



# QbCheck User Manual

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# 1 Manufacturer Contact Information

QbCheck User Manual

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## **2 Device Description**

QbCheck is a web-based test that combines a Continuous Performance Task (CPT) with motion tracking to objectively measure the three core symptoms of ADHD; activity, attention and impulsivity and provide a likelihood for ADHD. By providing quantitative measures of a test-taker's activity level, ability to pay attention, inhibit impulses and a likelihood of ADHD, QbCheck can aid healthcare professionals in the assessment of ADHD.

### **2.1 System Components**

The system consists of the following components:

- QbCheck Software, accessed online and used to administer test and access the result
- QbCheck User Manual (this document)
- QbCheck Technical Manual
- Behavior Observation Form

Access to a Remote Server that processes QbCheck data and generates test reports QbCheck also requires usage of the user's own computer with web camera.

### **2.2 Intended Use**

QbCheck provides qualified professionals with objective measurements of hyperactivity, impulsivity, and inattention to aid in the assessment of ADHD and in the evaluation of treatment interventions in patients with ADHD. QbCheck results should be interpreted only by qualified professionals.

### **2.3 Indications for Use**

QbCheck is indicated to be used to aid in the assessment of ADHD and in the evaluation of treatment interventions in patients with ADHD. QbCheck results should be interpreted by qualified professionals.

### **2.4 Limitations**

QbCheck shall always be interpreted in combination with other clinically relevant information, such as a clinical interview and/or standard symptom scales.

### **2.5 Caution**

Federal law restricts this device's sale by, or on the order of, a qualified health care professional.

### **2.6 Contraindications**

None known.

### 3 About this Manual

The intention with this User Manual is to give QbCheck users an introduction to the QbCheck web tool. The manual contains the following information:

- How to standardize the test situation
- How to perform and administer a QbCheck in various settings
- How the user can access the different parts of the QbCheck software
- How to administer the QbCheck results
- A brief description of the QbCheck report
- A brief description of the QbCheck parameters

For a description of the norm data and a more in-depth explanation of the outcome measures/parameters, please refer to the QbCheck Technical Manual. The QbCheck Technical Manual can be found under the Documentation tab when logged into QbCheck for professionals.

## 4 Safety Precautions

### 4.1 General





Read this User Manual before using QbCheck.

Use QbCheck only for its intended use as described in this manual.

### 4.2 Device Labelling

The following symbols are shown on the label of QbCheck.

Read the User Manual thoroughly before using QbCheck.

Symbol	Explanation
	CE marking applies according to the Directive 93/42/ EEC as amended by 2007/47/EC.
	Manufacturer
	Unique Device Identifier
	Medical Device

## 5 Test Environment

To ensure reliability and validity of the QbCheck results, it is important that the test environment fulfils certain requirements. This section outlines the test room requirements and the equipment needed to administer the test.

### 5.1 Test Room Environment

The test room needs to be quiet and free from any auditory or visual distractions for the test-taker when he/she is seated in the test position. Before administering the test these guidelines regarding the environment should be followed:

- Choose a well-defined area with privacy
- If the room contains a window, please draw any blinds and curtains so that direct sunlight and bright daylight will not interfere with the measurement. This is also important to prevent any visual distractions for the test taker.
- Remove potential sources of distractions. These can include, but are not limited to, posters, computers with an enabled screensaver, wall mounted or loud clocks etc.
- When conducted in a clinical or educational setting, it is advised that a test administrator monitors the test-taker during the test, to ensure that the test-taker performs the test in accordance with test instructions and to capture clinically valuable information. Interaction, during the test, however, should be avoided as this could affect the quality and validity of the QbCheck result.
- When conducted in another setting than a clinical or educational setting (for example a home setting), it is advised that a parent or caregiver observes the test-taker during the test if he/she is below 18 years of age. Unnecessary interaction during the test, however, should be avoided as this could affect the quality and validity of the QbCheck result.
- Ensure the correct seating arrangement depending on the test taker's age. For children performing the QbCheck (6-11 years) a stool without any back or arm support is required. For older children, adolescents and adults performing the QbCheck (12-60 years) a chair with back-support but no arm support is required. When the appropriate seating arrangements are not available, comparable seating supporting an upright seating position should be ensured and chairs with wheels or that swivel and/or recline should be avoided.



## 5.2 QbCheck Software and Materials

### 5.2.1 Provided by Qbtech

- **QbCheck Software** accessed online and used to administer the test system and to access the result.
- **Access to a Remote Server** that generates test reports.
- Documents available in PDF-format in the web tool:
  - User Manual
  - Technical Manual
  - **Stimulus Card** used by the administrator to help explain the task.
  - **QbCheck Observation Form** used to make standardized observations during the test.
  - **QbCheck Patient Brochure** for test takers and/or their parents or caregivers performing the test.

## 5.3 Additional Equipment Requirements

### 5.3.1 Not Provided by Qbtech

- A computer with a built-in camera
- Internet connection
- Google Chrome is required to be used as web browser
- A stable table suitable for the computer
- A stool without any back or arm support for QbCheck (6-11 years)
- A chair with back-support but no arm support for QbCheck (12-60 years)
- A color printer for QbCheck report printing. The report will work with a black and white printer but is optimal in color since the result is reported in colors to facilitate interpretation.

Since health-related data is transferred through the QbCheck system, both computer and data security at the test site is an important part of ensuring test taker anonymity. The user is also responsible for collecting test taker consent since QbCheck collects and stores essential data about the test taker to generate age and gender adjusted result comparisons. Before testing, the test taker must be informed about this and also consent to the collection and storage of this information. This is done by a check box in the tool that confirms the test taker has read the information and agrees to it. The Test Taker Consent form can be retrieved by selecting the option 'Read consent' when starting a test or generating a voucher code, or in the section Documentation in the QbCheck account. It is the legal responsibility of the user to handle and ensure test taker consent, regardless of the setting in which the test is conducted.

Qbtech can only process the data according to the instructions on the site. The information is submitted after each test to a central server under the control of Qbtech. The server generates test reports by processing the test data and calculating specific parameters. Test data transferred between the software client and the server is encrypted.

## 6 Computer and Data Security

### 6.1 Computer Security

It is important that both users and test takers and/or their parents or caregivers protect their system and their data. Since they are using their own computer the following three points should be fulfilled to protect their PC.

- Install and use updated anti-virus software
- Install and use a firewall
- Log out or turn off the computer when left unattended

Administered tests are stored on servers managed by Qbtech and no tests will be stored locally on a machine. As a result, QbCheck data will not be lost if a local computer were to break down or get stolen.

When QbCheck transfers data to and from the Qbtech servers the connection is encrypted so that no outside party can read the result of a QbCheck. Only users have access to and can search for test reports via the Existing Test Takers section.

### 6.2 QbCheck Login

To access the QbCheck professional account (e.g. administer a test, create a voucher code or access test results), a 2-step authentication process is required for each login session. This process consists of a one-time password linked to a user's site together with their site's unique username and password. There are two alternatives for getting the one-time password: using a YubiKey or via email. Which method a user is using depends on how the account is set up.

#### 6.2.1 Software Protection Device – YubiKey



The YubiKey is a software protection device that resembles a USB memory stick. The YubiKey works with any computer's USB port, or computer supporting a USB keyboard. When inserted into a computer's USB port it will uniquely identify itself with information available on the stick during each login. When pressing the button on the YubiKey, a one-time password/verification code will be generated to verify your identity.

Only YubiKey security related codes are directly read from the YubiKey when in use. No transfer of non-security related data occurs, meaning the YubiKey will never be a vector for viruses, Trojans or other malware.

The YubiKey does not contain an internal battery or any moving parts so it will never stop functioning due to lack of power, mechanical issues or internal damage due to exposure.

#### 6.2.2 Verification code via email

From QbCheck version 1.10.0, it is also possible to receive the verification code to your email address. At a login attempt, a 6-digit code is sent to the user's registered email address. This code is valid for 10 minutes and must be entered during login, either by typing the code manually or by copy/pasting it.

### 6.2.3 Password and Username

When registering for a professional account through the QbCheck homepage, a username and password are set up simultaneously. These details are later used together with the verification code sent to the registered email address to login to the account.

It is important to select a safe password to protect test taker data. The most common form of hacking is often done by directly asking someone for his or her password or for the password of a third party. Therefore, users should be careful to never reveal any of their passwords to anyone.

### 6.2.4 How to Login in to QbCheck Professional Account

- Open a Google Chrome web browser and enter [www.qbcheck.com](http://www.qbcheck.com)
- Click on 'LOGIN'
- Enter username and password
- Click on 'Login'
- In the next screen, you will be asked to enter your one-time password/verification code.
  - If your account is configured to use a YubiKey
    - Connect the YubiKey to an available USB port on the computer.
    - Put the mouse cursor in the input field and press the button on the YubiKey. The server will then connect to the YubiKey to ensure a secure login. If the code can be verified, the user will be directed to the welcome page for QbCheck for professionals.
  - If your account is configured to receive a verification code via email:
    - Go to your email inbox and open the email. Enter the verification code in the text field, either manually or by copy/pasting. Click 'Login'. If the code can be verified, the user will be directed to the welcome page for QbCheck for professionals.



When a user has forgotten their password, username or has any difficulty logging in to QbCheck, our support team can be contacted on [technical.support.qbcheck@qbtech.com](mailto:technical.support.qbcheck@qbtech.com).

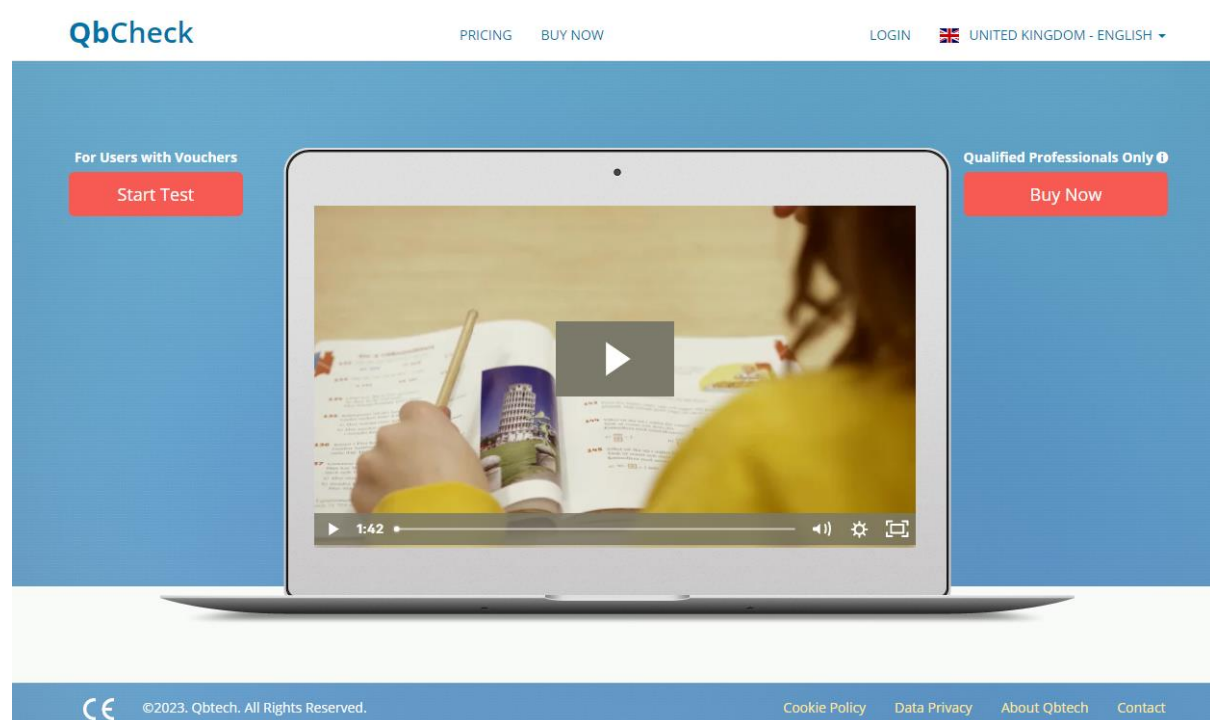
QbCheck is a software that can be accessed online through [www.qbcheck.com](http://www.qbcheck.com). The software consists of a landing page with menus and buttons as well as a section which requires login to access QbCheck's functionality. When exiting the QbCheck professional account, please logout or close the web browser by clicking on the red Close (X) button.

## 7 QbCheck Software Overview

QbCheck is a software that can be accessed online through [www.qbcheck.com](http://www.qbcheck.com). The software consists of a landing page with menus and buttons as well as a section which requires login to access QbCheck's functionality. When exiting the QbCheck professional account, please logout or close the web browser by clicking on the red Close (X) button.

### 7.1 QbCheck Landing Page

The QbCheck landing page is the first page shown when entering [www.qbcheck.com](http://www.qbcheck.com). Anyone can view the content here. Users can login to their professional account through a two-step authentication process (see chapter 6.2 QbCheck Login). Test takers and/or their parents or caregivers can perform a test at home by visiting the QbCheck landing page and utilizing a voucher sent by the user (see chapter 8.1 New Test Taker).



#### 7.1.1 Subpages

The QbCheck landing page contains subpages where information can be found about pricing and sign up. In addition, the professional account is accessed through the "LOGIN" button on this page.

##### 7.1.1.1 Pricing

The 'Pricing' page contains information on pricing and conditions for QbCheck.

##### 7.1.1.2 Buy Now

The 'Buy Now' page allows qualified professionals to sign up for QbCheck.

##### 7.1.1.3 Cookie Policy

The 'Cookie Policy' page contains the cookie policy for QbCheck.

#### 7.1.1.4 Data privacy

The 'Data Privacy' page describes the secure processing of personal and test data as well as the test takers rights.

#### 7.1.1.5 About Qbtech

The 'About Qbtech' page contains information about Qbtech.

#### 7.1.1.6 Contact

The 'Contact' page contains contact information to Qbtech.

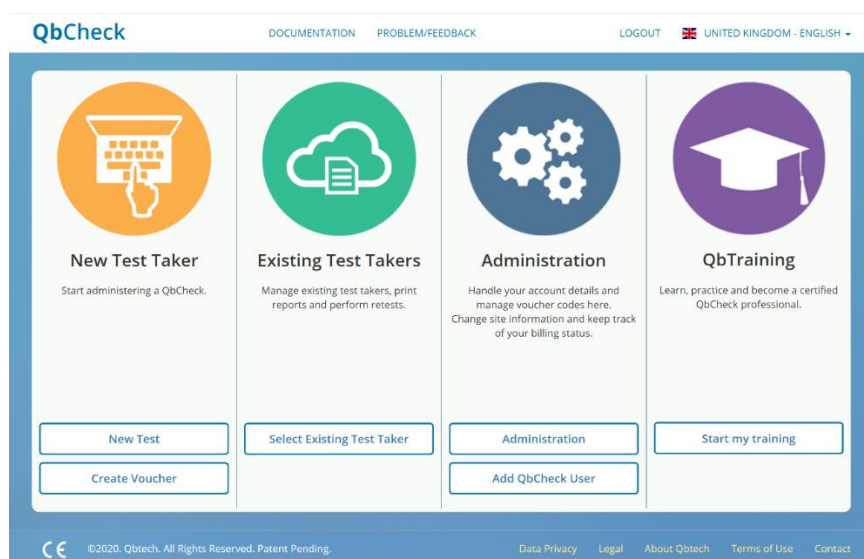
#### 7.1.1.7 LOGIN

The 'LOGIN' page allows users with a professional account to login and perform new tests, generate voucher codes, access existing tests and edit site and billing information.

### 7.1.2 Buttons

The QbCheck landing page has two buttons available. The "Sign Up" button is for professional users, allowing new sites to sign up for an account. The "Start Test" button 'For Users with Vouchers', is the entry point for test takers and/or their parents or caregivers to perform a QbCheck test outside the clinic or educational setting.

The professional QbCheck account may be accessed with a two-step authentication process (see chapter 6.2 QbCheck Login) through 'LOGIN' on [www.qbcheck.com](http://www.qbcheck.com). When logged in, professional users can perform new tests, create voucher tests, access existing tests, and edit site and billing information.



*Professional account landing page. Enables quick access to main QbCheck features*

To return to this overview, please press the QbCheck symbol in the top left corner.

### 7.1.3 Menus

When logged in, four menus are available on the QbCheck professional account landing page. These menus give professional users access to the full suite of QbCheck tools. The four menus are:

#### 7.1.3.1 New Test Taker

The 'New Test Taker' menu enables the start of a new test as well as the creation of a test voucher for test takers and/or their parents or caregivers. Both actions require personal data about the test

taker to be filled out in a few easy-to-follow dialogue boxes, for more details see chapter 8.1 New Test Taker.

#### **7.1.3.2 Existing Test Takers**

The 'Existing Test Takers' menu enables access to reports from tests that previously has been administered or to edit test taker-related information (see Section 9.1 for details).

#### **7.1.3.3 Administration**

Under the 'Administration' menu it's possible to view or edit the site information and billing status, view transactions made and add additional QbCheck users. Under "Documentation" additional information valuable when administering a QbCheck such as Behavior Observation Form, Patient Consent Form or Stimuli Presentation card can also easily be accessed.

#### **7.1.3.4 QbTraining**

Under the 'QbTraining' menu the user can learn how to successfully administer a QbCheck to a patient, and how to interpret a QbCheck report.

All menus are available in a panel to the left except for when administering a QbCheck. To return to the QbCheck landing page click on the QbCheck icon in the top left corner.

## 8 New Test

This section reviews how to start a new test, generate a voucher code, how to fill in the background information of the test taker and how to administer a test in different settings. To edit test taker or test related information after a completed the test see chapter 9 Administration. The 'New test' tab can be reached by logging in to the QbCheck for professional users on [www.qbcheck.com](http://www.qbcheck.com).

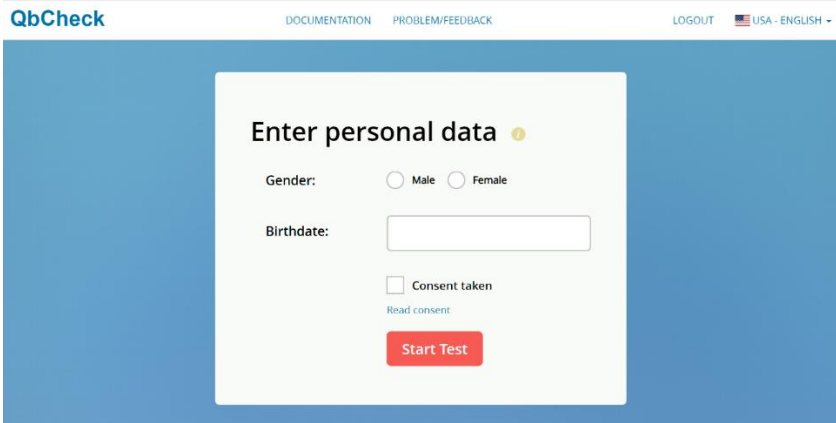
### 8.1 New Test Taker

New tests can be administered via the 'New Test Taker' menu and in two different ways: within the user's setting (e.g. clinic or school) or remotely (e.g. in the test taker's home environment). To utilize these options the user will have to log into their QbCheck account and select either the "New test" or "Create Voucher" button.

The subsequent test flow of "New Test" consists of a series of pages. Besides entering data about the test taker, the user will receive information on how to perform a QbCheck. When selecting "Create Voucher", the user is prompted to enter the test taker's data. Afterward a voucher code is generated that the test taker and/or their parent or caregiver will need, along with the test taker instructions, in order to perform the QbCheck at home. This is done by redeeming their voucher via [www.qbcheck.com](http://www.qbcheck.com). For a more in-depth description of the QbCheck administration procedure see chapter 8.2 QbCheck Administration Procedure.

#### 8.1.1 Enter Personal Data Page

For both new tests as well as creating vouchers, test takers personal data must be entered. Check the box for the test takers gender and select the birth date in the dropdown menu. Test taker age will determine what version of QbCheck that will be used, QbCheck (6-11 years) or QbCheck (12-60 years). The test taker's age together with his/her gender will also determine which norm group will be used for comparison and analysis of the result. When creating a voucher, an additional drop-down option is available to allocate multiple tests to one voucher code, allowing the test taker and/or their parents or caregivers to perform one or more tests.



*Enter Personal Data Page - New Test*

*Enter Personal Data Page - Create Voucher*

Before starting a new test or creating a voucher, consent from the test taker or the legal guardian should be collected. The consent form is available in PDF-format on the 'Enter personal data' page through a link underneath the check box. The form can also be printed from the Documentation tab in the QbCheck tool and sent separately. Save the signed consent in the test takers records and check the mandatory box 'Consent taken' in the test flow in QbCheck.

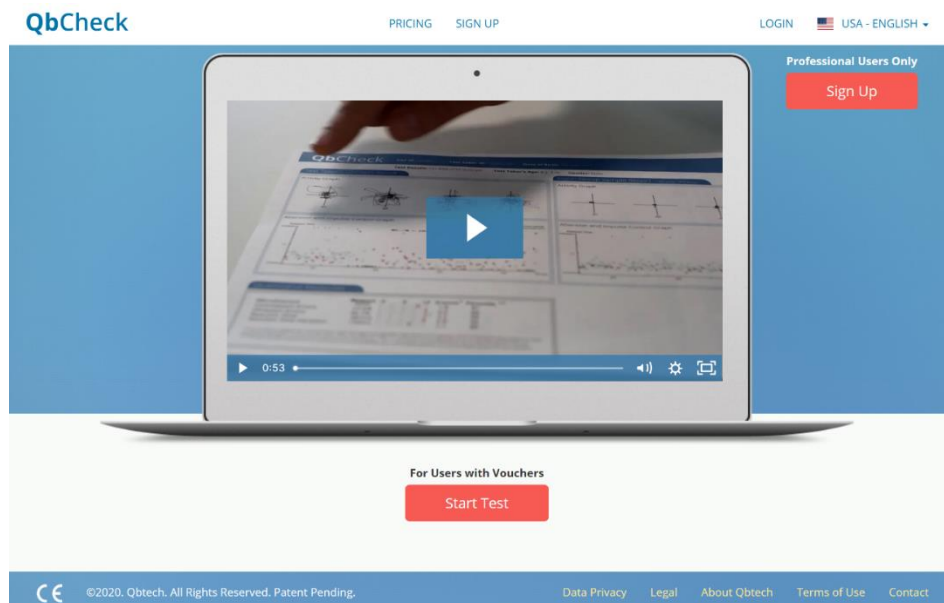
Once the button "Start Test" or "Get Voucher Code" is selected, a unique test taker ID is generated automatically. This test taker ID is displayed on the report upon test completion, as well as in the 'Test Takers List' under tab 'Existing Test Takers' (see chapter 9.1 Test Takers). If a voucher code has been generated, a unique voucher code will appear on the screen. This voucher code, together with the test taker ID, will also be sent to the user by email. Please note that voucher codes are case sensitive and that it is advised to copy and paste them, for example when forwarding them to test takers and/or parents or caregivers.

*QbCheck Voucher Code Page*

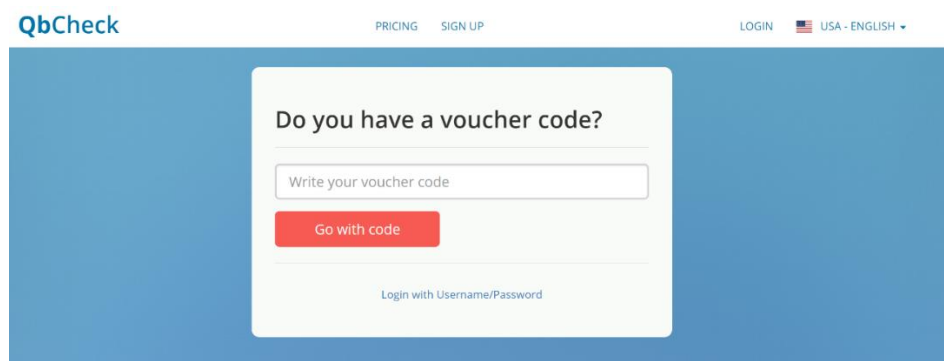
To ensure a successful test experience outside the clinic or educational setting, and to support test takers and/or their parents or caregivers accordingly, the 'QbCheck Voucher Testing Instructions' in



Appendix B should be sent together with the voucher code. Test takers and/or their parents or caregivers can redeem their voucher code on [www.qbcheck.com](http://www.qbcheck.com) via the “Start Test” button titled ‘For Users with Vouchers’. They will then be prompted to enter their voucher code.



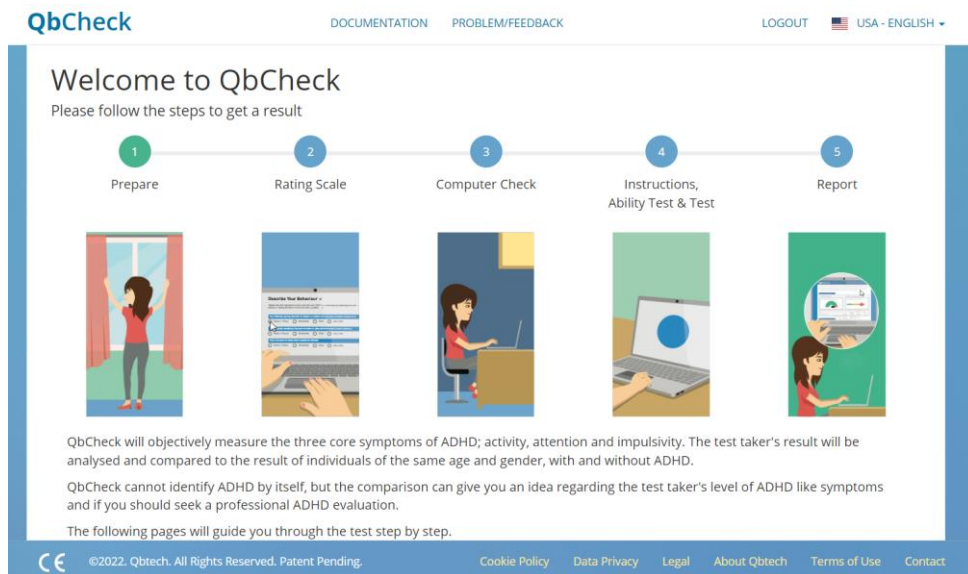
*QbCheck Landing Page*



*QbCheck Voucher Redeem Page*

## 8.1.2 Overview test flow

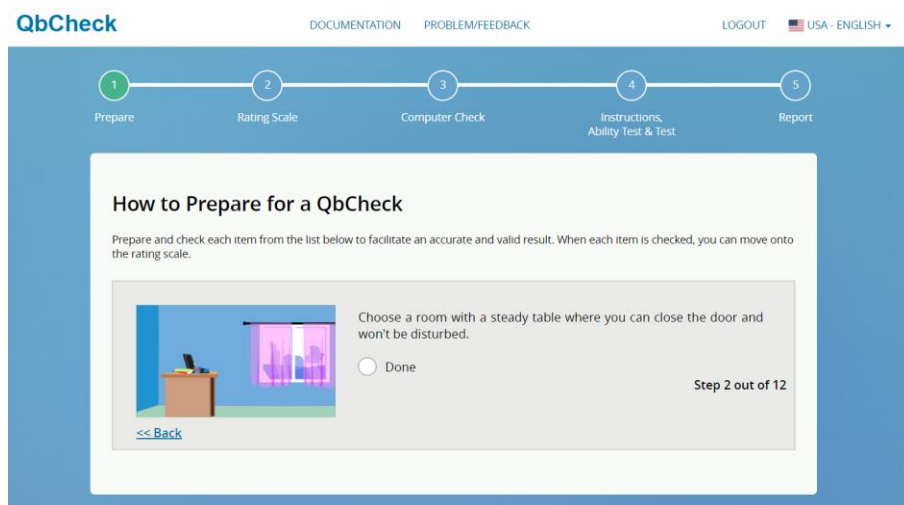
Once a user or test taker and/or their parent or caregiver commences a test, they will follow a 5-step test flow. This page gives a brief introduction and overview of the test flow. To continue press the “Next” button.



Overview page: Prepare, Rating Scale, Computer Check, Instructions, Ability Test & Test, Report.

### 8.1.3 Preparations Page

The Preparations page is a checklist containing 13 items on how to prepare the test environment for a QbCheck e.g. remove disturbances, use the correct seating arrangement, and correct computer setup. Each item must be checked off before continuing to the next step in the test flow.



Preparations page – checklist for how to prepare the test environment for a QbCheck

### 8.1.4 Rating Scale Page

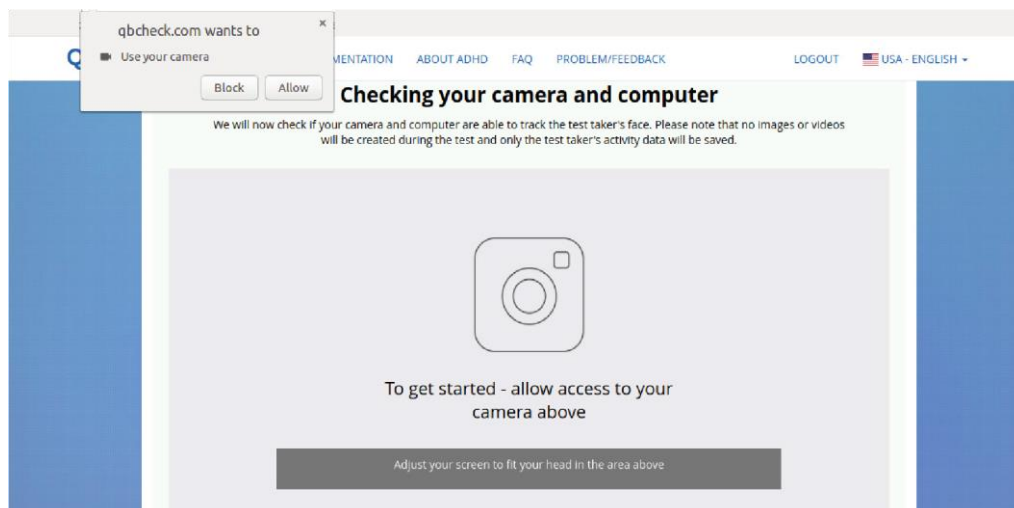
The rating scale consists of different questions that must be answered before QbCheck can start. The rating scale is developed by Qbtech and is based on the 18 diagnostic criteria in DSM-5, which describe behavior associated with ADHD. The purpose of the rating scale is to gather information about how the test taker experiences, or behaves, in different environments. The rating scale is filled out by the test taker themselves (for adults) or a person close to the young test taker. The results from the rating scale are on page two of the test report. Responses are made in Likert scale format, and symptoms are considered endorsed when “often” or “very often” is selected. The rating scale

also includes a summary of the ADHD-like symptoms and if they meet criteria for ADHD-like symptoms according to DSM-5 criteria.

### 8.1.5 Computer Check Page

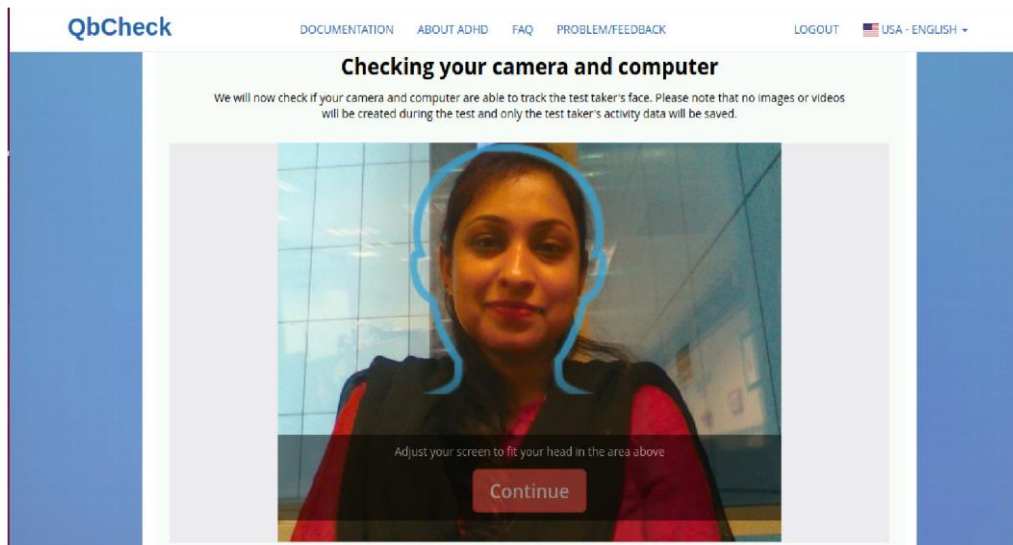
On this page the computer performance and camera quality will be checked to ensure that the computer used is fast enough and able to track the test taker's movements during the test. If not already done, seat the test taker in front of the test computer and adjust the distance from the camera to the test taker's head to about 60 cm or 24 inches. The test taker should of course still be able to reach the keyboard.

Depending on the computer settings, access to the web camera might have to be given through a popup dialogue box appearing on the top left of the screen. The test taker will then become visible on the screen and a green box will appear ready to start tracking the test taker's movements. The test taker will not be recorded at any time during QbCheck. Only data on how the test taker, e.g. the green box, moves during the test will be saved. If all computer and camera performance and quality is sufficient for a QbCheck it will be possible to continue in the test flow. If it for some reason is not possible to continue, please read our trouble shooting section (see chapter 11 Troubleshooting).



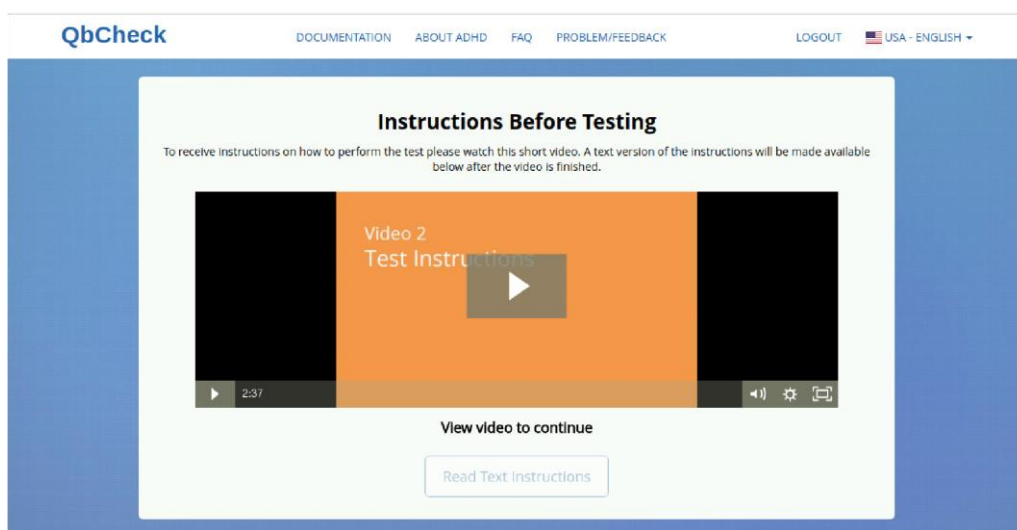
*Computer check page – Controls that both camera and computer performance is sufficient for a QbCheck*

A blue head shaped contour will appear in the image. Adjust the angle of the camera so that the test taker's head fits inside. Then press the continue button.



### 8.1.6 Test Instruction Page

On this page, instructions on how to perform a QbCheck will be given for the test taker. Both video and text instructions are available.



*Test instructions page in QbCheck*

In addition, a printed version of the stimuli card can be used by the user in order to ensure that the test taker has understood the test instructions. A PDF-version of the stimuli card can be found under Documentation tab (see chapter 9 Administration). To continue to the next page in the test flow press the 'Start Ability Test' button.

### 8.1.7 Ability Test Page

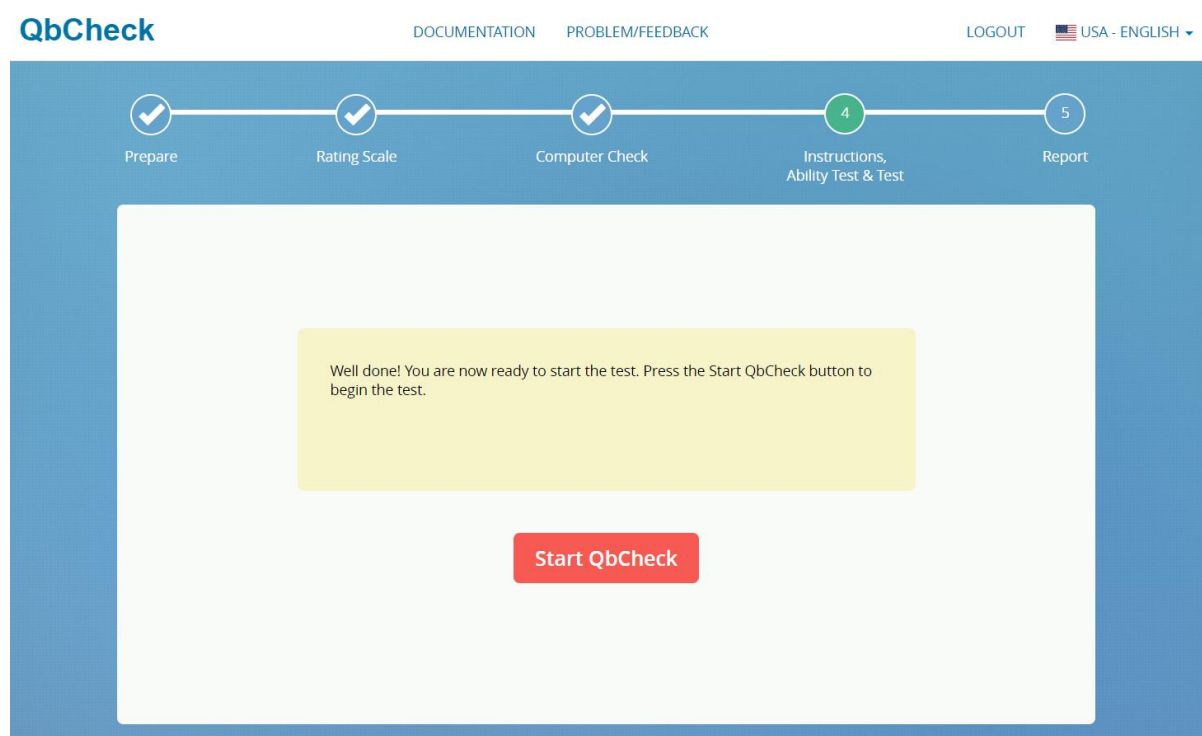
When pressing the 'Start Ability Test', a 1-minute Ability Test will immediately start. This is a check to ensure that the test taker has understood the test instructions. Afterwards the test taker will be informed if he/she passed the Ability Test. To continue to the actual QbCheck, the test taker must have less than 50% commission (incorrect presses) or omission errors (missed targets).

If the test taker did not pass the Ability Test, it's a chance to review the instructions again and/or retake the Ability Test. Discontinue after three Ability Tests if the test taker continues to make more than 50% commission or omission errors and the clinical decision is that this is due to not understanding the instructions.

Press the 'Start QbCheck' button to continue to the actual test. This button will only be visible after a successfully completed Ability test.

### 8.1.8 Start QbCheck Page

QbCheck will automatically start and continue for 15 or 20 minutes depending on the test taker's age. The test will stop automatically when finished.



*Start QbCheck page*

### 8.1.9 Test Result Page

If a test has been performed via the "New Test" button" (e.g. in clinic or at school), the test taker's QbCheck result will be displayed within 90 seconds. The result will also become available in a PDF-file that can be downloaded and printed or can be retrieved through the Existing Test Takers tab when logged into the professional account.

If a test has been performed remotely by utilizing a voucher code (e.g. at home), the QbCheck result will not be made available. Instead, the result can be downloaded and printed or can be retrieved through the Existing Test Takers tab when logged into the professional account.

## 8.2 QbCheck Administration Procedure

To maximize the validity and reliability of the test results, it is important to standardize the test conditions e.g. the instructions and the test environment (see chapter 5.1 Test Room Environment). This section will cover specific instructions for administering a QbCheck, beginning with preparations, test instructions and troubleshooting.

It is important that everyone who is being tested with QbCheck is informed of the purpose and the nature of the test and clearly understands what is expected of them. Please avoid referring to QbCheck as a “computer game”. Instead refer to it as a “computer task” when describing the test, to avoid associating QbCheck with amusement.

### **8.2.1 Test Preparations: initial set up**

It is recommended to turn on and log on to the computer before administration to prevent any automatic anti-virus or Windows updates interfering with the QbCheck web tool. Close all other programs opened on the computer. When conducted in a clinical or educational setting, it is also recommended that to have a printed copy of the QbCheck Behavior Observation Form available for taking notes during testing (this can be found under the ‘Documentation’ tab) as well as a stopwatch to keep accurate track of the time. It is at the discretion of the user/site if and how they wish to obtain observation from test takers and/or their parents or caregivers, if the test has been performed remotely.

1. Professional users should select ‘LOGIN’ in the top menu on the landing page and log in by using their password and security verification device. To start a test, select ‘New test’.
2. Test takers and/or their parents or caregivers should select ‘Start Test’ on the landing page and redeem their voucher code to start a test.
3. Choose the appropriate seating available according to instructions. Younger children performing QbCheck (6-11) should be seated on a hard stool without a backrest or armrests whereas older children and adults performing QbCheck (12-60) should be seated on a hard chair with a backrest but no armrests. It is important that there is some sort of sturdy footrest available for those test takers who, because of their height, will not be able to rest their feet comfortably on the floor while seated. It is also important that the chair or stool doesn't swivel or have wheels.
4. Also prepare the test environment by drawing the curtains of any window in the room to avoid reflections and distractions. Ensure normal lighting conditions and that the test taker's field of vision is clear of distractions (e.g. clocks, paintings, office clutter). Also make sure that the computer with a built-in camera is placed on a stable table.
5. Please ensure that the test taker has turned off their mobile phone and that they take off any coats/jackets, if applicable. Sometimes, especially when testing younger children, it might be a good idea to ask if they need a drink or to use the toilet before starting the test since it is not possible to take a break during the QbCheck.
6. For a “New Test”, the test taker data should be entered, test taker consent collected and the mandatory box for consent checked. For voucher tests, these steps are conducted separately. In either situation, it is particularly important that the gender and date of birth is filled out correctly as this will determine which normative data the test takers results will be compared to.
7. Regardless of the setting where the test is performed, the test procedure should be explained, for example:

"This is a computer-based task that is used to measure your ability to pay attention over time and your activity level. The test will continue for 15/20 minutes (15 minutes if you are using QbCheck (6-11 years), 20 minutes for QbCheck (12-60 years)). The test might feel long and boring, but it is designed this way to test your ability to stay focused. The camera will trace your movements, but it will not film you at any point during the task."

8. The test taker should be seated on the stool/chair in front of the screen. It should be ensured that the test taker is able to place his/her feet comfortably on the ground or on a sturdy footrest if they cannot reach the floor. The test taker should also be able to move freely on the stool/chair without being restricted by the walls, table or any other object. The distance from the camera to the test takers head should be adjusted to about 60 cm or 26.3 inches.
9. Continue to the camera and computer check. If prompted, the QbCheck web tool should be allowed to access the web camera. If applicable, the person observing the test taker should ensure to move outside of the camera view during the camera check as well as during the test. The test taker will not be filmed at any time during QbCheck. Instead, only data on the test taker's movements will be stored.
10. Next, the instruction video should be shown. The test administrator or test taker's parent/caregiver could say something like: "I will now show you a short animation that will explain the task in more detail. Please look carefully. Are you ready?". Start the animated instruction video. The following will be explained in the animated instruction depending on test type:

During testing the figures below are shown on the screen, one at a time.





The task is to press the spacebar when a circle is shown and withhold pressing when the circle is crossed out for QbCheck (6-11). The task in QbCheck (12-60) is to respond by pressing the spacebar whenever a figure of the same shape and color repeats itself. In both versions of the test the test taker is instructed to press the spacebar as quickly and accurately as possible.



### Example QbCheck (6-11):

If the figure is a:  Press

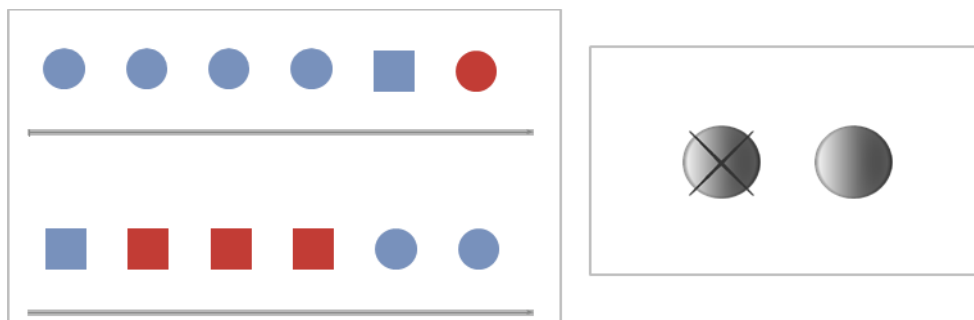
If the figure is a:  Do not press

### Example QbCheck (12-60):

If the first figure is a:  and the next figure is:  Press

If the first figure is a:  and the next figure is:  Do not press

11. After the animated instruction video, the test taker should be asked to repeat the test instructions using the 'stimulus card', if available. If he/she makes any errors, explain the task again using the same card. Emphasize that he/she should try to respond as quickly and accurately as possible and that he/she is not expected to respond before the target disappears. This is especially important when testing younger children who might believe this is required if not instructed otherwise.



*Stimulus cards for QbCheck (12-60 years) and QbCheck (6-11 years)*

12. Before starting the Ability Test, make sure the test taker has his/her dominant hand on the spacebar. It is okay to rest the wrist on the table or computer, but the test taker should not be leaning on the table.
13. Start the Ability Test. If it is a child performing the test, give him/her positive feedback during the test for the initial correct responses. For test takers using QbCheck (12-60), any remarks during the Ability Test are generally perceived as distracting so refrain from commenting while they are performing the Ability Test. If the test taker appears unsure of the test rules



during or after the Ability Test, provide further verbal instructions using the 'stimulus card', if available, and for tests conducted in a clinical or educational setting, a this should be recorded on the 'QbCheck Observation Sheet'. Be especially observant on test takers performing QbCheck (12-60) if they systematically misunderstand the task and try to only identify identical pairs rather than respond to all consecutive targets.

14. If the test taker has made more than 50 % commission or omission errors on the Ability Test, a message "Too many errors were done in the Ability Test, please review test instructions and try again" will appear. Review the test instructions and repeat the Ability Test. If available, the 'stimulus card' could be used to check that the test taker has understood. After the test taker has successfully completed the Ability Test, he/she can continue to the actual QbCheck. Discontinue after three Ability Tests if the test taker continues to make more than 50% commission or omission errors and likely due to not understanding the instructions.
15. Test administrators, test taker's parents/caregivers can tell the test taker: "Well done, you are now ready to start the task. The task will last for 15/20 minutes. Please try to respond as quickly and as accurately as you can but remember that you are not expected to press the spacebar before the figure disappears. Also, we can't talk during the test. Do you have any questions? OK, let's begin."
16. During the test it can be helpful to observe the test taker, however, it should be ensured that the observer is behind and to the right or left of the test take, outside what the camera picks up. They should, however, still be at a distance where they can see the screen and hear the button presses. This will allow them to make behavioral observations whilst not distracting the test taker during the test.
17. When the test has finished a "Well Done" screen will automatically appear. If performed in a clinic or educational setting, the administrator can press 'Next' to generate a test report. This report will be available on the screen as well in a PDF format. If performed outside the clinic or educational setting, no report will be made available and the test result can be viewed by the user via their QbCheck account, 'Existing Test Takers'. For a quick guide to administration of QbCheck (see Appendix A).

## **8.2.2 Problems and Possible Solutions During Test Administration**

Below are some problem situations described and possible solutions. However, irrelevant to the situation, it is always important that the observer's behavior be guided by the basic principle of intervening as little as possible. For tests conducted in a clinical or educational setting: please note any interaction with the test taker during testing in the 'QbCheck Observation Form'. This form can be retrieved under the administration menu when logged in to QbCheck for professionals (see Appendix C).

If the test taker talks to the observer or asks questions, the observer should ignore the test taker while maintaining focus on the screen avoiding interaction and eye contact as much as possible. If the test taker persists, the observer may respond softly: "Remember that we can't talk until the task is finished".

If the test taker disengages from the task and does not appear to self-regulate back to the test, encourage the test taker to continue by saying: "Please continue to do your best. Do not worry if you make mistakes, everyone does". Try not to offer this encouragement more than twice. If the test taker refuses to continue, prompt him/her by saying: "Please continue to work on the task a bit more, it will only last for another X minutes". If he/she continues to refuse, discontinue the test.

If the test taker appears to continuously press the spacebar indiscriminately, you may say: "Remember to only press the spacebar when there is a circle without a cross on the screen/a figure of the same shape and color that repeats itself".

If the test taker walks away from the test, ask him/her to: "Please sit down and continue with the task". If he/she refuses, discontinue the test.

If the test taker does not press the spacebar at all during the first two minutes of the test, encourage them to: "Remember to press the spacebar when there is a circle without the cross on the screen/a figure of the same shape and color that repeats itself". Discontinue the test if this continues for more than two minutes at the beginning of the test.

Do not comment on the test takers activity level unless their behavior constitutes a risk to themselves or to the equipment (e.g. they risk falling off the chair).

### **8.3 Cancel/Stop On-going Test**

If necessary, it is possible to stop an on-going test by pressing the Escape (ESC) or F11 button on the keyboard. Please be aware that it is not possible to continue the testing from where it was interrupted.

### **8.4 Finished Test**

After a QbCheck is finished the result is immediately analyzed and compared to an age and gender adjusted norm group. For tests conducted in a clinical or educational setting, the test result is then visualized on the screen and in a PDF-report that can be downloaded and printed. No test results are made available for voucher tests, conducted outside the clinic or educational setting. All QbCheck reports can be accessed through the QbCheck webpage for professionals under the tab 'Existing Tests Takers' (see chapter 9.1 Test Takers).

### **8.5 Retrieve Reports**

A test report can be opened from two locations: the Test Taker's detailed page (see Section 9.1.1) and the Tests page (see Section 9.2).

When a specific test has been searched for and located, click on the eye icon for the specific test to open the pdf report.

## 9 Administration

The administration view is used for User, Site, Test Taker and Test administration.

The top of the page contains the following links.

**QbCheck**

[DOCUMENTATION](#)






[PROBLEM/FEEDBACK](#)

[LOGOUT](#)

 [UNITED KINGDOM - ENGLISH](#) ▼

Page name	Description
QbCheck logo	Link to QbCheck start page
Documentation	QbCheck Documentation
Problem/Feedback	Feedback Form
Info	Device information
Logout	Log out of QbCheck
Language & Region	Language and Region Selector




The menu on the left side contains links to the following pages. The pages are further described in the following sections.

 <a href="#">Test Takers</a>
 <a href="#">Tests</a>
 <a href="#">Site and Billing Info</a>
 <a href="#">Users</a>
 <a href="#">My Profile</a>

	Description
Test Takers	List of all Test Takers created for your Site
Tests	List of all Tests performed for your Site
Site and Billing Info	Site and Payment details
Users	List of all users connected to your Site
My Profile	Your personal details

### 9.1 Test Takers

The Test Takers page lists all Test Takers created for your Site.

Test Taker List									
				Unused Voucher Tests		Date Search			
				All ▼		Select ▼		<input type="text" value="Search"/>	
↕ Test Taker ID	↕ QbTest ID	↕ Date of Birth	↕ Gender	Completed Te...	Discontinued ...	↕ Last Test Date	Unused Vouch...	↕ Created By	Open
JJUZMxu4Fj		06-15-1990	Female	0	0		N/A	@qbt...	
FrguKqIIdI		04-19-2016	Female	0	0		N/A	@qbt...	
ubijEkjI70		07-22-1964	Female	1	0	06-29-2022	N/A	@qbt...	

The following columns are shown:

Label	Description
Test Taker ID	The randomized ID generated when creating the Test Taker
QbTest ID	The QbTest ID entered for the Test Taker (optional). <i>Note! Personally identifiable information, such as names or initials, is not allowed</i>
Date of Birth	Test Taker Date of Birth
Gender	Test Taker Gender
Completed Tests	Number of completed tests the Test Taker has performed
Discontinued Tests	Number of discontinued tests (test with errors) the Test Taker has performed
Last Test Date	Date last test was performed
Unused Voucher Tests	Number of tests remaining for the voucher generated for the Test Taker. If no voucher generated: N/A.
Created By	Email address to the user that created the Test Tager
Open	Link to open the Test Taker Details page

On the top-right corner of the page, search functions are found. The following search options are available.

#### Unused Voucher Tests Date Search

All ▼

Select ▼

 Search

Label	Description
Unused Voucher Tests	Search filter to only show test takers with a specific voucher status. Three options are available: <ul style="list-style-type: none"> <li>All – shows all Test Takers</li> <li>Yes – only show Test Takers that have a voucher with tests remaining</li> <li>No – only show Test Takers that have a voucher but no tests remaining</li> </ul>
Date Search	Search filter that limits the result to the specified date range. One of the following fields can be selected for the date range search: <ul style="list-style-type: none"> <li>Date of Birth</li> <li>Creation date (date the test taker was created)</li> <li>Last Test Date (date of the last performed test)</li> </ul>
Search	Free text search that covers the following fields: <ul style="list-style-type: none"> <li>Test Taker ID</li> <li>QbTest ID</li> <li>Created By</li> </ul>


When selecting a date search, you can select start and end date, as shown below.

Unused Voucher Tests

Date Search

Start Date

End Date

 Search

All ▼

Date of Birth ▼

03-06-20

04-06-20

## 9.1.1 Test Taker Details

To edit test taker data or test data for a specific test, click on the test ID for the specific test in the existing test taker list. The test taker data and test data become available for editing. Remember to always press the save button after editing information.

### 9.1.1.1 Retest an Existing Test Taker

In QbCheck it is possible to retest a test taker so that the new test is saved together with previously done tests. To administer a retest, locate the test taker in the list of existing test takers. Click on their ID to be directed to the test taker page and then press the button New Test, directly starting the test flow. Test taker details do not need to be re-entered as this was done for the first test.

## 9.2 Tests

The Tests page lists all Tests performed for your Site.

Tests						
		Date Search	Created By	Test Status	Done	
		Select	Email	All	All	Search
Test Taker ID	QbTest ID	Created By	Date	Test Report	Error	Done
ubijEkl70		@qbtech.com	06-29-2022		None	<input type="checkbox"/>

The following columns are shown:

Label	Description
Test Taker ID	The randomized ID generated when creating the Test Taker
QbTest ID	The QbTest ID entered for the Test Taker (optional) <i>Note! Personally identifiable information, such as names or initials, is not allowed</i>
Created By	Email address to the user that created the Test Taker
Date	The date the test was performed
Test Report	A link to the test report
Error	Status information of the test. An error message is shown if the test was discontinued
Done	A checkbox that be used to mark a test as done when assessment has been finalized

On the top-right corner of the page, search functions are found, as shown below.

Date Search	Created By	Test Status	Done	
Select	Email	All	All	Search

The following search options are available.

Label	Description
Date Search	Search filter that limits the result to the specified date range. The following field can be selected for the date range search: <ul style="list-style-type: none"><li>Last Test Date</li></ul>
Created By	Email address to the User creating the test
Test Status	Search filter to only show tests with a specific status. The following options are available: <ul style="list-style-type: none"><li>All – show all tests regardless of status</li></ul>

	<ul style="list-style-type: none"> <li>Completed – only show tests that have been completed successfully</li> <li>Discontinued – only show tests that have been started but not completed successfully</li> </ul>
Done	Search filter to only show tests with a specific status of the Done checkbox. The following options are available: <ul style="list-style-type: none"> <li>All – show all tests regardless of status</li> <li>Yes – only show tests that have been marked as Done</li> <li>No – only show tests that have not been marked as Done.</li> </ul>
Search	Free text search that covers the following fields: <ul style="list-style-type: none"> <li>Test Taker ID</li> <li>Qbtest ID</li> <li>Created By</li> </ul>

## 9.3 Site and Billing Information

On the 'Site and Billing Info' page, it is possible to view and edit a site's contact information. When editing information remember to press 'Save'. The following information is required from each site:

Label	Description
Country	Country that the Site is registered in
Billing/Contact Email	Email address to the Site main contact person
Telephone	Telephone number to the Site main contact person
Address	The Site's full address
Zip Code	The Site's postal code
City	The city the site is located in

### 9.3.1 Payment Method

To use QbCheck, a credit card must be connected to the site account and details about the credit card need to be specified and saved. Only the last 4 digits are displayed after the card is saved to the account.

On the 'Site and Billing Info' page, it is possible to change the card being used for payments.

## 9.4 Users

Under the 'Users' page, a list of all users connected to a Site are listed. Apart from viewing all users, this page can also be used to

- Add new users,
- Open and edit details for each user, and
- Delete users.

## 9.5 My Profile

The 'My Profile' page shows the logged in user's personal information. From this page you can

- Edit your Name, email, telephone number and preferred language,
- Update your password, and
- Enter an email address to which a notification will be sent for all performed tests.

### 9.5.1 Email notification of completed tests

If entering an email address in this field, an email will be sent for each completed test created by the user. It is possible to enter multiple email addresses. An email will be sent for completed and uncompleted tests, including a link to the Test Taker doing the test.

## 10 The Report

In this chapter a short introduction to the QbCheck report will be given. After a successfully completed QbCheck, the result is immediately sent in to the Qbtech server for analysis and generation of a report. When performing a test in a clinical or educational setting via “Start Test”, the report is displayed directly on the screen in a PDF-format available for download and print. When utilizing a voucher code, the report is not made available upon test completion. The report can, however, be accessed through a site’s professional account (see chapter 9.1 Test Takers) together with all the other existing test results.

### 10.1 The QbCheck Report

QbCheck captures the test takers performance during the test. It is important to stress that QbCheck does not give a diagnosis. Instead, the tool is a first step, capturing and illustrating the test takers difficulties to aid the assessment of ADHD. The report consists of two pages containing the test taker’s result.

The report displays the test takers degree of ADHD-like symptoms. This is done by comparing the test taker’s result both to persons with ADHD as well as people without ADHD. Both groups are of the same age and gender as the test taker. The result is also presented in graphs and as quantitative measures of individual variables in comparison to a normative group, without ADHD.

#### 10.1.1 Test Demographics

The report contains a bottom section that enables a user to identify the test taker and view any information about demographics or the specific conditions that a user has entered in the beginning of the test. At the bottom of the report, you can find the following headings:

- **Test Taker ID** - A unique and automatically generated code for each test taker
- **Date of Birth** - The test taker’s date of birth
- **Test Details** - Time and date when the test was performed
- **Test Taker Age** - Age of the test taker at the time of the test
- **Gender** – The test taker’s gender.

Date of birth and gender will allow QbCheck to make accurate comparisons with the norm group data.

#### 10.1.2 Overview of the First Page Report

When interpreting a QbCheck, we recommend beginning by looking at the first page of the report. The first page contains the variable ADHD Total Symptom Score that is also presented as a QbCheck ADHD Total Symptom Level. It also contains a graphic representation of the test taker’s result, a graphic representation of a norm group sample result and quantitative measures comparing the test taker’s result to an age and gender adjusted norm group. Both the test taker’s result (left), and the sample result from the norm group (right), are displayed in an Activity Graph and an Attention and Impulse Control-Graph to facilitate visual comparison.





norm and a result below 1 Q-Score is considered as a normal performance. The percentile expresses (in percent) the probability of a normative person to score lower than the test person.

#### **10.1.2.4 Activity Graph**

The Activity Graph illustrates the test-takers head movements during the test. The path of the head is broken down into four diagrams each representing one quartile of the test time duration. These diagrams show the dynamics of activity over time.

#### **10.1.2.5 Attention & Impulse Control Graph**

The Attention & Impulse Control Graph contains information on several aspects of attention and impulsivity. The horizontal axis (x-axis) is the test-time axis covering the duration of the test. The vertical axis (y-axis) shows the reaction time to both correct and incorrect responses. If the test-taker has correctly pressed the spacebar at a presented Go stimulus, a green circle is plotted at a height corresponding to the stimulus reaction time (y-axis) and the time into the test when the response was made (x-axis). If the spacebar is incorrectly pressed a No-Go stimulus (i.e., a Commission Error), a red square is plotted in the same manner. On the first line just above the horizontal axis (x-axis), Omissions Errors (incorrect no button-presses) are represented by a black marker.

### **10.1.3 Overview of the Second Page**

The second page of the report contains the QbCheck rating scale result. The QbCheck rating scale adds a subjective perspective to the evaluation process. The scale is developed from the 18 questions in DSM-5, describing patterns of behavior associated with ADHD. Each behavior is graded as Never/ Rarely, Sometimes, Often and Very often.

Children, 6-17 years, must present Often or Very Often on at least six symptoms in one or both categories to display ADHD-like symptoms according to the DSM-5 criteria. Test takers 17 years and older must present at least five items rated Often or Very Often in one or both categories, in order to display ADHD-like symptoms according to the DSM-5 criteria.

## About the Rating Scale

The QbCheck Rating Scale adds a subjective perspective to the evaluation process. The scale is developed from the 18 questions in DSM-5, describing patterns of behavior associated with ADHD. Each behavior is rated over the last 6 months and graded as "Never or Rarely", "Sometimes", "Often" or "Very Often".

Children 6-17 years, must present "Often" or "Very Often" on six items in at least one category to display a persistent pattern of ADHD-like symptoms according to the DSM-5 criteria. Test takers 18 years and older must present with five items rated "Often" or "Very Often" in at least one category, in order to display a persistent pattern of ADHD-like symptoms according to the DSM-5 criteria.

## Rating Scale Results

This test taker has 7 items in the Inattentive category and 8 items in the Hyperactive/Impulsive category that are rated as "Often" or "Very Often".

The test taker thus meets the criteria for displaying ADHD-like symptoms according to DSM-5.

## Rating Scale Overview - Reporter: Parent

Inattention	Never or Rarely	Sometimes	Often	Very Often	Hyperactivity/Impulsivity	Never or Rarely	Sometimes	Often	Very Often
Has difficulty paying attention to details or makes careless mistakes unless interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Fidgets or squirms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Has difficulty remaining focused on tasks or play activities unless interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Leaves seat when remaining seated is expected	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Does not seem to listen when spoken to directly	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Runs about or climbs when inappropriate or appears restless	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has difficulty to follow through on tasks	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Has difficulty to engage in play or leisure activities quietly	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Has difficulty organizing and managing tasks	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Seems uncomfortable being still for extended time periods	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Avoids sustained mental effort unless interested	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Talks excessively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Loses things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Blurts out answers or thoughts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Seems easily distracted by the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Has difficulty waiting turn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Forgetful	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Interrupts or intrudes on others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Sum of items rated Often or Very Often			3	4	Sum of items rated Often or Very Often			3	5

Test Taker ID: 0000000000 Date of Birth: 0000-00-00 Gender: Male Test Details: 0000-00-00 00:00 Age: 8y, 3m.

Page two of the report

## 11 Troubleshooting

Here are some of the most common problems encountered in QbCheck.

Indication	Probable cause	Correction
Cannot log in to QbCheck for professionals.	Incorrect username or password has been used.  Incorrect use of YubiKey.  Verification code is incorrect or cannot be verified.	Contact <a href="mailto:technicalsupport.qbcheck@qbtech.com">technicalsupport.qbcheck@qbtech.com</a> for help with resetting the password, verifying your email address or the YubiKey
QbCheck says the computer performance is too low.	The automatic computer performance test requires a certain computer performance to start the test.	Review the setup requirements for the room and the laptop and try again. If no change, try on another computer.
Cannot detect face.	The camera is not aligned properly, the environment is not set up properly.	Review the setup requirements for computer and room and try again
The internet connection was removed while performing QbCheck.	No internet connection was available when test was complete.	When the internet connection is back, go back to <a href="http://www.qbcheck.com">www.qbcheck.com</a> . The user will be asked if they would like to upload their latest test result.
An error message is displayed when data is submitted after the test is complete	No internet connection was available when test was complete.	When the internet connection is back, go back to <a href="http://www.qbcheck.com">www.qbcheck.com</a> . The user will be asked if they would like to upload their latest test result.

If there are any other questions, please contact us at [technical.support.qbcheck@qbtech.com](mailto:technical.support.qbcheck@qbtech.com)

## 12 Technical Specifications

PC requirement	Specification
Keyboard	Keyboard available
Internet connection	Modem or broad band
Web or video camera	Built-in to computer with a resolution of at least 640x480.
Sound speaker	Sound speaker available
Web browser	Chrome version 110 or later, Edge version 120 or later.
Operating system	Windows 10 or later, Mac OS 11 or later.
Display system	At least 1024x768

## Appendix A – Quick Guide to Administration

1. Open a Google Chrome browser. Also remember to close any other open program, window or tab.
2. Log in to QbCheck. You will need both your password and software protection device to be able to login.
3. Select appropriate seating according to test - For QbCheck (6-11) choose a stool without arm- and backrest. For QbCheck (12-60) choose a chair with backrest but no armrests, please note that the chair/stool should have no wheels.
4. Accompany the test taker to the test room. Remind him/her to switch off their mobile phone and take off any coats/jackets.
5. Enter relevant test taker data. Review the Data Protection Information document and, if approved, check the box 'Consent taken'.
6. Note down the unique and automatically generated test taker-ID in the test taker's health records.
7. Explain the test procedure, e.g.: "This is a computer-based task that is used to measure your ability to pay attention over time and your activity level. The test will continue for 15/20 minutes (15 minutes if you are using the QbCheck (6-11) version, 20 minutes for the 12-60 years version). The test might feel long and boring, but it is designed this way to test your ability to stay focused. The camera will trace your movements, but it will not film you at any point during the task. Before we continue with the test you (or your parent) will have to fill out a few questions regarding you. Do you have any questions at this point?"
8. Seat the test taker comfortably on the stool/chair with both feet on the ground. If needed, use a wider footrest for the younger children who may have a problem reaching the floor.
9. Adjust the distance from the camera to your test takers head. The distance should be 60 cm or 26.3 inches.
10. Continue to the computer and camera check. The test taker is not filmed here or at any time during QbCheck. Only data on the test taker's movements is recorded and stored.
11. Start the animated instructions saying, "I will now show you a short animation that will explain the task in more detail.
12. Please look carefully. Are you ready?". When testing children their guardians may stay until the animated instruction has been shown but should be asked to leave before the Ability Test begins.
13. Ask the test taker to repeat the test instructions using the 'stimulus card'. The parent or legal guardian should now leave the room.

14. Show the test taker how to hold their dominant hand at the spacebar throughout the test. It is okay for the test taker to rest the hand on the table or the computer, but he/she should not lean on the hand or the table.
15. Start the Ability Test. If it is a child being tested give him/her positive feedback during the test for the initial correct responses. If it is a test taker using QbTest (12-60), feedback is generally perceived as distracting.
16. If needed review the instructions and retake the Ability Test. If the test taker has made more than 50% commission or omission errors, you should make sure that the test taker reviews the test instructions and retake the test. The 'Stimulus card' can be useful to check that he /she has understood the instructions. This procedure may be repeated a maximum of three times.
17. Before starting the full test give the following instructions: "Well done, you are now ready to start the task. The task will last for 15/20 minutes. Please try to respond as quickly and as accurately as you can but remember that you are not expected to press the spacebar before the target disappears. Also, we cannot talk during the test. Do you have any questions? OK, let us begin."
18. Start the test by clicking Start Test.
19. After the test is finished the result will become available on the screen and as a PDF-file that can be downloaded and printed.

## Appendix B – QbCheck Voucher Testing Instructions

### Instructions for patients and caregivers

QbCheck is an FDA cleared and CE marked online ADHD test that supports early identification, assessment and treatment of ADHD. It is a computer-based test that objectively measures the core signs of ADHD: Hyperactivity, Impulsivity and Inattention. During the test, a spacebar is used to respond to targets and motor activity is registered by a web camera. No images are captured during the test.

Please note that it is important that you, as a patient, create a “clinic like” environment when testing. This should be free of distractions, and in an environment where you can perform the test to the best of your abilities. Please follow the following instructions to begin testing. If you run into technical difficulty, please contact the clinic immediately and note the specific error message you are receiving.

1. Perform the test as soon as possible, preferably in the morning or as instructed by your provider.
2. Use a computer with a built-in camera. If using a laptop, please make sure that the power cord is connected and that the high-performance power scheme is selected. Please note that no smartphones or tablets can be used in the performance of this test including Microsoft Surface, or Apple iPad.
3. Ensure that all programs on the computer are closed.
4. Open a Google Chrome or Microsoft Edge web browser, QbCheck is not supported by other browsers such as Safari, Firefox or Internet Explorer.
5. Go to the following address: <https://www.qbcheck.com>
6. Select the region that has your preferred language.
7. Click on the red button below the picture of a laptop, titled ‘For Users with Vouchers’
8. Enter the voucher code provided by your healthcare contact. This is case sensitive, so it is recommended you copy and paste the voucher from the provider’s email.
9. Follow the instructions on the screen preceding the test.
10. The test starts with a self-rating scale describing symptoms. Please complete this form yourself if you are over 18 years old. For individuals under 18, the parent/ legal guardian should complete the form.
11. You will then perform the actual test. Please try to stay focused throughout the whole test and visible for the web camera. If a significant distraction occurs during the test, please make sure to inform your healthcare provider.
12. If the test taker is under 18, the parent/legal guardian should observe the test taker during the test and, if needed, prompt the test taker to complete the test.
13. The entire procedure is estimated to take no more than 1 hour. The test itself is 15-20 minutes long depending on the test taker’s age.
14. After test completion, your test results will not be made available to you, but they will be reviewed by your healthcare contact.

Thank you!

# Appendix C - Behavior Observation Form

## QbCheck

## Behavior Observation Form

Test Taker ID: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Test Administrator: \_\_\_\_\_

### Before Testing

1. Do you observe any of the following about this patient before the test?

☐ Stressed    ☐ Agitated    ☐ Tired/Fatigued    ☐ Anxious    ☐ Illness/Pain    ☐ Caffeine    ☐ Substance Use

2. Test Instructions and Ability Test

Comments

Seems to pay attention to test instructions	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Seems impatient during test instructions/interrupts	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Seems motivated to perform test	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Seems to have difficulties understanding instructions	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____

3. Instructions needed to be:

☐ Rephrased    ☐ Simplified    ☐ Interpreted (sign/2<sup>nd</sup> language)    ☐ None

4. Note the number of times that you administered each of the following:

Video    1    2    3                      Stimulus Card    1    2    3                      Ability Test    1    2    3

### During Testing

1. General Patient Observations

Repetitive movements (e.g. tics, tremors, rocking/sensory seeking behaviors)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Appears to be dazed/daydreaming (e.g. "staring into space")	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Expresses frustration when making errors	<input type="checkbox"/> Yes	<input type="checkbox"/> No

2. Note events/observations that occur during the test in the Quartile box in which they occur. Examples: interruptions, auditory/visual distractions, restlessness, changing response hand, pausing responding, vocalizing/making sounds, etc. Note any interaction with Test Administrator and redirection(s) used. *Basic principle is to intervene as little as possible and keep prompting to a minimum.*

Quartile 1	Child Test (minutes) 0 – 3:45 Adol/Adult Test (minutes) 0:45 – 4:59	Quartile 2	Child Test (minutes) 3:46 – 7:30 Adol/Adult Test (minutes) 5:00 – 9:59
Quartile 3	Child Test (minutes) 7:31 – 11:15 Adol/Adult Test (minutes) 10:00 – 14:59	Quartile 4	Child Test (minutes) 11:16 – 15:00 Adol/Adult Test (minutes) 15:00 – 20:00

### After Testing

1. How did the patient experience the test situation?

☐ Nothing special    ☐ Easy    ☐ Boring    ☐ Difficult    ☐ Tiring/Exhausting    ☐ Other \_\_\_\_\_

2. Additional observations (e.g. patient remarks on strategies used): \_\_\_\_\_

QbCheck\_Behavior\_Observation\_Form\_EN\_C



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