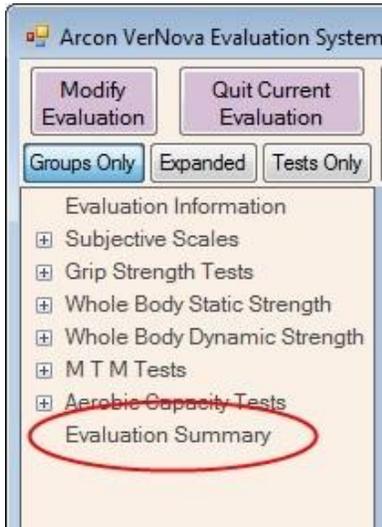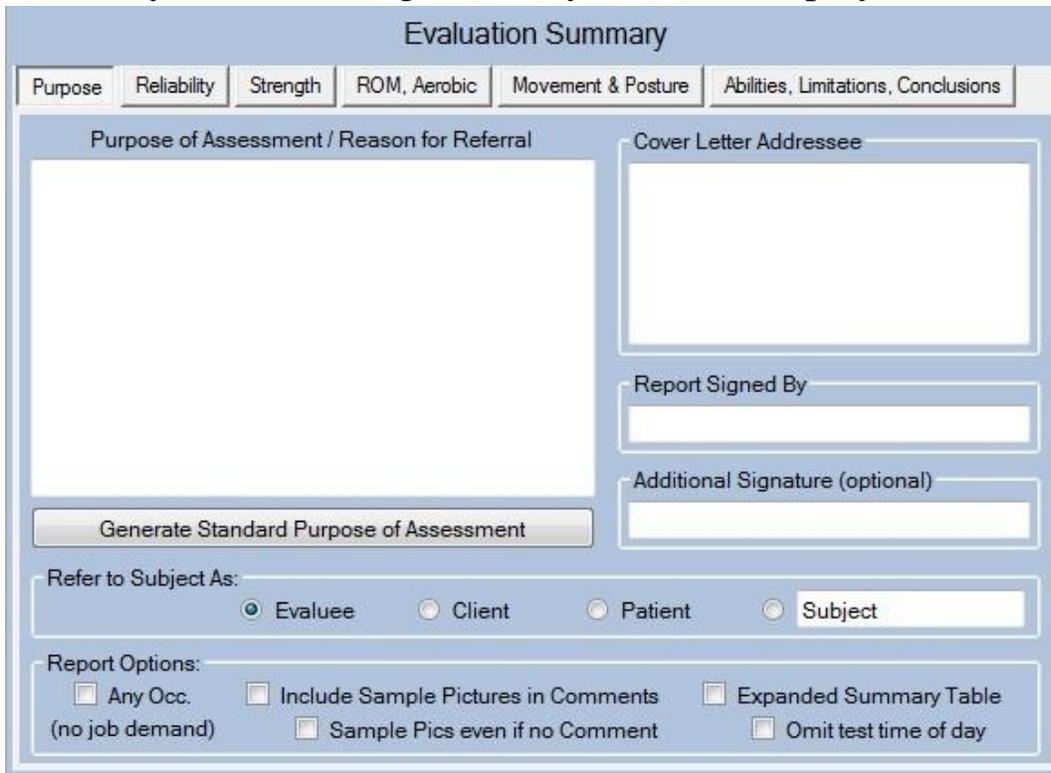Once the steps (tests) of an Evaluation have been completed you must summarize your findings. This is accomplished using the last step of the Evaluation, the Evaluation Summary.

 When you advance to, or click on the Evaluation Summary, the following summary screen is displayed below:

The summary is comprised of six sections, each represented by a tab on the Evaluation Summary screen. You will be entering or reviewing information on each of the tabs to summarize the findings of this Evaluation. When the information on these six tabs is complete, you will be ready to generate a final Report. No additional steps are required between the summary and the report. We will review each section of the Evaluation Summary Screen in the following topics

Purpose of Assessment

In the Purpose of Assessment, you communicate to the reader of your report the reason(s) for performing this evaluation. One of the key issues is to determine the type of evaluation that your referral source requires.

There are three general categories of Functional Evaluations are listed below. For example, there is a difference between returning to work as ICU nurse for a local hospital as compared to the general occupation of nursing, and an ever-bigger difference if the subject is to return to any available job. Usually worker's compensation is interested in a specific job match. In a long-term disability the referring source is more interested in an occupational category. If you are comparing to a specific job or occupation, make sure you identify it. Here are some examples:

1. Specific Job (Own Job): Mr. Smith is referred for a functional capacity evaluation to determine his functional abilities to return to work as a truck driver with Roadway Express.
2. Specific Occupation (Own Occupation): Mr. Smith is referred for a functional capacity evaluation to determine his functional abilities to return to work in his own occupation as a truck driver.
3. Any Occupation: Mr. Smith is referred for a functional capacity evaluation to determine his functional abilities to return to any occupation.

For the first two categories, you must have a description of the essential physical demands of that job or occupation - often called the Job Demands. This information should be provided by the subject's employer, or by the referral source (e.g. insurance case manager). In the event that you are not provided with Job Demands, you can ask the subject (employee) for this information , but understand that in most jurisdictions the employer's description of the job has legal precedence over the employee's description.

The results of the functional evaluation are used to compare the subject's demonstrated abilities to the essential physical demands of the job or occupation. Job demand information is entered in the "Occupation" record on the Patient screen.

For the third category, there are no specific job demands because we don't know which job or occupation the subject might seek. In this case the results of the functional evaluation shows the subject's demonstrated ability level in each of the standard work task categories.

The Purpose of Assessment tab is shown below:

Under the Purpose of Assessment / Reason for Referral section you should inform the reader of the following:

Why are you doing the evaluation?

Is it to determine functional abilities to return to a specific job?

Or to return to a specific occupation?

Or to return to a general functional category (physical demand level)?

You should also identify the subject's diagnosis for the purpose of the evaluation. This is important because we would expect to see functional deficits in the upper extremities, if there is an upper extremity diagnosis. Again, this helps to orient the reader to the information to follow:

Mr. Smith is diagnosed with chronic low back pain. He underwent a lumbar laminectomy in March 2010 and a subsequent fusion at L5-S1 in January 2011.

You should also identify when the client was evaluated and over what period. Typically, this will be a one day evaluation over a 4-hour period. If testing was modified because of discomfort and performed over two days or if client left after only 2 hours of testing this will alert the reader to potential problems.

1. Mr. Smith was evaluated on July 2, 2011 from 8:00 am until approximately 12:00 pm.
2. Mr. Smith was evaluated on July 2, 2011 for approximately 4 hours.
3. Mr. Smith was evaluated on July 2, 2011 from 8:00 am until 11:00 am. He discontinued testing and because of pain and then returned on July 3, 2011 to complete testing from 10:00 am until 12:00 pm.

4. Mr. Smith was evaluated on July 2, 2011 from 8:00 am until 12:00 pm. He returned on July 3, 2011 to retest his lifting and MTM components to determine any change in functional abilities. He was present on day 2 from 8:00 am until 10:00 am.

Generally, this would be enough information to include in the Purpose for Assessment. However, in some cases, unusual circumstances occur that should be documented. Here are a few examples:

1. If a witness is present, please include the name of the witness and at whose request they are present.
2. If a client comes with a note from his/her physician presenting information that was not known prior to the evaluation (such as specific FCE restrictions) this should be documented. (And it is recommended that you call the referral source regarding this change)
3. If the client videotapes the FCE. (It is recommended that you also videotape the results of the FCE) The fact that one or both parties is videotaping should be documented.
4. If testing is deferred for medical reasons such as blood pressure. And the client later returns to complete the FCE, the first FCE date and subsequent date should be recorded and reason why the FCE was interrupted.
5. If the client or a client's family member is disruptive with testing or the client declines to sign informed consent. This is grounds to terminate testing but should also be documented.
6. Any other medical conditions that may significantly impact function, even if it is not the primary disabling condition. For example if the client has bilateral total knee replacement as primary disabling condition, but has a past medical history significant for carpal tunnel syndrome in her right dominant hand.
7. The client took additional medication during the evaluation for pain relief. Document how much and of what type.
8. Any other unusual situation that would help the reader understand what is going on.

The Arcon software provides a convenient shortcut for generating a "standard" Purpose of Assessment. If you click on the button "Generate Standard Purpose of Assessment", the text box will be automatically filled in with some predetermined text that satisfies most of the recommendations listed above. You can use this as a starting point, and then edit the text for any custom referral questions or unusual circumstances. You can customize this "predetermined text" template by editing the file "POA.txt" in the program Data folder.

Refer to Subject As:

You need to identify how you will refer to the subject of the evaluation in the report. While we refer to the subject as the "Patient" in the software (e.g. the Patient Information screen), the term patient implies that you have a treating relationship with the individual. When you are asked to evaluate an individual, and not treat them, it is recommended that you refer to the subject as an Evaluee, Client, or Mr./Ms. Last Name. Select the appropriate term in the section of the screen shown below.

Cover Letter Addressee:

The first page of the report is in a narrative cover letter, summarizing the findings of the evaluation. Fill in the name and address of the referral source (the entity who is to receive the report) in this text box.
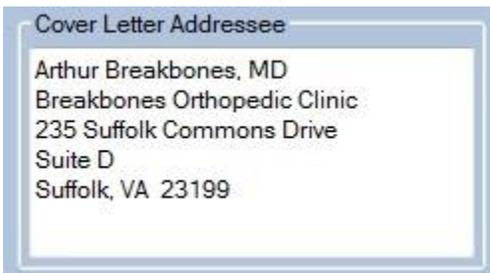
As a shortcut, you can alternately right-click in the Addressee text box and select one of the following entities from a drop-down menu, but

only if they have been entered for this Patient: Employer, Physician, Case Manager or Attorney. If you have set the "Referral Source" item in the Evaluation screen, then Referral Source will also appear on the drop-down menu.

Report Signed By:

Enter your legal name and your professional credentials. If there are two evaluators, fill in the additional signature as well. As a shortcut, you can right-click on either text box and select from a drop-down list of evaluators whose names you have already entered.
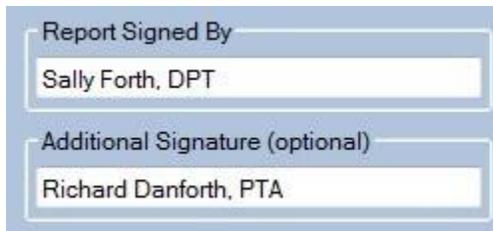
Report Options:

There are several options you can select for your report as shown below.

Any Occ. is selected when you have entered an "Occupation" for this Patient, but you wish to generate an "Any Occupation" type of report. Normally an "Own Occupation" type report is generated when the patient has an Occupation. This option is not shown when there is no Occupation record for the current Patient.

Include Sample Pictures in Comments (and optionally sample pics even if no comment) is selected when you wish to show test sample pictures of the test activity in the comment section of each test. The first option shows the sample picture only if you have entered a comment for a test, while the second option shows the sample picture for all tests, even if you have not entered a comment. Selecting the second option automatically selects the first option, and clearing the first option automatically clears the second option (i.e. they work together).

Expanded Summary Table is selected when you wish to add detail Test Information Table immediately following the "Perceived Exertion Chart" in the summary section of the report. This table contains the Test Name (and date), the Test Description, the Test Comment (if entered), and the Comment Picture (or sample picture, if selected) for each test in the evaluation. Note that this table may be several pages long, depending on the number of tests in the evaluation, so be sure that this feature is required by your referral source before selecting the Expanded Summary Table. Normally this table is NOT included in the report as all the information in the table (other than the Test Description text) can be found in other sections of the report.

Omit test time of day is selected when you wish to omit the time of day from the test date information in the "Perceived Exertion Chart" and/or the "Expanded Summary Table". The test time of day is included by default, and this is the appropriate choice for instrumented systems that "time stamp" each test. However, when test data is entered at a subsequent time (or day), as might occur with a manual FCE system, where data entry may not occur at the actual time of the test, this options prevents incorrect time information from being shown in the report.

Of all the sections in the Evaluation Summary, the Reliability and Consistency section is cause for most questions. In an effort to simplify the process let's start with the following definitions:

1. Reliable: Reliable data is consistently reproducible data. Reliable doesn't necessarily mean that the data was maximal. It simply means that it was consistent. A consistent presentation is necessary to determine that the demonstrated abilities are maximal. There are more than 70 reliability measures that captured as part of the Arcon data. However, there are also clinical observations that the computer has no way of recording. When you make an assessment that the data is reliable it should also, include your clinical observations. When 80% or more measures are reliable, reliability is generally accepted as reliable. As mentioned previously if only a few tests were performed (the rest being declined) and clinical observations are very inconsistent even 20 of 20 reliable measurements could be considered unreliable.

2. Unreliable: Unreliable data is inconsistent. An unreliable data set cannot be maximal. Another rule of thumb would be if less than about 50-60% of reliability measures are reliable then overall reliability is generally unreliable. However, the percentage may be much higher and still be considered unreliable because of clinical observations.

3. Self-limited: Self-limitation of performance may relate to Symptom Magnification Behavior or it may be related to real organic condition that is present. Self-limitation is common among clients who wish to avoid test induced discomfort or an increase in pain or discomfort.

4.   Maximal Effort: Maximal effort suggests that the client's data was both reliable (consistent) and that it represents his/her best, safe physiological efforts. Specific tests such as the maximum voluntary effort tests, the rapid exchange grip, the horizontal strength changes and the changes in heart rate, all give insight as to whether the client's demonstrated efforts are maximal. You would also expect to see physiological changes in movement patterns that would be consistent with decline in functional abilities.

5.   Symptom Magnification Behavior: You may choose to use alternative language to describe this behavior such as pain focused or symptom exaggeration behavior. It is important to note that you are describing observed behaviors, and not trying to understand the client's motivation for self-limiting activities. This is not based on one single test or observation. Generally, you would expect to see a pattern of behavior. You have clinical knowledge of the client's diagnosis. Based on that clinical knowledge you would expect a specific pattern of reported symptoms, areas of weakness and functional abilities than may be affected. When the client's functional presentation deviates from this expected pattern, it may be because of another clinical problem that has not be identified, or may indicate an inconsistent presentation. When the client reports a subjective change in symptoms you would typically expect to see behaviors consistent with this.

For example, if a symptom is reported during lifting tasks, the movement patterns should slow and recruitment of accessory muscles will change body mechanics. Physiological signs such as perspiration, heart rate and change in color or temperature may also be noted. If subjective reports are consistent with these changes then the subjective pain reports, regardless of how high they may be, are appropriate. If however, the subjective pain reports increase and there is no observed change in movement patterns or physiological measures this is an inconsistent finding.

Another area to compare is the client's perceived abilities versus demonstrated abilities. The client perceives the ability to sit for 10 minutes but demonstrates 30 with no change in posture or facial expression. These inconsistencies are primarily identified through clinical observations. Ideally you will document examples of inconsistencies to support this opinion.

Reliability of Effort Tab (Evaluation Summary):

Evaluation Summary

| Purpose | Reliability | Strength | ROM, Aerobic | Movement & Posture | Abilities, Limitations, Conclusions |

Reliability Measures from This Evaluation

Test Name	Result	Expected	Measure	Reliable
5-Position Grip Left	6.6	> 7.5	SD	No
5-Position Grip Right	4	2 or 3	Peak	No
Balance	11.7%	< 10%	CV	Marginal
Crouching	13.9%	< 10%	CV	Marginal
Climbing Stairs	11.7%	< 10%	CV	Marginal
H Floor Lift	40.0 lb	<=37.5 lb	IHSC	No
H Torso Lift	88.0 lb	>=87.8 lb	IHSC	Marginal
Arm Lift	20.4%	< 15%	CV	No

Reliability of Effort

41 Measures Yield a Reliability Score of 77 out of 92 (84%)

◉ Reliable Effort
(Suggest score > 80%)

○ Self-Limited Effort
(Suggest 60% to 80%)

○ Unreliable Effort
(Suggest score < 60%)

☐ Include Reliable Measures in Table

Reliability Narrative

The results of this evaluation suggest that Ms. Benoiter gave a reliable effort, with 41 consistency measures yielding a reliability score of 77 out of 92 (84%).

☐ Detailed Narrative

The tests listed in the "Reliability Measures" table, above, are only the tests with measures that were deemed as unreliable. The same test may be listed more than once because several tests have more than a single measure of reliability associated with them. For example, with whole body static lifting (ST) tests, there is a CV or coefficient of variation measure, an HR (heart rate) measure, and an IHSC (inappropriate horizontal strength change) measure.

If you would like to see a list of all the reliability measures in your evaluation, both reliable and unreliable, check the box marked "Include Reliable Measures in Table." This only for your review as you go through data interpretation. Please remove this check prior to printing the report or the table of reliability measures will be unnecessarily long.

The reliability measures used by the ARCON FCE System are as follows (an Evaluation does not necessarily use every type of reliability measure):

CV: Coefficient of Variation
This indicates that this specific test fell outside the expected range of consistency. For static lifting, grip strength and pinch strength the measure is inconsistent 15% and for MTM tests it is 10%.

HR: Heart Rate Change
The research that was done, indicates that with static lifting tests there should be an expected increase in heart rate. If the heart rate does not rise as expected this may indicate that the client was self-limited. If the client is taking medication for blood pressure, heart rate may not rise as expected because of the effects of the medication. Always check the types of medication the client is taking. If you are not sure the medication will affect heart rate, you can go to www.rxlist.com and find out about their medication.

IHSC: Inappropriate Horizontal Strength Change:
3 of the static lifting tests, the Floor Lift, the Torso Lift and the High Near Lift, are performed in two postures. One is a mechanically advantaged posture and the other is disadvantaged. Regardless of the diagnosis one would expect a change the client's functional performance. The advantaged posture should be at least 33% greater than the disadvantaged and the disadvantaged 33% less than the advantaged. This calculation is derived from the laws of physic.

Peak: Five-Position Grip Test Peak Positon:

With the five-position or maximum voluntary effort test, grip strength is measured in each of the five grip widths or positions on the dynamometer. Research suggests that when these positions are plotted on a graph a bell shape curve should appear with peak grip strength at position 2 or 3. If the data deviates from this pattern this will be identified as an inconsistency. Look closely at the curve and the client's diagnosis. If the curve is bell shaped, but the peak is at one or four it may be the size of the client's hand that is impacting this. Perhaps the client has a partial amputation that limits the ability to generate force in some of the positions. If the curve is flat or very random it may indicate that the effort was self-limited.

SD: Five-Position Grip Test Standard Deviation:

Like the "Peak" criterion described above, SD is another reliability measure for the five-position grip test. Research published by Stokes, et. al., suggests that when the standard deviation of the five grip strength values should be less than 7.5.

REG: Rapid Exchange Grip:

Another test that is performed with grip strength is the Rapid Exchange Grip. This test is performed in the "Standard Position" or position two and compared to the position two results of the MVE protocol or the HD Standard protocol. The expected outcome is that because the rapid exchange grip does not allow the client enough time to generate maximal force the MVE for position two, will be greater than the rapid exchange grip. Tests results, where the rapid exchange grip is greater than the MVE grip would be reported as positive and suggests that the client self-limited during grip testing.

OE: Observed Effort: (new in Version 5.1.0)
When a test is stopped prior to completion, and the reason for stopping the test is Declined by Subject or Stopped by Subject, the program now asks the evaluator for his or her clinical impression of the subject's reliability of effort in attempting to perform that activity or a similar activity. The evaluator can choose reliable (subject made a good or sincere effort), marginal (subject made a fair or equivocal effort), or unreliable (subject made a poor or insincere effort). Since the test was not completed, there are typically no measurements on which to base reliability, so the observed reliability of effort is reported. The evaluator can alternately indicate that he/she is unable to rate subject,s reliability. In that case, no reliability of effort is reported for this test (similar to skipping the test in the evaluation). The OE reliability measure is used for strength tests and MTM tests. It is not reported for range of motion tests.

RM: Spinal Range of Motion:
Reliability for spinal range of motion testing is described by the <u>AMA Guidelines to the Evaluation of Permanent Impairment</u> as 3 consecutive trials within 5 degrees or 10% of one another performed within 6 trials. If the client is not able achieve 3 consecutive trials within 6 trials, the test is not valid.

SLR: Straight Leg Raise:
With lumbar range of motion there is one additional test that may be used to determine validity. The tightest straight leg raise is expected to be less than the sum of sacral flexion and extension plus 10%, (15% for 5th edition). If the straight leg raise exceeds this number lumbar range of motion is considered invalid. It is important to note that this test has a very high evaluator error rate and should be looked at closely prior to determining if lumbar range of motion is invalid.

The evaluator can override the reliability results that appear in the table. In certain situations, you may want to change a No (unreliable) to a Marginal (marginally reliable), or a Yes (reliable), or vice-versa. To change the result for a reliability measure, right-click the reliability value and select a new value from the menu that is shown. If you change a value, the new value will be shown in square brackets e.g. [Marginal] indicates that this value was changed by the evaluator. You can reset the original value, if desired, by right-clicking the value and selecting Reset from the menu.

Completing the Reliability of Effort Tab:

To complete the Reliability of Effort tab you must do the following:

1. Choose, by selecting the appropriate radio button, Reliable Effort, Self-Limited Effort or Unreliable Effort. This choice must be made by the evaluator, the software does not do this automatically. Setting this value is typically done by examining the Reliability Score shown above the radio buttons. Scores greater than 80% are typically Reliable. Scores between 60% and 80% are typically Self-Limited and scores below 60% are typically Unreliable. Remember that these percentages are guidelines, not hard and-fast rules, and that your clinical observation of the patient during testing is an important factor to consider as well. Patient scoring of 85% might be classified as Self-Limited, while patient scoring of 75% might be classified as Reliable.

2. Click the "Reliability Narrative" button at the bottom of the screen to generate the narrative text for the summary section of your report (only click this button after you have selected the reliability classification). You may add to or edit the narrative text if you wish to add additional supporting information or clinical observations.

Factors to consider in determining overall reliability:

Please remember that the referral source does not have your advantage of observing the evaluation, or even familiarity with the tests performed. You should present a clear case for your decision based on a "preponderance of evidence" of all the measures used in the evaluation. We suggest that you review the data by section or type of test as follows.

Whole Body Static Strength Tests:

You will have CV measures, and likely IHSC and HR measures as well. You may also have OE measures when the subject declines or stops a test. One or two high CVs, or a single HR or IHSC measure does not indicate an overall pattern of inconsistency. On the other hand, several CVs (or OEs), or two or more HR and IHSC measures suggests a pattern of inconsistent or submaximal effort. Look for patterns that may relate to the client's diagnosis. If the client has a lower back problem and they are consistently self-limited with the Floor and Torso lift, but gave maximal effort with all other tests, you can say that the client was self-limited with activities below waist height but overall demonstrated maximal effort.

Grip and Pinch Strength Tests:

Review the data. Are the inconsistencies on just one side? Is there a fatigue pattern with repeated trials? Are inconsistencies expected based on the diagnosis? Look closely at the MVE curves, do they approximate the expected bell shape? You may have consistent data (no CV measures which are above the cut point) but the MVE curves are flat or random and do not approximate the expected bell shape and the rapid exchange grips are positive. This would suggest submaximal effort. The data may appear inconsistent based on CV measures, but there is a consistent pattern of fatigue. This suggests that overall demonstrated efforts are maximal. You may also have OE measures when the subject declines or stops a test, look for patterns of repeated lack of effort.

Range of Motion:

Describe any inconsistencies with range of motion that are noted. If specific areas are inconsistent, do these match up with diagnosis deficit areas? If so, was the observed motion during the testing consistent with motion observed during other parts of testing? All of this is important to gain insight into whether the client's presentation was consistent. If lumbar range of motion was invalid because of a SLR, was this because of operator error (moving the leg too far) or because of inconsistencies on the part of the client? If it is because of operator error, you can change that measure to be reliable.

Methods Time Measurement:

When reviewing the MTM data check to see if there is a pattern of successive trial improvement, learning curve or successive trial degradation or a fatigue pattern. Also, look to see if testing was performed correctly. If there is a trial that should have been taken out because client or evaluator determined there was a need to stop testing. Fatigue patterns and learning curves generally do not indicate self-limited effort. Make sure however that these patterns are consistent with your clinical observations. You may also have OE measures when the subject declines or stops a test, look for patterns of repeated lack of effort.

Summary:

Once you have summarized the inconsistencies, you should determine whether overall demonstrated efforts were maximal or sub maximal. The explanations mean little to the reader unless there is some sort of summary interpretation. Also, describe if fatigue or pain were limiting factors in the evaluation. If so, comment on whether objective signs were associated with these self-reports. Finally, if there were any additional inconsistencies associated with testing, please comment on these as well.

Strength Summary

A typical Strength Summary is shown below.

Evaluation Summary

| Purpose | Reliability | Strength | ROM, Aerobic | Movement & Posture | Abilities, Limitations, Conclusions |

Whole Body Strength Test Results

Strength Test Name	Strength	PDC	HR
Floor Lift	56.0 lb	M	?
Torso Lift	66.0 lb	M	?
Arm Lift	44.0 lb	M	?
High Near Lift	57.0 lb	M	?
Carrying 10 Lb (MTM Const.)	104.8 %IS	M	?
Carrying 20 Lb (MTM Freq.)	95.7 %IS	M	?
Carrying 50 Lb (MTM Const.)	104.2 %IS	VH	?
Push Cart 40 Lb (MTM Freq.)	73.4 %IS	M	?
Pull Cart 40 Lb (MTM Freq.)	74.9 %IS	M	?
Push Cart 100 Lb (MTM Freq.)	n/a	H	?

Strength Ability Levels

Set Demonstrated Ability (PDC) Level for Each Lifting Range, Carry, Push, Pull and Overall Strength Using Results Shown at Left

Activity Range	Demonstrated Ability Level	Job Demand Level
High	Medium	Sedentary
Mid	Medium	Medium
Low	Medium	Medium
Full	Medium	Medium
Carry	Heavy	Light
Push	Medium	Light
Pull	Medium	Medium

Overall Strength Rating (PDC)

Overall	Medium	Medium

On the left side of the screen are listed all the static and dynamic whole body strength tests that were performed. These tests show results in pounds of strength, and a PDC (Physical Demand Characteristic) ability category. There are also results from MTM Carrying and Push/Pull Cart tests. These tests show results as %IS (percentage of industrial standard) and a PDC category. Peak HR for that test is also shown if HR was measured during the test. The standard PDC categories, as defined by the Dictionary of Occupational Titles, are S(sedentary), L (light), M (medium), H (heavy), and VH (very heavy). You will use these strength test results to set the items in the Demonstrated Ability Level column on the right side of the screen. You do not need to set items in the Job Demand Level column, as these are automatically set from the subject's

occupation record, however you may override a Job Demand value if that is appropriate.

Note that the table on the right side of the screen describes lifting ability by level as follows: Low (Knuckle level and below), Mid (Knuckle to shoulder level), High (Shoulder level and above) and Full (the full vertical work plane). Carry, Push and Pull abilities are listed separately from lifting ability. The Overall category includes all the individual categories listed above, and is typically a value determined by the lowest essential ability level. By reviewing the individual test results, you can determine an appropriate ability level for each category. For example, to set the Low category you might consider the result of the Floor to knuckle lift, the FLOOR lift and the TORSO lift. Most clinicians place more weight on dynamic (LC) lifting results rather than static (ST) lifting results if there is a discrepancy between tests for the same lifting level.

To set an ability level, right-click the ability item and select the desired value from the menu. Menu items are:

Sedentary – Light – Medium - Heavy - Very Heavy - Not Able

Skipped

 Declined

The first five items are the standard PDC categories. The sixth, Not Able should be selected if the patient was physically unable (not unwilling) to perform that activity, and the last two items are used to indicate activities that were either skipped by the evaluator (perhaps not appropriate), or declined by the patient.

ROM, Aerobic Summary

If you performed any Range of Motion tests (Extremity EG type tests or Spine RM type tests), or any Aerobic Capacity tests in this evaluation, the results are summarized on the ROM, Aerobic Summary tab as shown below:

Evaluation Summary

| Purpose | Reliability | Strength | ROM, Aerobic | Movement & Posture | Abilities, Limitations, Conclusions |

Range of Motion Testing Results

ROM Test Name	ROM	Norm	% Imp.	Deficit
Cervical Flexion	18	50	4	Yes
Cervical Lateral	23	45	1	Yes
Cervical Rotation	20	80	4	Yes
Cervical Rotation	39	80	2	Yes
Lumbar Flexion	40	60	5	Yes
Lumbar Extension	20	25	2	Yes
Lumbar Lateral	25	25	0	No

Aerobic Testing Results

Aerobic Capacity

Predicted VO2 Max 41.4

(units = ml/kg/min)

Determined Using:

YMCA Step Test

Other:

Sustainable Work Capacity

Medium

Note: More than one Aerobic Test was performed in this evaluation. Results for the last test performed are shown.

Range of Motion Testing Results:

The table on the left reports the results of all range of motion (RM and EG) tests. The ROM value is the measured range of motion. The Norm value is the AMA Guides suggested normal range of motion value for that joint or region. Note that ROM values that

differ from Norm values do not necessarily indicate "abnormal" range of motion. The % Imp. (percent impairment) value is the regional (joint) impairment value from the corresponding table in the AMA "Guides" (based on the Edition of the Guides selected for that test). Finally, the Deficit value is Yes if % Imp. is greater than zero, and No if % Imp. is zero. Note that a non-zero regional or joint impairment value does not indicate the presence of an actual whole body impairment. Such a determination must be made by a qualified evaluator per the instructions in the AMA "Guides".

It is suggested that you review the Range of Motion results, and that you modify any reported Deficits if the ROM value does not actually represent a functional deficit for the patient. This would be the case if there are only a few degrees' difference between the ROM value and the normal value, or if a reduced ROM value represents a "normal" reduction in range of movement typical for individuals of that age.

To modify a deficit value, right-click the value and select either No (no deficit) or Marginal (marginal deficit). Modified values will be shown in square brackets (e.g. [Marginal]). To reset a deficit to the original value, right-click the deficit and select Reset from the menu.

Aerobic Testing Results:

The right side of the screen reports the results of the patient's aerobic tests (e.g. Treadmill Test, YMCA Step Test or CAFT Step Test). If no aerobic tests were performed, this section will be empty. Normally you do not need to make any changes to the data reported in this section.

Predicted VO2 Max reports the patient's maximal oxygen update ability based on his or her score in the aerobic test listed in the "Determined By" item.

Sustainable Work Capacity reports the PDC category of work (see Strength Tab section for description of PDC categories) that the patient can maintain over an 8-hour work day. This value is also determined by the patient's score in the aerobic test. You can override the sustainable work capacity level by right-clicking the value and selecting another value from the menu. Modified values will be shown in square brackets (e.g. [Sedentary]). To reset the work capacity to the original value, right-click the item and select Reset from the menu.

Movement and Posture Summary

The Movement and Posture summary tab reports the results of the MTM (Methods Time Measurement) functional tests performed, as well as cumulative Sitting and Standing time for this Evaluation. MTM tests all involve movement in some predetermined work task, and several of the tests also involve the ability to work in certain body postures (e.g. stooping, crouching, kneeling, etc.). Most MTM tests (except the Carry test with higher weights) focus on a specific functional ability that is not directly related to or limited by body strength. Most healthy individuals, including those with below-average strength, are able to perform these tests without difficulty. Thus, the primary purpose of MTM testing is to assess abilities relating to movement and posture, rather than whole body strength.

The Movement and Posture summary tab is shown below:

Evaluation Summary

| Purpose | Reliability | Strength | ROM, Aerobic | Movement & Posture | Abilities, Limitations, Conclusions |

Movement and Posture Task Abilities (from MTM testing)

Task Name	% IS	Ability - 8 Hour Day	Job Demand
Walking	128 %	Constant	Constant
Balance	57.4 %	Occasional	Never
Bending	125.3 %	Constant	Frequent
Crouching	69.5 %	Occasional	Frequent
Kneeling	102.2 %	Constant	Frequent
Reach Immediate (Front) Right	111.5 %	Constant	Frequent
Reach Immediate (Front) Left	90.2 %	Frequent	Frequent
Reach Overhead (Front) Right	109.5 %	Constant	Occasional
Reach Overhead (Front) Left	88.9 %	Frequent	Occasional
Handling Right	91.1 %	Frequent	Frequent
Handling Left	74.5 %	Frequent	Frequent
Fingering Right	93.6 %	Frequent	Occasional
Fingering Left	69.2 %	Occasional	Occasional
Climbing Stairs	78.7 %	Frequent	Occasional

SITTING
Total Sitting Time:
1 Hr. 30 Min.

Ability Level
Constant

Job Demand
Occasional

STANDING
Quiet Stand Time:
2 Hr. 0 Min.
Active Stand Time:
1 Hr. 0 Min.

Ability Level
Frequent

Job Demand
Frequent

Modify Sit/Stand
Times

The large table in the left portion of the screen shows the results for all MTM type tests in this Evaluation. The columns of the table are as follows:

Task Name: The name of the MTM test.

%IS: The MTM test score, expressed as a percent of the Industrial Standard score for that test

Ability - 8 Hour Day: The subject's demonstrated ability level as projected for an 8-hour work day, based on the %IS score.

Job Demand: If specified, the demand level for the subject's job or occupation. This may be blank for an "Any Occupation" type evaluation

Normally this table is complete as shown, and requires no action on your part. However, you may override any of the Ability (or Job Demand) ratings by right-clicking on that item and selecting a different value from the menu that is shown. When you override a value, that value is shown in square brackets in the table (e.g. [Frequent]). If you override a value, you may revert to the original value by right-clicking and selecting Reset from the menu.

Sitting and Standing Tolerance:

These are shown in the right portion of the screen. The program tracks the amount of time the subject spends in Sitting, Quiet Standing and Active Standing. Because sustained sitting and sustained standing cannot be assessed with MTMs (MTM tests can only measure predetermined movement tasks) you must rate the subject's ability for Sitting and Standing based on your clinical observations in conjunction with the time spent in those postures. Generally, it is recommended that you look at four criteria: Quantity, Quality, Speed and Symptoms.

How long can they sustain sitting or standing at
one time?

Must the client frequently weight shift or do
they sit or stand asymmetrically?

How is the transition from one posture to the
next?

Does this posture result in diagnosis specific
symptom increase?

Using these factors determine the client's sustained sitting and standing
tolerance, in the "Ability Level" items. Right-click the item and select
the appropriate ability level from the menu that is displayed. Choices
are Constant, Frequent, Occasional, Not Able, skipped and declined.
The latter two would only be used if you intentionally skipped observing
either of those postures, or if the subject declined to exhibit either of
those postures.

Abilities, Limitations and Conclusions

This part of the Evaluation Summary is divided into three sections: Functional Abilities, Functional Limitations and Conclusions. When this tab is first selected, each section will be blank (no information displayed). You are required to fill in each section using the instructions, below, as a guideline. The sample screen that follows has been partially completed.

Functional Abilities:

    The key finding in a functional evaluation is the objective determination of the patient's functional abilities. It is typically more important (or more useful) to understand what the client can do, than what he or she cannot do. Initially this section is blank, however the program can automatically fill in the patient's

measured abilities. To do this, right-click the white text area, and select "Generate Default Text for Functional Abilities".

If the patient has an Occupation record (with job demands specified), then Functional Abilities are described as those activities that meet the essential demands of his or her job. This is an "Own Occupation" type functional evaluation. If the patient does not have an Occupation record, then Functional Abilities are described as the ability level (e.g. Sedentary, or Occasional) for each activity. This is an "Any Occupation" type functional evaluation. Range of motion deficits are also listed in this section for either type of functional evaluation.

You may wish to clarify or add comments to the default functional abilities narrative. For example the client demonstrates the ability to walk occasionally. However the client walked using the assistance of a straight cane only on level surfaces. This would be important information to add. You may also want to document observations relating to sustained sitting and standing tolerance times. Finally, if a client demonstrates minimal functional abilities during the FCE you may want to detail observed functional abilities during the client's visit such as:

      a. The ability to drive to the evaluation independently
      b. The ability to push and pull open doors
      c. The ability to carry a purse
      d. The ability to complete paper work independently
      e. The ability to walk, stand and sit when not testing.
      f. The ability to reach, grasp objects
      g. Observed range of motion from voluntary movements.

This section can also be used to detail the results of any special job specific simulations that you may have performed. If the client was observed keying on a keyboard for 30 minutes the details of this observation should also be included in this summary.

Functional Limitations:

As with Functional Abilities, this item is initially blank. To automatically fill in the patient's functional limitations, right-click the white text area and select "Generate Default Text for Functional Limitations".

If the patient has an Occupation record (with job demands specified), then Functional Limitations are described as those activities that do not meet the essential demands of his or her job. This is an "Own Occupation" type functional evaluation. If the patient does not have an Occupation record, then Functional Limitations are described as those tasks or activities that were not or could not be performed. This is an "Any Occupation" type functional evaluation. As with functional abilities, you may wish to add comment or observations to clarify or explain the presence or extent of functional limitations. For an "Any Occupation" type evaluation, this might include observations as to why the patient did not or could not perform certain activities above the indicated level. This section may also be used to describe modifications that might assist the client in overcoming limitations to successfully perform work tasks, but only if such recommendations were requested by the referral source. Unsolicited job modifications can unnecessarily complicate a case for the referral source. Some of the more common examples include:

a. Alternating sitting and standing postures
b. Self-paced work
c. Ergonomically designed work station
d. Restricting lifting to mid-range or above waist level
e. Working within near reach (16inches)
f. Need for additional rest breaks

In addition, it is important to identify if cardiovascular conditioning is a limiting factor for return to work.

Conclusions:

Unfortunately, there is automatic method to fill in this section. The evaluator is always required to enter the overall conclusions for the evaluation. Conclusions should, at a minimum, answer the initial referral question(s). Does the client meet (or not meet) the essential physical demands of a specific job or occupation and/or at what physical demand level is he/she currently functioning? This section may also be used to elaborate on return to work accommodations that may be appropriate for successful return to work, but only if such recommendations were requested by the referral source. Be careful not to include unsolicited recommendations in a functional evaluation. These can unnecessarily complicate a case for the referral source. Recommendations, if provided, are based on an 8-hour workday unless specific reference is made to a shorter or longer workday.

Once this is completed make sure you press the Next Item button on the bottom right side of the screen. This will save all your changes. When the Evaluation Summary is complete, you are ready to print your report.

Report Interpretation and Writing your Report

The report is the single most important component of your Functional Evaluation. This is your work product - what your referral source (customer) is paying for. It is important that it consistently meets three criteria so that your customers will continue to rely on you for their functional testing needs. These three criteria include:

a. Legally defensible: Your documentation is clear, and your results and conclusions are supported by objective data. Should this document ever be questioned in court, be sure that it contains enough information to recall pertinent details to your memory. Add comments and explanations as needed.

b. Answers referral questions: The specific questions identified at the time of referral as to why the FCE was performed are answered completely and in layman's terms.

c. Well written: The document is written in clear, easy to understand terms. The spelling and grammar have been checked. The ideas follow a logical pattern and assist the reader in coming to the same conclusion you did regarding the data.

Remember your writing is the only evidence of your clinical expertise. Even an inexperienced evaluator can be assumed as both competent and professional based on the evidence of his/her writing. A poorly written document with needless spelling and grammar mistakes often makes even a highly qualified and experienced clinician appear both unprofessional and incompetent. Keep this in mind as you complete your reports.

Generate a Report for an Evaluation

To generate a report for an evaluation, click on the Evaluation Review & Report button on the Information Bar. Select the Evaluation to be used for the report by clicking on that item in the table (normally there is just one Evaluation). Then click the "Generate Report for This Evaluation" button.

There are two report options shown on the screen as check boxes. Check the box to select that option prior to generating the report.

Omit test graphs from report will produce a report without the graph results for individual tests (ST, HD, PG, CX, WF, EG and RM). This options is selected to produce a shorter report when graph information is not important in the presentation of results. Normally graphs are included in reports
.

Evaluation contains test results entered AFTER original evaluation date... this option is only present when the selected evaluation has test information that was collected or manually entered after the original date of evaluation. This can occur if you perform a multi-day evaluation or, more likely, if you have subsequently entered evaluation information you manually recorded on the day of the evaluation. In the latter case, check this box to show the evaluation date for each test in the report, rather than the date the test information was entered.

Note that you cannot combine evaluations into a single report. You can only select a single evaluation at a time to report. After you click the "Generate Report..." button, the program starts the report process. While the report is being generated you will see the status window as shown below, and the program will be inactive until the report completes.

At the same time, you will also see a Microsoft Word window open in the upper left corner of your screen. This reduced-size window is used to show the progress of the report as it is created. Unlike the previous (older) version of the Arcon FCE software, the Word window does not show the "animated" process of generating the report. This results in faster report generation. When the report is complete, the Microsoft Word window is enlarged to full screen.