Kinesia HomeView™
AMBULATORY MOTOR ASSESSMENT

User's Guide

GREAT LAKES
NEUROTECHNOLOGIES

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Telephone: (216) 361-5410 or toll-free 1-855-GLNeuro (1-855-456-3876)
                    9:00 a.m. - 5:00 p.m. EST
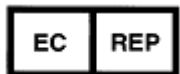   Monday – Friday

Fax: (216) 361-5420

E-Mail: Customer Support: support@GLNeuroTech.com
                  Sales: sales@GLNeuroTech.com

Web: http://www.GLNeuroTech.com

Mailing Address: Great Lakes NeuroTechnologies Inc.
                              10055 Sweet Valley Drive
                              Cleveland, Ohio 44125

Great Lakes NeuroTechnologies Inc.
10055 Sweet Valley Drive
Cleveland, Ohio 44125
Phone: 216-361-5410
Fax: 216-361-5420

EC | REP

Emergo Europe
Molenstraat 15
2513 BH, The Hague
The Netherlands
Phone: + 31 (0) 70 345 8570
Fax: + 31 (0) 70 346 7229

CE
0086

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Introduction

Intended Use

Kinesia HomeView is intended to monitor physical motion and muscle activity to quantify kinematics of movement disorder symptoms such as tremor and assess activity in any instance where quantifiable analysis of motion and muscle activity is desired.

Warnings

⚠Tripping Hazard – keep the electrical cord away from walking paths

⚠Do not use in conjunction with a defibrillator.

⚠Improper routing of cabling may result in a choking hazard.

⚠Do NOT expose the system to liquids. Liquid exposure may permanently damage the system.

⚠Do NOT turn the system on immediately if it has been stored in temperatures lower than 50°F or higher than 90°F. Wait at least two hours for the system to return to room temperature (68 F to 72 F) before it is turned on. Operate system with room humidity between 35% and 80%.

⚠Do NOT place the system next to TV's, air conditioning units or other household appliances that may cause interference and damage from magnetic fields.

⚠Power supply plug must be inserted only into a properly grounded, three prong electrical outlet.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

NOTE*: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.*

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System Recommendations

Internet Explorer 8 and 9
Windows XP Pro (32 bit), Windows Vista Business or Windows 7 Ultimate
Intel Core 2 Duo 6300 1.86GHz CPU (or equivalent)
1GB (2GB for 64-bit systems) RAM
1024 X 768 or greater display resolution
One available USB 2.0 port
1GB or more available Hard Disk space
Microsoft compatible keyboard and mouse or other pointing device
Adobe Reader
Microsoft Silverlight
Broadband Internet access

NOTE: *Macintosh and Linux operating systems are not supported.*
NOTE: *Windows XP Pro 64-bit not recommended.*

Functionality may vary based on system configuration.
*Product performance may vary based on your system configuration.

Package Contents and Warranty Information

Great Lakes NeuroTechnologies Inc. thanks you for your recent product purchase. Great Lakes NeuroTechnologies offers phone technical support (9 AM-5 PM EST) and warrants Kinesia HomeView (parts and labor) for 1 year from the date of purchase which covers material and workmanship under normal operating conditions and use. Technical support after the 1 year period will be charged hourly. Call Great Lakes NeuroTechnologies for hourly rates. For your benefit, we recommend that you record the pertinent details below. If necessary, this information will allow us to better serve your needs. We highly recommend that you staple a copy of the sales receipt to the blank pages in the back of this manual. Please check to make sure your kit has the required components and record the requested data:

SN: _____   ☉Tablet PC; REF 502-0190
SN: _____   ☉Docking Station; REF 502-0185
SN: _____   ☉Finger Sensor; REF 502-0183
                           ☉USB flash drive; REF 501-0229
                           ☉Power Cord; included in REF 502-0190
                           ☉Travel Case; REF 502-0191
                           ☉User's Guide (this document); REF G392-5001

Date of Purchase: _____

Care and Use Instructions

When transporting Kinesia HomeView, ensure all components are secured in the travel case to prevent damage.

It is not recommended to store Kinesia HomeView in very hot or cold temperatures. If the system has been stored in an environment lower than 50°F or higher than 90°F, wait at least two hours for the system to return to room temperature (68°F to 72°F) before it is turned on.

Do not expose the system to liquid or excessive moisture to prevent mechanical or electrical damage.

Use alcohol wipes to clean the system including the touch screen, finger sensor and sleeve after each patient study.

Chapter 1: About Kinesia HomeView

General Device Description

Kinesia HomeView is a medical device capable of recording, analyzing, and displaying kinematic and diary data from movement disorder patients. Using data storage and miniaturization technologies, Kinesia HomeView provides kinematic data acquisition that is untethered, thus allowing patients to move freely while performing instructed motor tasks. The purpose of this system is to provide clinicians with a detailed report of motor symptom fluctuations, videos, and patient diary information throughout the day.
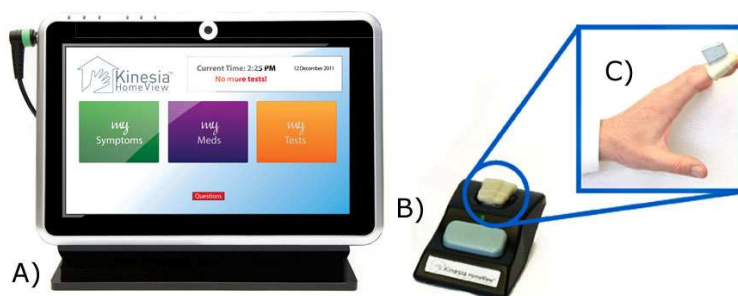

Figure 1. Kinesia HomeView components. A) tablet PC, B) docking station, C) finger sensor. The patient application is displayed on the tablet PC. Web application not shown.

Kinesia HomeView consists of three hardware components: A) a tablet PC, B) a docking station, and C) a finger sensor (Figure 1). The tablet PC is used to initiate a patient study and store patient data (motor tests, diary, and medication information) from a completed study. The docking station charges the finger sensor and facilitates the motion data transfer from the finger sensor to the tablet PC. The finger sensor records the motion data while the patient performs the instructed motor tasks and stores the data until it is returned to the docking station.

The two software components are the patient application and the web application. The pre-installed patient application software on the tablet PC allows patients to enter diary information and perform video-guided motor tasks. The web application is used by the clinician to create study definitions, upload patient data, and view patient reports.

Tablet PC

The touch screen tablet PC is the central component of the Kinesia HomeView system. A color-coded system (Table 1) highlights where the AC power cable and docking station should be connected to the tablet PC, as well as the location of the power button and camera. Patient data is stored on the tablet PC while a study is in progress. The docking station and power cord must remain connected to the tablet PC at all times to ensure the system operates properly.

Table 1: Kinesia HomeView Color Code System

Component of HomeView System	Color Code
Power button	Yellow
Docking station USB	Red
AC power port	Green
Camera	White

Docking Station

The docking station allows easy removal and docking of the finger sensor during motor symptom assessments. It also serves as the charging platform for the finger sensor when motor tests are not being performed. Additionally, the docking station is the method by which data is transferred from the finger sensor to the tablet PC.

Finger Sensor

The finger sensor (Figure 2) is worn on the patient's index finger while performing video-guided motor tasks. During assessments, the patient should wear the finger sensor on the index finger with the blue box facing up. The sensor measures three-dimensional motion using accelerometers and gyroscopes. Accelerometers measure linear acceleration while gyroscopes measure angular velocity. Motion sensor data are sampled at 128 Hz.

Figure 2. Kinesia HomeView Finger Sensor. The patient slides the tip of their index finger into the opening of the sleeve with the sensor box oriented up.

Patient Application

The patient application is the primary interface that patients interact with while using Kinesia HomeView (Figure 3). This application has three main features:

1. **'my Symptoms'** allows the patient to choose from two options: various symptoms (i.e. tremor, rigidity, and slowed movements) as well as various activities (i.e. getting dressed, sleeping, and walking) can be subjectively rated by the patient; OR the patient can choose to capture a 30-second video of themselves.

    - Symptom ratings appear to the patient as color-coded smiley faces that have values of 1/green (corresponds to no symptoms) to 5/red (corresponds to severe symptoms).

2. **'my Meds'** contains a list of the patient medications the clinician is interested in evaluating. Patients can select medication type and time of use.

3. **'my Tests'** allows patients to perform a motor test session at any time.
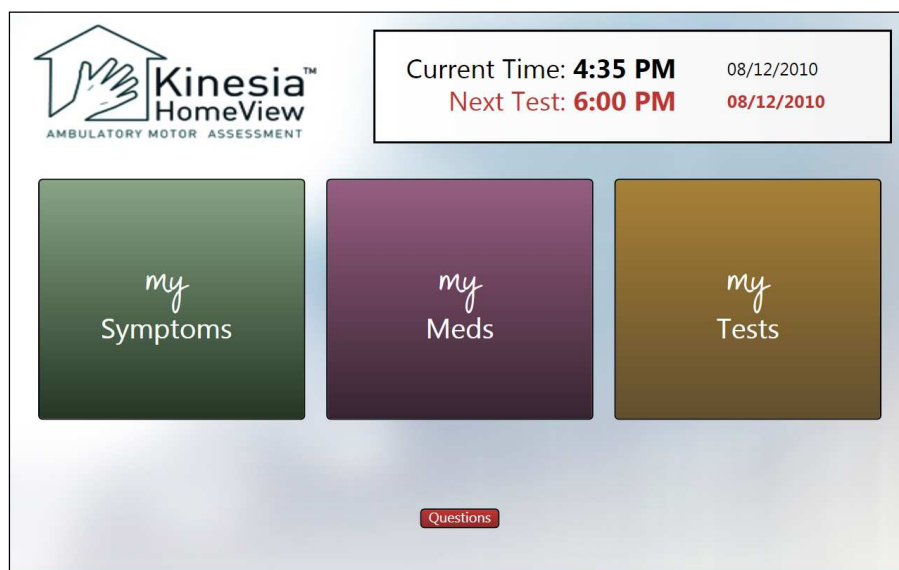

Figure 3. The Kinesia HomeView patient software interface consists of a symptom and medication diary and the time of the next motor test session as instructed by the clinician.

When a new test session is scheduled to begin or 'my Tests' is manually selected, an audible alarm will sound and the screen will alert the patient to begin testing (Figure 4). At that point, the patient can select from four options:

1. **'View How-To Video'**: Plays an instructional video informing how far to distance yourself from the tablet PC during testing, how to use the white marker as a reference point for several motor tasks, and how to remove the finger sensor from the docking station and place over the finger.

2. **'Start Test'**: Removing the finger sensor from the docking station enables the 'Start Test' button (turning it from gray to green). Pressing it initiates motor testing.

3. **'Snooze'**: Delays next test time 15 minutes.

4. **'Cancel Test'**: Cancels the current test and returns you to the main screen. The system will alarm at the next clinician-prescribed testing session.
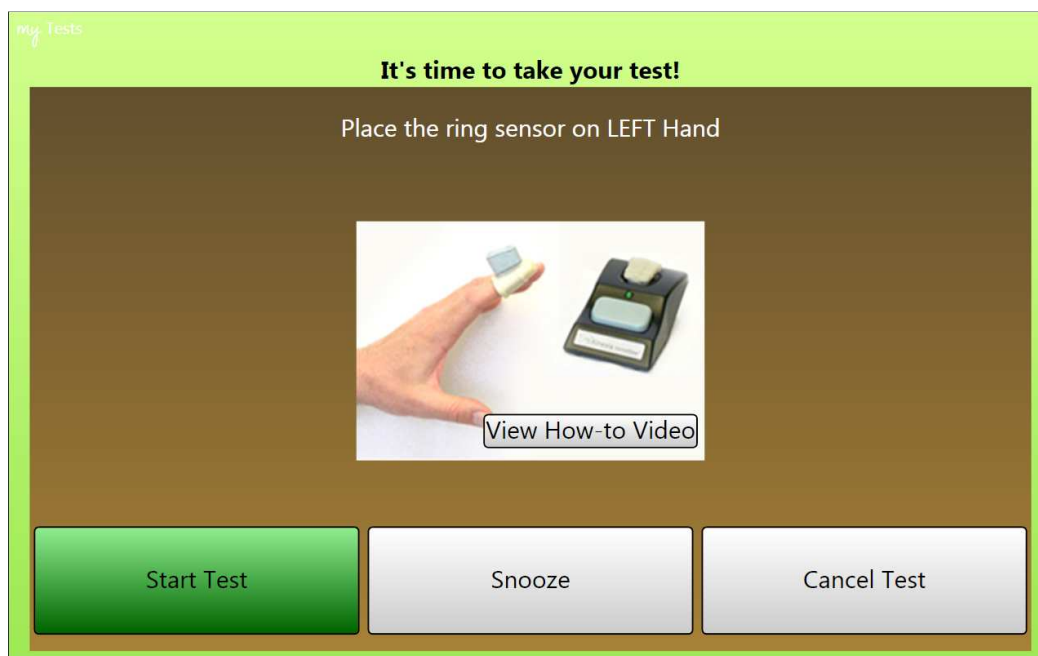

Figure 4. Kinesia HomeView patient application will alert the patient when to begin the clinician-prescribed motor testing. This screen will also appear when the patient presses the 'my Tests' button from the main screen.

Web Application

The Kinesia HomeView web application is a HIPAA-compliant online interface that allows clinicians to create study definitions, upload study data and create study reports. The web application includes a patient database where you can easily add and update patient demographics and view studies. The status of a study is also displayed; Setup Study, Pending Upload, Scoring In Progress, New Report Ready and Archived Report. The language on the web application can be changed from English to Spanish by selecting the appropriate flag next to "Language" in the bottom left corner of the web application.

Chapter 2: Administrative Options

Installing Updates

Great Lakes NeuroTechnologies will email customers a notification when a new Kinesia HomeView software update is available for download. To install the update, copy the update file onto the HOMEVIEW USB flash drive and plug it into the tablet PC. When the 'Administration Options' menu appears, press 'Install Update'. Upon completion, the message 'Update successful. Please wait while system reboots' appears. Once the system has restarted, the patient application returns to the main screen (Figure 3) and is ready to be used.

NOTE: *Data loss may occur if all patient data from completed studies are not transferred to the web application prior to updating the patient station software.*

Changing the Language

There are two language options: English and Spanish. To change the language on the patient application:

1. Plug the HOMEVIEW USB flash drive into the tablet PC or press the Administration Options Button (Figure 5) and enter the administrative login password. All Kinesia HomeView users should utilize the password *glnthv* to access the Administration Options button. An 'Administration Options' screen will appear (Figure 6).
2. Press the 'Select Language' button and select the desired language. The main Kinesia HomeView screen will reappear.
3. Remove the HOMEVIEW USB flash drive if applicable.

Figure 5. The Administration Options Button is disguised on the patient software to prevent patients from accessing it. Only study administrators need to be aware of the presence of this button.
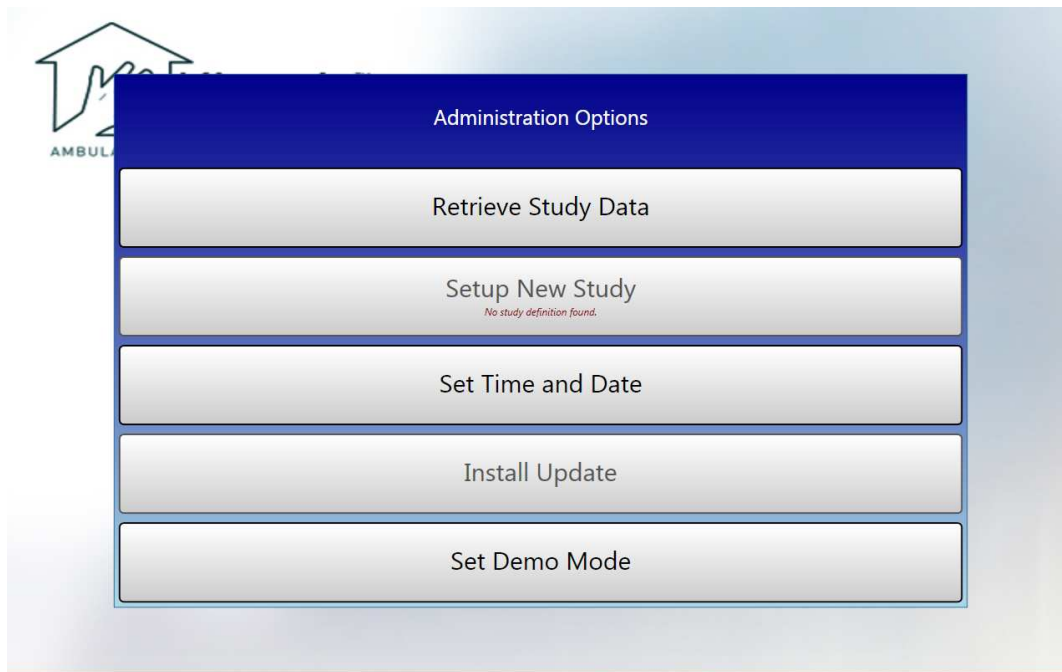
Figure 6. The 'Administration Options' menu allows the clinician to transfer a new study definition to the tablet using the Patient List, set the time and date, toggle between manual (USB) and wireless (broadband) data upload, set the demo mode, select the language (English or Spanish), configure your SIM card PIN and exit from the menu.

Creating/Editing a Study Template

Institution administrators have the option to create a study template. When a study template is created, all subsequent study definitions created by users affiliated with that institution will default to the template selections with the exception of the dates and times. However, each user can move through this template on a per patient basis to make any desired changes to the template. To create a study template:

1. Login to the Kinesia HomeView web application.
2. Click on the Studies tab.
3. Click the Create / Edit Study Template button.
4. Select the diary mode.
   a. If you choose Custom Diary, you will be prompted to select times, motor tasks, medications, symptoms, and activities. Cycle through each option by making the appropriate selection (you can also choose to check the box on the top of the screen next to 'I do not want [specified feature]' if applicable) and pressing the Next button when complete.
   b. If you choose Dyskinesia Diary, you will be prompted to select the start date, times, motor tasks and medications. Cycle through each option by making the appropriate selection (you can also choose to check the box on the top of the screen next to 'I do not want [specified feature]' if applicable) and pressing the Next button when complete.
5. When you arrive at the Summary screen, verify your template is correct.
6. Click Finish.

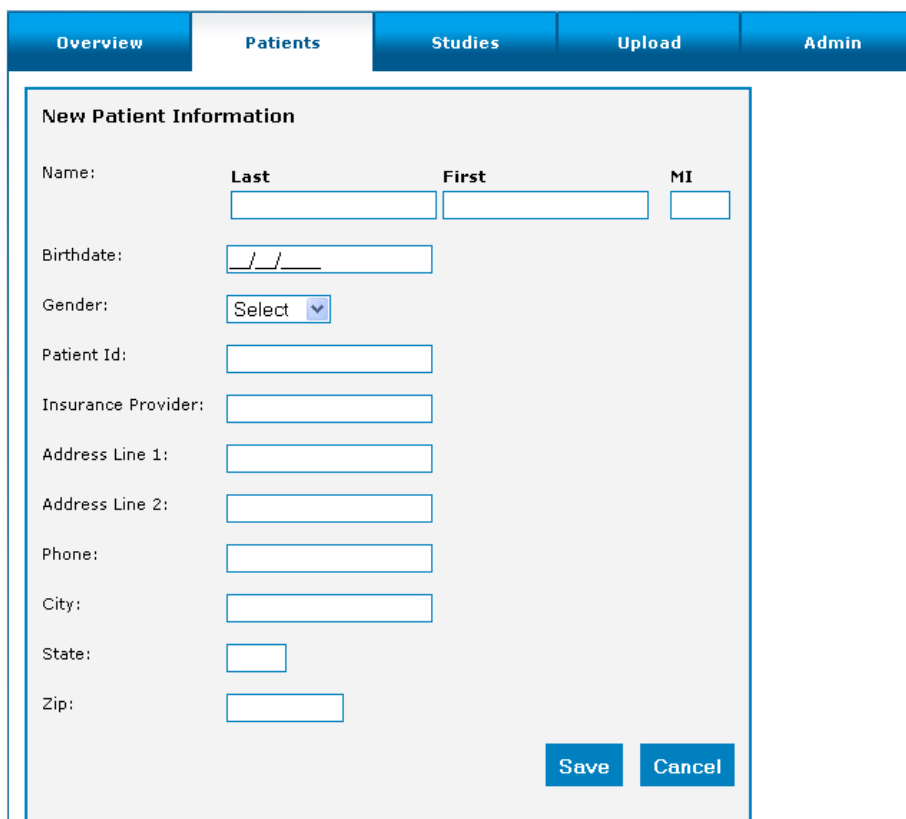NOTE: *Only institution administrators can create and edit templates and only one template per institution may exist at a time.*

NOTE: *Once a template exists for an institution, all studies created by users will default to this template. However, users can specify study dates as well as update the remaining features (times, motor tasks, medications, symptoms, and activities on a per patient basis).*

Chapter 3: Set up a Study

Adding a New Patient

1. Log into the web application (http://homeview.GLNeuroTech.com)
2. Click on the 'Patients' tab on the top of the screen
3. Select 'Add New Patient' and complete the patient information (Figure 7)
   - Patient first and last name, birth date, gender, and a unique patient ID are required.
4. Press 'Save' to add a new patient to the database, or 'Cancel' to return to the main screen.

Figure 7. In order to add a new patient, complete the required fields and press 'Save.'

Creating a New Study Definition

1. Log in to the web application
2. Click on the 'Patients' tab on the top of the screen
3. Select the '+' next to the patient's name under the 'Create Study' column (Figure 8).
4. Create the study definition by selecting any combination of the following features (Figure 9): (If a specific feature should not be included, such as an activity diary, check the box on the top of the screen next to 'I do not want [specified feature].'

   - **'Set Dates/Set Times/Set Motor Tasks'**: Motor task names may be displayed differently to clinicians on the web application compared to their appearance on the patient tablet PC (Table 2):

Table 2: Motor Tasks

Web Application	Patient Application
Rest Tremor	Arms Resting
Postural Tremor	Arms Extended
Kinetic Tremor	Touch Nose
Finger Taps	Finger Taps
Hand Movements	Hand Movements
Rapid Alternating Movements	Rapid Alternating Movements
Dyskinesia	Arms Resting & Arms Extended

   - **'Set Med Diary'**: a list of medications to track during study
   - **'Set Symptoms Diary'**: a list of clinician-specified symptoms rated by patient from 1 to 5 but displayed to the clinician as 0 to 4 severities
   - **'Set Activity Diary'**: a list of clinician-specified activities rated by patient from 1 to 5 but displayed to the clinician as 0 to 4 severities

5. At the 'Summary' screen, review and verify study definition features
6. Click 'Finish' to save the study definition to the database. You will then be able to download this study definition to the tablet PC using either a Broadband network or your HOMEVIEW USB flash drive.
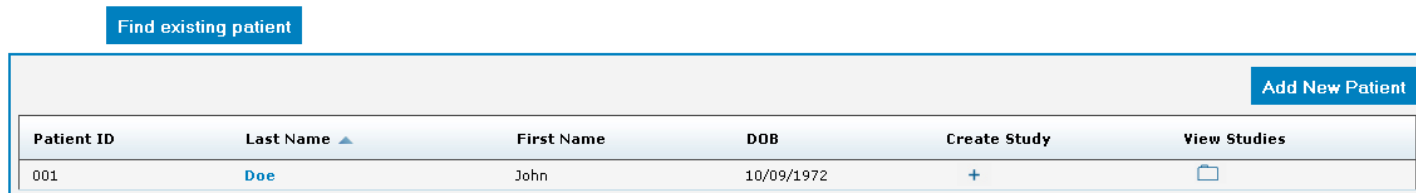
Figure 8. Click on the '+' under the 'Create Study' column to create a new study definition for a specific patient.

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| Overview | Patients | Studies | Upload | Admin |

Patient ID: 001 | **Last Name:** Doe | **First Name:** John

- Set Dates
- Set Times
- Set Motor Tasks
- Set Med Diary
- Set Symptom Diary
- Set Activity Diary
- Summary

Start Date: 09/15/2010

Duration: 2 day(s)

Times: 08:00 AM
10:00 AM
12:00 PM
02:00 PM
04:00 PM
06:00 PM
08:00 PM
10:00 PM

Med Diary: Levodopa
Rasagiline

Motor Tasks: 1. Rest Remor
2. Postural Tremor
3. Hand Movements
4. Rapid Alternating Movements
5. Finger Taps
6. Kinetic Tremor

Selected Hand(s): Both

Diary Symptoms: Slowed Movements
Stiff Joints
Tremor

Diary Activities: Exercising
Getting Dressed
Sleeping
Eating

Finish ➡

Figure 9. The 'Summary' screen will provide a review the study definitions. If it is correct, click 'Finish'. If additional changes are required, click on the appropriate tab on the left.

Chapter 4: Patient Station Setup

Patient Station Assembly

The Kinesia HomeView system will be sent home with patients in an easily accessible carrying case. The patient should adhere to the following instructions for home assembly and use:

1. First remove the tablet PC and place it in an upright position on an easily accessible table or desk.
2. Using the color-coded system from Table 1, plug the AC power cable into the top-right corner of the tablet PC by matching up the green markers.
   - Plug the other end of the AC power cable into a nearby wall electrical outlet.
3. Remove the docking station from the carrying case and place it next to the tablet PC. Ensure that the finger sensor is connected.
   - Plug the docking station USB cable into the right side of the tablet PC by matching the red markers.
   - In order to make a proper connection, the red marker on the USB cable should be facing forward.
4. Press the power button on the top of the tablet PC indicated by a yellow marker.
5. The patient station will be ready for use once the home screen appears (Figure 3).
6. The current time and next test time are on the top right corner of the screen.

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Patient Station Use

When "Current Time" and "Next Test Time" match, an alarm will sound alerting the patient to begin motor testing (Figure 4). Tests may also be started by manually pressing 'my Tests' on the home screen to complete a missed or cancelled test.

1. The 'Start Test' button will be disabled if the docking station is not connected, or the finger sensor is not docked.
2. Place the finger sensor (Figure 2) on the index finger of the specified hand and do not remove it for the duration of the test unless instructed to switch hands.
   - The sensor box should be oriented up when the palm is faced down and fingers are extended.
   - The tip of the finger should be touching the front end of the sensor sleeve when worn.
3. During motor testing sessions, the green LED located on top of the sensor box will blink for 1 msec every 1 sec.
4. When the testing session is complete, the patient will be instructed to return the finger sensor to the docking station.
   - When the finger sensor is successfully docked, 'Dock successful!' will appear on the screen. Patients should be instructed not to turn the tablet PC off until the processing data message disappears. Shutting off the tablet PC prior to this message disappearing could result in loss of data.
   - Similarly, the finger sensor must remain securely docked when not in use.
   - When the finger sensor is properly docked, a green light on the front of the docking station above the large release button will indicate different system states (Table 3).

Table 3: Docking station LED Operation

Operation	Light Indicator Response
Battery Charging	½ second on, ½ second off
Battery Fully Charged	always on
Downloading Data	10 ms on/10 ms off – Light indicator may appear is steadily ON, but at half intensity
Sensor Shutdown[1]	off
Boot Mode[2]	100 ms on /100 ms off

NOTES: *[1]In order to wake up the finger sensor, it simply needs to be re-docked. [2]Boot mode should NEVER be seen in normal operation. If your finger sensor is operating in boot mode, contact Great Lakes NeuroTechnologies customer support.*

⚠ *To avoid tripping over the power cord, patients should place the Kinesia HomeView system somewhere that the electrical cord for the tablet PC is out of the way of walking paths.*

NOTE: *During the video-guided testing, the camera outlined by a white, circular target on the front of the tablet PC will capture patients performing the instructed motor tests. If the patient is not properly positioned in front of the camera as outlined in the video instructions prior to each motor test, video review of study reports may be inconclusive.*

NOTE: *It is highly recommended that all patients are informed that the built-in camera will both record and display real-time video as they perform the motor testing with the finger sensor.*

Chapter 5: USB Programming and Data Transfer

HOMEVIEW USB flash drive

The Kinesia HomeView system comes with a specially programmed USB flash drive titled 'HOMEVIEW'. This USB flash drive is used to access the Administration Options menu of the tablet PC in order to add a new study definition, retrieve patient data from a completed study, change the device time and date, install updates, enter demo mode, and change the language on the tablet PC. For the USB programming and data transfer model, the Administration Options menu is most easily accessed with the HOMEVIEW USB flash drive.

Transferring a Study Definition to the Patient Station

1. Turn on the patient station by pressing down on the power button on top of the tablet PC.
2. After the home screen appears (Figure 3), insert the HOMEVIEW USB flash drive in the tablet PC. Note: You should have already transferred the new study definition from the website to the USB flash drive before completing this step.
3. Once the 'Administration Options' screen appears, click the 'Setup New Study' (Figure 6).
4. Press 'Proceed' to transfer the study definition to the tablet PC. All preexisting files on the HOMEVIEW USB flash drive will be automatically deleted.
5. 'Transfer Successful' in red text will appear at the bottom of the screen.
   - If the transfer is not successful, an error message will appear. If this occurs, remove the HOMEVIEW USB flash drive from the tablet PC, re-insert it, and attempt to transfer the study again. If the error continues, please contact Great Lakes NeuroTechnologies customer support.
6. Remove the HOMEVIEW USB flash drive from the tablet PC
   - The time and date of the patient's first test will be shown in red on the top of the home screen.
7. Turn off the tablet PC by pressing down on the power button. The system is now ready to be sent home with the patient.

NOTE: *Once a new study definition is transferred to the patient station, all patient data stored on the tablet PC from a previous study will be deleted.*

Clinician-Guided Demo Mode – HOMEVIEW USB Flash Drive

Demo mode can be used to guide patients through their study in the clinic before they are sent home with Kinesia HomeView. Demo mode allows patients to practice the prescribed tests without saving any data. To use demo mode, the new study definition must first be transferred to the tablet PC. To access demo mode:

- Plug the HOMEVIEW USB flash drive into the tablet PC, click the 'Set Demo Mode' button on the Administration Options screen. Remove the HOMEVIEW USB flash drive from the tablet PC. 'Demo Mode' is displayed on the lower left corner of the tablet PC software.

Click 'my Tests' for the patient to practice the prescribed tests. To exit demo mode, turn off the tablet PC by holding down the power button. The newly created study definition that was uploaded to the patient station will remain on the tablet PC for home use after demo mode has been exited.

NOTE: *Turning off the tablet PC during demo mode will cause the patient application to return to the default mode upon startup.*

Chapter 6: Broadband Programming and Data Transfer

Setting the SIM card PIN

If the SIM card you use for mobile broadband requires a PIN and/or PUK to be set up on the Kinesia HomeView tablet PC, complete the following steps:

1. Click the Administration Options Button on the tablet PC.
2. Enter the administrative login password.
3. Click Proceed.
4. On the Administration Options panel, select the option to configure your SIM.
5. Enter the SIM PIN and PUK. This information can be found on the insert that comes with your SIM card.
6. Click Apply. A message will appear that indicates your settings are saved.
7. Click Close. You are returned to the main Kinesia HomeView screen.

NOTE: *You may need to reboot the Kinesia HomeView tablet PC after changing the PIN and PUK values for the SIM card for mobile broadband to connect.*

Toggling Remote Upload

You can manually select to utilize mobile broadband or USB uploads. To toggle between the two:

1. Click the Administration Options Button on the tablet PC and enter the administrative login password and click 'Proceed'. An 'Administration Options' screen will appear (Figure 6).
2. Press the 'Toggle Remote Upload' button and select 'Proceed'.
   - When remote upload is enabled, there will be a white '3G' marker in the upper right side of the HomeView main screen with two arrows on the upper left side.
   - When remote upload is disabled, the '3G' marker and arrows on the top of the main screen will not be displayed.

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Transferring a Study Definition to the Patient Station

1. Turn on the patient station by pressing down on the power button on top of the tablet PC.
2. Click the Administration Options Button in the lower right corner of the screen (Figure 5).
3. Enter the administrative login password "*glnthv"* and click 'Proceed'.
4. Once the 'Administration Options' screen appears, click the 'Patient List' button. You will be prompted by the tablet PC to enter your login information to view a list of patients with studies that are pending upload.
5. To gain access to this list, enter the username and password you use to gain access to the Kinesia HomeView web application into the fields on the tablet PC and click 'Login'.
6. A list of patients with studies pending upload appears. Select the patient of interest.
7. Press 'Proceed'.
   - If data transfer is successful, 'Study Transfer Successful' will appear in red at the bottom of the screen.
   - If this message does not appear, repeat steps 4-7. If the transfer continues to fail, please contact Great Lakes NeuroTechnologies customer support.
8. Press 'Exit'. The time and date of the patient's first test will be shown in red on the top of the home screen.
9. Turn off the tablet PC by pressing down on the power button. The system is now ready to be sent home with the patient.

NOTE: *Once a new study definition is transferred to the patient station, all patient data stored on the tablet PC from a previous study will be deleted.*

Clinician-Guided Demo Mode – Administration Options Button

Demo mode can be used to guide patients through their study in the clinic before they are sent home with Kinesia HomeView. Demo mode allows patients to practice the prescribed tests without saving any data. To use demo mode, the new study definition must first be transferred to the tablet PC. To access demo mode:
   - Click the Administration Options Button in the lower right side of the main screen and select 'Set Demo Mode' on the Administration Options screen. Click Exit.

Click 'my Tests' for the patient to practice the prescribed tests. In order to exit demo mode, turn off the tablet PC by holding down the power button. The newly created study definition that was uploaded to the patient station will remain on the tablet PC for home use after the demo mode has been exited.

NOTE*: Turning off the tablet PC during demo mode will cause the patient application to return to the default mode upon startup.*

Chapter 7: Conducting and Viewing Studies

Preparing the Patient Tablet PC

First, confirm that all components are present in the carrying case. Remove the tablet PC, connect the power supply cable to the tablet PC and wall outlet by matching the green markers, and press the tablet PC power yellow button (Table 1). Next, update the tablet PC time and date:

1. Plug the HOMEVIEW USB flash drive into the tablet PC or press the Administration Options Button and enter the administrative login password. An 'Administration Options' screen will appear (Figure 6).
2. Press the 'Set Time and Date' button, enter the current date and time, and press 'OK'. The 'Administration Options' screen will reappear.

NOTE: *The current time and date MUST be set prior to transferring a new study definition to the tablet PC. The time will NOT automatically update to the local time zone or for day light savings.*

Conducting a Study

Create a new study definition for a patient. Detailed directions for this process can be found in Chapter 3: Creating a New Study Definition. You are now ready to add the study definition to the tablet PC. See Chapters 5 and 6: Transferring a Study Definition to the Patient Station for detailed instructions on adding the study definition to the tablet PC.

Uploading Patient Data to Web Application

In order to view a study report, the patient data stored on the tablet PC needs to be transferred to the Kinesia HomeView web application. This must be done before transferring a new study definition to the patient station and has a different process to follow depending on your mode of data transfer:

USB Flash Drive Programming and Data Transfer

1. Turn on the patient station by pressing down on the power button on top of the tablet PC.
2. After the home screen (Figure 3) appears, insert the HOMEVIEW USB flash drive in the tablet PC.
3. Once the 'Administrative Options' screen appears, click the 'Retrieve Study Data' button.
4. Press 'Proceed' to remove the data from the tablet
   - If data transfer is successful, 'Transfer Successful' will appear in red at the bottom of the screen (Figure 10).
   - If this message does not appear, remove the USB flash drive, re-insert it, and try again. If the transfer continues to fail, please contact Great Lakes NeuroTechnologies customer support
5. Remove the HOMEVIEW USB flash drive from the tablet PC and turn it off by pressing down on the power button.
6. Insert the HOMEVIEW USB flash drive into a computer connected to the internet and log in to the Kinesia HomeView web application.
7. Click on the 'Upload' tab on the top of the screen
8. Press 'Select File' and navigate to the 'HOMEVIEW' drive of the USB flash drive on the computer.
9. Select the patient data file with the .khv file extension and select 'Open'. Once the file has been selected it will appear in the text box next to the "Select File" button. Click "Upload" next to "Select File" to initialize the file transfer.
10. 'Upload Complete' will appear when the transfer is done.
    - The patient data will be reviewed by a Great Lakes NeuroTechnologies administrator for accuracy.
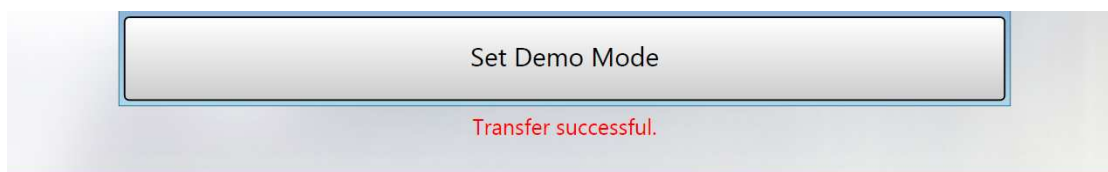

Figure 10. To transfer patient data from the tablet PC for study review, connect the HOMEVIEW USB flash drive, press 'Retrieve Study Data', and then press 'Proceed'. 'Transfer Successful' will appear in red at the bottom of the 'Administration Options' screen if data download was successful.

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NOTE: *After transferring patient data of a completed study from the tablet PC to the HOMEVIEW USB flash drive, upload the data file to the web application before creating a new study definition or transferring patient data from another Kinesia HomeView system. This is the best way to avoid sending a unit home with the wrong study and/or loss of patient data.*

NOTE: *Patient data from a completed study will remain on the HOMEVIEW USB flash drive after it is uploaded to the web application, but will be deleted once a new study definition is transferred to the patient station.*

Mobile Broadband Programming and Data Transfer

When broadband is enabled, this is done automatically from the patient's home every ten minutes and/or when a motor assessment or diary entry is completed. You should instruct your patients to leave their tablet PC on for at least fifteen minutes at the end of the day to ensure all data from that day's assessments have adequate time to upload to the Kinesia HomeView web application.

Viewing a Study

Once a study is ready to be viewed, log in to the web application.

1. Press the 'Studies' button on the top of the screen.
2. Navigate to the report based on the patient name, ID, and study start date.
3. Click on 'Archived Report' or 'New Report Ready' and select any of the following features to view a customizable study summary (Figure 11).
   - **Motor Trends** displays all motor tests performed in response to medication. Red and green corresponds with high and low symptom severity, respectively. Video diary entries will also be displayed on this tab.
   - **Diary Trends** displays patient-rated symptom and activity scores in response to medication.
   - **Time Response** displays a bar plot for one selectable motor trend symptom, one selectable diary trend symptom, and one selectable medication.
   - **Interpret** allows the clinician to enter his or her interpretation of the study results and the follow-up recommendation. Click 'Save' to add the entered text into the final report. Clicking 'Save' again will overwrite the interpretation and recommendation.
4. To create a PDF of the report, click 'Create Report' on the left and then press 'Click here to download PDF'.

NOTE: *All motor and diary data are automatically added to the created study report PDF. Time response plots are not included in the PDF.*

NOTE: *The patient data displayed below the 'Interpret' text boxes will correspond to the selection(s) made in one of the Motor Trends, Diary Trends, or Time Response sections right before clicking Interpret. For example, if you select information in the Diary Trends section then click Interpret, only the selected Diary Trends data will appear.*
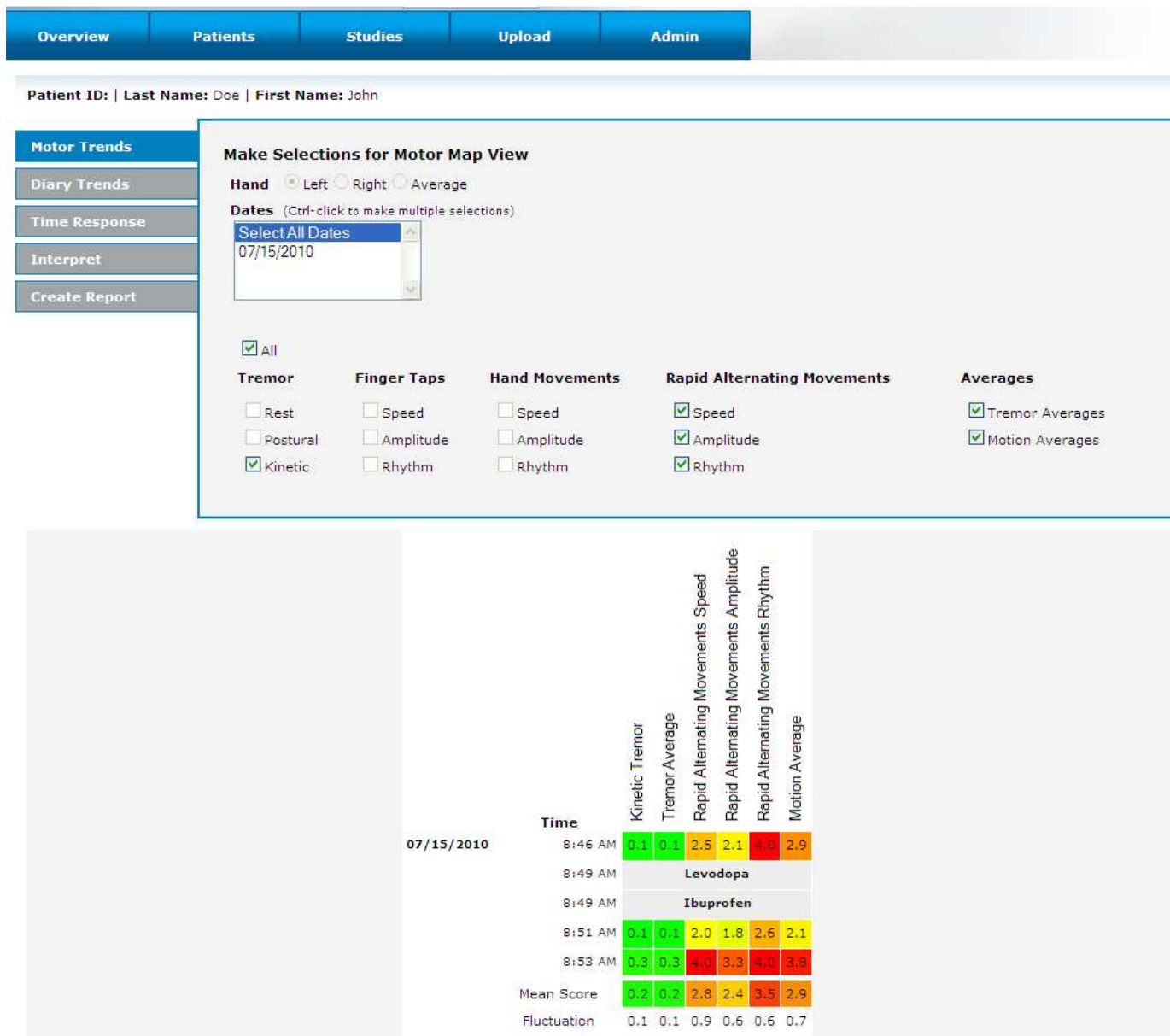
Figure 11. The 'View Report' web application page allows customizable viewing of motor and diary trends in response to medication, entering of clinician data interpretation and recommendations, and creating of a PDF report for record keeping.

Chapter 7: Frequently Asked Questions (FAQs)

Q. I am unable to login and access the patient list on the patient unit using the Administration Options Button. I get a login failed error message.

A. Ensure the mobile broadband is enabled using Toggle Remote Upload and verifying 3G does not have a red line through it on the upper right side of the patient station. If 3G is enabled and you are still unable to login, contact a GLNT administrator at 1.855.GLNeuro (1.855.456.3876).

Q. I set times for the study definition but the system doesn't alarm at those times and says there are no more tests on for the patient to take.

A. Ensure you selected specific dates for your study definition. If you did not specify dates and/or specified "n/a" for the duration, the study definition will not alarm at your specified times.

Q. When I try to create a study for a patient the configuration options such as medications and times are pre-configured.

A. There is likely a study template assigned to your institution. You can contact your institution administrator to change the template. Furthermore, you are able to adjust all of the template selections on a per patient basis as you create study definitions.

Q. When I attempt to create a new study definition for a patient I am automatically redirected to an old study definition I had begun setting up but not yet finished.

A. The Kinesia HomeView web application is designed to allow only one study in the 'Setup Study' status for a patient at a time. You are redirected to an old study that had not been finished as a result of this functionality.

Q. I cannot go back to edit the previous selections (dates, times, motor tasks, etc.) when I have progressed beyond them when setting up a study to make changes.

A. Finish setting up the remaining options. When you arrive at the Summary screen you can go back and update the other tabs, but not until you have reached the Summary screen.

Q. Toggle Remote Upload is on and the SIM card is plugged into the tablet PC but it is not connecting to the network.

A. Turn the tablet PC off and on again. If the system is still not connected (as indicated by a red line through the 3G on the upper right side of the patient software), double check the SIM card is plugged in and that the SIM PIN and PUK match the card contained in the system. If the problem persists, contact your mobile broadband carrier.

Q. I do not know what my password is to enter the Administration Options screen via the Administration Options Button.

A. All users can access the Administration Options screen by entering the password *glnthv*. Please do not share this password with your patients.

Q. My tablet PC's 3G connection is active but it is not transferring patient data remotely.

A. Ensure the time on the tablet PC is correct. If the current time on the tablet PC is not within 24 hours of the current Eastern Standard Time (EST), the tablet PC will not remotely upload data.