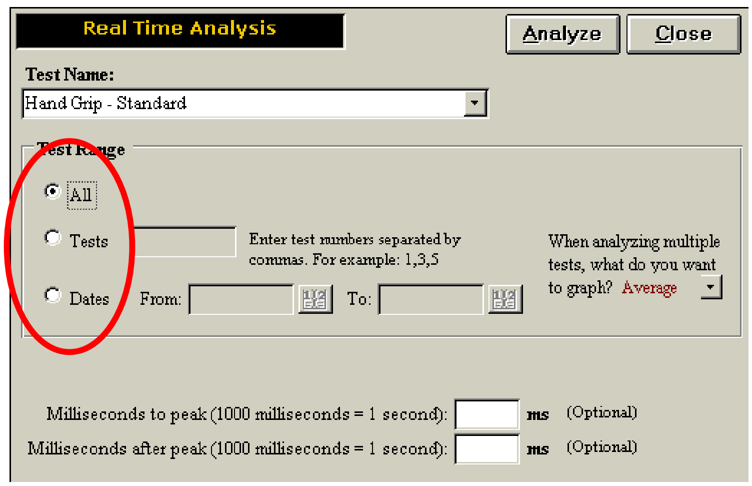
Real Time Analysis is accessed by going to Statistics | Real Time Analysis. It allows you to analyze the data from each individual client in detail. It also allows you to compare individual or multiple trials of any strength test recorded in the database.



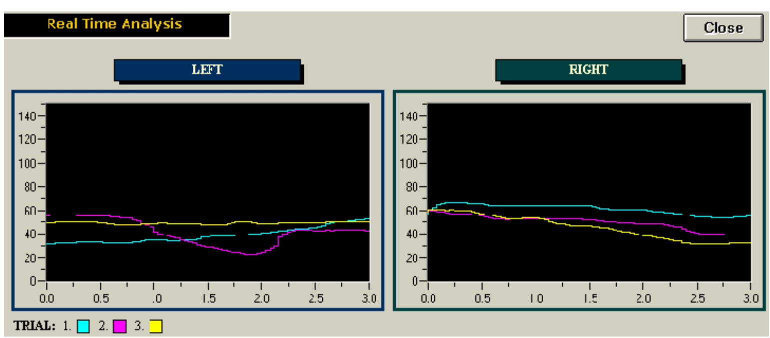
Real Time Analysis is a useful function for:
Research
Job Demands – You can see whether your client was able to obtain their required goal and whether or not they were able to sustain it over time (i.e. their percentage of decrease after peak value was obtained)
Client Progress/Tracking

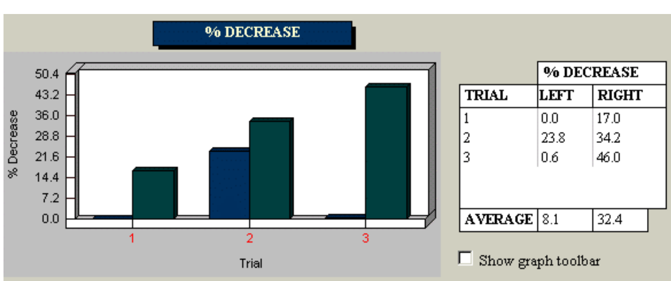
Using Real Time Analysis

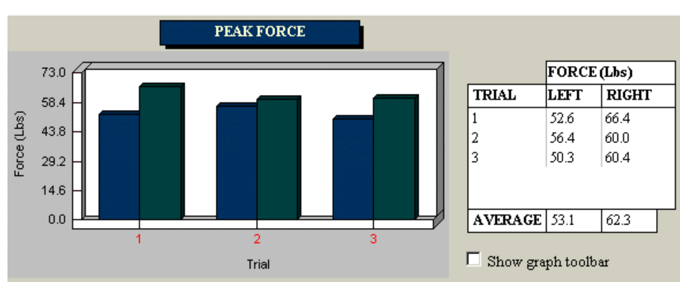
In order to utilize the Real Time Analysis feature, select the protocol to analyze.You must specify whether you wish to analyze only one trial or all of the trials relating to a specific protocol in a specific client. You may also analyze the selected protocol within a certain time frame.

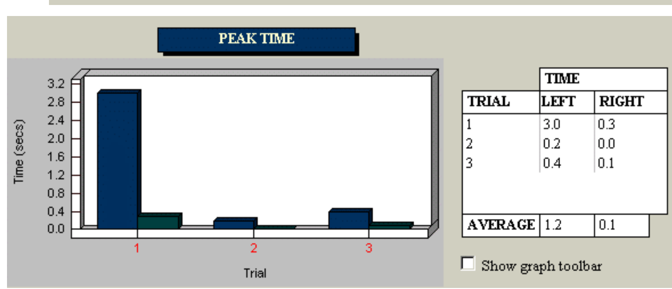


The top graph depicts the actual values obtained in the trials or test selected



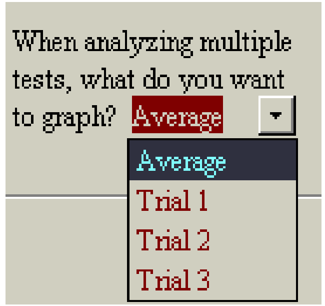






Peak Force, Peak Time and % Decrease are then used to analyze your data. You may also isolate your data in milliseconds to peak and milliseconds from peak

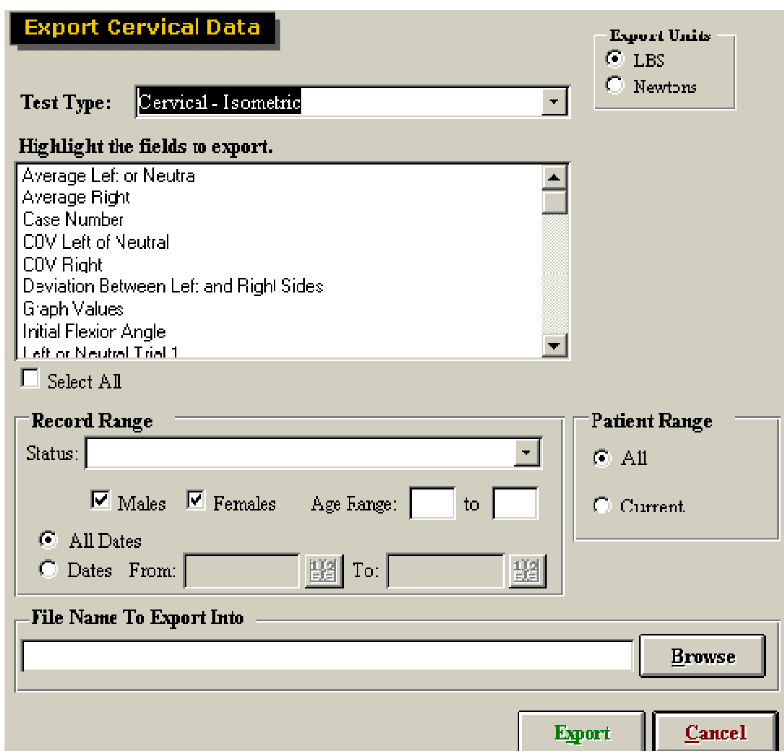
, you can choose to graph trial 1, trial 2, trial 3 or the average



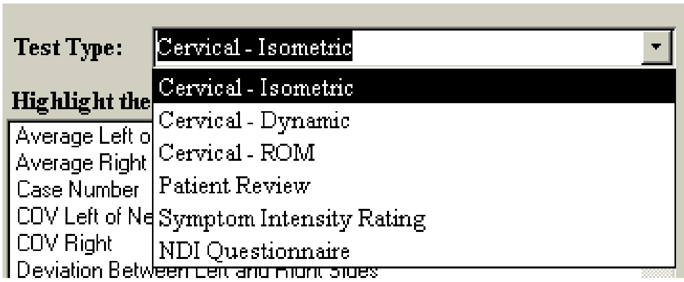
Exporting Data

ODES also allows its Multi-Cervical Users participating in International research with the Melbourne Protocol to export raw data into a program outside of ODES. This allows you to work with the data in a spreadsheet format if so desired. ER Users may also use this function, but are limited to exporting only NDI data.

You may select individual or multiple fields to export from ODES, depending on the specificity of your needs. You may isolate the data to be exported by Client Range, Units of Measurement, Status, Gender, Age Range, and/or Date

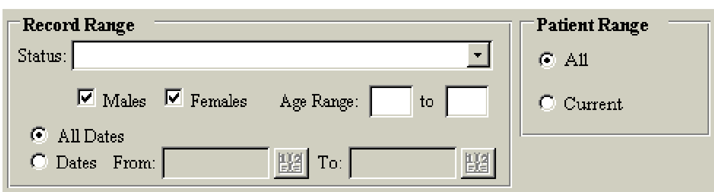


Using The Export Function

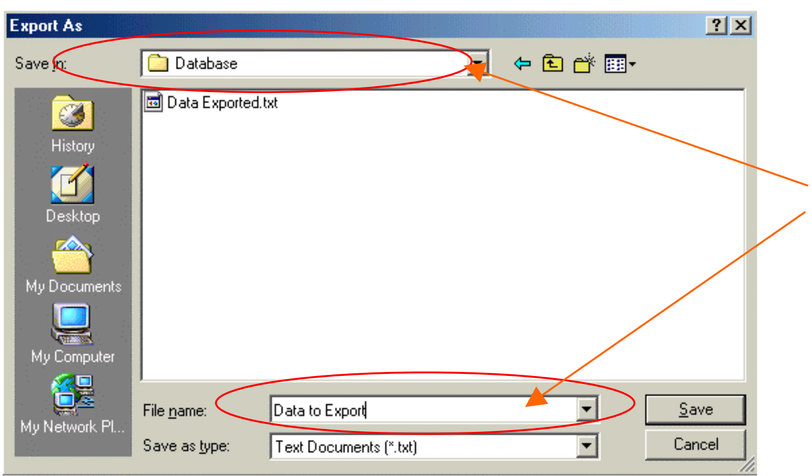


Select the type of testing data you wish to export

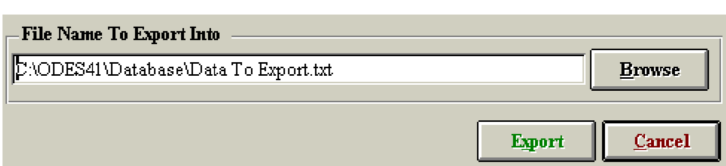
Select the fields you wish to include when exporting



Specify your target population or target dates



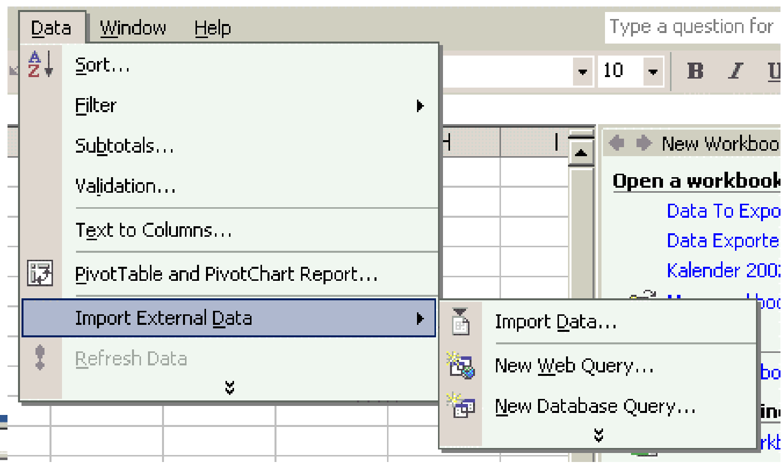
Select a file name and a directory – your data will be saved as a text file here.

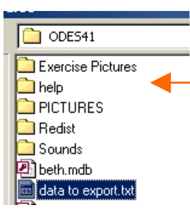


The file name that you chose will now be written in the File Name to Export line

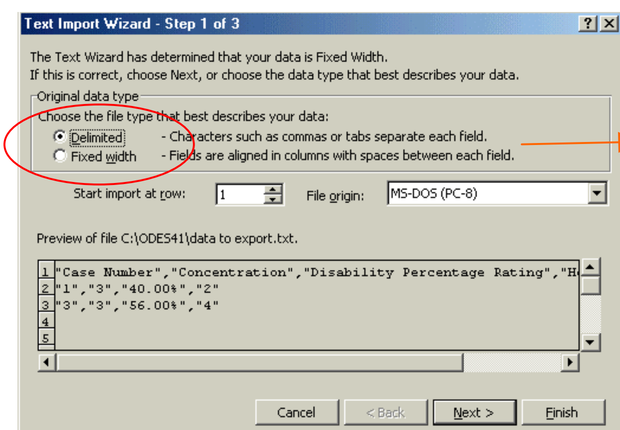
Once the data has been successfully exported, this message appears

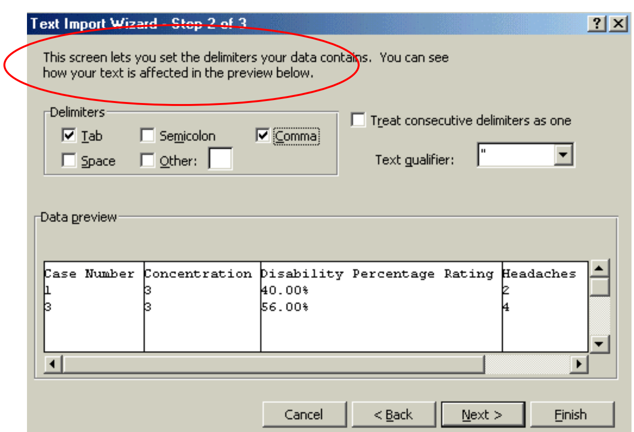
Locating Your Exported Data
In order to locate the data that you just exported from ODES, you must first close the ODES software and return to your Windows desktop.
Open the program that youexported the data to (i.e. Excel)
Go to the Data tab, select Import External Data | Import Data

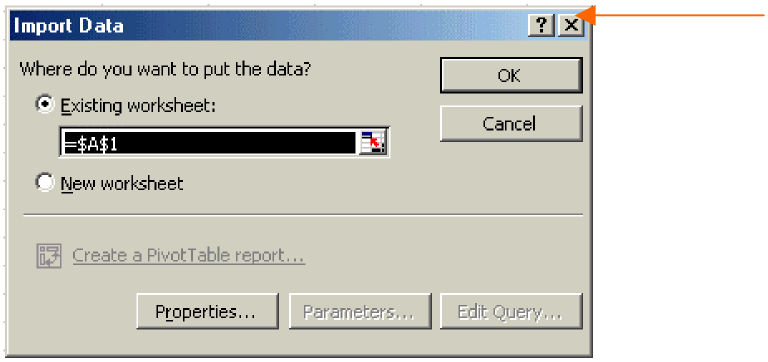




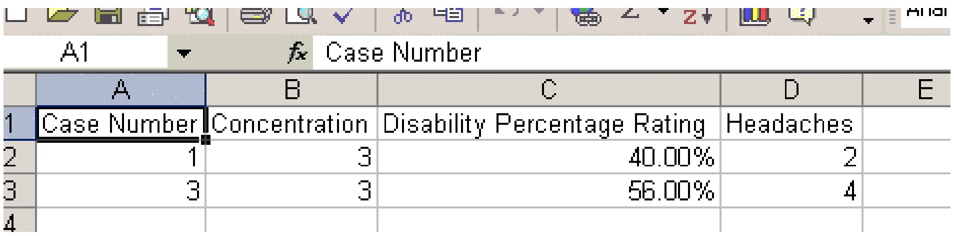
Find your text file – open it and follow directions





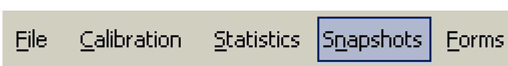


You information will now be put into Microsoft Excel Spreadsheet format (see below):

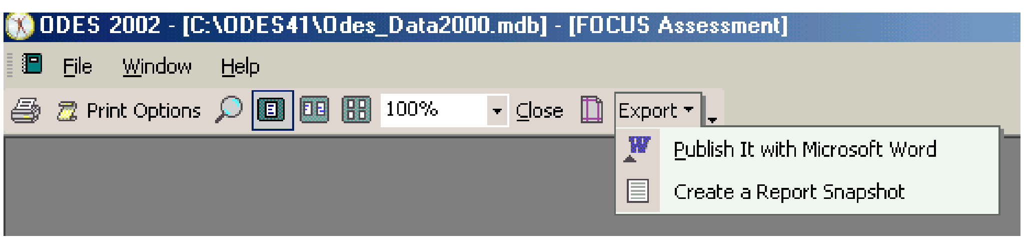


Snapshots

The snapshot function allows users to create "PDF-like" files from reports that can be emailed without compromising the validity of the document. A snapshot viewer executable file is bundled with the report file, which will allow individuals without ODES to view the reports (i.e. insurance companies, other offices, etc.).

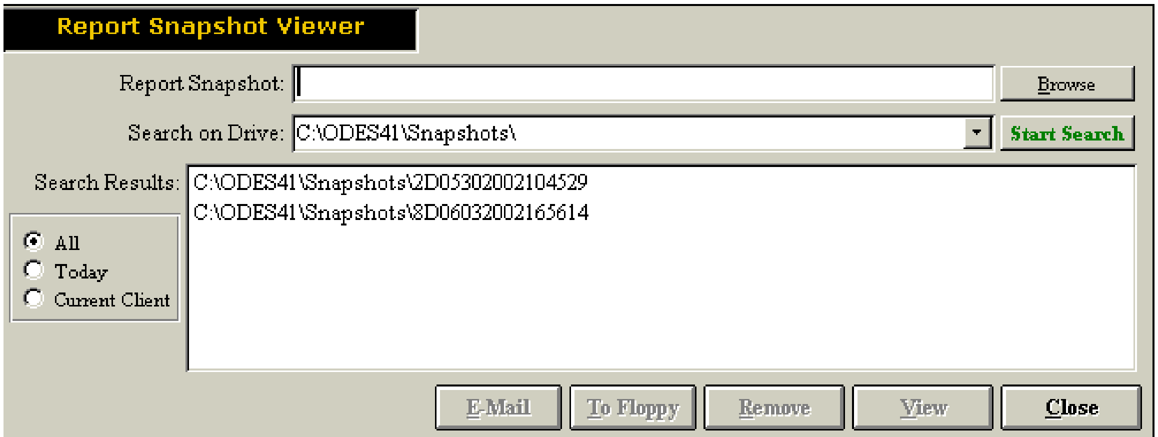


In order to use this function, you must first preview the report you want to send as a snapshot. Once in the print preview for your report, select Export | Create a Report Snapshot.



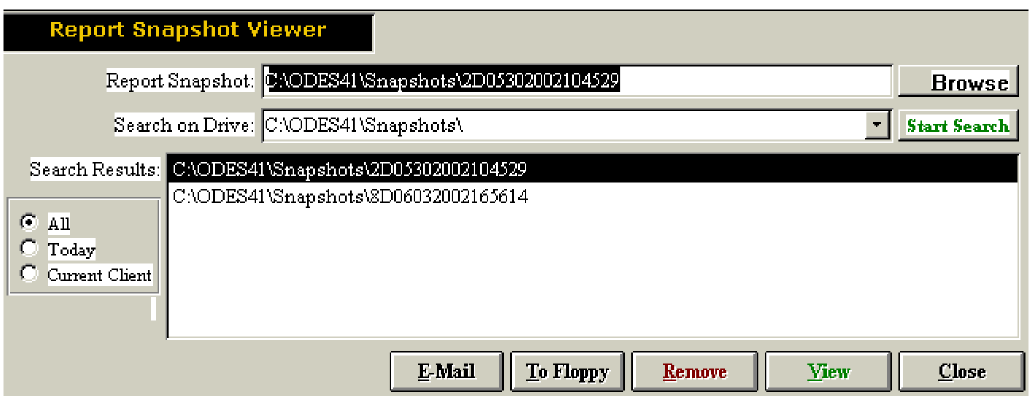
The report will now be exported into a report snapshot, and you will see the following message:

In order to access the snapshot file for emailing, printing or saving to a floppy disk, you must first return to the ODES main page. Select Snapshot and the following page will appear.

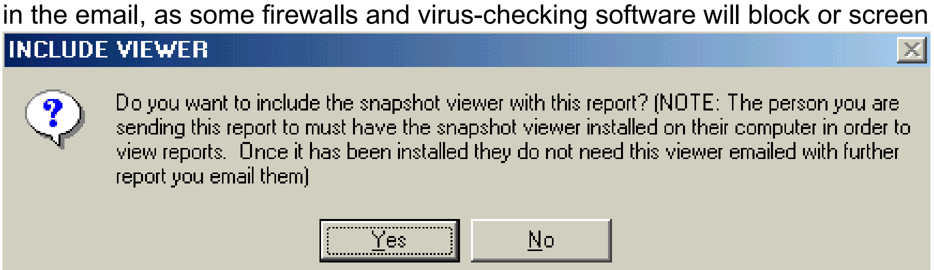


You may search for your snapshot by selecting Current Client, Today or All. In order to perform any function with the snapshot, you must double click the snapshot you wish to use so that it appears in the Report Snapshot field.

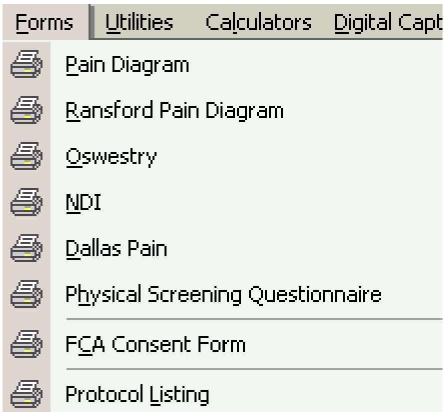
You may now E-Mail the snapshot you selected, save it To Floppy disk, Remove it or View it.



If you choose to E-Mail it, ODES will ask you if you wish to include the snapshot viewer. If you are emailing the file to someone who has not viewed a snapshot before or does not have ODES, you must include the snapshot viewer. Make sure that they are aware the viewer will be included in the email, as some firewalls and virus-checking software will block or screen .exe files.



Forms Menu

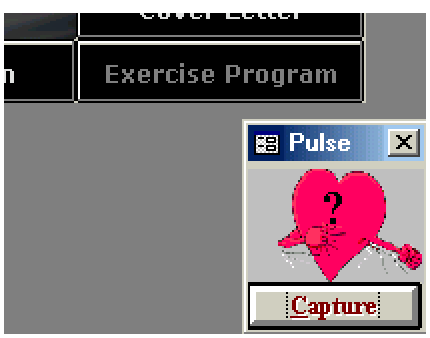


A variety of questionnaires and forms are available for printing from the Forms menu. The client can fill out these forms and the information can be entered into the software manually later on.

Utilities Menu

Heart Rate Monitor

This feature opens a window, which allows you to monitor a client's heart rate even outside of a testing page. Click Capture to initiate the Heart Rate Report. The software will then record the date, time, and heart rate of the client, as well as what the client was doing when the heart rate was captured (i.e. Before starting the Standard Hand Grip Test). If Capture is selected on a non-testing page, the evaluator can enter information regarding the client's activities at the time. Standard entries can be set up under Administration | Heart Rate Comments. Prior to clicking OK on the page to close it, make sure there are no errors, as the data cannot be corrected later. You may also double click the question mark to manually enter the client's heart rate. Input the value and hit the Enter key.

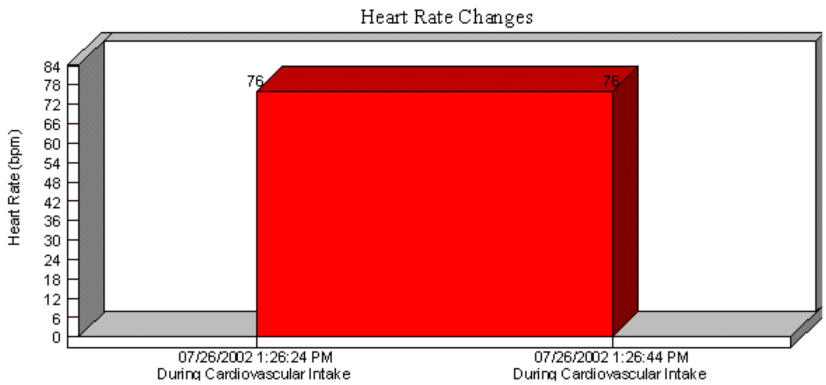


Heart Rate Report

This report provides the evaluator with any heart rate information that has been manually entered into testing pages, or cardiovascular intake pages. It includes date, time, comments and the heart rate value. This report is not integrated with the report section of the software and must be printed from here and included as an appendix to the report.

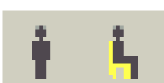
Heart Rate

Date	Time	Comment	Value
Jul 26 2002	1:26:24 PM	During Cardiovascular Intake	76
Jul 26 2002	1:26:44 PM	During Cardiovascular Intake	76



Sitting and Standing Tolerance

t the top of the ODES Menu you will see the following icons:



These icons can be used to track both the sitting and standing tolerances of a client.

In order to time a client sitting, click the sitting icon. Once the client has finished sitting, click the stop button.

In order to time a client standing, click the standing icon. Once the client has finished standing, click the stop button.

When the assessment is complete, you may print off a sitting/standing tolerance report by going to Utilities│ Sitting/Standing Tolerance Report. The following is an example of what you will see. The report includes total sitting or standing time, date, time and duration each position was maintained.

Standing/Sitting Tolerance

Date & Time Started	Position	Duration
02-Aug-2002 2:08:41 PM	Standing	1 Minute
02-Aug-2002 2:09:26 PM	Sitting	0 Minutes

Total Standing Time:	1 Minute	100.0%
Total Sitting Time:	0 Minutes	0%

Post Offer of Employment Software (Optional Upgrade)

The Post Offer of Employment software feature allows the evaluator to set the employment standards for an employer, generate a letter acceptable for the Human Resources department, and the ability to generate statistics on the hiring of a particular employer.

To access the Post Offer of Employment Test software feature click on POET from the drop down menu.

If you are going to create any customized test particular for the employer you are going to be working with, it is recommended you create the tests before setting the standards.

POET Receipts

This software feature allows the creation of a receipt in the event the client is required to pay for the POET test. Select the payment type, and the amount. From the drop down menu the supervising practitioners listed in ODES will be available. To enter in another name that the money was received by type it in.

Set Standards

Select Set Standards from the drop down menu. Select the employer from the drop down menu. The employer must have been entered in a client's case at least once for it to be available from the drop down menu.

Next select the tests you are going to include in the Post Offer of Employment Test for this particular employer from the drop down menu.

From here you would include the External ID, if the results were being exported to a FAT file for synchronization with the employer's computer system. Include the standards for the particular test in the white box (in this example it is "0").

Next you are required to select the comparison method for the standard you entered. The following are the options available:

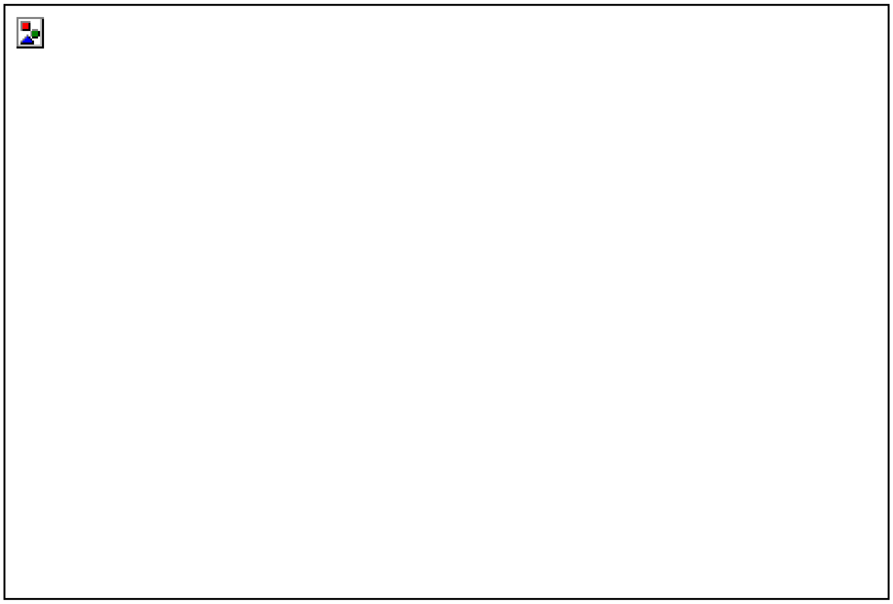
Compare the score for each column with the standard for that column
Compare the left hand score with the standard for the left hand, and compare the right hand score with the standard for the right hand
Compared the combined maximum of the right and left hand scores with the left hand standard
Compare the hand that scored the higher of the two hands with the higher of the two standards.
Compare the hand that scored the lower of the two hands with the lower of the two standards
Compare the dominant hand score with the higher of the two standards. Compare the non-dominant hand score with the lower of the two standards

Then select from the drop down menu whether "The evaluee must fail all or only one of the standards defined above to fail this individual test."

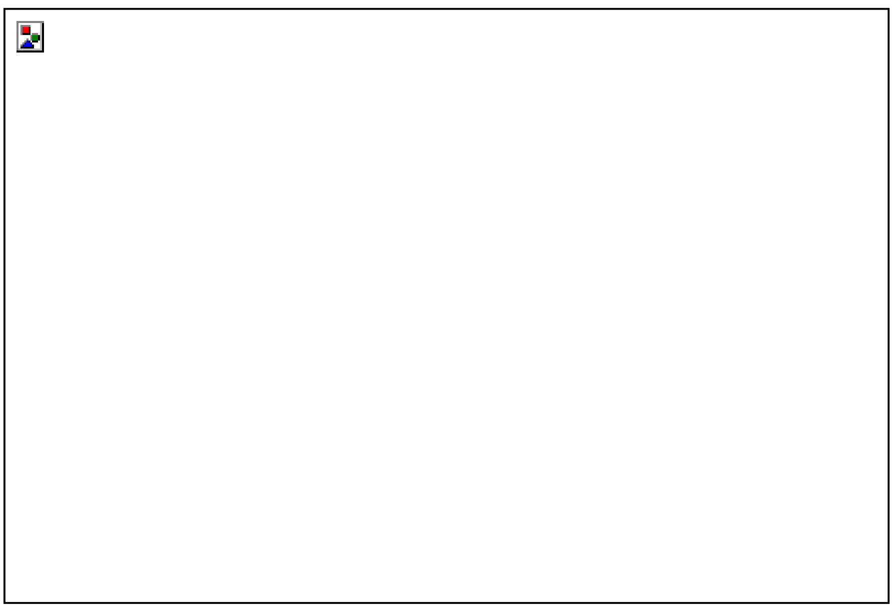
Once set up, select the next test from the drop down menu to be included in the Post Offer of Employment Test and set up the standard. Continue until all the standards have been set up for this particular employer.

POET Standards Report

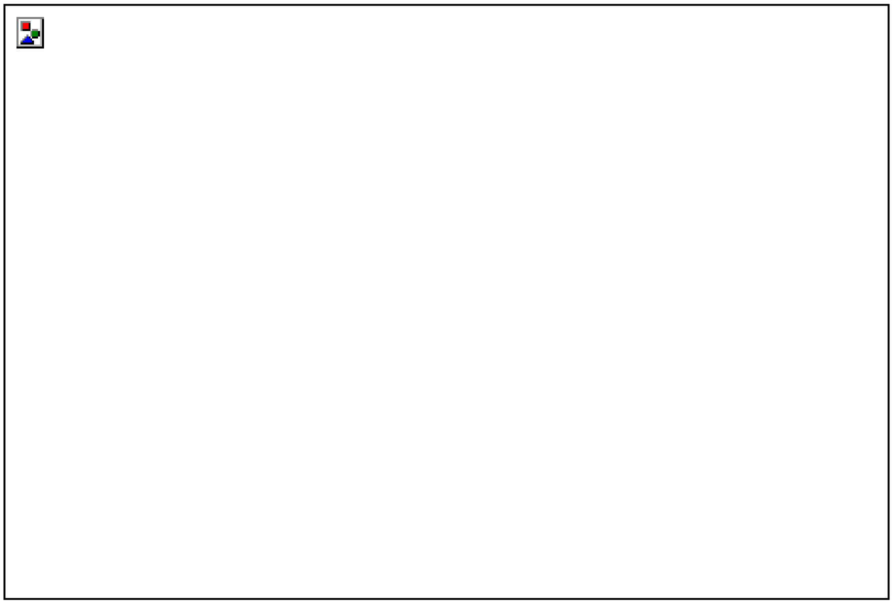
Once completed click on Print from the Set Standards screen or select POET Standards Report from the POET drop down menu from the main screen of ODES.



Click on Next to be taken to the next screen.

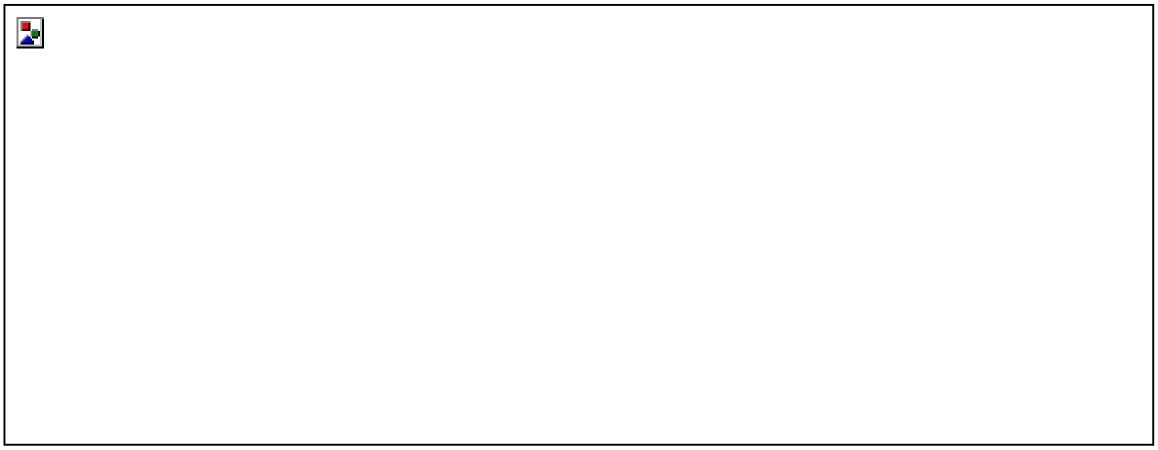


Select the particular employer from the drop down menu and click Next.



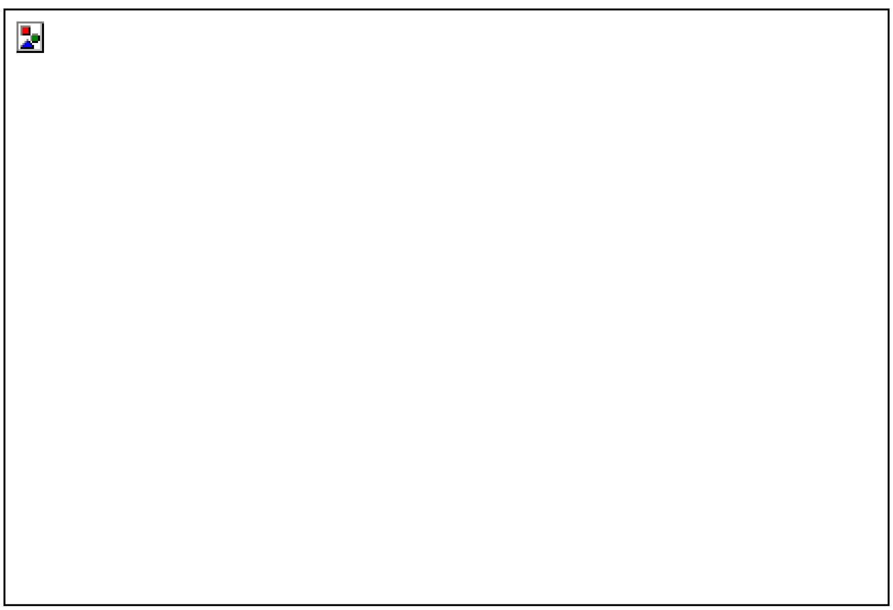
If a Super Protocol was set up for the Post Offer of Employment Test, select it from the drop down menu at the top of the screen and then click on Select Tests. You can review the tests that are included then in the list below and the tests assigned to the particular Super Protocol you selected should be highlighted. Alternatively, you can select the particular tests from the list of tests. Once this step has been completed click on Next.

Select whether you want to Preview the report or Print the report. Then click on Finish. The following is an example of the report. Click on the printer icon to send the print job to the default printer. Click on Print Options to select which printer to send the report to. Click on Close to close out of this screen and return to the main screen of ODES or click on Export to export the report to Microsoft Office Word (if installed on computer) or to export the report to a Snapshot (see section of creating snapshots for further details).

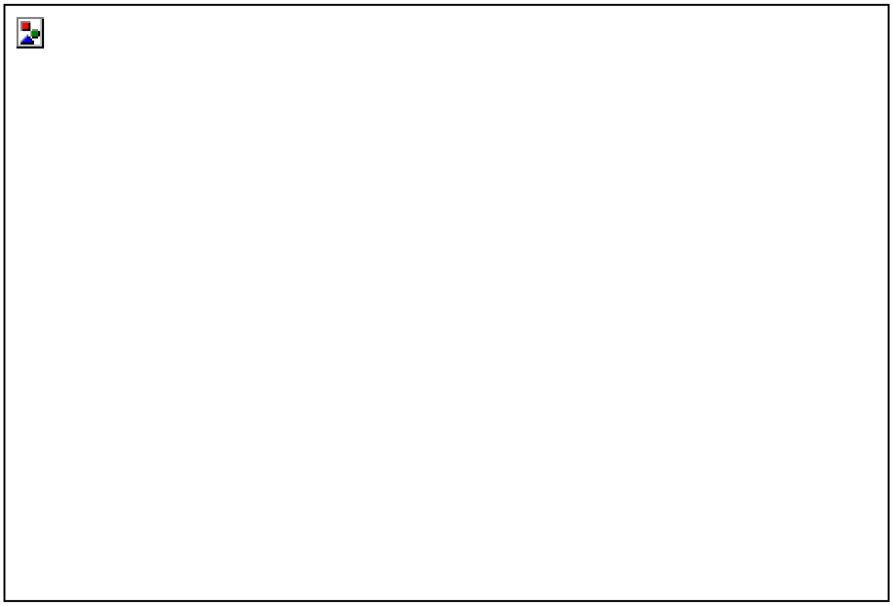


POET Summary Report

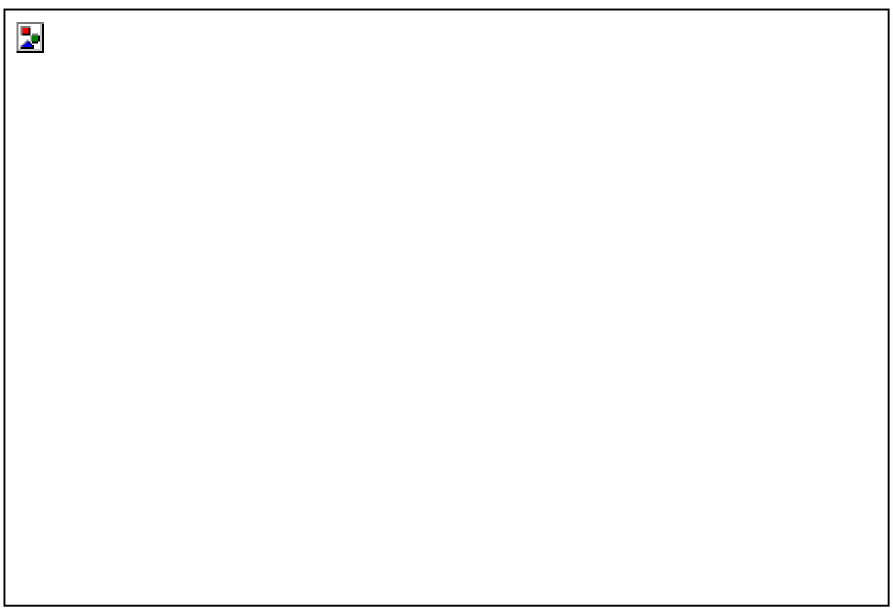
The POET summary report will allow you to generate statistics on the number of POET tests completed for a particular employer for a particular date range. It will provide details on the number of tests completed and the number and percentage of males and females that passed and failed the tests. To generate a POET Summary Report select this option from the POET drop down menu. Click on Next to take you to the next screen.



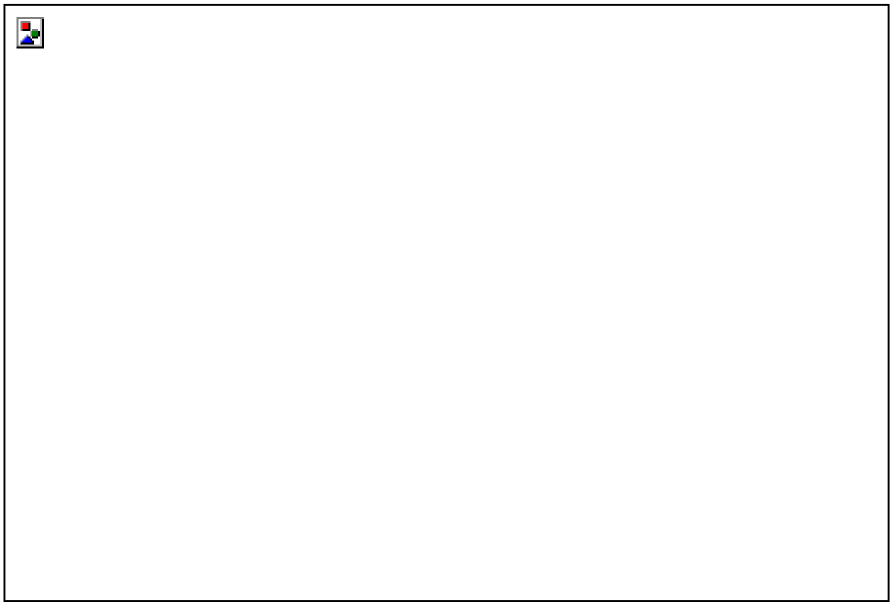
Select the appropriate employer from the drop down menu and the click on Next.



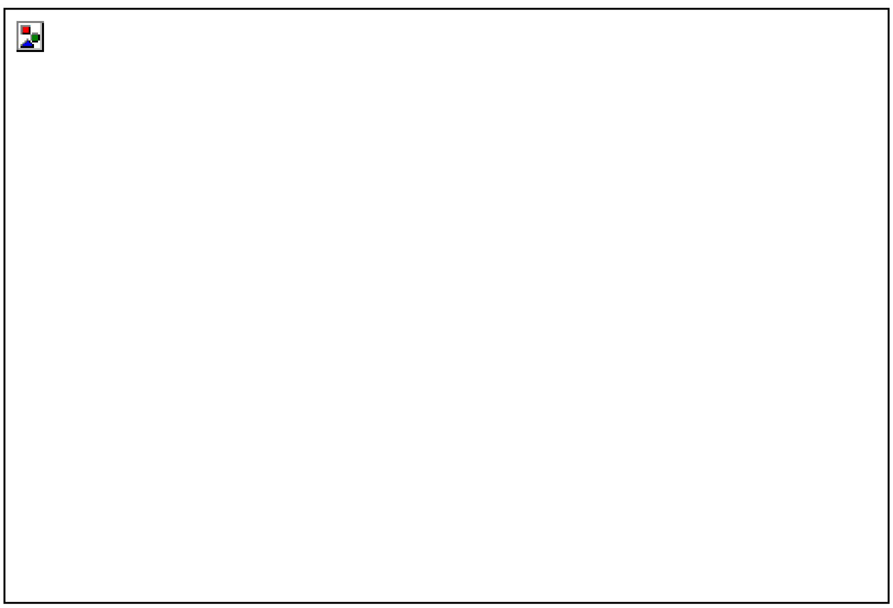
Select the statuses you would like to collect data on. The status is assigned to the client's case. Examples of statuses that are used for Post Offer of Employment Tests are: Candidate, Present Employee, Recall, Did Not Test, No Show. Select "Include employees with no status", if you would like to include the data where the evaluator forgot to assign a status. Click on Next to continue to the next screen.



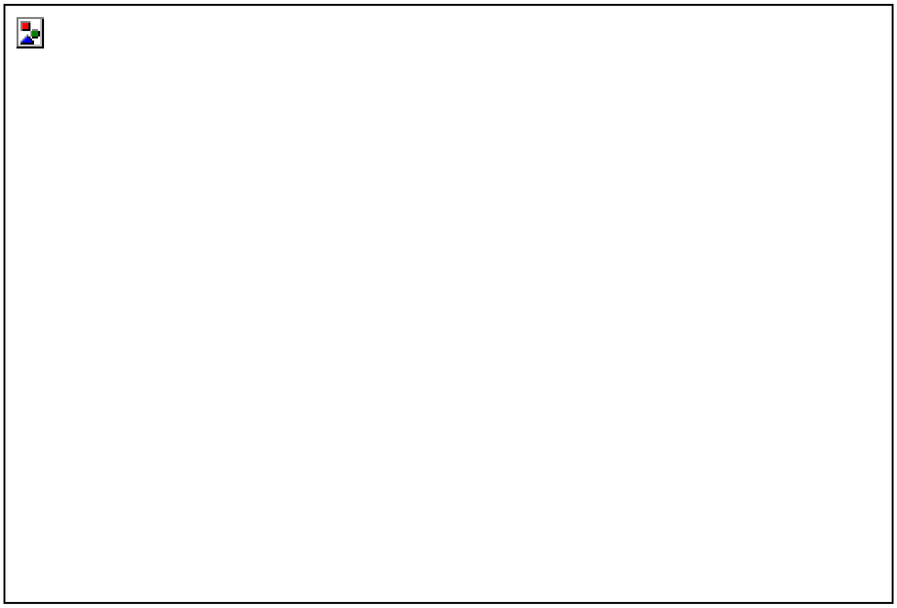
If a Super Protocol was set up for the Post Offer of Employment Test, select it from the drop down menu at the top of the screen and then click on Select Tests. You can review the tests that are included then in the list below and the tests assigned to the particular Super Protocol you selected should be highlighted. Alternatively, you can select the particular tests from the list of tests. Once this step has been completed click on Next.



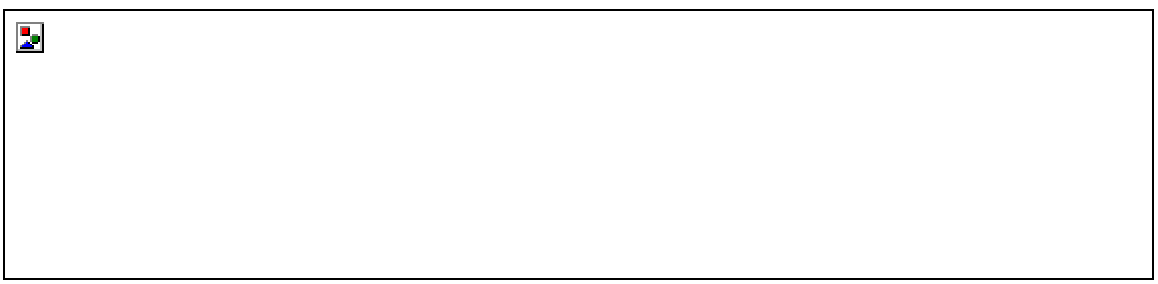
Next select the data range you wish to select the data from.



Select whether you want to Preview the report or Print the report. Then click on Finish.



The following is an example of the report. Click on the printer icon to send the print job to the default printer. Click on Print Options to select which printer to send the report to. Click on Close to close out of this screen and return to the main screen of ODES or click on Export to export the report to Microsoft Office Word (if installed on computer) or to export the report to a Snapshot (see section of creating snapshots for further details).

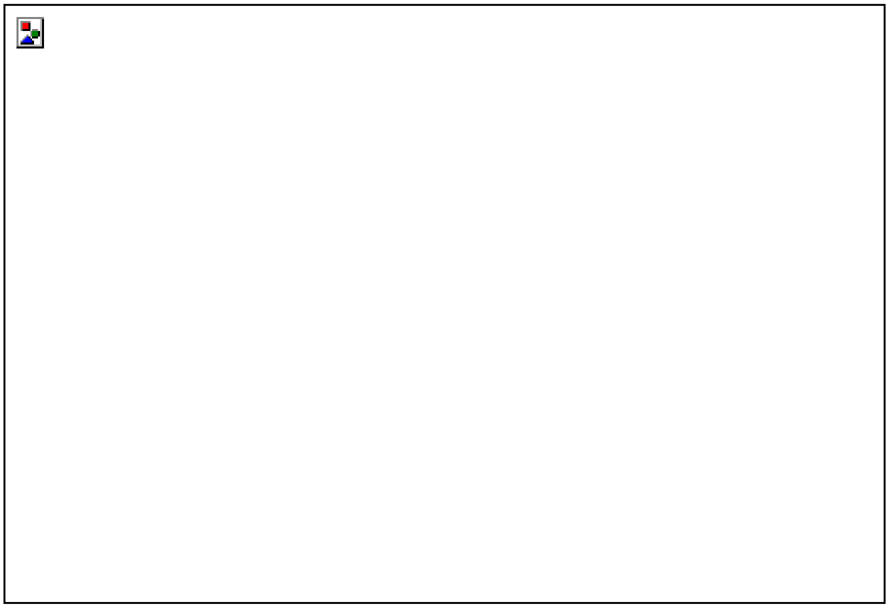


POET Detailed Summary Report

The POET Detailed Report is used to generate a letter to provide to the employer to indicate whether the client met the job demands or not.

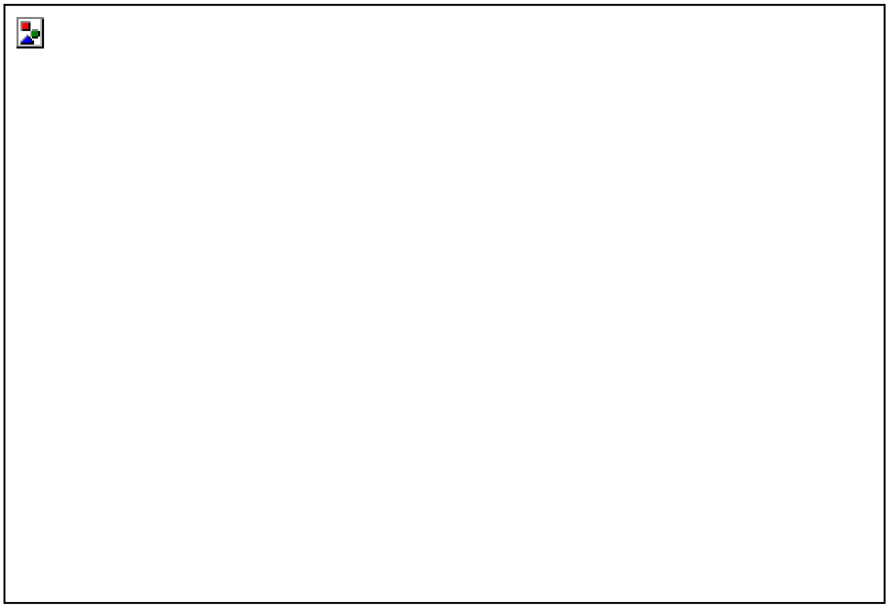
Prior to completing this report make sure your clinic information and logo are included under Administration | Clinic Information.

Click on Next to take you to the next screen.

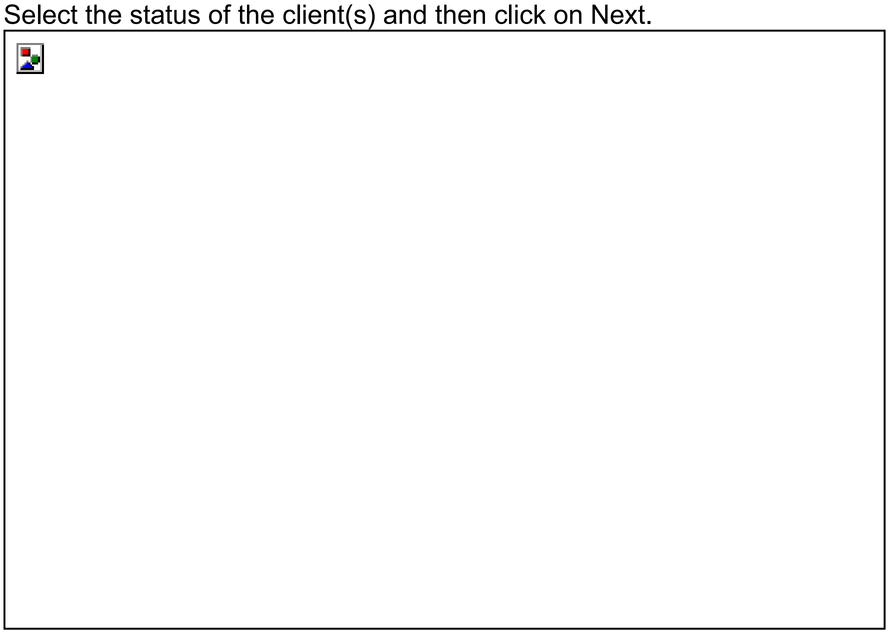


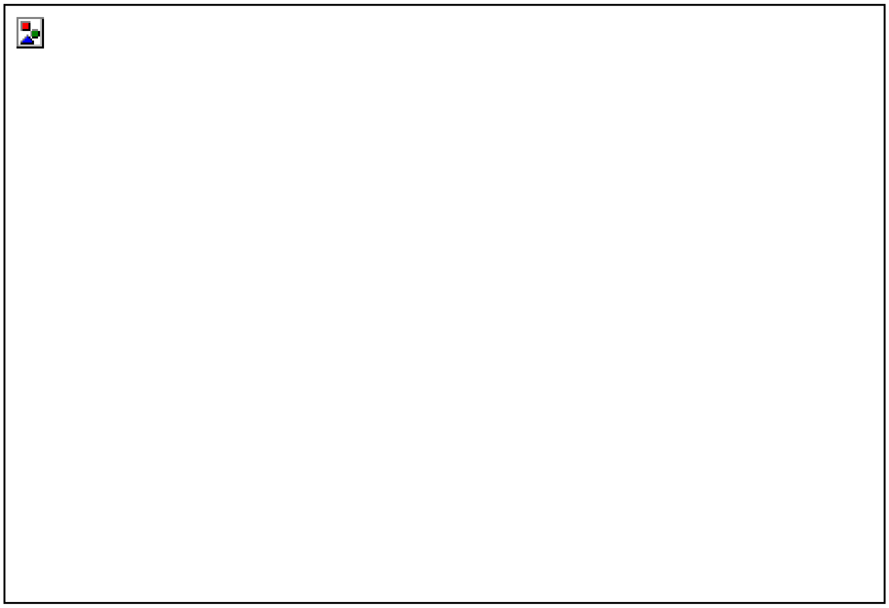
Select whether you want to report to include the current client or all the client’s for a particular employer.

Select the appropriate employer and click on Next.

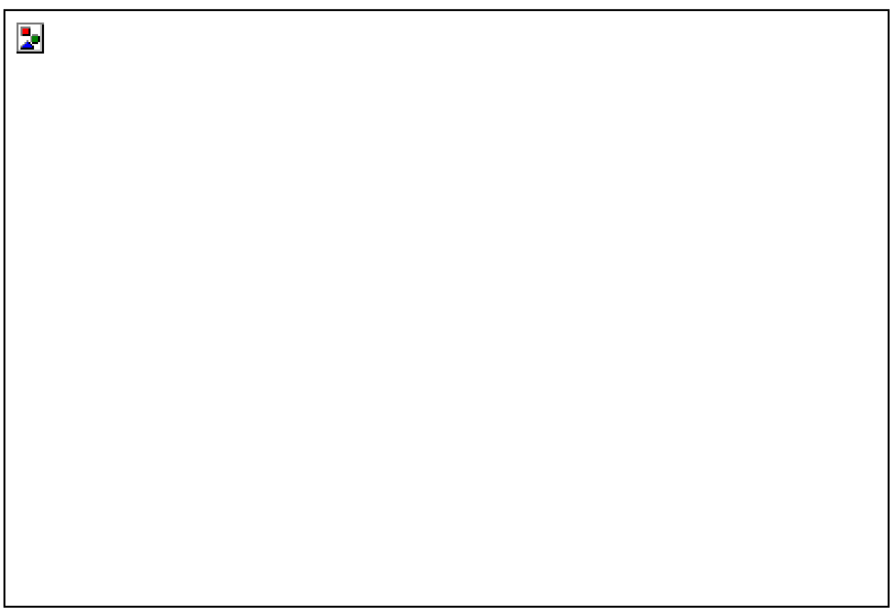


Select the status of the client(s) and then click on Next.

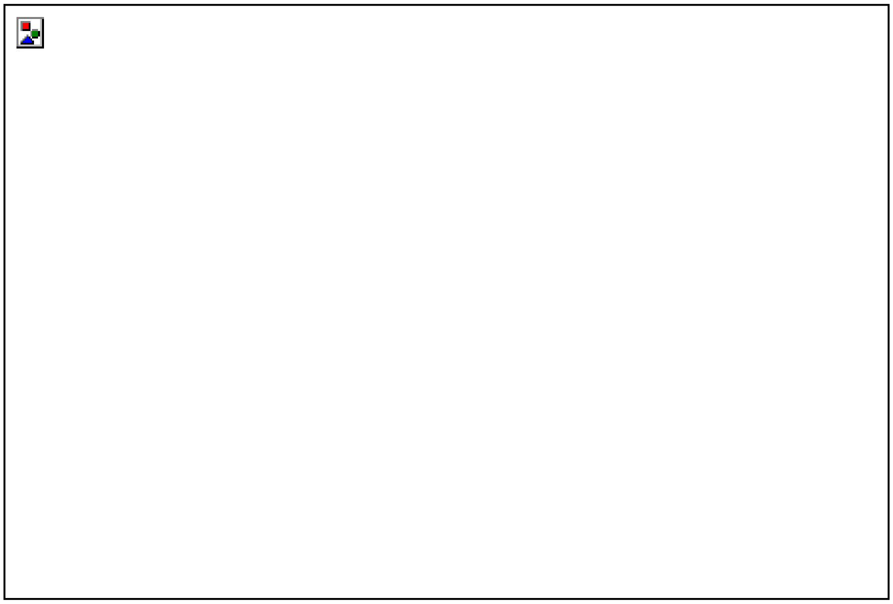




If a Super Protocol was set up for the Post Offer of Employment Test, select it from the drop down menu at the top of the screen and then click on Select Tests. You can review the tests that are included then in the list below and the tests assigned to the particular Super Protocol you selected should be highlighted. Alternatively, you can select the particular tests from the list of tests. Once this step has been completed click on Next.



Next select the data range you wish to select the data from and click Next to continue to the next screen.

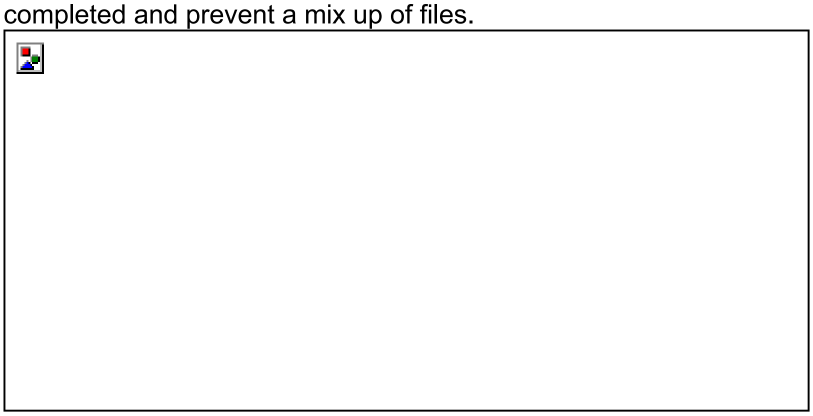


Select whether you want to Preview the report or Print the report. Then click on Finish.

The following is an example of the report. Click on the printer icon to send the print job to the default printer. Click on Print Options to select which printer to send the report to. Click on Close to close out of this screen and return to the main screen of ODES or click on Export to export the report to Microsoft Office Word (if installed on computer) or to export the report to a Snapshot (see section of creating snapshots for further details).

Export POET Results

This feature is used to export data to a FAT file to synchronize the data to the employer's computer Select the Super Protocol for the employer to be exported and the date range of tests completed. Either type in the Export File Path or click on Browse to select where to export the file to. Type in what you would like to call the Export File. Select to append the current date to the file name if you would like today's data added to the file name to distinguish when the export was completed and prevent a mix up of files.



Digital Capture Menu

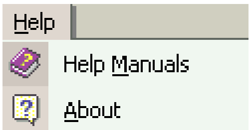
For those evaluators with access to a digital camera, a variety of pictures can be saved to your computer and input to the ODES software. You may use this feature to show a client performing tasks or exercises. Comments and headings can be added to each picture prior to printing them.

Take the picture with the digital camera. Download the picture to your hard drive using your camera software. Use the binoculars button to locate the picture, then click Insert. Once inserted, the file name will be included below the photo. Include a page title and the top of each new page. Include any comments by clicking Comments.

Click Remove to remove a picture.

To insert a new page, click New. Each page will hold nine pictures. To delete a page click Delete. To print an entire page of pictures and comments, click Print.

Help Menu



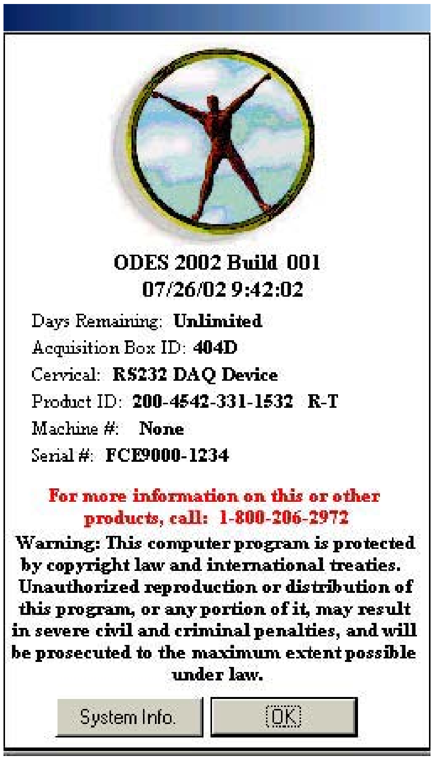
Help Manuals

If you have loaded the Adobe Acrobat reader and help manuals onto your hard drive from the ODES installation disk, you will be able to access them by going to Help | Help Manuals. If you have not loaded the Acrobat reader and Manuals to your hard drive, a window will prompt you to insert the ODES CD into your disk drive. To load the Adobe reader go to www.adobe.com to down the reader.

About

To access information on your system go to Help | About. On this page, details on the ODES software version you are using can be obtained. If the system has not been unlocked, 'Days Remaining' indicates for how long you will be able to use the system. The ODES software can be unlocked by calling BTE Customer Service. Once unlocked, Days Remaining will display as 'Unlimited'. 'Machine #' is set to 'None' unless the system has been purchased on a utilization basis. The 'Serial #' for the system is also included here. The System Info button located at the bottom of this window will also provide you with statistics on your system, such as amount of memory and operating system.

To manually update the database after installing software updates go to Help | About. Hold the Shift key down, and hit the 'Z' key three times.


ODES 2002 Build 001
07/26/02 9:42:02
Days Remaining: Unlimited
Acquisition Box ID: 404D
Cervical: RS232 DAQ Device
Product ID: 200-4542-331-1532 R-T
Machine #: None
Serial #: FCE9000-1234
For more information on this or other products, call: 1-800-206-2972
Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
System Info.
OK

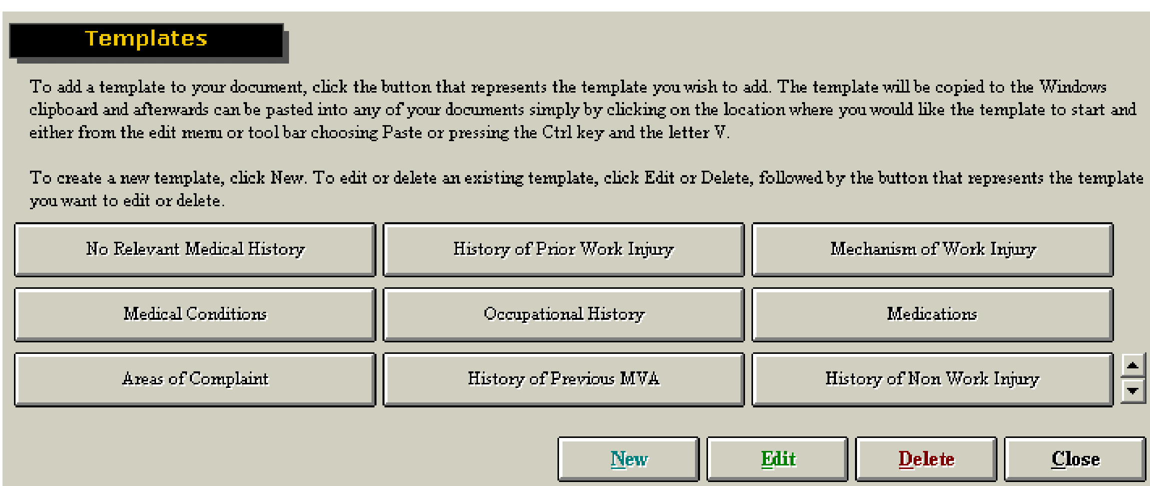
Templates

Each of the note pages in ODES has a template section that allows the evaluator to create any number of templates. Using this feature the evaluator can have any field from the client and case information automatically populate a template when applied to the client's file. For example, the client's name, date of injury and injury locations could be brought into the note exactly where you designed the template to put them. This feature speeds up reporting time, improves efficiency and hence, profitability. There are a variety of headings under which templates can be created. These include:

History
Examination
Diagnosis
X-Rays/Lab
Referral
Impairment
Return To Work
Custom Note
Testing Analysis
Recommendations
Progress Analysis
Cover Letter

There are also a variety of pre-programmed templates in the ODES software. To access or create a new template in any of the above categories, you must first choose a note from the list above and then click the template button located in the bottom right-hand corner of any page.

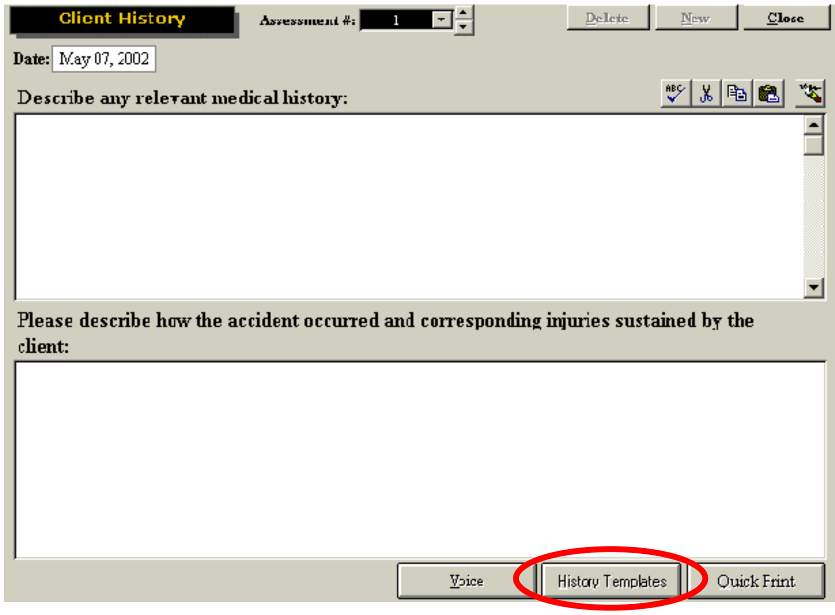
This will bring you to a page where the pre-programmed templates are located. You may delete, add or edit templates here.



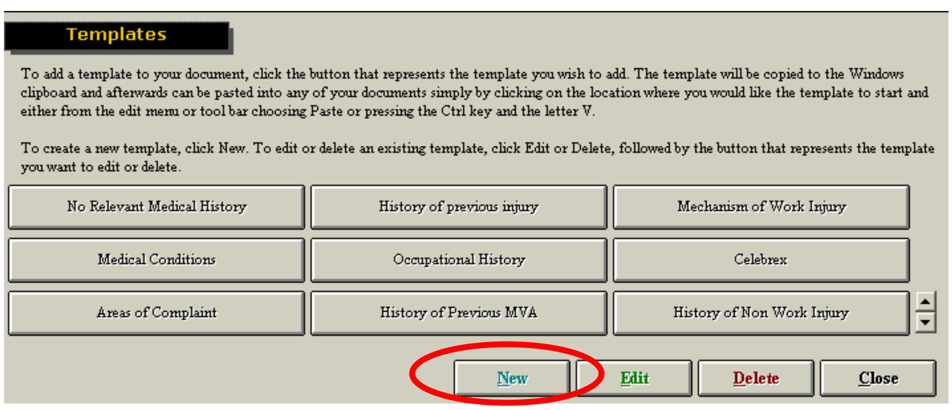
To utilize an existing template, click the template you wish to use. You will be brought back to a blank page. Place your cursor where you would like to paste the information and click the paste icon. Your template will now fill in the appropriate information for your client. In order to alter any remaining fields that have not been filled, use your tab button and make the necessary changes.

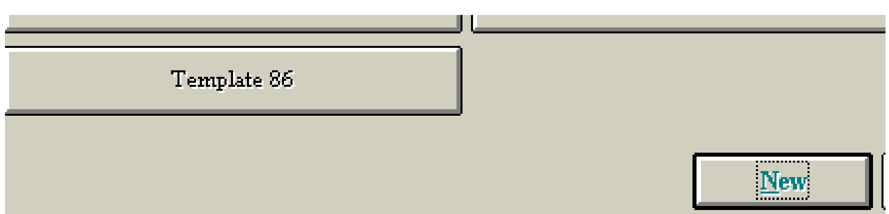
Creating a Custom Template

–To create a custom template click the template button on the note page to which you wish to add the template (i.e. History, Examination, etc.)

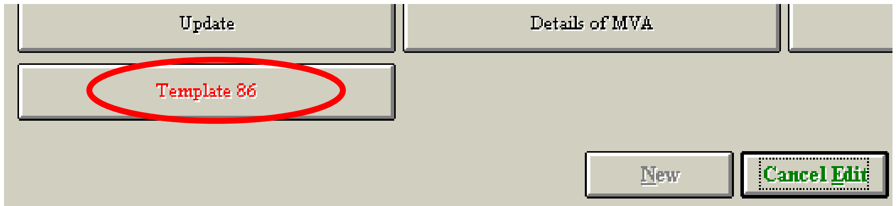


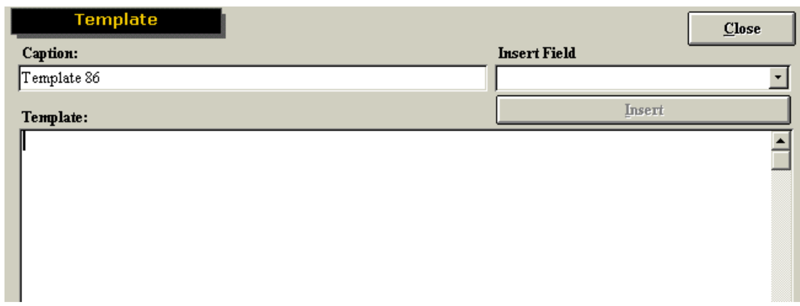
Click NEW to create a new template.



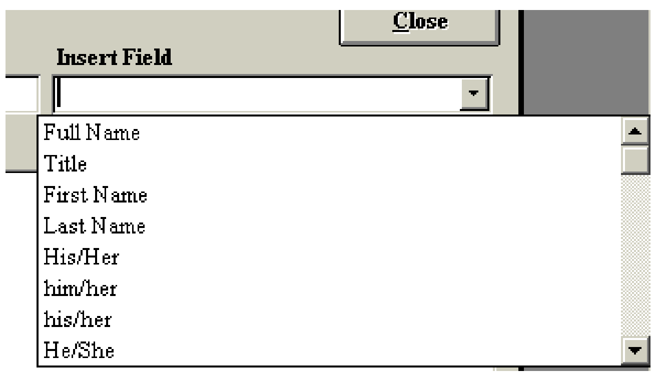


Click Edit then select the new template (in this case Template 86) in order to add text and change the template name.



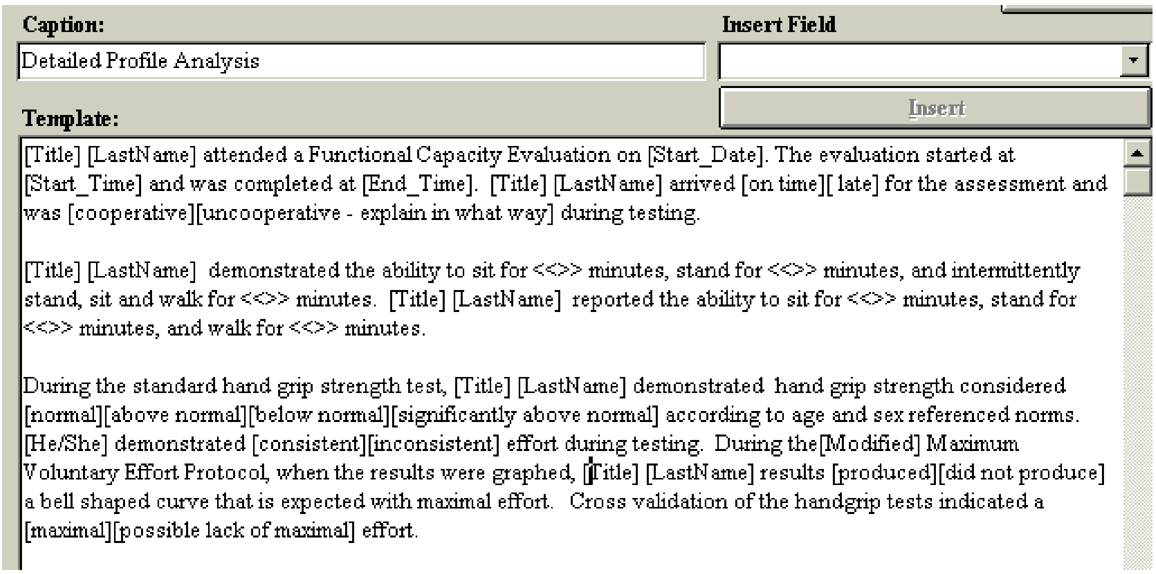


ODES has multiple pre-programmed fields in order to help you build your template. These fields include names, times, dates, results, status, etc.

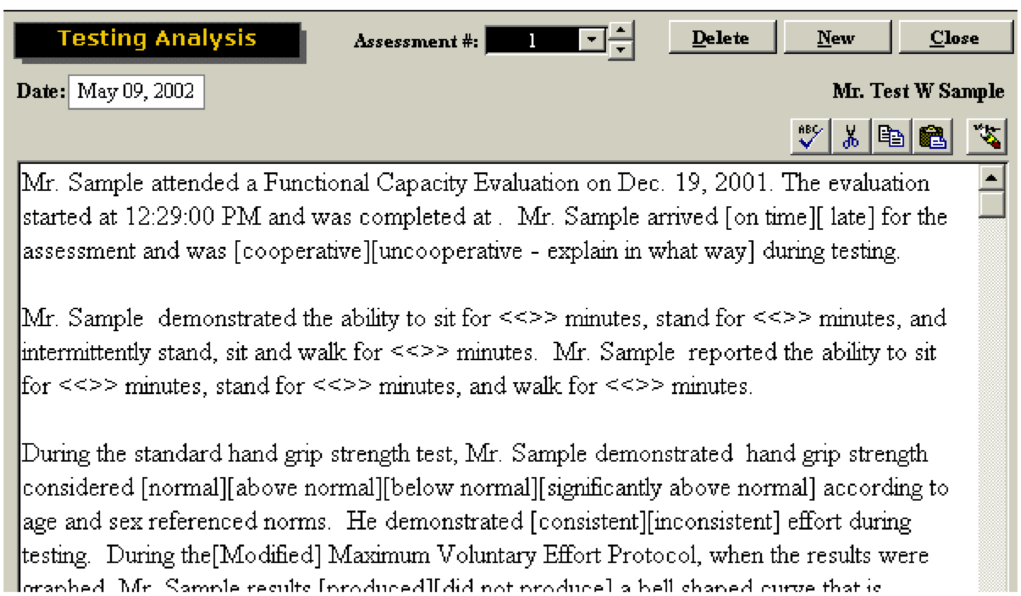


Begin by writing what you wish to include in the report, but use the merge fields in order to automatically query data. To use the merge fields, select the field from the Insert Field dropdown menu and click Insert. This will place the merge field in the template at the spot where your cursor was located. The merge field will have square brackets around it.

You may create your own merge field by typing the possible options and placing square brackets around each one. This is useful in situations where there are a limited number of options (i.e. “arrived [on time][late] for the assessment…”).

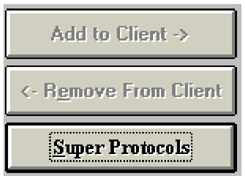


Once finished, click Close, then click Cancel Edit on the Template page. Select your template and paste it into place

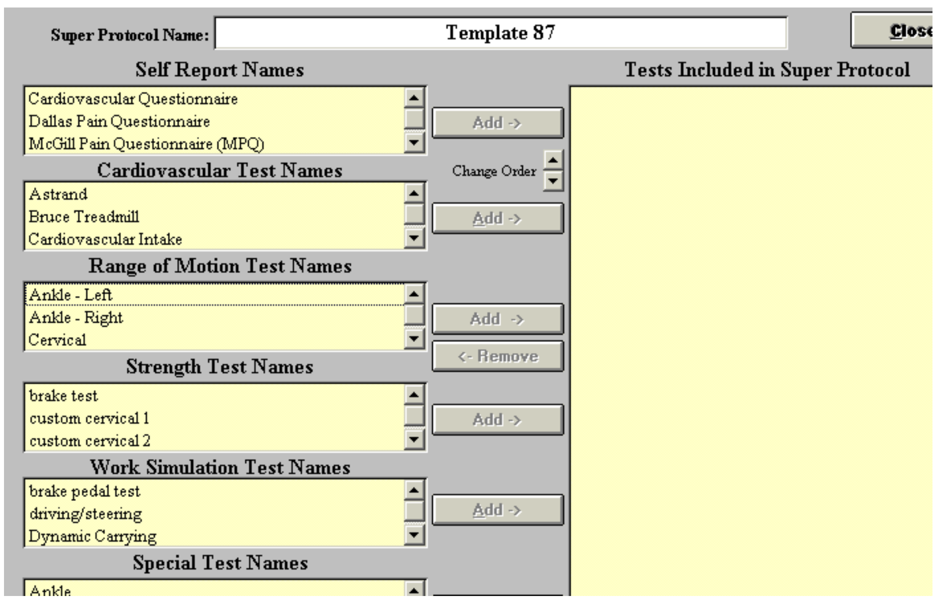


You may now use the “tab” key on your keyboard to find and replace any outstanding fields on the template. Remember that you will need to choose the appropriate comments in certain circumstances (i.e. normal, above normal or below normal). Click on delete to remove a selection or click on tab again to allow the selection to stay.

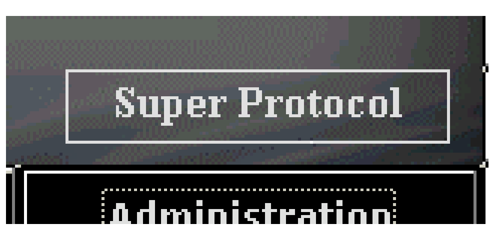
Super Protocols



Super Protocols can be created when you require a standardized protocol for testing (i.e. Post Offer of Employment Testing). They can also be used if you want to decrease the amount of time required to select specific tests for a specific injuries. You can create a Super Protocol in the same manner you would create a template.
Select a client and click Super Protocol from any testing page. Click New Test and then Edit the protocol to include the tests applicable to your needs.

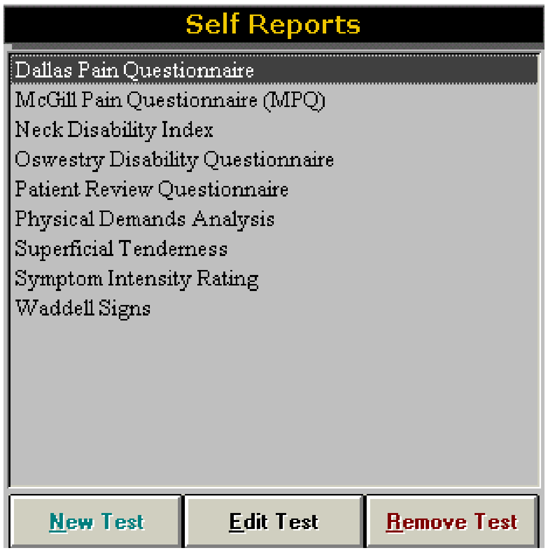


Select the applicable tests from the lists on the left-hand side of the page and Add them to the Super Protocol. The order of testing can be changed by selecting one of the included tests and using the Change Order arrows to move it up or down within the list. Once you have added all the applicable tests and arranged them in the desired order finish the process by clicking Lock Super Protocol. You will be prompted to enter and confirm a password to lock the Super Protocol.
To apply a Super Protocol, select a client then click Super Protocol from either the ODES main menu or from a page where tests are selected. Click the Super Protocol you wish to use. The tests for that protocol will automatically be added to your client once you have performed the first test. Click Next Protocol to go to the next test in sequence.



Self Reports Menu

Self Reports can be printed from the Forms menu or from the test page if the evaluator would like the client to them out on paper, with the exception of the Spinal Function and Hand Function reports. The client may also complete the reports on the computer. To view the results after the client has completed a report, click Show. To hide the results, if the client can see the computer screen, click Hide.



Dallas Pain Questionnaire

The DPQ was developed to assess the amount of chronic pain affecting four aspects of the client's life: daily activities, work-leisure activities, anxiety-depression and social interest. The DPQ has 16 sections, divided between the four aspects. The questionnaire utilizes a Visual Analogue Scale (a pain-free state being to the left and the most painful state being to the right). The Visual Analogue Scales are 10 cm long. The questionnaire must be answered by placing an "X" on the Visual Analogue Scale at the appropriate pain rating

McGill Pain Questionnaire

The McGill Pain Questionnaire (MPQ) is a tool that has been widely recognized as a reliable instrument to measure the pain experience, and has been translated into many languages and widely researched. Pain descriptors cover four aspects: sensory, affective, evaluative and miscellaneous. The MPQ has been demonstrated to be a good instrument for clinical work and research. At the bottom of the report you have the option of including the score on the report or not.

The Neck Disability Index (NDI)

The Oswestry Low Pain Index was modified to produce a 10-item scaled questionnaire entitled the Neck Disability Index (NDI). The NDI is designed to inform the doctor as to how the client's neck pain has affected their ability to manage in everyday life. It has been offered as a self-reporting instrument for the ADL (Activities of Daily Living) assessment of sufferers of disabling neck pain, particularly from whiplash injuries. The NDI demonstrates a high degree of test-retest reliability and internal consistency. The evaluator has the option of printing a progress graph for the NDI once a minimum of two tests have been completed. The graph can be printed by clicking New Test from the testing page, then clicking Progress. Alternatively, the NDI progress graph will be included with a Progress Report if that report is printed (see the Reports section).

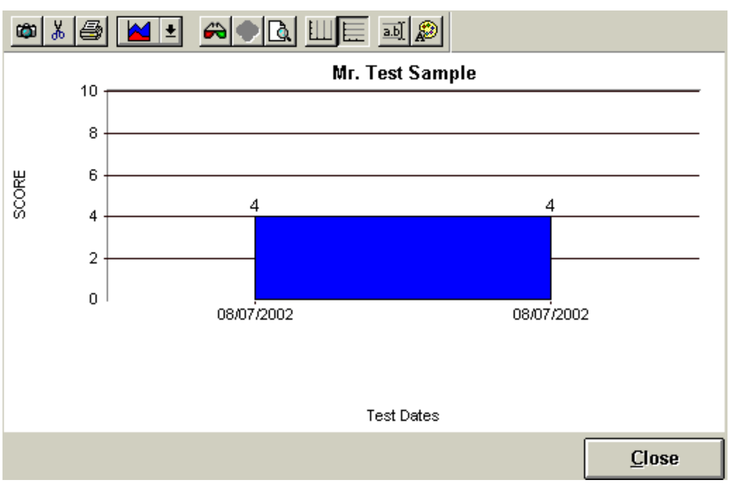
The Oswestry Questionnaire

The Oswestry LBP Questionnaire is divided into ten sections designed to assess limitations in various activities of daily living. Each section contains six statements relevant to the problems suffered by people with low back pain. This self-administered questionnaire avoids interviewer bias and ensures uniformity of presentation while the combination of closed questions and self-administration gives a reliable format. The evaluator has the option of printing a progress graph for the Oswestry LBP once a minimum of two tests have been completed. The graph can be printed by clicking New Test from the testing page, then clicking Progress. Alternatively, the Oswestry LBP progress graph will be included with a Progress Report if that report is printed (see the Reports section).

Patient Review Questionnaire

The Patient Review Questionnaire takes a look at a client's progress over the course of a rehabilitation program. In addition, this questionnaire also takes into account changes in medication relating to neck pain over the course of the program. This questionnaire was designed for the Melbourne Protocol with the BTE Multi-Cervical Unit.

Once the patient has completed multiple Client Review Questionnaires, a progress report can be created illustrating whether improvement has occurred over time. This report is in the form of a graph.

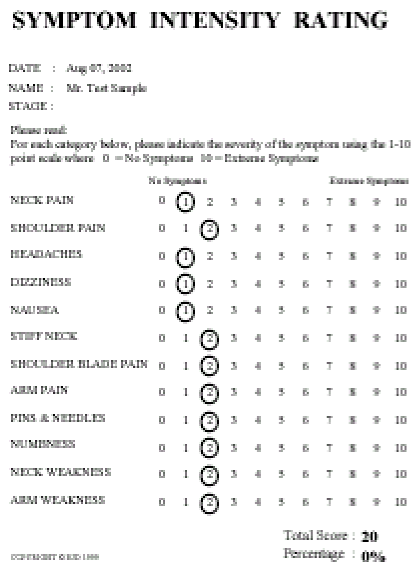


Superficial Tenderness

The superficial tenderness test allows for an objective analysis of chronic pain with disorders such as fibromyalgia. Please refer to the Algometer section of this manual for more details.

Symptom Intensity Rating

The Symptom Intensity Rating Questionnaire is a tool in which the client rates their symptoms throughout a treatment program. Upon completion of more than one questionnaire, a graphical progress report can be printed. This questionnaire was designed for the Melbourne Protocol using the BTE Multi-Cervical Unit.



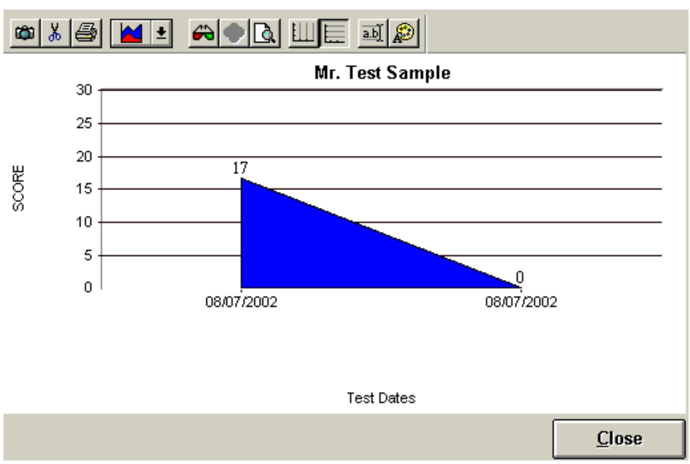
SYMPTOM INTENSITY RATING

DATE : Aug 07, 2002
NAME : Mr. Test Sample
STAGE :

Please read:
For each category below, please indicate the severity of the symptoms using the 1-10 point scale where 0 = No Symptoms 10 = Extreme Symptoms

	No Symptoms										Extreme Symptoms
NECK PAIN	0	1	2	3	4	5	6	7	8	9	10
SHOULDER PAIN	0	1	2	3	4	5	6	7	8	9	10
HEADACHES	0	1	2	3	4	5	6	7	8	9	10
DIZZINESS	0	1	2	3	4	5	6	7	8	9	10
NAUSEA	0	1	2	3	4	5	6	7	8	9	10
STIFF NECK	0	1	2	3	4	5	6	7	8	9	10
SHOULDER BLADE PAIN	0	1	2	3	4	5	6	7	8	9	10
ARM PAIN	0	1	2	3	4	5	6	7	8	9	10
PINS & NEEDLES	0	1	2	3	4	5	6	7	8	9	10
NUMBNESS	0	1	2	3	4	5	6	7	8	9	10
NECK WEAKNESS	0	1	2	3	4	5	6	7	8	9	10
ARM WEAKNESS	0	1	2	3	4	5	6	7	8	9	10

Total Score : 20
Percentage : 0%



Waddell Signs

The Waddell Signs test is a standardized assessment of behavioral responses to examination. When completing the Waddell tests, select 'positive' or 'negative' as per the test protocol. The score for the test can be found at the bottom of the page.

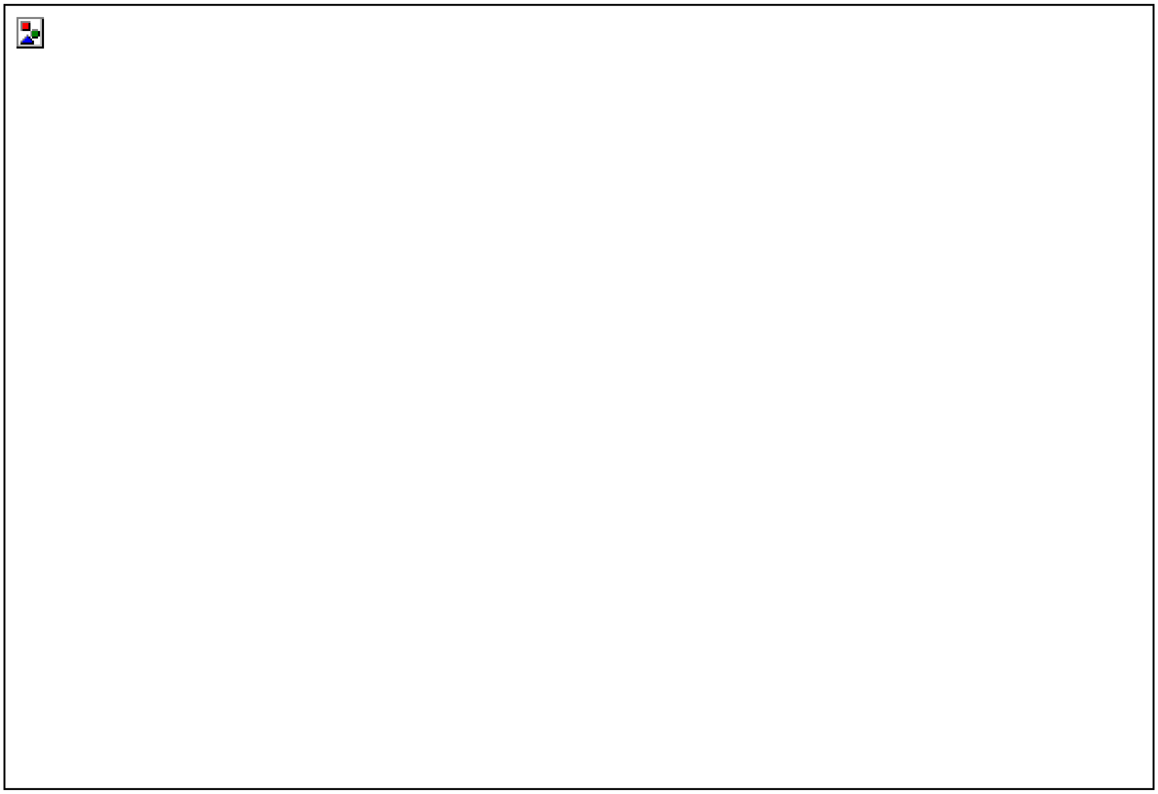
Physical Demands Analysis

This portion of the software is designed to gain additional information from your client regarding their pre-injury employment. It requires your client to describe their duties at work (as they perceive them to be).
Go to the Self Report section of the software, select Physical Demand Analysis and click Perform. You may print a blank form for the client to fill out.

Creating Custom Self Perception Tests

The ODES software allows you to customize your own self-perception tests (such as questionnaires). In order to do so, you must go to the Self Reports page and click NEW TEST.

This will bring you to a template page where you can begin to create your new self-perception test.



You will be able to include section titles, which will let you add a score to them in the test screen. Add in the name for the Final Score Column. If you are entering ratings based on a research article, select the Rating Column and add in the name for the Rating Column. To add a rating complete the rating entries box and include the rating to and from. Click on Add to include the rating. You may also include any examiner or report descriptions here. Examiner descriptions are only seen in the testing screen. Report descriptions are only seen on the printed report.

EPIC Hand Function Sort (Optional Upgrade)

The purpose of the 62-item Hand Function Sort (HFS) is to quantify the disabled person's perception of their ability to perform work tasks that involve the hands and upper extremities. The HFS can be useful to provide a baseline measure of the client's perception of their functionality in everyday tasks prior to the onset of intervention. This allows progress to be noted as it occurs, extending the benefits of treatment beyond the clinic's walls into the client's life at home, at work, and in the community.

Drawing 1

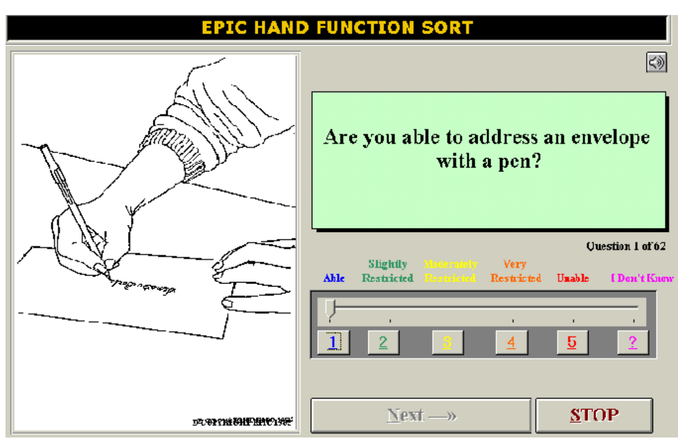
HFS Figure 11
Cut a piece of steak with a fork and sharp knife.

In the HFS, drawings of handling and fingering tasks are supplemented by drawings that depict common activities of daily living. The drawings have been selected by experts in rehabilitation from among hundreds of tasks that persons with upper extremity impairments report as presenting significant challenges.

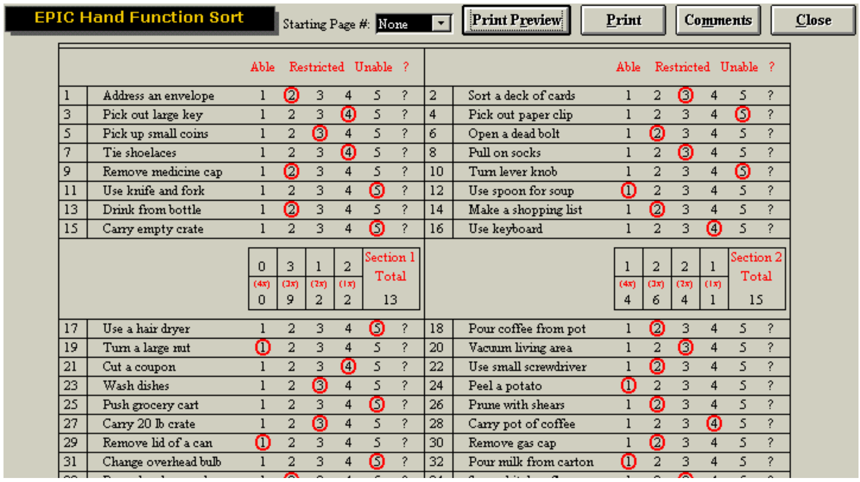
The client is instructed to "Look at each drawing and read the description. On a separate answer sheet, indicate your current level of ability to perform the task."

The answer sheet provides a 5-point rating from "Able" to "Restricted" to "Unable." Operational definitions of these adjectives are provided in the standardized instructions. There is also a sixth rating, depicted as "?", which indicates "I don't know."

The HFS is not timed and usually requires 8 to 10 minutes to complete. It can be administered by a technician by following the standardized instructions



Once the test is performed with a client, the results will be shown in a chart.



		Able	Restricted		Unable		?			Able	Restricted		Unable		?
1	Address an envelope	1	2	3	4	5	?	2	Sort a deck of cards	1	2	3	4	5	?
3	Pick out large key	1	2	3	4	5	?	4	Pick out paper clip	1	2	3	4	5	?
5	Pick up small coins	1	2	3	4	5	?	6	Open a dead bolt	1	2	3	4	5	?
7	Tie shoelaces	1	2	3	4	5	?	8	Pull on socks	1	2	3	4	5	?
9	Remove medicine cap	1	2	3	4	5	?	10	Turn lever knob	1	2	3	4	5	?
11	Use knife and fork	1	2	3	4	5	?	12	Use spoon for soup	1	2	3	4	5	?
13	Drink from bottle	1	2	3	4	5	?	14	Make a shopping list	1	2	3	4	5	?
15	Carry empty crate	1	2	3	4	5	?	16	Use keyboard	1	2	3	4	5	?

0	3	1	2	Section 1 Total
(4x)	(3x)	(2x)	(1x)	
0	9	2	2	13

1	2	2	1	Section 2 Total
(4x)	(3x)	(2x)	(1x)	
4	6	4	1	15

17	Use a hair dryer	1	2	3	4	5	?	18	Pour coffee from pot	1	2	3	4	5	?
19	Turn a large nut	1	2	3	4	5	?	20	Vacuum living area	1	2	3	4	5	?
21	Cut a coupon	1	2	3	4	5	?	22	Use small screwdriver	1	2	3	4	5	?
23	Wash dishes	1	2	3	4	5	?	24	Peel a potato	1	2	3	4	5	?
25	Push grocery cart	1	2	3	4	5	?	26	Prune with shears	1	2	3	4	5	?
27	Carry 20 lb crate	1	2	3	4	5	?	28	Carry pot of coffee	1	2	3	4	5	?
29	Remove lid of a can	1	2	3	4	5	?	30	Remove gas cap	1	2	3	4	5	?
31	Change overhead bulb	1	2	3	4	5	?	32	Pour milk from carton	1	2	3	4	5	?

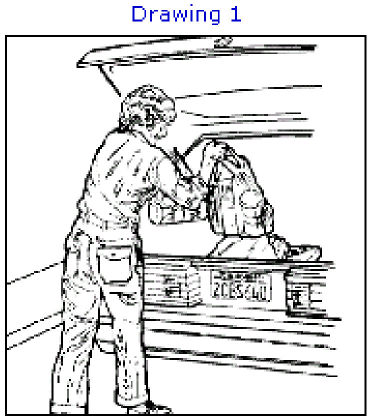
The HFS is easily scored and yields a single "Rating of Perceived Capacity" which ranges from zero to 248. Three "internal validity check" drawings are included which are similar to drawings presented earlier.
Normative values for both healthy and disabled males and females are provided in the HFS examiner's manual. Additionally, the Rating of Perceived Capacity score can be cross-referenced to the U.S. Department of Labor's Physical Demand Characteristic of Work system.

The normative values allow the evaluator to compare functional test results, the HFS score, and the target job's demands, providing a crucial three-way cross-validation of findings.

EPIC Spinal Function Sort

The purpose of the 50-item Spinal Function Sort (SFS) is to quantify the disabled person's perception of their ability to perform work tasks that involve the spine. This can be useful to provide a baseline measure of the client's perception of their functionality prior to the onset of intervention.

Drawing 1

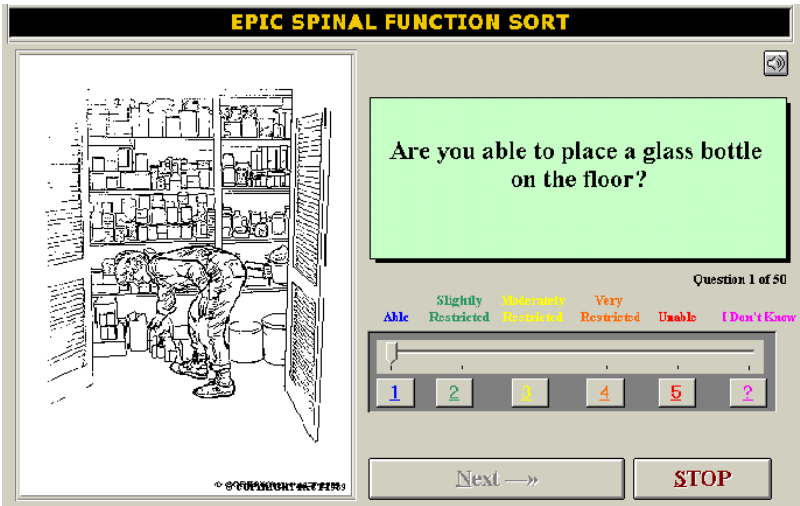


SFS Figure 15
Unload two 10-pound grocery bags from the trunk of an automobile.

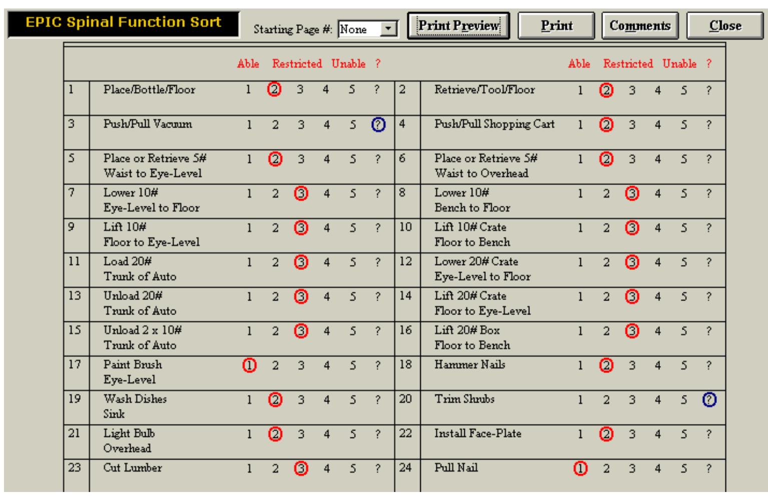
The client is instructed to "Look at each drawing and read the description. On a separate answer sheet, indicate your current level of ability to perform the task."

The answer sheet provides a 5-point rating from "Able" to "Restricted" to "Unable." Operational definitions of these adjectives are provided in the standardized instructions. There is also a sixth rating, depicted as "?", which indicates "I don't know."

The test is not timed and usually requires 8 to 10 minutes to complete. A technician can administer it by following the standardized instructions.



Once the test is performed with a client, the results will be shown in a chart.



EPIC Spinal Function Sort   Starting Page #: None   Print Preview   Print   Comments   Close

		Able	Restricted			Unable	?			Able	Restricted			Unable	?
1	Place/Bottle/Floor	1	2	3	4	5	?	2	Retrieve/Tool/Floor	1	2	3	4	5	?
3	Push/Pull Vacuum	1	2	3	4	5	?	4	Push/Pull Shopping Cart	1	2	3	4	5	?
5	Place or Retrieve 5# Waist to Eye-Level	1	2	3	4	5	?	6	Place or Retrieve 5# Waist to Overhead	1	2	3	4	5	?
7	Lower 10# Eye-Level to Floor	1	2	3	4	5	?	8	Lower 10# Bench to Floor	1	2	3	4	5	?
9	Lift 10# Floor to Eye-Level	1	2	3	4	5	?	10	Lift 10# Crate Floor to Bench	1	2	3	4	5	?
11	Load 20# Trunk of Auto	1	2	3	4	5	?	12	Lower 20# Crate Eye-Level to Floor	1	2	3	4	5	?
13	Unload 20# Trunk of Auto	1	2	3	4	5	?	14	Lift 20# Crate Floor to Eye-Level	1	2	3	4	5	?
15	Unload 2 x 10# Trunk of Auto	1	2	3	4	5	?	16	Lift 20# Box Floor to Bench	1	2	3	4	5	?
17	Paint Brush Eye-Level	1	2	3	4	5	?	18	Hammer Nails	1	2	3	4	5	?
19	Wash Dishes Sink	1	2	3	4	5	?	20	Trim Shrubs	1	2	3	4	5	?
21	Light Bulb Overhead	1	2	3	4	5	?	22	Install Face-Plate	1	2	3	4	5	?
23	Cut Lumber	1	2	3	4	5	?	24	Pull Nail	1	2	3	4	5	?

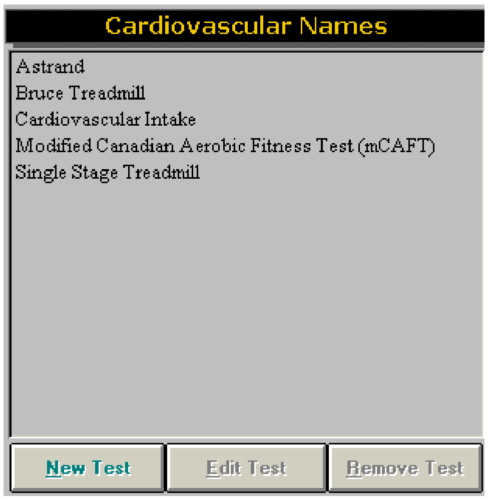
The SFS is easily scored and yields a single "Rating of Perceived Capacity" which ranges from zero to 200. Two "internal validity check" drawings are included which are similar to drawings presented earlier.

Normative values for both healthy and disabled males and females are provided in the SFS examiner's manual.

Additionally, the Rating of Perceived Capacity score can be cross-referenced to the U.S. Department of Labor's Physical Demand Characteristic of Work system. This allows the evaluator to compare the FCE results, SFS score, and the target job's demands, providing a crucial three-way cross-validation of findings.

In a multi-site study of the California Functional Capacity Protocol (Matheson, et al, 1996), the authors demonstrated that SFS test results are closely linked to work capacity performance measures. Furthermore, the SFS provided the best single indicator of client effort.

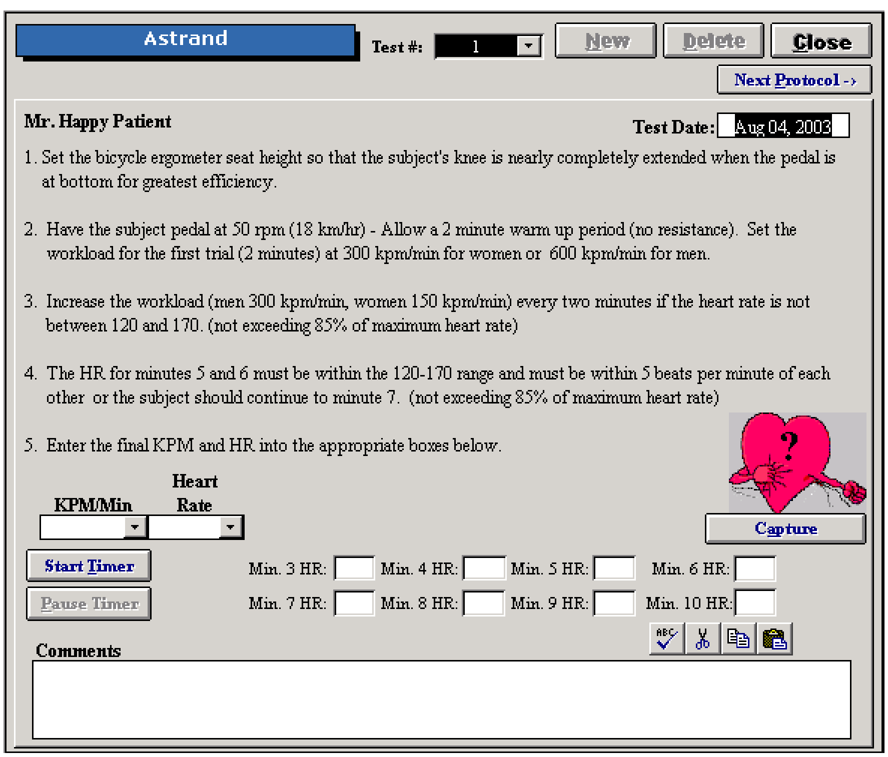
Cardiovascular Menu



A variety of cardiovascular tests are included in the software for you to utilize.

Astrand

The Astrand protocol is a bike ergometer test used to determine a client's aerobic capacity. The software can be used in two ways. The test can be completed away from the system and the KPM/min and final heart rate entered. The software will calculate the aerobic capacity for the client. Alternatively the test can be completed on an integrated fashion with ODES. The evaluator can click on Start Timer and if the client has the heart rate monitor on, the heart rate will be captured each minute after the first three minutes of the test until the client's stead state heart rate is obtained. Click on Capture to add the heart rate value to the Heart Rate Report.

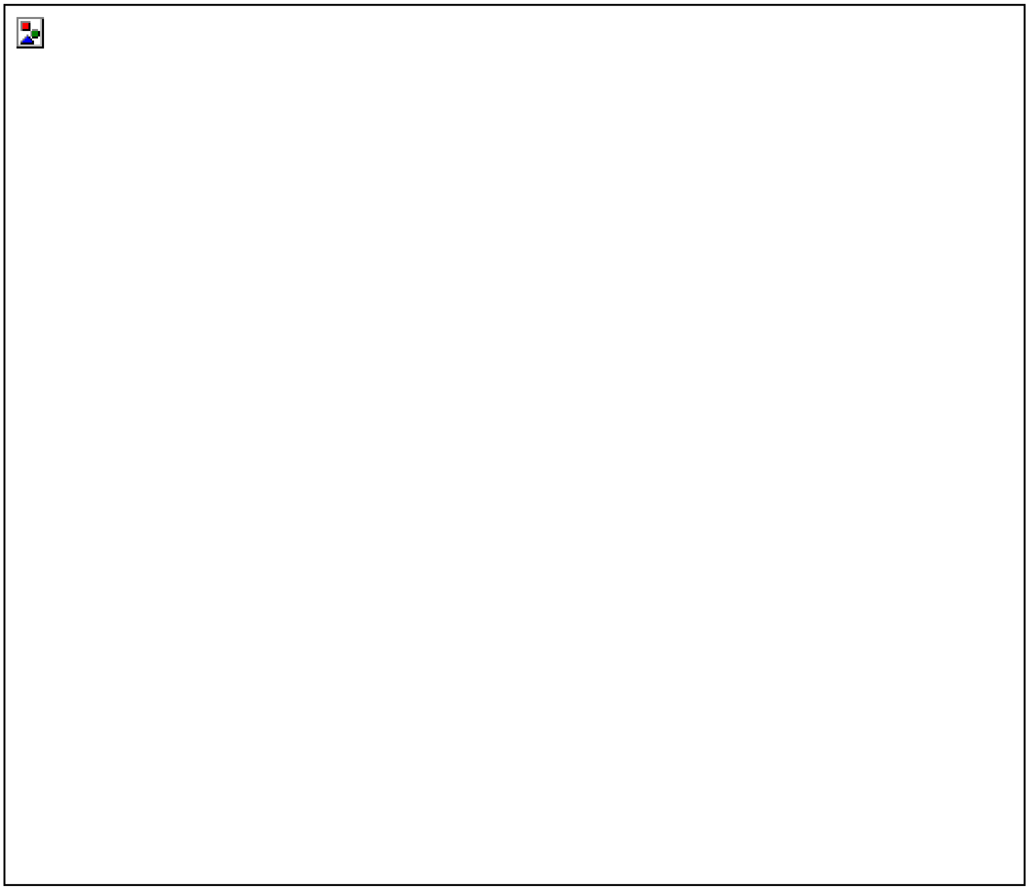


Bruce Treadmill

The Bruce Treadmill test is used to determine a client's aerobic capacity. Both the modified and standard protocol is available in the ODES software. Click on Standard or Modified on the top right hand corner of the screen to switch to the other protocol. Click on Start Timer when starting the test. Click on Pause Timer if the test must be paused to clarify to the client what they are required to do or for safety reasons. To stop the test click on Stop Timer and the aerobic capacity will be calculated. Click on Capture to add the heart rate value to the Heart Rate Report.

Cardiovascular Intake

Cardiovascular Intake allows for the recording of the client's resting heart rate and blood pressure. If the client is wearing the heart rate monitor, double click on the white box under the title, resting rate (min) and the value will be entered in the box. The software will alert you if the value is indicates a high resting heart rate or blood pressure by the text turning red in the result section of the screen.



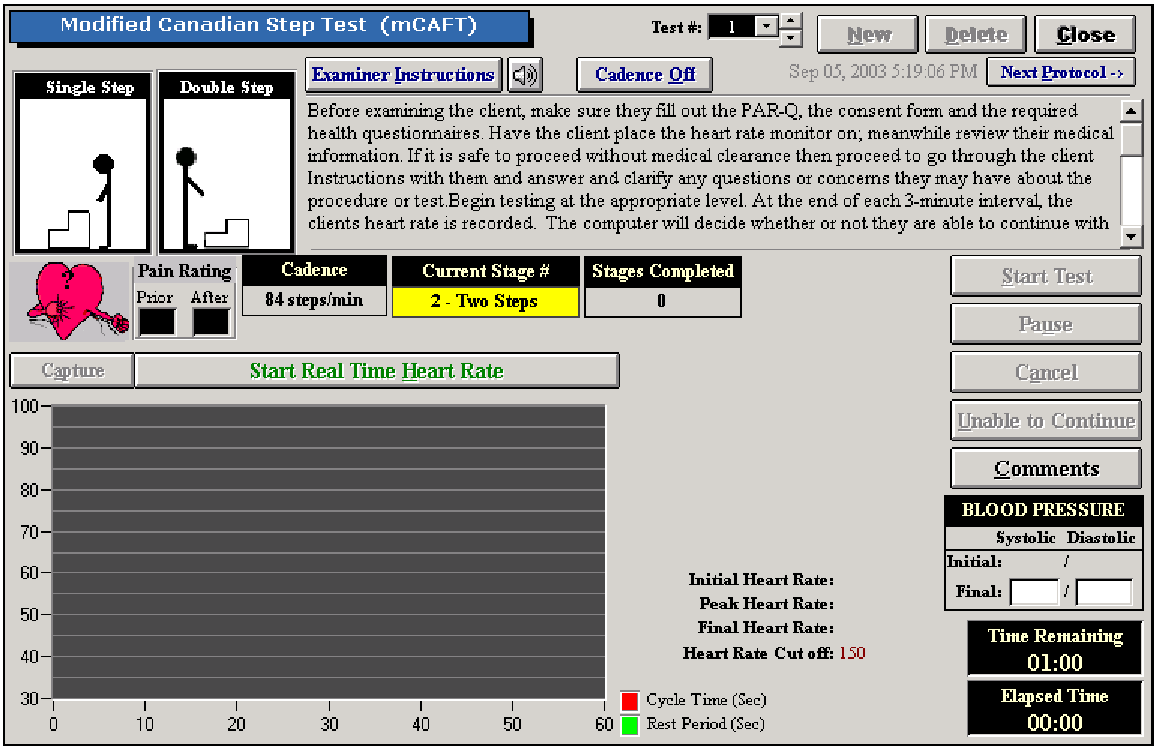
Modified Canadian Aerobic Fitness Test

The Modified Canadian Aerobic Fitness Test is used to determine a client' aerobic capacity and the number of METs they can work at by stair climbing.

Prior to completing the test the resting heart rate and blood pressure need to be entered under Cardiovascular Intake. As well make sure the client has completed a PAR-Q or health questionnaire to identify any contraindications to cardiovascular testing. The client should be wearing the heart rate monitor during testing. If the heart is being captured manually, double click on the heart. Enter the number in and hit enter for the heart rate to be entered into the software.

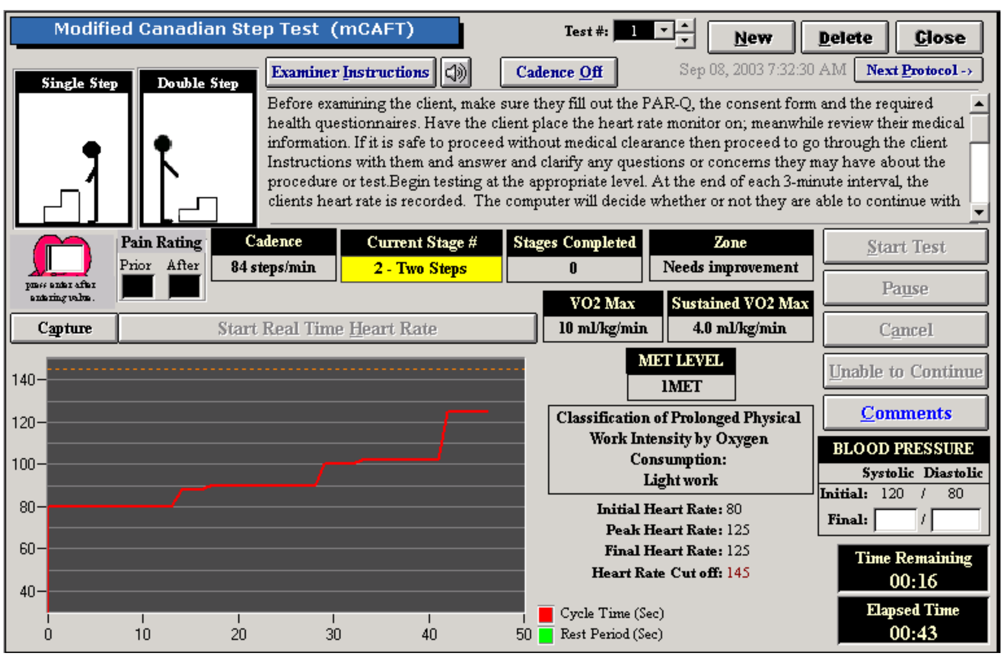
To provide a demonstration for the client, double click on either the single or double step stick figure diagram. Click on Cadence Off if you are using a metronome or tape to prompt the client.

Begin testing at the appropriate level as indicated on the screen (i.e. Cadence 84 steps/minute and 2 steps with this example). At the end of each 3-minute interval the heart rate is entered. The computer will alert you as to whether to continue testing or not. Measure blood pressure as per the protocol at the 2:00 to 2:30 minute mark, the 3:30 to 4:00 minute mark and prior to them leaving your clinic.



The test will stop automatically when they have completed the protocol or click on Unable to Continue if the client voluntary stops the test. Click on Pause if you need to clarify instructions for the client.

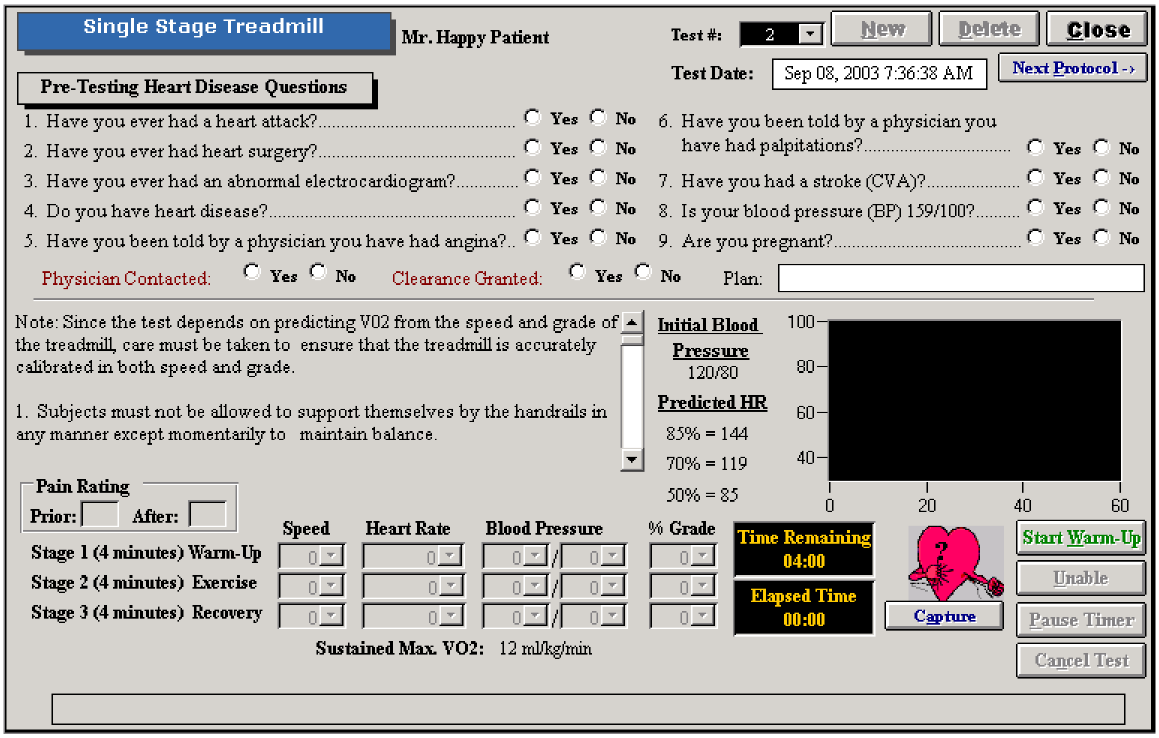
Once testing is completed the computer will calculate the client's VO2 and MET level.



Single Stage Treadmill

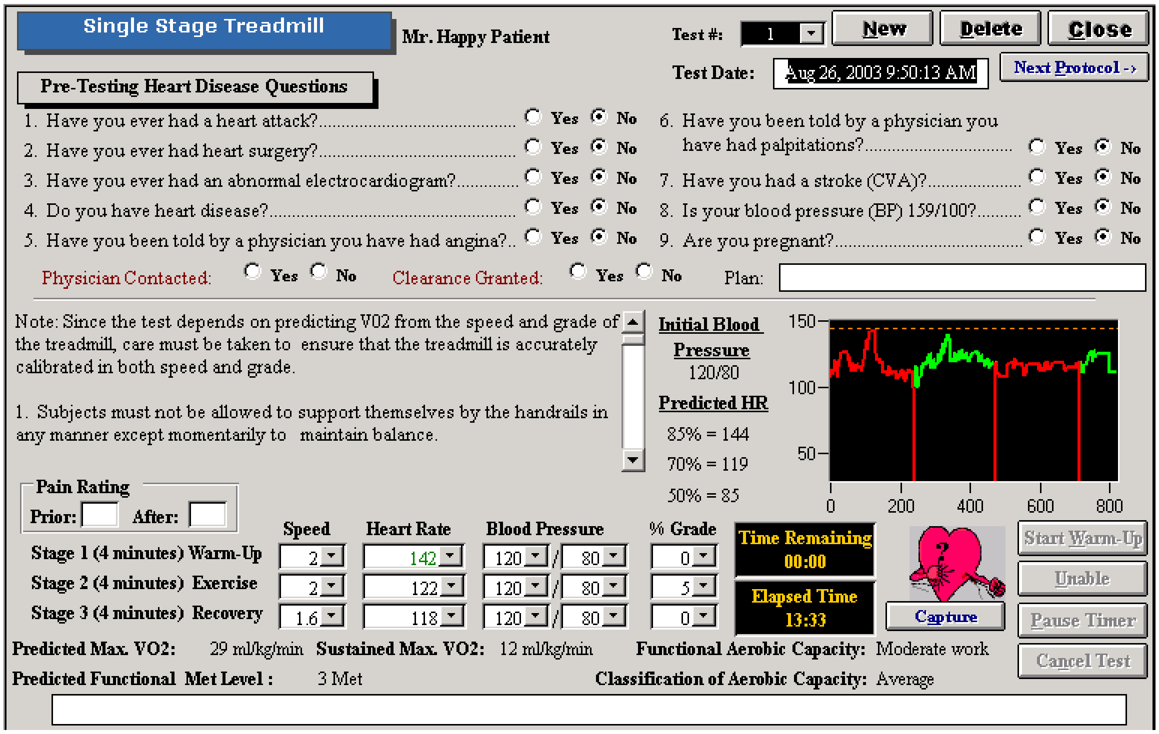
The Single Stage Treadmill test is used to determine a client's aerobic capacity and MET level. The test is based on the treadmill's speed and grade and so it is important the treadmill is calibrated regularly. Refer to your treadmill user manual for more details on this or contact the manufacturer.

Prior to completing the test complete the Pre-Testing Heart Disease Questions. Contact the client's physician for medical clearance if any of the answers are yes.



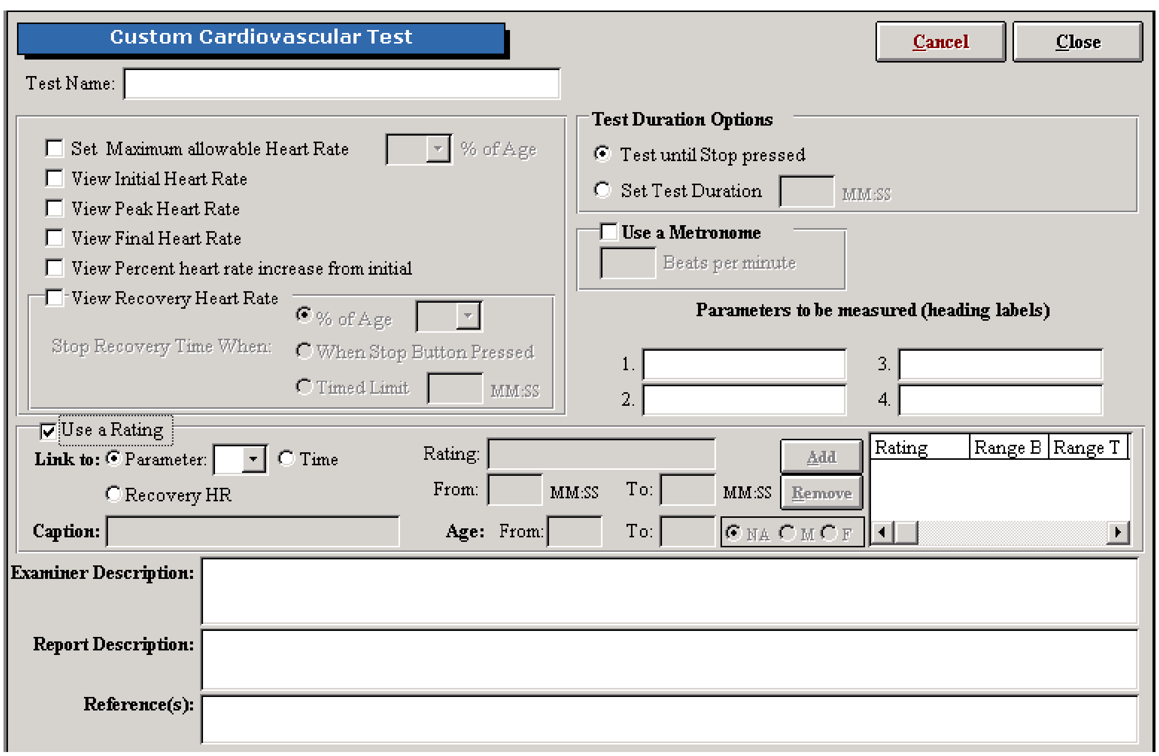
During testing the client is not allowed to hold onto the handrails of the treadmill for balance. Each stage is 4 minutes long with the heart rate and blood pressure being measured during the final minute of each stage. Begin the first one to two minutes of the test by selecting a comfortable pace for the client. Increase the speed to between 2.0 and 4.5 mph depending on the condition of the client. Increase the incline the grade by 5% maintaining a final speed of warm up stage. Stage two begins when the grade reaches 5%. Decrease the grade and speed for stage three.

The following is the screen when the test is completed.



Customized Cardiovascular Tests

From the Cardiovascular menu you may also create your own cardiovascular test by clicking New Test.

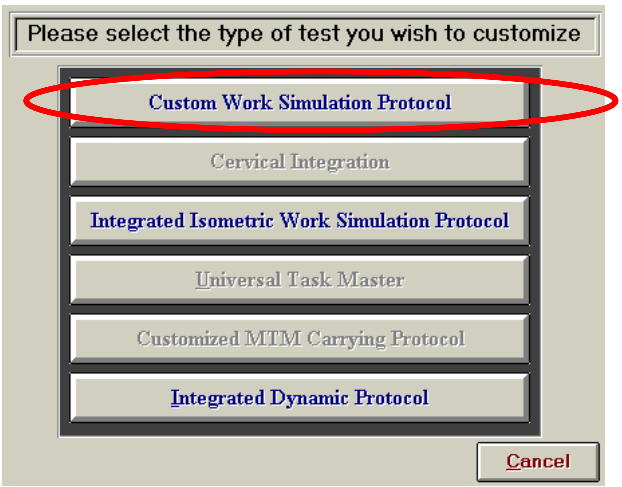


Include the parameters for the test based on the protocol you have selected. Click on Close to save the protocol.

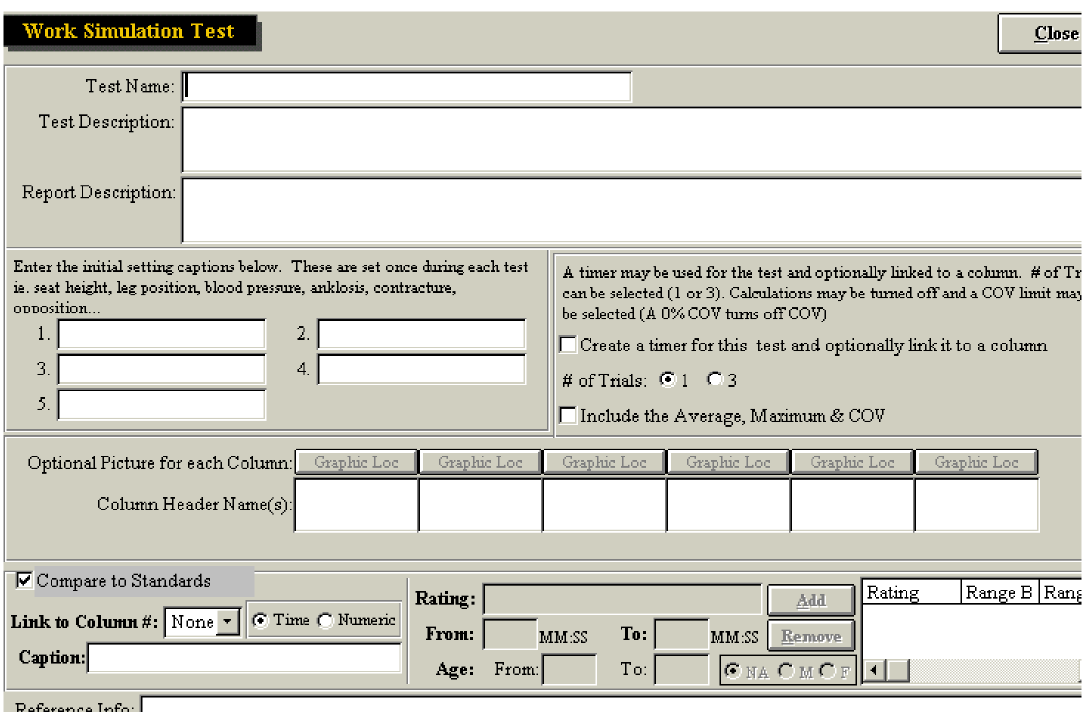
Creating a Non-Integrated Work Simulation Protocol

Within ODES you have the ability to create either a non-integrated work simulation test.

After clicking New Test, located on the Work Simulation Protocol screen, the following menu will be displayed:

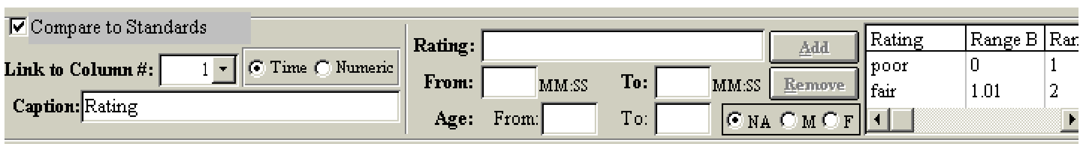


From this menu, select Custom Work Simulation Protocol. This type of test allows you to create any non-integrated work simulation protocol, such as: carrying, lifting, balancing, climbing, walking, dynamic pushing/pulling, etc.



Include the test name, test description, report description, initial settings (if any), number of trials, and column header name fields. If the test is timed, select “Create a timer for this test and optionally link it to a column.” Once the timer has been selected below the Column Header Names you will have access to buttons below the graphic locations called Timer Linkage. Click on the one where you would like the time linked to. Once the button has been clicked it will say Timer On.

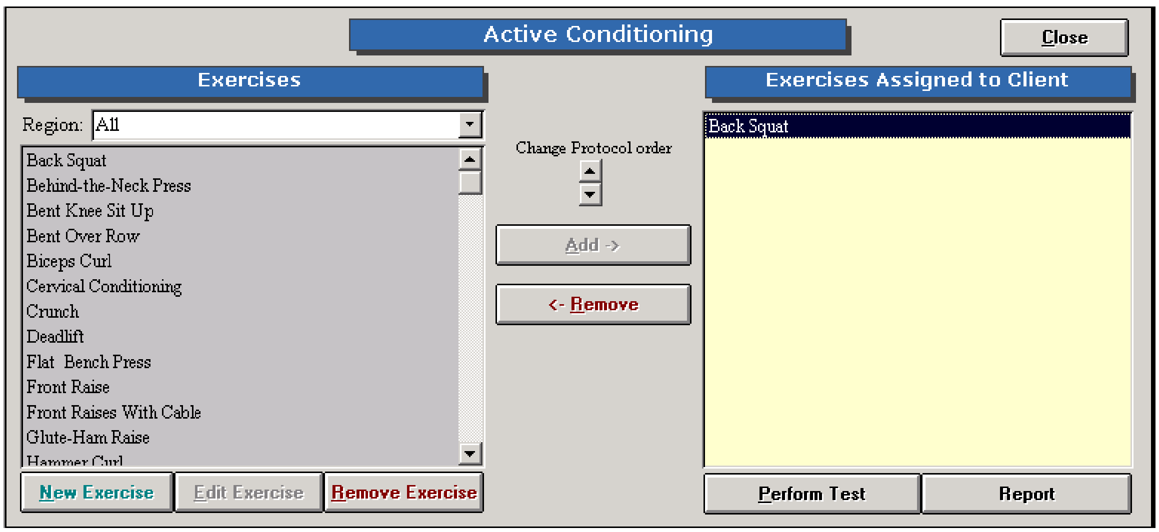
You are also able to incorporate standards based on research into your test by entering ratings. First select which column you will be using the value obtained to compare against the standards. Select this from the drop down menu titled “Link to Column”. Select whether the value is numeric or a time. Include a caption so that you will be able to enter in the ratings (i.e. Percentile, Rating etc). Now you can enter in all the normative data and related it to age and sex if indicated in the research. Click on Close to save the test.



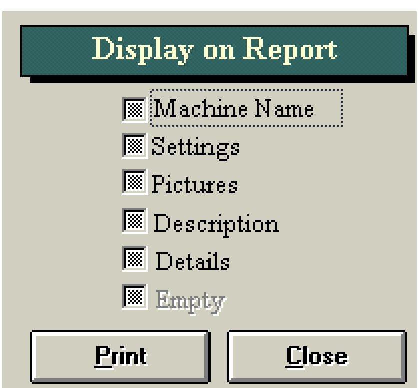
Exercise Program/Cervical Conditioning

a) Exercise Program

ODES comes with a variety of pre-programmed exercises you can. include within your client's program. You may click Perform Test to conduct the exercise, or print out a Report to allow the client to track their progress manually.



You can customize your report to include any of the following pieces of information:



Mr. Test Sample August 08

Front Raise

Front Raise With Dumbbells

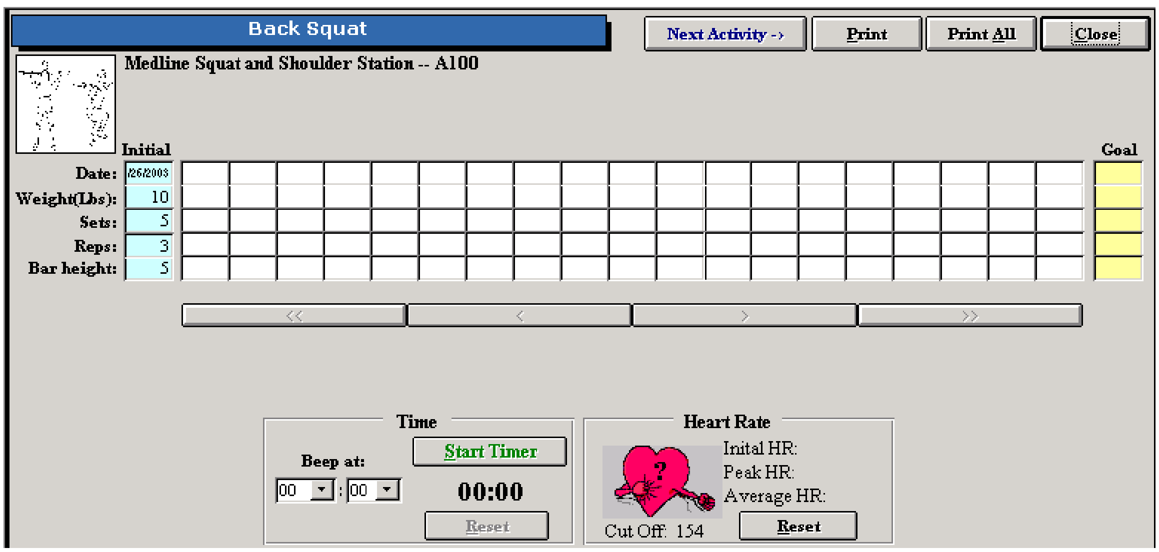
Beginning Position: Grasp dumbbells using a closed, pronated grip. Stand erect with feet shoulder-width apart, knees slightly flexed. Allow dumbbells to begin in front of the body, elbow slightly bent. Position upper arm against the ribs, perpendicular to the floor.

Upward Movement Phase: With the dumbbells flex the shoulder (allowing the dumbbells to move in an arc away from the body), keep the elbow slightly bent. Maintain body position. The motion should be completed when the arm is approximately parallel to the floor.

Downward Phase: Lower dumbbells slowly and under control until the attachment is once again in front of the body. Do not jerk or bounce the weight at the bottom of the movement. Maintain body position.

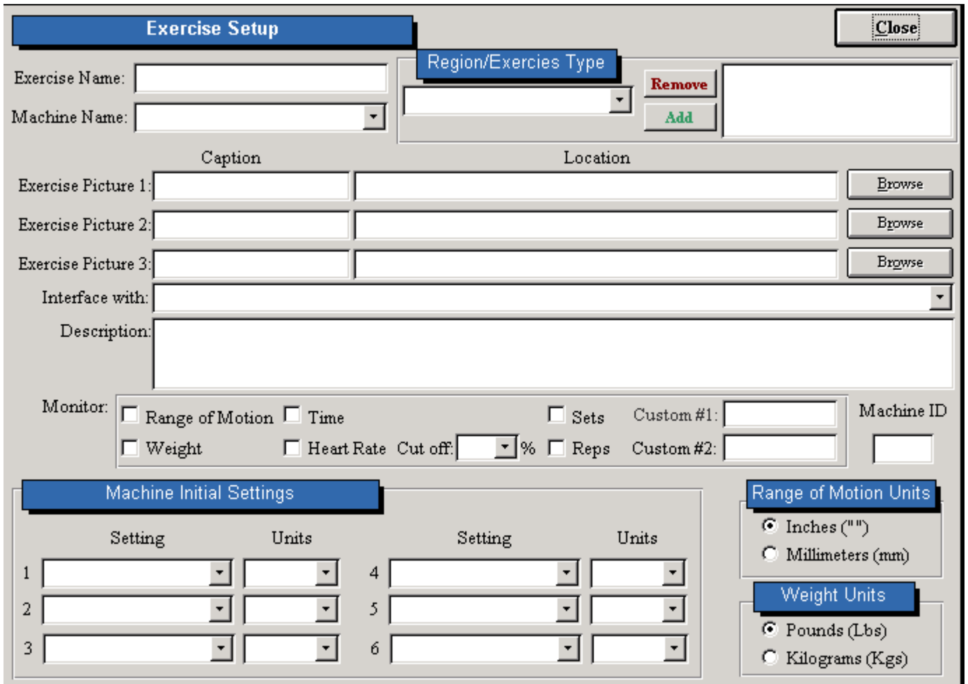
	Initial																			
Date:																				
Weight(Lbs):																				
Reps:																				
Sets:																				

Click on Perform Test to enter information for the client's exercise.



The initial weight, sets, repetitions and other parameters can be entered in and the goals for the exercise.

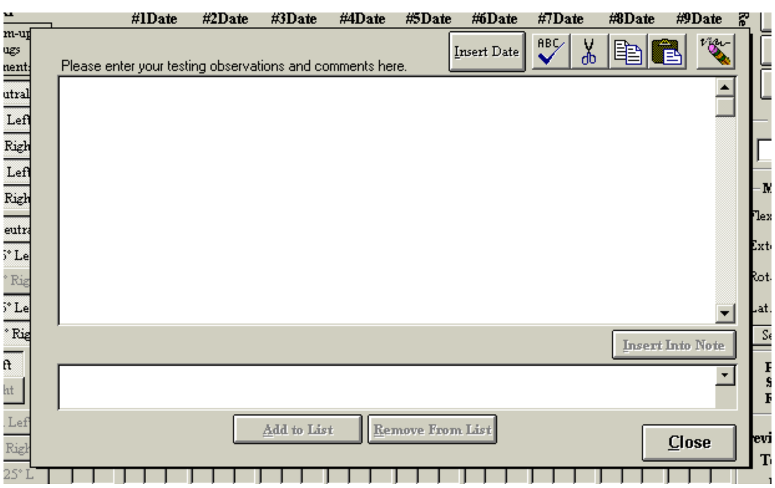
To add in a new exercise or work simulation protocol click on New.



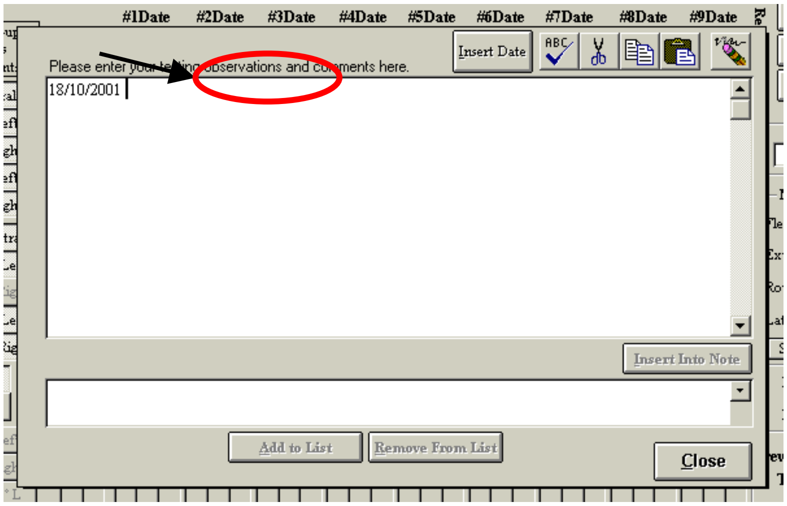
Fill out the required parameters and click on Close to save the information.

Comments

All testing screens allow for evaluator comments to be added in. A box will be available on the screen or a Comments button can be clicked on.

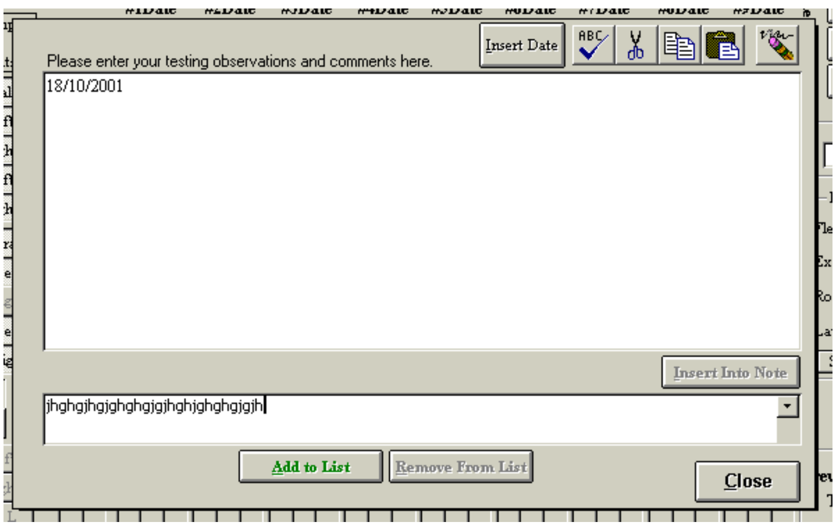


To enter notes, place your cursor in the larger blank text box. Type any information that you wish to include. If you wish to include to date prior to entering your note, click Insert Date n (located on the tool bar). The date will now appear in the text box.

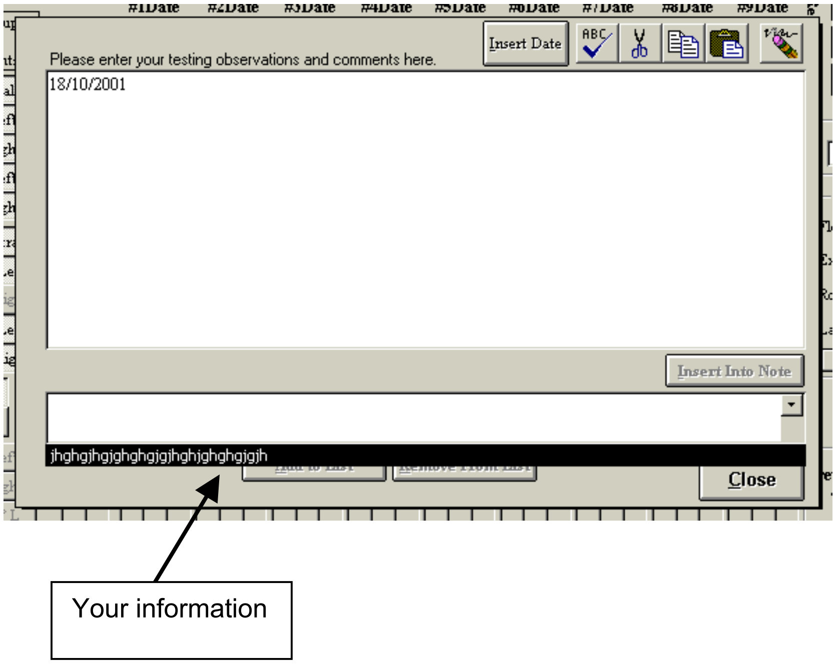


You may also enter information into a template. This allows you to save popular phrases so that you do not have to re-enter them time and time again.

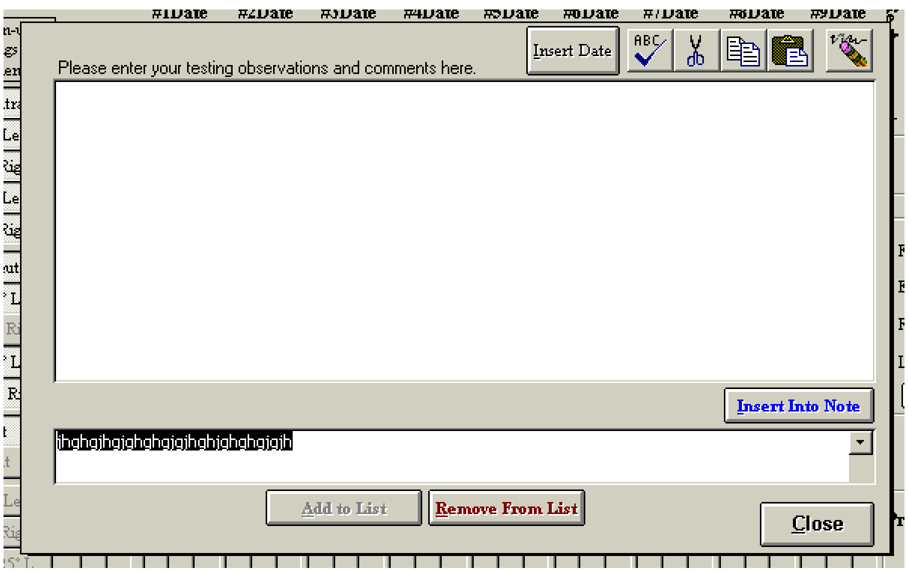
To create a template, enter the information you wish to save in the smaller text box and then click Add to List:



The new template will now appear in a dropdown menu.

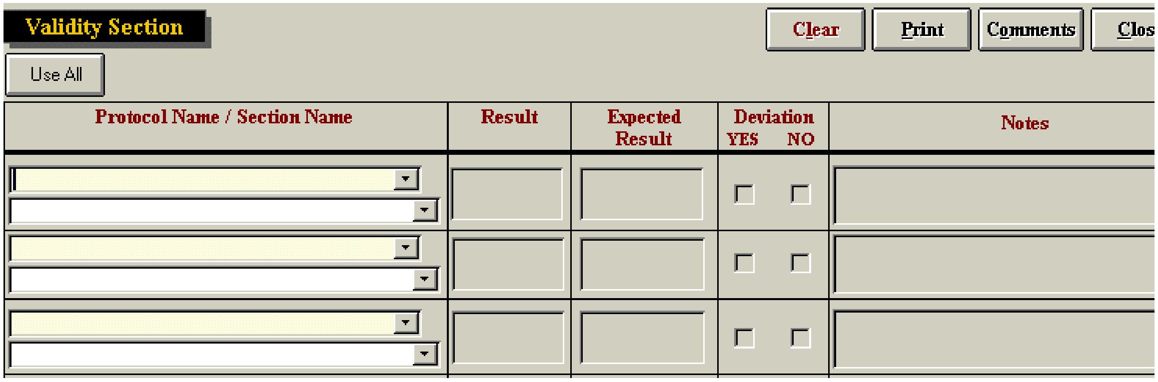


To insert this information into your note, select the template you wish to include from the menu and click Insert Into Note.



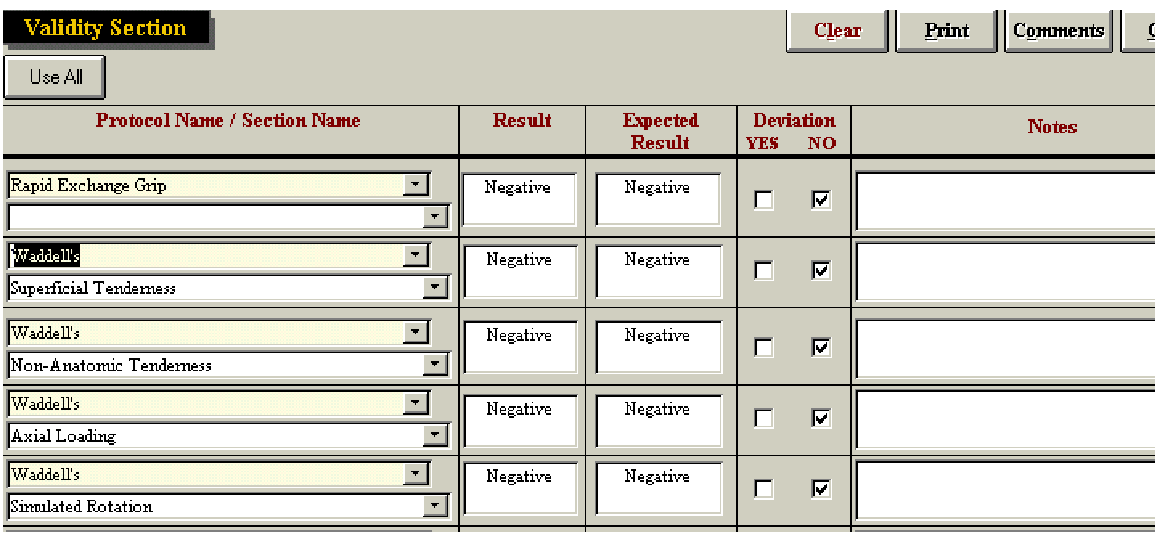
The information will now appear in the notes section (the upper text box):

Validity Analysis



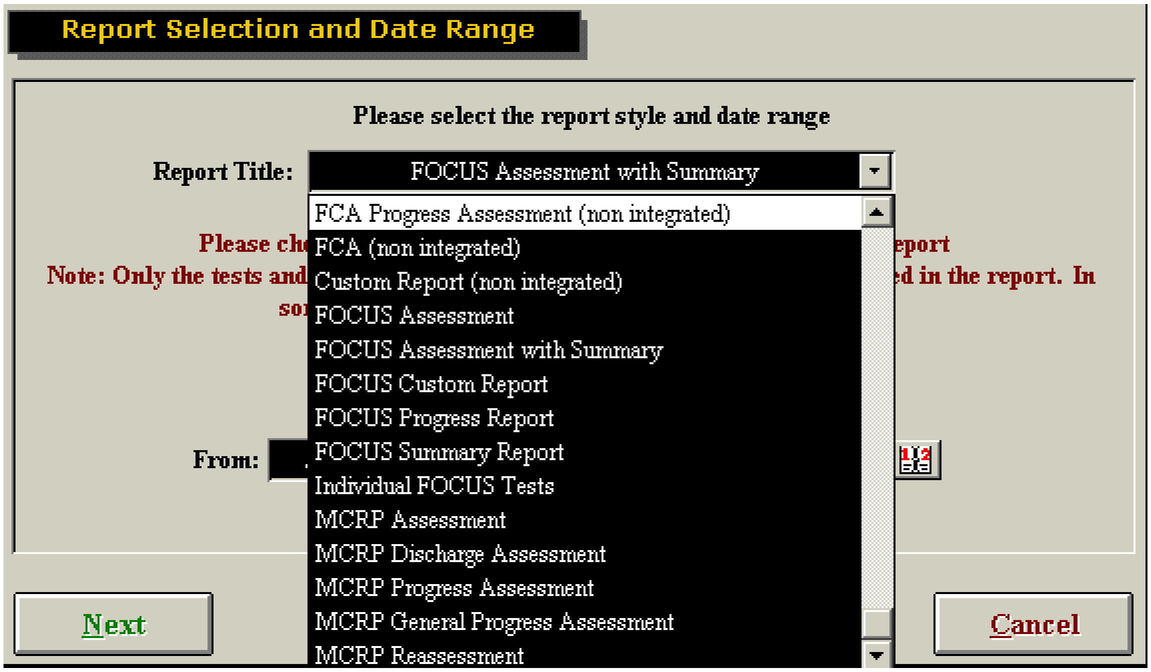
This section of the ODES software analyzes the validity of the testing performed on each client. Validity analysis compares results to expected results for all tests completed by a client, or for selected tests. This information provides details on what the expected result of the tests should have been, according to research and the actual result. Click Use All to collect information from all client tests; to select individual tests, use the dropdown menus. Click Add Validity Item to add a new test to the current analysis.

Once the information has been reviewed, the total number of deviations will be displayed at the bottom of the page, and you may add comments regarding the consistency of the performance. Since this feature is not integrated with ODES reporting, click Print to print out the validity analysis.



Reports

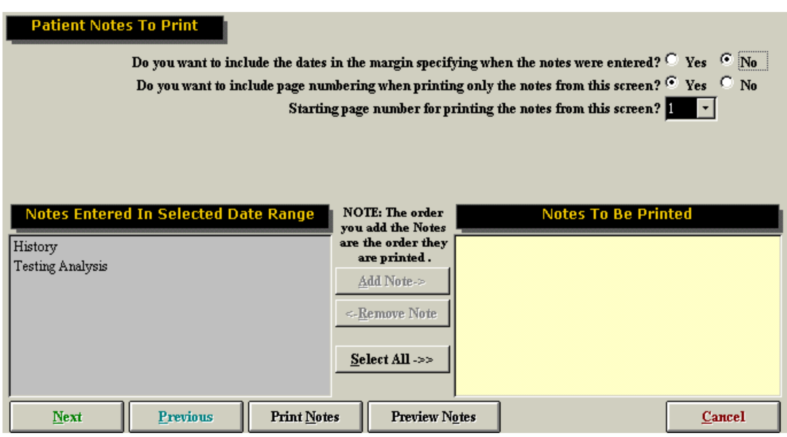
ODES has the ability to create a variety of different reports.



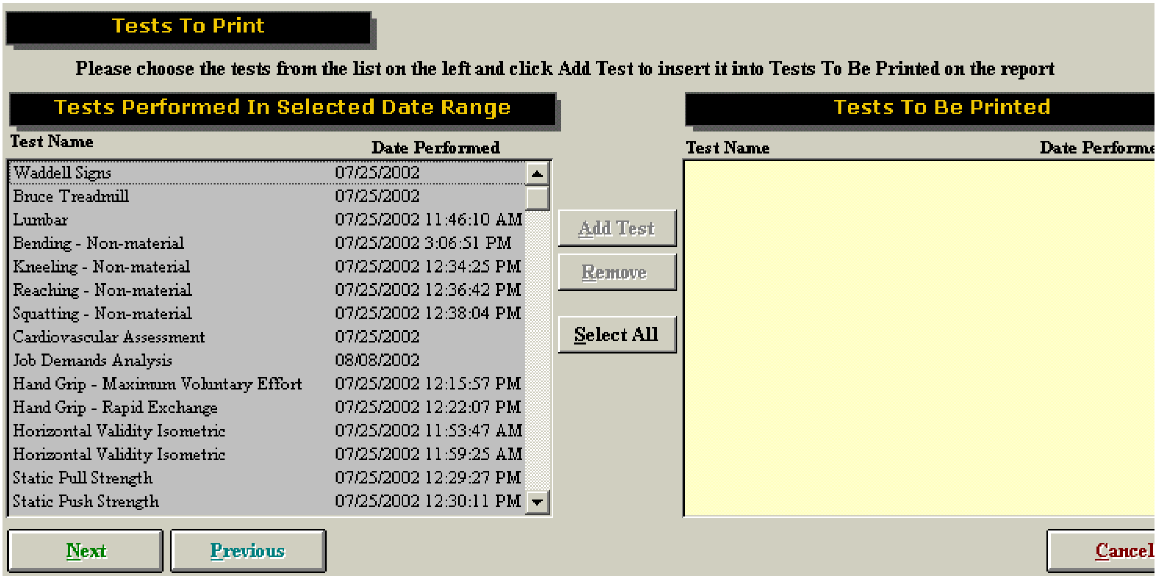
Each report has different features. For example, a summary report only contains the actual raw data that is collected from testing (no verbal comments or information). On the other hand, a FOCUS Assessment will include all notes, comments and testing data that the evaluator wishes to include. Custom reports will let you change the name of the report.

All information will be automatically pulled from the tests, making report writing efficient and time saving. To create a new report simply choose the type of report you wish to use, ensure that the start and end dates for the notes and protocols are correct and click Next.

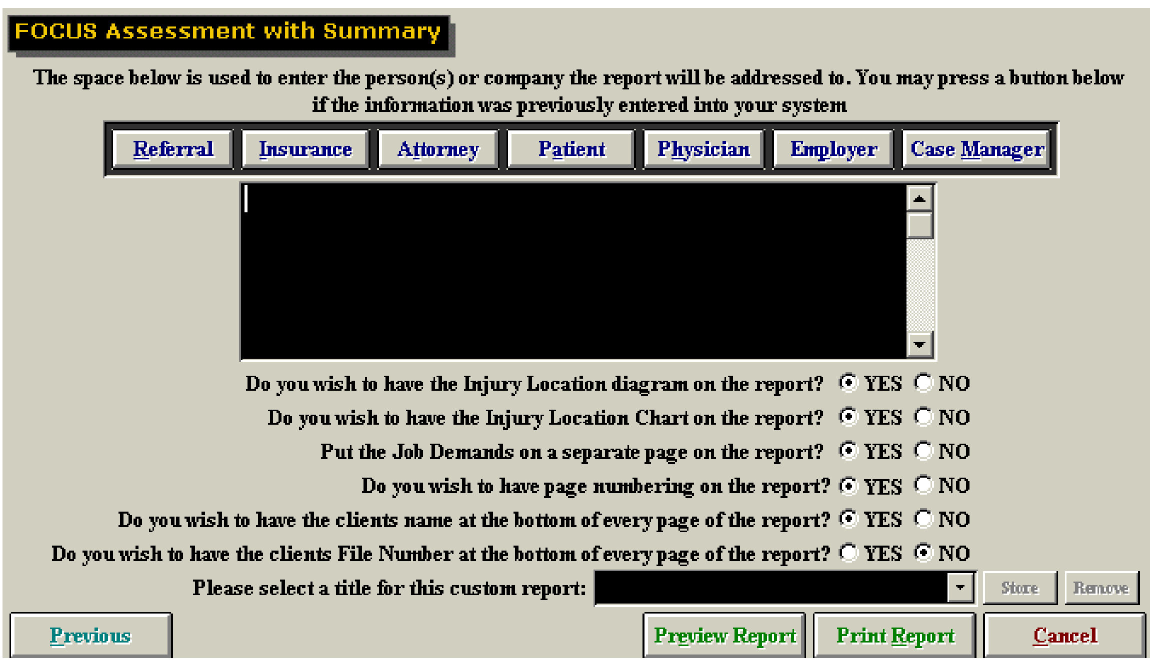
You now have the option of including notes. You can add individual notes, or include all notes at once by clicking Select All. The notes will be printed in the order in which they are listed, with the exception of Diagnosis and Recommendation notes, which are always printed first. This page also lets you modify page numbering, and whether dates are included in the margins. If the supervising practitioner has a digital signature in the system, you will be able to include a signature line and/or digital signature to the report.



The next page allows you to choose which tests you wish to include in the report.



Finally, you can include contact information, change page specifications, include job demands and injury locations, etc. You may then preview your report, or send it directly to the printer.



Types of Reports:

Cervical Assessment:

Allows you to select date range of data
Allows you to add and remove client notes from the report
Allows you to alter page numbers
Allows you to enter dates in the margins beside client notes
Allows you to select all or only specific tests to include on the report
Allows you to print or preview the report

MCRP Assessment:

Allows you to select date range of data
Allow you to add and remove client notes from the report
Allows you to alter page numbers
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

MCRP Discharge Assessment:

Allows you to select date range of data
Allow you to add and remove client notes from the report
Allows you to alter page numbers
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

MCRP Progress Assessment:

Allows you to select date range of data
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

MCRP General Progress Assessment

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report
Allows you to create a custom title for the report

MCRP Reassessment

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific tests to your report

Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

FCA Progress Assessment (non integrated)

This report is designed to include only Non-Integrated tests that have been performed. It is specifically used to track the progress of multiple assessments

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

FCA (non integrated)

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report

Custom Report (non integrated)

This report is designed to include only Non-Integrated tests that have been performed.

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report
Allows you to create a custom title for the report

FOCUS Assessment

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific tests to your report

Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

Focus Assessment With Summary

The main difference with this report is that a summary chart of all raw data precedes all of the testing information.

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report
Allows you to create a custom title for the report

FOCUS Custom Report

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report
Allows you to create a custom title for the report

FOCUS Progress Report

This report is specifically used to track the progress of multiple assessments

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to address the report to the following: Referral, Insurance Company, Attorney, Client, Physician, Employer, Case Manager
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

Allows you to create a custom title for the report

FOCUS Summary Report

Allows you to select the date range of data
Allows you to print preview all raw data obtained for a specific client

Individual FOCUS Tests

This report includes only specific tests that you select.

Allows you to select date range of data
Allows you to alter pages numbers
Allows you to add and remove client notes from the report
Allows you to add specific non-integrated tests to your report
Allows you to include injury diagram and/or chart on the report
Allows you to put the job demand on a separate page
Allows you to add or remove page numbers from the report
Allows you to include clients name at the bottom of each page of the report
Allows you to print or preview the report

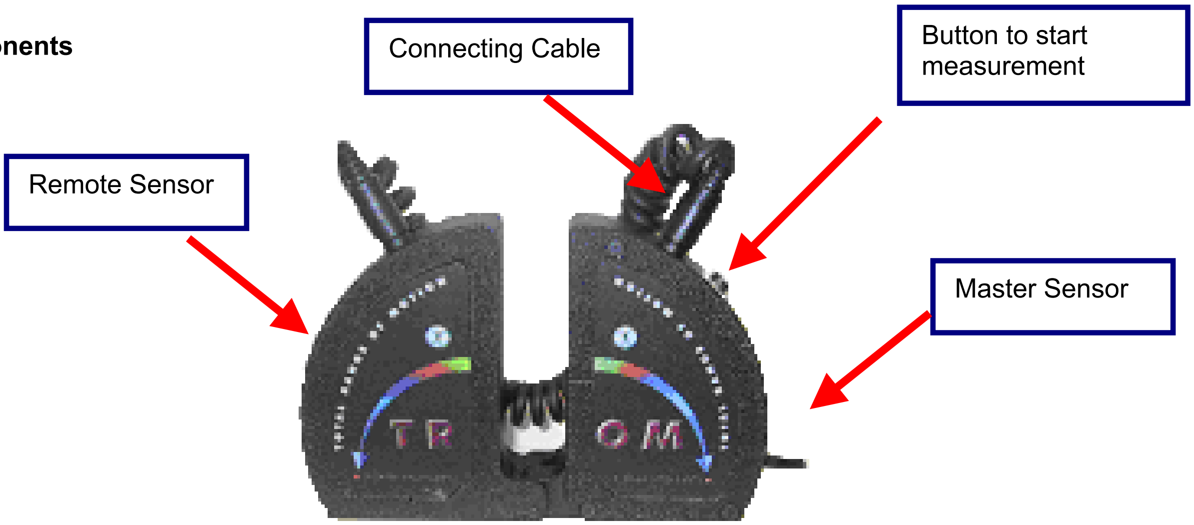
The BTE Dual Inclinometers

The dual inclinometers are used to evaluate spinal range of motion, which allows for sections to be tested in isolation. You may choose to use a single inclinometer; however, the evaluator must be aware of the value's origin. For example, if you were to assess lumbosacral flexion by placing a single inclinometer on the appropriate landmark and have the client flexing from a standing position, the inclinometer will measure the combined lumbosacral and hip flexion.

The single inclinometer can be used to evaluate range of motion of the extremities. The small goniometer feature can be used to evaluate the range of motion of the smaller joints in the hand and foot.

The basic premise of the dual inclinometers function is to calculate the amount of rotational displacement of both the sensors and subtract (or add) the two values to arrive at a true range of motion value.

Components



The dual inclinometers consist of three separate components. First, there are two sensors, referred to as the Master and Remote sensors. There are also two cords that accompany the BTE Dual Inclinometers. A Foot Pedal is also available to start and stop measurements using the Inclinometer.

One cord connects the Master and Remote sensors together to allow the calculation of angular displacements. The ends of this cord connect to the ports at the top of each sensor. The other cord is permanently attached to the Master sensor at one end and fits into the BTE Data Acquisition Box at the other end. This cord functions to direct all calculated angles into the ODES diagnostic software system.

The BTE Dual Inclinometers are self-calibrating and never need to be manually calibrated.

The Dual inclinometers are connected to the Data Acquisition Box by a long cord from the Master sensor, which connects to PORT 12 on the Data Acquisition Box.

When using the BTE Dual Inclinometers to measure range of motion, they must always be positioned in the same plane and with the hinges facing each other. The following figures demonstrate correct and incorrect orientation for the Dual Inclinometer placement.

The Master sensor has a round black button at its top. When performing a test, this button is pressed at the start and end of a test range. The difference between the two readings is calculated and entered into the ODES diagnostic software system. The Inclinometers will not measure accurately if the hinges are at opposite ends as in this picture. As well the Inclinometers cannot operate in the coronal plane of movement.

The BTE Dual Inclinometers can also be used as a Small Goniometer when they are attached to each other. The Dual Inclinometers can be joined to each other as demonstrated in the figure below.

The Master and Remote sensors attach at their bottom corners, where they form right angles.

When attached, the Dual Inclinometers can be used as a Small Goniometer to measure finger and thumb range of motion.

To start measuring using the Inclinometers click on the button on the Master or on the foot pedal. To stop taking the measurement click once again.

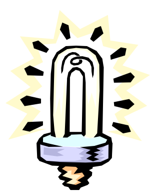
The Master and Remote sensors of the Dual Inclinometers have internal magnets. As a result, it is strongly suggested that these are NOT placed on computer hard drives, since doing so may result in erasure of data files!

Performing Spinal Range of Motion Evaluations

Most importantly, in order to do effective range of motion evaluations with consistency, ensure that the same landmarks are used each time.

Following is a table of landmarks for spinal evaluations:

Area to be **Assessed**	Superior Landmark	Inferior Landmark
Cervical Spine	Occiput	T1
Thoracic Spine	T1	T12
Lumbosacral Spine	T12	Sacral Midpoint
Sacral/Hip Flexion/Extension	Sacral midpoint	Lateral Thigh
Gross Combined hip and spinal flexion/extension	T1	Sacral Midpoint
Straight Leg Raise	-- Not Applicable --	Anterior Lower Leg



It is important to have the client wear appropriate clothing that exposes, or provides for, easy access to the landmarks. You may wish to stock such items as cloth or paper client gowns for this reason.

Guidelines to Locating The Landmarks

Occiput - Locate the Occipital protuberance and place the lowest portion of the Inclinometer directly above it.

T1 - This is usually the larger of the two protruding spinous processes at the base of the cervical spine near the height of the shoulders. It is easily identified when the client flexes their cervical spine.

T12 - Follow the lower ribs posteriorly to the spinous process.

Sacral Midpoint Follow the iliac crests posteriorly to the PSIS, medially into the sacral sulcus and then medially to the midline. While maintaining one hand at the midline at this level, locate the sacrococcygeal joint. Now locate the midpoint between these two landmarks.

Lateral Thigh-Locate the Greater Tuberosity and place the tip of the Inclinometer just inferior.

Anterior Lower Leg-Locate the Tibial Tubercle and follow the anterior ridge of the tibia inferiorly approximately two-thirds down the lower leg.

For Single Unit Use-Place distally to the joint being assessed in the plane of movement. If there is compound joint movement use the Dual Inclinometer method of landmarking.

For Dual Unit Use-Place one unit distally and one unit proximally to the joint being assessed, ensuring to not include the other joint(s) that are involved in the compound movement. Align the sensors in the plane of movement.