

# TRACKER 5 RELEASE NOTES

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## 5.0.55 (August 18, 2017)

- [TRACK-10] Revulytics Usage Intelligence has been incorporated. Usage statistics are now gathered, and notifications can be sent to users through this tool. Either of these features can be enabled or disabled from the *Web Connectivity Settings* item in the *System* menu.
- [TRACK-14] Range of motion tests have improved how they treat large angle values. Along with a popup warning and other visual indicators, values greater than 360° can no longer be saved within the test.
- [TRACK-15] The DOT Medical Exam test form has been updated with background details and a link directing users to the current DOT website.
- [TRACK-16] Some settings have been updated to be machine specific instead of user specific. Now settings such as device IDs, support keys and more will remain the same across all users on the same computer.
- [TRACK-17] The max allowed force for manual muscle testers (MMTs) has been increased to 200 lb (90.7 kg, 890 N). This is in preparation for newer revisions of our Echo MMTs which can safely and accurately handle forces up to 200 lb.
- [TRACK-19] Obsolete web links have been updated throughout the software.

## 5.0.54 (May 4, 2017)

- [TRACK-3] Fixed error with narrative reports printing incorrect clinic information in the header and footer after updating the clinic information.
- [TRACK-4] Added extra labeling for clinic phone and fax numbers in the narrative reports. Now both are displayed with *Phone:* or *Fax:* before their respective numbers.
- [TRACK-8] A link to our Remote Support Tools website has been added to the Help dropdown menu.
- [TRACK-12] Fixed a typo with a Fischer reference in the Algometry narrative reports. The reference used the incorrect year of the Fischer study and has been updated to reference the correct year.
- [TRACK-13] Fixed a bug where the Employer Services Packet was not opening correctly from the Forms section in the Reports.

## 5.0.53 (December 22, 2016)

- [TRACK-1] Fixed error with graph auto-scaling within narrative reports which could cause graphs to scale incorrectly.
- Integrated latest version of IRIS (v2.0.0), our instrument communication software.

### 5.0.52 (July 15, 2016)

- A new manual for the Echo USB receiver and wireless devices is now being distributed with the software.
- An error is now displayed when attempting to perform an auto-backup or set the auto-backup folder to an inaccessible location.
- The “No MCI device open” error should no longer appear while viewing help videos.

### 5.0.51 (January 28, 2016)

- Static Force Gauge or Muscle Tester calibration is now available when the IsoTrack or Algometry module is enabled, respectively
- Resolved a few issues with the Rating of Perceived Exertion (RPE) for the Activity Stair Climbing Test

### 5.0.50 (August 28, 2015)

- Official support for Windows 10
- Updated web links for help and support throughout the software and installation
- Fixed an issue that was showing an incorrect error when first connecting to a Legacy device

### 5.0.49 (June 10, 2015)

#### *New Features*

- Custom Questionnaires are now included in the “Database Transfer” feature
- Added Primary Muscle and Nerve Root information to the Muscle and IsoTrack narrative report graded tables

#### *Updates*

- Incliniometry and Goniometry extremity narrative report data tables now combine the results of left and right sides; active/passive results are still in separate tables
- Removed extraneous settings from 4<sup>th</sup> Edition Grip/Pinch Strength Impairments
- Attempting to start a test with a device that is not registered should now properly alert the user (1 time per device)
- Fixed an issue within the FCE Posture Test form improperly setting a distraction subtest duration to 1 second in rare circumstances
- The Impairment narrative report will now show references for impairment ratings of 0%
- To help prevent misplaced data, users will now be prompted when attempting to create more than 1 Incident per Patient
- Updated the Algometry Test Selection mannequin
- The supplemental instructions for some IsoTrack tests have been updated to match their video better
- The PDL Chart in the Narrative and Worksheet reports has been updated

### 5.0.48 (February 11, 2015)

- Updated Impairments to allow for a greater range on the Range of Motion forms
- Updated the audio for the MMT Knee Internal and External Rotation help videos

### 5.0.47 (December 3, 2014)

- Updated the Sample Data database (Trial Data database for the Trial version) to have JTECH's new information for the clinic
- Updated the *Suggestions/Feedback* URL under the *Help* menu
- References for Videos is now scrollable so that all the text is easily accessible
- Fixed an issue that locked out the software when closing the *License* form via the 'X' button

### 5.0.46 (August 29, 2014)

#### *New Features*

- AMA 4<sup>th</sup> Edition Impairments

#### *Updates*

- Updated the Static Strength test forms so that data can manually be added as Newtons

### 5.0.45 (May 14, 2014)

#### *New Features*

- Added IsoTrack tests to the Reliability of Effort section of Analyze Data

#### *Updates*

- Updated the installer program to install the "Sample Database" to a public location as default
- Updated some Goniometry ROM tests to correctly record Lag
- Updated the Zero Calibration form to show the correct "Normal Values" gain range for the Goniometer
- Updated the Narrative Creation area to correctly update when adding new Custom Narrative Items
- Updated the looks of the installed weblinks
- Updated the Dexterity Narrative report to match the data shown in the test selection form and correctly print when it's part of a larger report

### 5.0.44 (February 5, 2014)

#### *New Features*

- Added Pinch tests to the Reliability of Effort section of Analyze Data

#### *Updates*

- Updated ROM extremity tests to properly show lag for a specific side when loading a test (rep values remain unaffected)

- Updated various worksheet reports to use colors to represent reps in graphs that match the colors in the test forms
- Updated the norm percentile scores in the Minnesota Dexterity Displacing test
- Updated the Coefficient of Variation (CV) text in the narratives to be more consistent throughout
- Updated help screens for Static Strength tests to show the correct Dynamic Predictor
- Updated help screens for Material Handling lift tests to correct a text error and display updated software forms
- Updated the licensing software engine to more efficiently handle the software being closed unexpectedly
- Updated CV calculations to round instead of truncate
- Updated Muscle Testing multimedia references to correct a spelling error

#### **5.0.43 (October 1, 2013)**

- Updated the Sustained Grip test to allow test times of 60 and 300 seconds
- Updated the software to connect to multiple devices from different families more effectively
- Updated the Narrative Report to contain labels for header/footer items such as report date/time, patient age, patient DOB, exam date and complaint onset
- Updated the Narrative Report for Dexterity, Work Activities, Cardiovascular and Postures to include more data in the data tables
- Updated Range of Motion tests to correctly allow for saving if only a motion lag was set
- Updated Custom FCE Material Handling test instructions to be more consistent with instructions for other Material Handling tests
- Updated help screens for Image Attachment in FCEs
- Updated the software to handle network licenses
- Updated the software and hardware manuals

#### **5.0.42 (June 5, 2013)**

- Updated the text displayed when user receives “LegacyEngine serial port inactive” error to be more informative in helping to resolve the error
- Updated various messages about Tracker Echo to display the correct receiver information
- Added Clinic Fax and the first Care Provider for an incident as selectable header/footer items in Narrative reports
- Updated PDL table in Narrative reports to be more consistent with published information
- Updated percentile norms for Purdue Pegboard tests
- Added an introductory video to the software that gives the basics of software usage

#### 5.0.41 (December 12, 2012)

- Created a demo version of Tracker 5 that has its own settings, databases, installation directory, etc.
- Updated the Minnesota Dexterity test to fix an issue with the timer not functioning
- Updated Hand Sensory forms to include reference materials, additional labeling for the hands and color legend updates
- Updated Narrative report to account for changes in Hand Sensory color legends
- Updated the 5-Position Grip Worksheet to add “Left” and “Right” labels
- Updated the Pain Progress graphs in the narrative report to fix spacing issues
- Updated Iris to resolve unintended error notification in calibration forms
- Updated the normal gain for Pinch to be between 27.6 and 40.0 in calibration screens
- Updated the Narrative report for Vital Signs to say “Pulse” instead of “Heart Rate”
- Updated the Minnesota Dexterity Worksheet to display trial calculations in minutes and seconds instead of total seconds
- Updated the Incident and Exam custom name fields to allow 40 characters
- Updated the default narrative location to be blank for new installations

#### 5.0.40 (August 21, 2012)

- Updated the Current Report Template for Worksheet and Narrative Reports to maintain the template elements until the software is closed or a different database is selected
- Updated video help files for knee flexion muscle tests
- Updated SOAP notes results to recall the most recent results for an incident
- Added muscle testing references for strength ratios
- Updated Minnesota Dexterity test to properly assign the trial number when switching between tests
- Updated the ability to load calibration information from the registry
- Updated the DOT Medical Examination Report to reflect changes from the official DOT Medical Examination Report
- Updated the Impairment Module to correctly import values for the Sacral ROM testing so straight leg raise calculations are correct
- Updated Tracker Freedom Manual
- Updated web shortcuts to link to new customer support portals site

#### 5.0.39 (April 3, 2012)

- Added additional Muscle Strength Ratio tables and progress for all Muscle Strength Ratios
- Updated narrative progress reports for Five Position Grip to show correct units
- Updated the software to display instructions for registering a device, when a user attempts to connect to a device that has not been registered

- Updated narrative reports for Isometric Muscle testing to not show empty data rows for tests that have been graded but not force data exists
- Updated the warning message for the goniometer reaching its device limit
- Updated the Rapid Exchange Grip test to announce the rung setting when the test is started
- Updated the software maintenance tracking status text when notification has been disabled
- Updated the Inclinometry Lumbar Flexion/Extension test screen to not show sacral data in the progress graph
- Updated the Goniometry Thumb MP Flexion/Extension and Thumb IP Flexion/Extension tests to automatically determine lag like other digit tests
- Updated the software settings file. Information in this file is automatically copied from the previous location
- Updated the Create New Exam portion of Patient Files to automatically populate the exam date with the current date
- Updated the Narrative Reports' Medical Necessity category to be higher in the list of categories
- Updated the Goniometry PIP Flexion/Extension and DIP Flexion/Extension multimedia help to play the correct video

### 5.0.38 (December 16, 2011)

#### *New Features*

- Added a link in the Help menu for users to be able to provide feedback and suggestions to JTECH to enhance user's experience

#### *Updates*

- Updated the muscle testing screens to allow up to 150 pounds of force to be applied to the muscle tester before the software stops the test to avoid instrument damage
- Updated default settings for the foot switches and hand switch to be disabled
- Updated the default colors for rep graphs in narrative reports to match the test forms. Existing users can reset the colors by clicking on Narrative Report Preferences in the narrative report screen and then clicking Reset to Default
- Updated narrative reports for Rapid Exchange Grip and 5-Position Grip to have more readable graphs by increasing the weight of the lines
- Updated wording for 5-Position Grip tests in narrative to be more consistent
- Updated Grip tests to round data values displayed in Newtons to the nearest whole number
- Updated the Head & Neck questionnaire to display the proper title in progress reports
- Updated the Intake tables to streamline data communication
- Updated the Wake-up Device form to more efficiently handle enabling/disabling of devices
- Updated the main menu to properly Show/Hide menu items
- Updated the 5-Position Grip statistics to display based on the primary stat

### 5.0.37 (October 7, 2011)

- Updated the temperature portion of the Hand Evaluation's Skin section to better account for changing the temperature units
- Updated narrative progress reports for Goniometry Hand Composite data to properly show the exam date
- Updated software to not show percent of norm for Thumb Radial Abduction/Adduction tests
- Updated TCI to be more robust for Tracker Legacy hardware

### 5.0.36 (September 23, 2011)

#### *New Features*

- Modified the extremity Range of Motion test screens to only show individual inclinometer readings when both inclinometers are used
- Added a prompt notifying the user when newer factory calibration information is stored on their device vs what is recorded in the software

#### *Updates*

- Updated narrative reports progress graphs to better display progress information
- Updated narrative reports for Grip to better report measurement units used during testing and more precise measurement data
- Updated narrative reports for Multi-max Grip to not display a comparison table when data does not exist
- Updated narrative reports for Rapid Exchange Grip to show measurement units used during testing
- Updated narrative progress reports for 5-Position Grip to better handle percentage change values that are negative
- Updated narrative reports for Hand to properly label entries
- Updated the Algometry testing screen to show appropriate battery levels for the Hand Switch device

### 5.0.35 (August 3, 2011)

#### *New Features*

- Added a new COM port selection form for Tracker Legacy (Wired) Interface with larger port range
- Added extrapolation table for Material Handling to FCE Narrative Reports
- Added static comparison table for Material Handling to FCE Narrative Reports
- Added support for the new hand switch device for algometry tests

#### *Updates*

- Updated manuals with better Instructions for Use, Technical Specifications and enhanced regulatory information



- Updated narrative report progress graphs to properly display when multiple tests are completed on the same day
- Corrected an issue with Tracker Legacy (Wired) Inclinometers occasionally returning zero values
- Updated Tracker Communications Interface (TCI) to address Windows compatibility issues
- Updated the software to better handle Tracker Freedom (Wireless) device wakeup protocols when moving from one test to another in a test sequence
- Corrected the main menu disappearing after the Quick Screen module is closed
- Updated the Isometric Hip Internal/External Rotation help videos to be more clear
- Updated the Recommendations Worksheet report to accommodate longer selection items
- Updated Algometry progress graphs in narrative to remove a deprecated graph
- Updated the Goniometer Hand ROM Summary in Analyze Data to properly show values
- Updated the main menu to show properly on Windows 2000 systems
- Updated Recommendations in Analyze Data to limit the number of characters for input to 50
- Updated Sensory [Lower Extremity] test to allow proper region selection

#### *Hardware*

- Released new hand switch for algometry

### **5.0.34 (June 15, 2011)**

- Updated manuals for increased regulatory compliance

### **5.0.33 (March 7, 2011)**

#### *New Features*

- Added the ability to open the folder that was last used to save a narrative report
- Added comparative data for the Rapid Exchange Grip test to the narrative reports

#### *Updates*

- Updated the software to eliminate a screen flicker when the software is maximized
- Updated the logout function of security enabled databases to function more smoothly
- Updated the software to properly handle the running of tests when no audio device is installed
- Updated the analyze data screen for grip and pinch to properly display the correct units
- Updated ROM testing screens to properly determine AMA validity when motion default of AABB or BBAA is selected
- Updated the Patient Quick Selection form to properly sort custom exam lists
- Updated the printing of Worksheet reports to properly pass printer options to the printer



- Updated the Quick Screen section for Lumbar Flexion/Extension to record the sacral hip values
- Updated the ordering of narrative templates when transferring from one database to another
- Updated the printing of the Calibration Worksheet report to function properly when improper or corrupted factory calibration data exists
- Updated the auto-backup feature of Tracker to not freeze the software when Tracker is closed
- Updated the License/Registration form to properly determine the login status of a user
- Removed hotkey functionality from the attachments button on the main Tracker form
- Updated the Sitekey Request email subject to better reflect the contents of the email
- Updated the printing of reports to display a warning when a printer is not installed or is not accessible

### 5.0.32 (October 21, 2010)

#### *New Features*

- Added the ability to import and print images.
- Added the ability to have imported images be tied to specific areas of the evaluation such as FCE or Hand
- Added the ability to print a wallet-sized medical examiner's certificate from the employer services module
- Added Start Menu and Desktop shortcuts to the JTECH Website as well as the Customer Support portal

#### *Updates*

- Updated the FCE Reliability of Effort section in Analyze data with more information
- Updated the DOT Physical form to allow multiple driver's license classes to be selected
- Updated the DOT Physical report so that check marks are more visible when printed
- Updated the transferring of calibration data from one database to another to allow the calibration data on the source database to take precedence over the calibration data in the target database
- Updated the narrative report so that all custom orthopedic tests with data will print correctly
- Updated the Rapid Exchange Grip test screen to allow the run position to be changed without requiring the repetitions to be redone
- Updated the printing of Max Grip tests to properly print progress if data exists for more than one exam
- Updated various screens in the software to reference the new Customer Support portal at [portals.jtechmedical.com](http://portals.jtechmedical.com)
- Updated the importing of calibration data to properly import dates

- Updated the Job Requirement Summary in Analyze Data to only show values assigned in the test form
- Updated various help forms to account for software screen changes

### 5.0.31 (May 10, 2010)

#### *New Features*

- Added progress graphs to reports and analyze data section for Questionnaires
- Added progress graphs to reports and analyze data section for Pain Scale
- Added the ability to transfer calibration data, clinic information, contacts, custom tests, test protocols, custom narrative items and report templates between databases
- Added a section to the main Tracker screen that displays information about the status of software maintenance

#### *Updates*

- Updated the printing of custom tests to display the custom test description before the data
- Updated the import button in some spine impairment forms to have a flyover hint
- Updated the main menu so that the help item is visible always
- Updated the text in the General Medical Examination form to not be specific to drivers
- Updated the creation of new databases to ask the user if they want to transfer items from other databases
- Updated Composite Report templates to be displayed as Worksheet Templates
- Updated Lumbar Flexion/Extension inclinometry tests to allow tests to be reviewed after the data is collected and the screen closed
- Updated the Occasional Material Handling tests in FCE to import and display the NIOSH and Expected values for Static Comparison before the Material Handling test is complete

### 5.0.30 (March 18, 2010)

- Updated the Employer Services module to allow the creation of custom material handling tests
- Updated the narrative selection form to properly display FCE items
- Updated the narrative selection form to properly add items to the report queue
- Updated the Analyze Data section of the software to display Employer Services related data
- Updated the custom test manager to be available if Employer Services or Physical is enabled
- Updated worksheet reports to allow for selection of job requirements, material handling and cardiovascular sections of FCE to be selected when the Employer Services module is enabled
- Updated the impairment screens to allow the user to edit the values in the form

## 5.0.29 (February 24, 2010)

### *New Features*

- Added Employer Services module that is available for purchase
- Added lower extremity dermatomes sensory to Physical/Neurological module
- Added the ability to import/export test protocols

### *Updates*

- Updated impairments to allow lower extremity dermatome sensory information to be imported
- Updated the import button in some spine impairment forms to have a flyover hint
- Updated the goniometry testing screens to allow the goniometer to be more fully extended before a warning is displayed
- Updated the goniometer testing screens so the goniometer is not automatically disabled when the limit is reached
- Updated the goniometer's normal range for gain in the calibration screens
- Updated the Tracker Communication Interface (TCI) to automatically check the installed Tracker Freedom driver version and prompt for new driver installation if applicable
- Updated the testing screens to reduce the amount of time it takes for wireless devices to reconnect when going between tests
- Updated the Quick Screen tests to prompt for a database regardless of whether one is currently selected or not
- Updated the impairment summary report to display the interpolation method information without cutting off text
- Updated the metronome function in FCE tests to play an internal Tracker sound rather than relying on system sounds

## 5.0.28 (December 29, 2009)

### *New Features*

- Added the ability to view battery power graphs for each instrument in the Tracker Communication Interface (TCI)

### *Updates*

- Updated the Tracker Freedom Driver License

## 5.0.27 (November 13, 2009)

### *New Features*

- Added the ability to use the Static Force Gauge as the instrument for Isometric tests
- Added the ability to select Date of Onset as an item in the header or footer for reports
- Heart rate monitoring has been made into a module of its own and does not require the FCE module to be enabled for use

### *Updates*

- Updated the algometry test screen force graphs to scale more smoothly during testing. This should make it easier to follow the pacer for accurate results
- Updated the sensory images in the narrative reports to have a “cleaner” look
- Updated the table header names for sensory data to reduce ambiguity
- Updated Material Handling Occasional tests that allow lifting comparisons to pull data from the greater of the Static Strength or Isotrack NIOSH tests
- Updated several help screens to be more consistent with software changes
- Updated the Current Exam Results for Algometry to show data for custom tests that have been marked as inactive if data was previously collected
- Updated the zero calibration screen to include a notification if factory calibration is older than one year or not present
- Updated the behavior for opening PDF manuals, to prevent problems in certain circumstances
- Updated the install message for updates to advise the user that customizations and data will not be affected
- Updated the AMA norm for Hip Flexion to 30°
- Updated the AMA norm for Thoracic Flexion to 45°
- Updated the AMA norm for Thoracic Kyphosis to reflect no normal value
- Updated the norms for the Mid Shin (PTo), Mid Deltoid (PTo) and Upper Trapezius algometry tests to better match the published research
- Updated the factory calibration import to prevent problems for first-time installations
- Updated the zero and full calibration screens to include a notification about zero count and gains being outside of the accepted limits
- Updated the calibration help screens to give more details about the new notifications
- Updated the causation section of Complaints to load and update correctly for Chief and Secondary Complaints

#### ***Hardware Driver Update***

- The Tracker Freedom hardware drivers have been updated to support Windows 7 operating systems. The drivers are included on this CD, and are automatically installed to your hard drive during the software setup process. For driver update or installation help or other questions, please contact JTECH Medical’s Customer Service at 800 985-8324 option 4.

### **5.0.26 (October 1, 2009)**

#### ***New Features***

- Added the ability to print calibration reports for Tracker instruments
- Added the ability to use the new goniometer with built-in enter button
- Added the ability to rate toe ROM impairments in the software
- Added the ability to print progress reports for 5-position grip tests in narrative reports
- Added the ability to create shortcuts and web links to the attachments section of the software

- Added an email link to the Tracker license screen to make it easier to obtain licensing information

### *Updates*

- Updated testing screens to disable devices when the operational limit of the device has been reached. This helps to prevent damage to the device
- Updated inclinometry tests to correctly switch to the opposite side when validity criteria has been met
- Updated the rapid exchange grip test to save data at the proper rung location
- Updated the narrative selections for grip testing to be more consistent with other items
- Updated the Function section of hand evaluations to have a memo box for describing necessary adaptive equipment instead of just checking a box to indicate adaptive equipment is used
- Updated FCE narrative and worksheet reports to identify MVE Grip Test as MVE (Maximum Voluntary Effort)
- Updated orthopedic tests to allow multiple tests to be selected and deleted
- Updated calibration screens to warn the user if the zero calibration value is  $\pm 20\%$  of the factory calibration zero value or if the gain is outside of the recommended values
- Updated postures to allow names up to 50 characters
- Updated the posture form with a new category of "Other" to allow for documentation of complex postures and other postures not accounted for in the standard categories
- Updated the sustained grip test to allow test times of 15, 20 and 30 seconds in addition to the other default settings
- Updated the help screen for frequent lift tests
- Updated custom tests to remove character limitations on the test descriptions
- Updated narrative reports to print all sensory images
- Updated muscle test selection forms to more clearly show which tests are grade only
- Updated the Intake narrative report to put the complaint description first
- Updated custom algometry tests so that they print in narrative reports in the order shown at the custom test creation form
- Updated the FCE extrapolations defaults to remove the Blankenship option, but added two alternate extrapolations
- Updated worksheet reports to correctly print norms for spinal ROM tests
- Updated the fingers complete test form to show the correct video help

## **5.0.25 (June 2, 2009)**

### *New Features*

- Added the Inclinometry Auto-Rep function. Range of motion endpoints are automatically recorded when the inclinometers reach a maximum angle and return the opposite direction. After indicating an initial neutral position, the Enter buttons or Footswitches are not needed to record reps. This feature can be enabled, disabled, and adjusted for sensitivity

### *Updates*

- Updated Grip and Pinch impairment sections to display values in metric units to coincide with the AMA Guides
- Updated Narrative reports to display sensory images
- Updated normal values for zero count and gain when calibrating devices
- Updated Narrative reports to display rep values for Straight Leg Raise test
- Updated Narrative reports to display “bpm” when reporting heart rate values
- Updated the Acute Whiplash reports
- Updated Static Strength and IsoTrack test forms to display consistency of effort for the repetitions
- Updated the ROM tests to properly advance between sides when AMA validity is selected
- Updated Max Grip and Multi-Max Grip tests to properly countdown rest time
- Updated the Rapid Exchange Grip test to warn the user if a Max Grip or 5-Position Grip test has not been completed
- Updated the Rapid Exchange grip test to properly select the appropriate rung for testing
- Updated the Quick Screening form to move between reps properly. ROM tests use ABAB and non-ROM tests use LLRR
- Updated testing screen to display force values properly under certain conditions

## 5.0.24 (April 16, 2009)

### *New Features*

- Added the Dr. Croft Acute Whiplash Guidelines to the software. This feature is available with the Analyze Data module
- Added the ability to document SOAP notes. This feature is available with the Intake module
- Added a new Quick Screening module with reports
- Added the ability to create single motion custom ROM tests
- Added the ability to create custom algometry tests with force application rates between .1 kg/s and 10 kg/s

### *Updates*

- Updated the selection screen for standard and isometric muscle tests to have a more user-friendly image when using the Nerve Root selection method
- Updated the Tracker Communications Interface (TCI) to keep track of multiple devices and their timestamps and to issue a warning when devices have been out of sync for more than a couple of seconds
- Updated the patient/incident/exam quick select screen to have drop down boxes for Incident and Exam
- Updated the 5-position Grip test form to correctly cycle through rung positions
- Updated the Initial Complaints form in Intake to allow manual editing of the complaint's causation

- Updated the Orthopedic Test forms to allow for a greater number of notes to be entered
- Updated digit impairment forms to correctly display previously entered data when returning to the impairment form
- Updated multimedia video help for Cervical Flexion/Extension, Shoulder Flexion/Extension and Shoulder Abduction/Adduction ROM tests
- Updated the ROM progress worksheet reports to correctly display motion names and norms

### 5.0.23 (February 23, 2009)

#### *New Features*

- Added support for 64-bit drivers that have been digitally signed for use on Windows Vista and XP 64 operating systems
- Added the ability to attach external files into the Tracker software. This feature is available with the Intake module
- Added American Association of Orthopedic Surgeons (AAOS) ROM norms as an option for inclinometry and goniometry tests
- Added a reminder to the software to periodically check for software updates
- Added the Berg Balance Score and Tinetti Assessment Tools questionnaires to the new Functional questionnaire category

#### *Updates*

- Updated the force curve graphs that print in narrative reports to be more easily discernible when printed in black and white
- Updated the PDL table reports to include energy (MET level) requirements
- Updated the factory calibration import screen to show the instrument's current battery level
- Updated the narrative and worksheet customization screens to add a Reset to Default button
- Updated FCE screens and reports to properly handle characters other than '.' as the decimal point
- Updated Sensory worksheet reports to properly orient images based on whether the report is for left or right side
- Updated patient, incident and exam screens to consistently ask to save changes when the screens are exited and data has changed
- Updated the Sustained Grip narrative report to display the units used for testing
- Updated the Software Maintenance reminder screen to include a web link to JTECH Medical's website
- Updated the Medical History test forms and reports to not allow blank entries
- Updated the Tracker Communication Interface (TCI) to allow the current serial port to be changed when using Tracker Legacy mode
- Updated the muscle test forms to correctly indicate the completion of non-bilateral tests with visible and audible prompts



- Updated the 5-position grip test form to announce the first rung position that is selected by default when the form is opened
- Updated the extremity ROM test forms so the multimedia help defaults to the video that matches the current mode (dynamic/static) setting
- Update the Beck Depression Scale questionnaire to more closely match the published questionnaire

#### ***Hardware Driver Update***

- The Tracker Freedom hardware drivers have been updated to support 64-bit Windows operating systems and provide more robust USB features. The drivers are included on this CD, and are automatically installed during the software setup process. For installation help or questions, please contact JTECH Medical's Customer Service at 800 985-8324 option 4.

### **5.0.22 (December 19, 2008)**

- Updated the ROM testing screens to not prompt for neutral between motions
- Updated the Goniometer Fingers Complete testing screen to properly handle the entry of -180° for extension values
- Updated the Tracker Install program to more efficiently install necessary 3rd party files
- Removed Tracker License Transfer feature
- Removed support for 64-bit drivers pending digital signature on drivers

### **5.0.21 (November 20, 2008)**

#### ***New Features***

- Added custom questionnaire capabilities
- Added a new Past Medical History form to Intake to allow greater documentation of a patient's medical history
- Added the ability for Narrative Reports to handle extended foreign characters, such as Korean or Cyrillic, using the current system locale setting
- Added the ability in Tracker licensing to allow for license transfers

#### ***Updates***

- Updated the Tracker Communication Interface (TCI) to wait for 2 seconds before determining that a device is inactive
- Removed the audible warning that plays when a device enters the inactive state
- Updated audio prompts throughout the software to be more consistent from one test to another
- Updated test forms and reports for algometry fibromyalgia tests to use the Maximum value to determine if test results are positive
- Updated the default value for "Start" in static strength and isometric lifting tests to Auto

- Updated grip, static strength and isometric strength tests with additional Threshold selections
- Updated the Purdue Pegboard test to properly allow for entry of three reps for the Assembly test for female patients
- Updated the Analyze Data section to properly handle retrieval of data for large databases
- Updated Narrative Reports to display test grades for all graded muscle tests and isometric muscle tests
- Updated the Narrative Reports to display data using the correct units for Sustained Grip tests
- Updated the Tracker main form to address an issue that would occur when clicking on the navigation buttons when a patient, incident or exam is being edited
- Updated the Narrative Reports to correct nerve names and adding more detailed nerve descriptions for upper extremity sensory reports
- Updated the Narrative Reports to correctly order inclinometry and goniometry progress reports
- Updated setup text for isometric muscle tests to be more consistent with the help videos
- Updated Analyze Data to allow for adding or editing of notes

#### ***Hardware Driver Update (November 20, 2008)***

- The Tracker Freedom hardware drivers have been updated to support 64-bit Windows operating systems and provide more robust USB features. The drivers are included on this CD, and are automatically installed during the software setup process. For installation help or questions, please contact JTECH Medical's Customer Service at 800 985-8324 option 4.

### **5.0.20 (July 18, 2008)**

#### ***New Features***

- Added a new module for setting up user names and passwords to access Tracker databases
- Added a new Spine Palpation section to the Physical/Neurological module that allows for quick documentation of spine palpation results to help justify continued care and treatment
- Added custom test capabilities to the Orthopedic section of the Physical/Neurological module and redesigned the section so that all tests can be documented at one screen
- Added the ability to choose custom colors for different narrative items
- Added customizable headers/footers to narrative and worksheet reports
- Added the ability to print the Straight Leg Raise equation in narrative and worksheet reports

#### ***Updates***

- Updated the worksheet report engine

- Updated the Tracker Communications Interface (TCI) to help improve troubleshooting capabilities
- Updated the Dexterity Test Selection form's Current Exam Results section to show sum, average or both depending on the selections when the test was created
- Updated the sound that alerts an examiner when a patient's heart rate has exceeded the recommended maximum heart rate
- Updated instrumented testing forms so that the history graph display functions similarly for all tests
- Updated the overall and recent change tables in Algometry narrative reports so they are similar to other instrumented test change tables
- Updated test summary worksheet reports to print correctly
- Updated the Straight Leg Raise Validity test screen to clearly indicate which side is currently being tested
- Updated the narrative selection screen so that items and sub-items are more consistent throughout the screen
- Updated the Close Without Saving button in the Questionnaires screen to have the correct appearance
- Updated narrative reports to print Grade Only muscle tests
- Updated the default offset for Wrist Radial/Ulnar Deviation to be 180°
- Updated the display order for finger goniometry tests to go from MP to PIP to DIP
- Updated default list items in Recommendations form in Analyze Data
- Updated the 5 Position Grip Summary form in Analyze Data to not display an error if Rapid Exchange Grip testing has not been performed
- Updated the threshold for Static Strength tests to 10 pounds
- Updated the Add/Edit Narrative item section to give more room for editing items
- Updated IsoTrack muscle testing forms to open the correct Manual Entry or Instrumented form
- Updated Static Strength and Isometric testing forms to more easily identify when testing is ready to begin in Manual mode
- Updated the change graph for Lumbar Flexion/Extension in Analyze Data to display correct data
- Updated the patient information screens to prompt the user that impairment data will not be automatically updated when changing patient information such as gender, birth date or handedness
- Updated Grip narrative reports to display mean and fatigue information
- Updated Muscle Testing narrative reports to include CV
- Updated Muscle Testing narrative selection to allow for selection of CV Statement
- Updated the Patient Incident and Exam sections to have a list of names for Incidents and Exams that can be easily selected and edited

### **5.0.19 (April 9, 2008)**

#### *New Features*

- Added the Isometric testing module to the software. This allows the IsoTrack Isometric Testing Station to be used with 5 Software.
- Added the ability to record and print FCE data using metric units
- Added a new Test Protocols section to the software. This section will contain pre-defined protocols supplied by JTECH. The section also contains the Repeat Last Exam function that was previously listed on the Perform Exam screen.
- Added age and gender based norms for cervical range of motion. These norms are based on research by Youdas et al.

### *Updates*

- Updated history graphs for Sustained Grip to display using the correct scale
- Updated narrative reports to correctly allow for adding and editing of custom items
- Updated the Thoracic ROM Details worksheet report to correctly report individual rep data
- Updated the Edit List Item form to display a warning prompt when clicking on the Reset to Default button to warn that custom items will be removed
- Updated various Intake forms to correctly save data
- Updated areas of the software that depend on an age to calculate the age of the patient based on the exam date rather than the current date
- Updated the Material Handling selection form's Current Test Results section to display the appropriate information from completed tests
- Updated Custom Dexterity test forms to allow for more than nine rows of data to be added
- Updated Material Handling Occasional Lift forms to use the maximum load instead of occasional load for NIOSH comparisons
- Updated the Data Analysis worksheet reports to be available only if the Analyze Data module is enabled
- Updated the Restrictions section of Analyze Data to display correctly Other Restrictions that have been entered and saved
- Updated Static Strength - HSC worksheet reports to display a legend for only one repetition since only one repetition is allowed
- Updated the Tracker Communication Interface error messages to be more informative and user-friendly
- Updated custom grade only muscle tests that are not bilateral to allow documentation of only one grade for the test
- Updated muscle test Analyze Data screens to show only muscle strength ratio information for Neck Flexion/Extension and Trunk Flexion/Extension
- Added help information for muscle strength ratios
- Updated various FCE test and Analyze Data forms to scroll automatically to display newly added information
- Updated Hand Module forms to remove the multimedia help button as there are no help videos for these tests

- Updated Validity Straight Leg Raise and impairment forms to account for the sacral hip flexion/extension sum exceeding an average value. If this is encountered the software will display “Exempt” in the formula.
- Updated Intake Medical History form not to allow blank records to be added to the database
- Updated the Narrative reports to correctly handle blank records from Intake Medical History

### 5.0.18 (February 1, 2008)

#### *New Features*

- Added the ability to create, modify and perform custom tests for all Tracker instruments
- Added a new worksheet report containing a blank signature and date block
- Added new hand sensory narrative reports that print out detailed tables with sensory results
- Added the ability to select the autobackup directory
- Added the ability to turn color on or off for worksheet reports via the Worksheet Preferences button

#### *Updates*

- Updated ROM test defaults to allow for AMA normative values to not be shown
- Updated Grip test forms to allow the normative data to be changed during testing rather than just at the test selection form as a global default
- Renamed Standard Reports to Worksheet Reports
- Updated the Create Reports section of the software to default to Narrative Reports rather than Worksheet Reports
- Updated the Recommendations Worksheet Report
- Updated the selection method for Narrative Report sections to be more consistent with other areas of the software
- Updated Analyze Data forms to be consistent throughout the software
- Updated sensory images to be more side-appropriate
- Updated Functional Narrative Reports to print notes
- Updated the color coding for hand sensory monofilament tests
- Updated Knee Extension and Elbow Extension ROM tests to not allow the selection of Ankylosis
- Updated spine nerve impairment forms to display whole person impairments in addition to regional impairments
- Updated Analyze Data and Reports to display muscle strength ratios only for Neck and Trunk Flexion/Extension
- Updated finger distance measurements in ROM testing to allow data entry to be done in millimeters rather than centimeters
- Updated the horizontal position for the Torso HSC test to display 25 inches

- Updated the audio prompts in grip testing to play at the end of the rest period if one is selected
- Updated multimedia help system to display text references even if videos are not available
- Updated FCE material handling worksheets to correctly reference occasional weight ability
- Updated Tracker help system to work correctly on computers running Windows Vista

### **5.0.17 (August 23, 2007)**

#### *New Features*

- The functional testing (FCE) module has been released. This module includes new test forms and reports for material handling, work activities, postures, dexterity and cardiovascular tests
- Tracker Freedom® wireless heart rate monitor is now supported in Version 5 software
- Added a new narrative report entitled General Exam Notes under the Miscellaneous category. This report prints out any incident, exam or test selection form notes entered

#### *Updates*

- Updated narrative intro statements for Monofilament, Static 2-Point and Moving 2-Point sensory sections to be less confusing
- Updated the spine nerve root impairment forms to display appropriate captions for each regional impairment
- Updated the lumbar motor nerve root impairment form to allow proper rating of the right side
- Updated import functionality for Grip and Pinch tests in impairment forms to be more consistent with other instrumented import functions
- Updated the “Close” button in Questionnaires to match the color of the other buttons in the software
- Updated the Pinch Test Results report to display the type of norms used for each test
- Updated the Upper Extremity Worksheet impairment forms to display the correct labels for Shoulder Abduction and Shoulder Adduction.
- Updated the Upper Extremity ROM report to correct the spelling for Elbow Flexion
- Updated the Muscle Testing multimedia help to display videos in descending order defaulting to Grade 5
- Updated reference information for Muscle Testing multimedia help to remove extra line breaks
- Update Analyze Data to properly display information from 5-Position Grip testing when rung positions were not completed

### **5.0.16 (June 14, 2007)**

- Updated the installer to fix a problem with the Crypkey driver installation

- Updated the Standard Reports to resolve an issue with the Upper Extremity Worksheet to correctly identify Shoulder Abduction/Adduction values

### 5.0.15 (May 1, 2007)

- Added a Hand Function progress item to the list of available narrative reports.
- Updated sensory impairment rating forms for spine, upper extremity and lower extremity to add a manual import button.
- Redesigned the spine sensory impairment forms to be consistent with the extremity forms.
- Added "Remove All" buttons to all Hand test forms to allow for quick clearing of the form.
- Added normative information to ROM progress reports.
- Added primary muscle innervation information to muscle test standard reports.
- Redesigned the standard report engine.
- **Note: Any previously saved composite reports will no longer function properly and will have to be recreated.**
- Updated the Print Preview of Standard Reports to allow the user to select a printer to print to instead of just printing to the default printer.
- Updated the McGill questionnaires to more accurately match research data.
- Updated the way that Tracker handles dates when using non-standard date formatting.
- Corrected spelling errors in the Static Two-Point Discrimination and Hand Nails narrative reports.
- Updated Spine ROM history graphs in Analyze Data to display correctly.
- Added muscle testing references to the Glossary and References Standard Report selection.
- Updated the ROM Glossary and References report to handle Inclination and Goniometry separately.
- Updated Knee Flexion and Elbow Flexion ROM tests to not allow "Lag" to be selected.
- Updated the Perform Exam form to disable the descriptive text for the Hand section if the module is not enabled.
- Updated Hand checkboxes so that each section has at least one default item listed.
- Removed the "Exclude Rep" button from Static Lift HSC tests as there is only one repetition.
- Updated Impairment forms to show a % to the impairment total displayed at the bottom right of each form.

### 5.0.14 (December 5, 2006)

- Release of Amputation documentation screens for the Physical/Neurological section.
- Release of Amputation Impairments for the Impairment module.
- Release of Amputation related reports.



- Updated Lower Extremity Impairment combining to be done according to the *AMA Guides'* errata.
- Updated the Hand Evaluation module documentation screens to include a "Recall Last Exam" selection for areas.
- Updated the Skin test form in the Hand Evaluation module to have a "Mark All as Normal" selection.
- Updated Sensory documentation screens to allow easy "painting" of multiple areas.
- Updated the Spine ROM Standard Report to have separate selections for Cervical, Thoracic and Lumbar regions.
- Updated the Chart Manager to allow changing of a Patient, Incident or Exam even if you are currently editing a different item.
- Updated Test Summary forms in Analyze Data to show normative values in history graphs.
- Updated the Rapid Exchange Grip Standard Report to show 5-Position Grip validity information.
- Updated the TCI to automatically shut down after 1 minute of inactivity.
- Updated Knee Range of Motion Impairment rating forms to properly calculate impairment ratings for measurements higher than 125°.
- Updated Rapid Exchange Grip testing screen to play audible pacing alerts when Rep Rate is set.
- Updated Algometry testing forms to accept input from the Enter footswitch when the Muscle Tester is selected as the algometry testing device.
- Updated all notes fields in Analyze data so they appear the same way.
- Updated all Analyze Data forms to display "No Test Data is Available" if testing was not completed for a section.
- Updated the Rep Details form for Lumbar Flexion/Extension in the Analyze Data Test Summary section to identify repetitions used for validity.

#### *Hardware Driver Update*

- The Tracker Freedom hardware drivers have been updated and are included on this CD, but are not automatically installed. For installation help, please contact JTECH Medical's Customer Service at 800 985-8324 option 4.

#### **5.0.13 (October 20, 2006)**

- Updated the Tracker software to allow the Physical/Neurological, Intake, and Analyze Data sections to be controlled by registration codes.
- **Important Note:** Licensed users of these modules should call JTECH's Customer Service department, at 800 985-8324 option 4, to have these modules permanently reenabled.
- Updated the Algometry module to allow data collection using the Muscle Tester for Tracker Freedom users.

### 5.0.12 (October 4, 2006)

- Release of Hand Evaluation module. This includes nine categories of Hand Evaluation testing (Observations, Function, Skin, Nails, Edema, Wound, Scar, Burn Scar, and Splint), Standard Data reports for each category, and Narrative report capabilities for each category.
- Release of Digit Sensory Impairments for the Impairment module.
- Updated Static Strength videos so that the first frame of the video is displayed when the video is done playing instead of the black screen.
- Added a prompt to the software when deleting a single repetition.
- Corrected spelling errors in multimedia help references.
- Updated Analyze Data to display a consistent message when a test type has no associated test data.
- Updated Fingers Complete test form in Goniometry to play the correct voice prompt for starting side.
- Updated Algometry Analyze Data so that the graphs will update when "From" and "To" dates are entered.
- Updated Muscle Testing Analyze Data to not display errors when viewing Exam Summary and History.
- Updated Narrative Reports to include an option for printing strength ratios for muscle tests.
- Updated Incliniometry Analyze Data to distinguish reps that were used to determine validity.

### 5.0.11 (July 10, 2006)

- Release of Static Strength module. This module includes NIOSH, HSC and Isometric Strength tests that are designed to be performed with the Onsite lift gauge
- Updated Manual Data Entry so that if the module is enabled, the user has access to manually enter data for all instrumented modules
- Updated ROM standard reports to resolve an issue where some data would print incorrectly
- Updated the Muscle Testing standard report to resolve an access violation when printing under certain circumstances
- Fixed an issue with the printing of the Exam Information Sheet that would print a blank page prior to the correct page being printed
- Added a selection for Normal under Gait in General Appearance form of the Physical/Neurological Eval section
- Updated notes fields to include scrollbars in case the notes exceeds the amount of visible space
- Fixed an issue in Analyze Data that would cause incorrect modules to show up as available or unavailable
- Fixed an issue in Algometry that would cause incorrect help files to be displayed

- Updated the Software Registration form to disable the Authorize button until the Sitekey has been entered
- Updated the Software Registration form to not show the number of days or trials left if a license has become invalid

### 5.0.10 (May 5, 2006)

- Updated the impairment module to allow for importation of and impairment of goniometry range of motion tests and pinch strength
- Added a standard report that documents agonist/antagonist ratios between paired muscles (e.g. Neck Flexion and Neck Extension)
- Updated the range of motion normative value for ankle dorsiflexion to be consistent with the Guides
- Updated the standard report engine to prompt the user to select a printer before printing
- Updated test selection screens to order test results more consistently throughout the software
- Updated narrative reports to show ankylosis values in <>
- Updated narrative reports to correctly scale force curve graphs
- Updated narrative reports to contain smaller force curve graphs that better duplicate the way the force curves are displayed at test time
- Updated the finger ROM standard report to show “cm” as the unit of measure for distance measurements
- Updated the test summary section of Analyze Data to show the units of measure for each test
- Updated the test summary section of Analyze Data to display CV as a % value
- Updated Manual Data Entry test forms to limit the range of possible entries
- Removed the notes section from the ROM Details standard report
- Fixed an issue with the pinch test screen that would temporarily display data on the wrong side
- Fixed an issue with the sustained grip test where the audio prompt announcing the side did not always match the current side being tested
- Fixed an issue with the straight leg raise test where the audio would not prompt the user to enter neutral
- Fixed an issue with the lumbar flexion/extension test where the audio prompt did not match the onscreen instructions after deleting a repetition
- Updated the copyright information in standard reports
- Updated all ROM reports to not show a % of norm statistic if the motion was ankylosed
- Updated the Fingers Complete test to properly advance to the next test if Auto Test Advance option is enabled
- Fixed an issue with the test summary section of Analyze Data that was not correctly populating the list of available test summaries

- Fixed an issue in spine impairments that would not enable kyphosis impairment
- Updated the finger ROM test screens to include a “lag” button for documenting flexion or extension lag
- Updated finger ROM test screens that use manual entry of data to use the “Enter” key for data entry

### 5.0.9 (March 22, 2006)

- Goniometry module released
- Pinch module released
- Added Manual Data Entry capabilities for the Algometry module
- Updated the standard reports for Spine, Upper Extremity, Lower Extremity and Hand ROM to print the associated notes for the tests
- Added a prompt to save patient information when switching from one patient to another in Patient Files if modifications were made
- Updated the muscle testing portion of Analyze Data so that bilateral neck/trunk tests aren't duplicated
- Updated progress reports for Range of Motion tests to properly display tests at or below 0°
- Updated the recent and overall progress graphs in the narrative writer to correctly display comparisons for active and passive motion
- Updated the Narrative Writer to correctly graph negative and blank numbers
- Updated the narrative writer selections to move Cover Page to the top of the list instead of putting it under Miscellaneous at the bottom
- Updated impairments for Ankle/Foot ROM to import data from Hindfoot Inversion/Eversion instead of Foot Inversion/Eversion
- Added Cervical ROM, Thoracic ROM and Lumbar ROM Details reports to Standard Reports
- Added normal ranges for calibration of devices to the full calibration screens
- Updated the Cervical Lateral Ankylosis multimedia video help to better demonstrate inclinometer placement
- Updated the Muscle Testing Standard Reports to print the notes for muscle tests that testing was not performed for but notes were entered
- Updated the Muscle Testing Summary in Analyze Data so that it does not freeze if testing was not completed
- Updated the voice prompts in the Max Grip and Multi-Max Grip tests to not play until after the rest time is completed if turned on
- Updated the Auto-Backup to backup all databases, if enabled, rather than just the last used database
- Updated consistency printing in the reports to be “Yes” if the CV is less than 15%
- Updated the Lumbar Flexion/Extension Inclinometry screen to play the correct audio prompt when a repetition is deleted

- Updated the history portion of Analyze Data so that all sections are consistent with the way data is displayed
- Updated the history portion of Analyze Data so that exams are displayed in chronological order rather than creation order
- Added a more descriptive error to the Instrument Registration screen if an incorrect serial number is entered
- Updated the Narrative Report for Vital Signs so that it does not print labels for Respiration or Heart Rate if values were not entered
- Updated the calibration form to not allow calibration until the zero value and weight used for calibration have been entered
- Updated the calibration form to automatically import the previous weight used for calibration if calibration had been performed previously
- Added the ability to select NR ("Not Rated") in the Pain Scale Evaluation
- Added audible alerts to the end of repetitions in Rapid Exchange Grip if the Rep Rate setting is set to "Off"
- Updated the on-screen instructions for ankylosed ranges of motion to display appropriate testing instructions
- Updated the Standard Report selection screen to be easier to navigate
- Updated the creation of databases to account for systems using locale settings that do not use . as the decimal designator
- Updated the Standard Reports for Algometry and Multi-Max Grip tests to print the bar graphs correctly
- Added a "Save Changes" prompt in Patient Files when selecting a different patient, incident, or exam after the current one has been modified
- Updated the autorun screen to display correctly on newer laptops

### 5.0.8 (11/4/2005)

- Impairments module released for 5 software
- Modified the software to delete intake information when a patient or incident is deleted
- Updated the Analyze Data portion of the software to have a color-coded legend that explains what each graph represents
- Updated the Analyze Data portion of the software to display the correct motion names for spinal tests
- Fixed an issue where changing the number of repetitions in some grip tests would cause an unexpected error
- Updated CV validity calculations to report CV of less than 15% as valid
- Updated bilateral strength differences of 0% to show as 0% instead of 0%L in reports
- Added an audio prompt to signal the side for testing in extremity range of motion screens
- Modified the patient files tree view to be more intuitive when displaying long lists of patients

- Added straight leg raise to the list of available Lumbosacral Spine orthopedic tests
- Updated reports to print the VAS pain questionnaire data correctly

### 5.0.7

- Added the ability to integrate custom libraries into the 5 software
- Updated the standard reports to print correctly from the print preview screen
- Updated the progress reports to print correctly from the print preview screen
- Updated the standard reports to properly scale if repetitions have been excluded
- Updated the progress reports to print information from a maximum of 7 exams
- Updated the range of motion and myotome screens in the physical/neurological section to open the correct help screens
- Updated the Braggard Orthopedic Test with the correct spelling of the test name
- Modified the Add/Edit Narrative item form so that standard item's text can be changed, but their position in the list and name cannot be changed

### 5.0.6

- Changed the software to force a full calibration if user is trying to zero calibrate without having full calibrated an instrument
- Updated the General Exam Notes report to contain general notes from the incident and exam
- Updated various report labels to be more consistent with the testing screens
- Added a label to the graph that is printed on the 5 Position Grip report to identify what the graph represents
- Updated the Orthopedic Test report so that more tests can be printed
- Modified the test selection screen for Physical/Neurological tests to separate the physical tests from the neurological tests and added the ability to add general physical/neurological notes
- Updated the sensory screens to default to dermatome testing rather than cutaneous testing
- Added the ability to select the 0.5 cm<sup>2</sup> tip for algometry testing
- Updated the Vital Signs screen to be more consistent with other parts of the software
- Updated the Sustained Grip test to exclude force curve information gathered during the ready time from statistical calculations
- Added a prompt to extremity range of motion test screens that will warn users that data will be deleted when changing certain test settings
- Updated the Straight Leg Raise Validity equation to use the correct data for calculation
- Changed the reports and testing screens so that statistical calculations are not made for Sacral Hip measurements
- Updated the database manager to disallow the creation of databases in invalid locations
- Updated the multimedia help for Elbow Pronation/Supination

- Updated the sample database

## 5.0.5

- Updated the Tracker 5 report engine
- Fixed an issue in lower extremity ROM reports that affected data positioning
- Fixed an issue in extremity ROM reports that would cause the norm not to print if the left side was not tested
- Changed the Spinal ROM report to show max and avg in <> if the motion was marked as ankylosed
- Changed the AMA validity criteria to use the first 3 consecutive reps that are within 5° or 10%
- Fixed an issue in Questionnaire reports that affected data positioning
- Increased the amount of space set aside in the reports for printing the description of the Questionnaire
- Fixed an issue that would cause an error to be displayed when printing Hand Sensory information
- Updated the communications interface to shut down and restart when the COM port is changed
- Changed the device wake up screen to show all devices trying to connect
- Updated toggle menu items so that if you click an item that is already checked it has no effect
- Updated the test sequence queue to properly update the test selection screen when ROM items are removed
- Decreased the number of characters that can be input for a test sequence name to 25
- Updated the vitals section to allow height to be added to exams after the initial exam
- Fixed spelling errors in Questionnaire databases
- Added instructions to the Software Registration screen
- Fixed an issue where the installation was not setting the correct property if the multimedia files were being installed to the local computer
- Updated the installation to display a software revision history during installation
- Fixed an issue in the installation where the location that files were being copied to was not showing properly
- Fixed an issue in the installation that did not report how much space was needed for a feature to be installed

## 5.0.4

- Added diagnostic abilities for Tracker wired communications to the Tracker Communications Interface (TCI)
- Fixed an issue in algometry that would create a data row for algometry tests even though data was not recorded
- Updated the import factory calibration information section for wireless devices



- Added a status message to the import factory calibration information screen
- Added help information for the import factory calibration screen
- Updated the TCI to more accurately depict battery levels of wireless devices
- Updated the TCI to be more robust with Tracker wired communications
- Updated the device names in the hover hints for the power icons
- Added a message to the user in History portions of Analyze data letting the user know that tests have not been completed for the section they are viewing
- Added a default message to the support/maintenance form if support has not been setup with JTECH Customer Service
- Fixed an issue that would cause an error to be displayed if Tracker was running when a password protected screen saver was turned on

### 5.0.3

- Updated the Tracker Communications Interface (TCI) to be more robust with wireless communications
- Added an error log to TCI to help diagnose communications problems
- Added the ability to import factory calibration information to the instrument registration screen for wireless devices
- Added factory calibration import ability to the full calibration screen for wireless devices
- Updated the calibration screens to present more information about calibration
- Changed the way calibration information was stored to separate factory calibration information from field calibration information
- Removed calibration screens for inclinometers
- Updated the device wake up screen to handle multiple devices in one screen rather than one screen for each device
- Added an icon to testing screens that signifies communications have been lost for a device
- Added a prompt in the software to suggest a repetition or test be redone if communication with a device is lost for more than 5 seconds
- Fixed an issue in Analyze Data that would show blank graphs
- Fixed an issue that would not update the selection tree when switching between Test Summary and History in Analyze Data
- Removed the Help menu item from the main menu
- Fixed an issue with the Rapid Exchange Grip testing screen that would not allow you to change test settings once a test had started
- Fixed an issue in grip tests where a repetition would not end until the force dropped to half of what the threshold was set at
- Updated the multimedia help system to default to the correct video rather than just open the first alphabetical one
- Updated the multimedia help system to show the first frame of the selected video rather than a blank box

- Added the ability to turn the footswitches on for ROM only using the Tracker Wireless interface
- Updated the installation program to install all or none of the videos
- Updated the installation program to require the 5 Engine be installed

## 5.0.2

- Added Zero Calibration to the system menu
- Removed minimum Lordosis from Inclinometry testing
- Added reference sources to the multimedia help system
- Updated the testing protocols for Thoracic Minimum Kyphosis
- Updated Extremity ROM tests to use an exact neutral rather than an assumed neutral
- Updated the way that the validity setting affects number of reps that can be performed in ROM tests
- Updated on-screen testing instructions