

# Elevate your ADHD care with QbCheck

# What is ADHD?

**Attention Deficit Hyperactivity Disorder (ADHD) is the most common neurodevelopmental condition affecting 3–5% of children and young people\*, which often persists into adulthood.**

ADHD symptoms include inattentiveness, hyperactivity and impulsivity, yet, how these symptoms manifest and affect children, adolescents and adults can differ greatly. Importantly, various studies also highlight findings regarding sex differences and birthdate bias in ADHD, widening the scope beyond the common stereotype of the 'naughty, hyperactive boy' and calling for the identification of those who have been missed.

These factors, combined with the frequent presence of other conditions, including Autism Spectrum Disorder (ASD) – formerly known as Autism or Asperger's – dysgraphia, dyspraxia and Oppositional Defiant Disorder (ODD), emphasize the need for a comprehensive ADHD assessment and treatment management.

\* NICE. Attention deficit hyperactivity disorder: diagnosis and management of ADHD in children, young people and adults. Clinical Guideline 72. London: National Institute for Health and Clinical Excellence, 2008.

# The problem

## Demand & Complexity in ADHD

### Age/sex symptom differences<sup>1,2</sup>

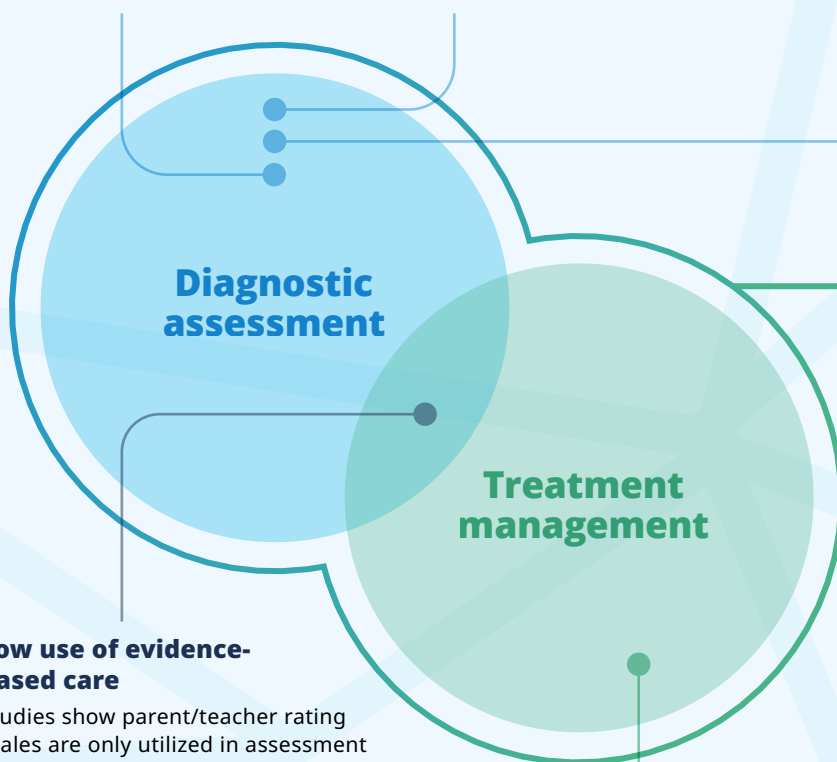
Studies show informants struggle to take into account age and sex when rating patients. This can be problematic considering the significant age and sex differences in ADHD symptom presentation.

### Complexity in patient history & overlapping symptoms

ADHD shares its core symptoms hyperactivity, inattention and impulsivity with many other conditions, leaving clinicians having to cut through complex history in order to diagnose accurately.

### Limited provider time & demand for speed

Resources are increasingly limited amongst clinicians, and demand for assessments continues to rise.



### Subjective ratings may fail to validly record levels of hyperactivity

Higher levels of motor activity in ADHD are objectively measurable not only in children, but in adults as well. The difficulty is, however, that ADHD patients have shown to fail to assess their level of motor activity.<sup>5</sup>

### Low use of evidence-based care

Studies show parent/teacher rating scales are only utilized in assessment between 20-57% of the time.

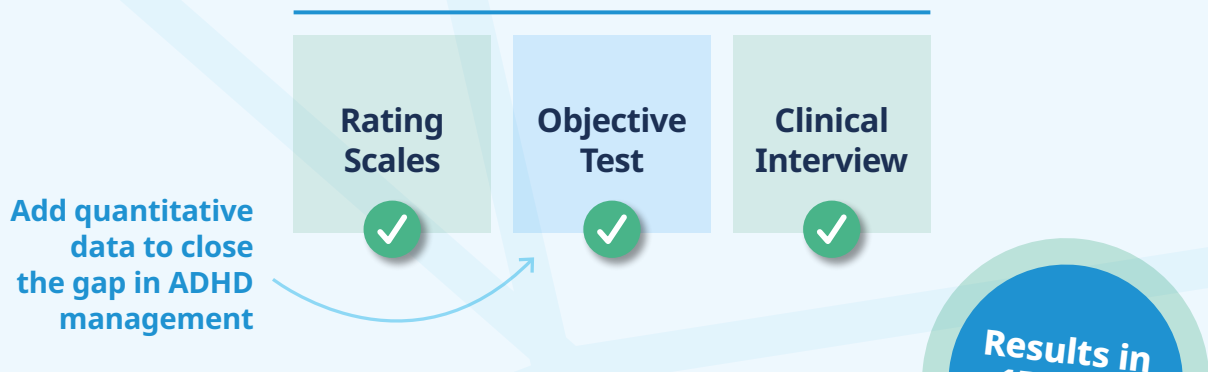
Throughout treatment, 80% of clinicians surveyed report rarely using standardized tools for rescreening. When collected, the average time for rating scales to be collected in the treatment process is 396.2 days following first prescription, leaving clinicians without data to make treatment decisions.<sup>3,4</sup>

### A gap in treatment monitoring<sup>6</sup>

Only 36% of patients reported treatment effect on Adult Rating Scales, compared to 86% as measured by Qbtech technology, showing a 50% better identification of treatment response at six months on objective measures over rating scales.

# The solution

**Innovative, EMA and TGA registered, CE marked and FDA cleared technology**



- ❖ Highly visual reports can be used to facilitate patient consultations
- ❖ Objective data cuts through complex history and overlapping symptoms
- ❖ Quick testing allows for low resource allocation
- ❖ Obtain data in-person or remotely
- ❖ Mitigate age/sex bias in assessment<sup>6</sup>
- ❖ More sensitive to treatment response<sup>7</sup>
- ❖ Improves provider confidence & patient satisfaction<sup>8</sup>

# About Qbtech

“ We simply cannot sit still for a minute. Too many clinicians lack confidence in their diagnostic decision and too many people are still seeking answers to their symptoms – whether they have ADHD or not. We have the technology, and we are on an endless quest to evolve to make our technology available to all. ”

**Carl Reuterskiöld, Qbtech CEO**

Qbtech is a market-leading provider of objective ADHD tests. Founded in 2002, Qbtech began its mission to help improve the lives of people with ADHD by focussing on a technology-first approach to ADHD assessment; combining both subjective and objective data. Qbtech is currently operating in the United Kingdom, United States, Europe, Australia and New Zealand whilst continuing to expand across new regions.

Qbtech continuously supports collaborations and independent publications led by world leading researchers and is recognized for their ongoing innovation, awarded multiple HSJ awards (Health Service Journal), the most recent for [Best in Mental Health Partnership Award](#) for their work with the FOCUS ADHD National Programme and NHS England in 2022, and positively appraised for QbTest in 2023 by the [National Institute for Health and Care Excellence \(NICE\)](#).

Qbtech is ISO 27001 and ISO 13485 certified and fully compliant with GDPR, ensuring stringent quality management and the highest level of data security whilst continually mitigating identified security risks. The company's software design & development process focuses on security-by-design. Qbtech also works with well-known industry practices like the OWASP Project & AWS Well-Architected to maintain sound & secure data processing, on-device as well as in the cloud.

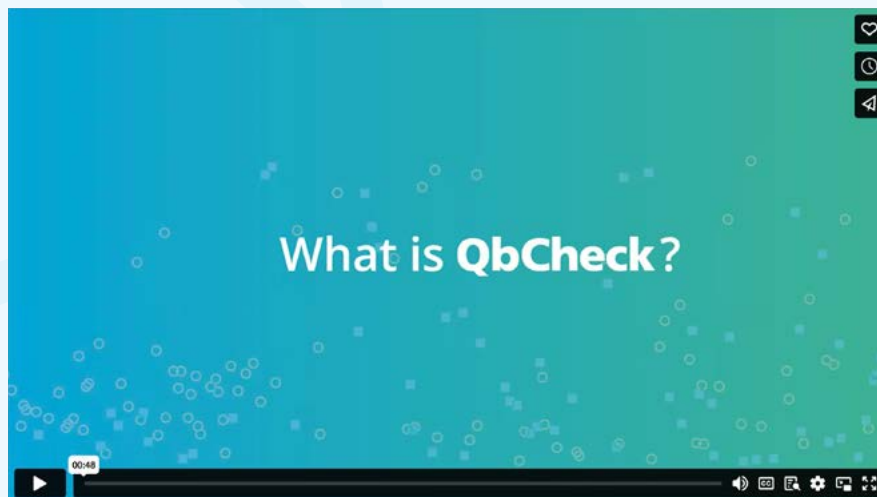
# What is QbCheck?

## **QbCheck is an EMA and TGA registered, CE marked and FDA cleared medical device supporting the assessment and treatment of ADHD.**

It is an online test that combines a computer task with facial recognition technology to objectively measure the core signs of ADHD: Hyperactivity, Impulsivity and Inattention. It objectively captures if a patient presents with typical ADHD symptoms and includes a subjective rating scale aligned with the DSM-5.

QbCheck is flexible and can be used in-person or remotely. It is suitable for both children and adults aged 6 - 60, and the test can take either 15 or 20 minutes.

Test results are instantly generated, scored and presented in a report that indicates how a patient performed in comparison to individuals of the same age and gender (sex-at-birth), with and without ADHD. This, in combination with other clinically relevant information, helps to inform clinicians about the presence of ADHD symptoms and/or someone's response to ADHD treatment.



QbCheck should only be used in line with its intended purpose according to its label, instructions for use and marketing materials as specified by Qbtech.

Importantly, QbCheck is not a stand-alone tool and should always be used by a qualified professional and in conjunction with a clinical interview and rating scales

Always read the label and follow the instructions for use. [www.qbtech.com/legal](http://www.qbtech.com/legal)

# How QbCheck works

**QbCheck is online based, and its platform can securely be accessed via [www.qbcheck.com](http://www.qbcheck.com) by using a 2-step authentication process.**



QbCheck can be administered in a clinic setting, whereby a patient conducts their test during an in-person appointment. In these instances, a test administrator provides support to the patient and prepares the test environment to ensure test standardization.

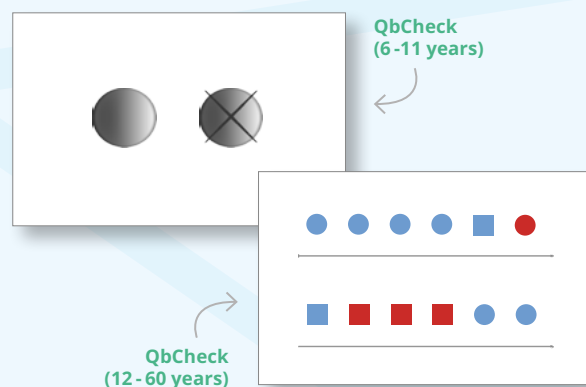
When administered remotely, e.g., in the patient's home setting, a voucher code is created and shared with the patient by the provider, together with supportive resources to ensure test standardization and a successful test experience.

During the test the patient uses the spacebar to respond to targets and their motor activity is registered simultaneously by the web camera. The test will take either 15 or 20 minutes depending on the patient's age, and it is advised to allow additional preparation time (e.g. set up, instructions, etc.). Additionally, a [QbCheck Behaviour Observation Form](#) is to be used for in-person tests, providing structured guidance on how to capture test observations.

## Test flow

A structured and intuitive five step test flow is in place to guide the test administrator and/or patient through the process;

- 1 Step-by-step instructions on test standardisation and preparation are provided
- 2 Rating Scale is included
- 3 Test conditions and environment are checked
- 4 Test instructions are provided and understanding verified, before starting the test
- 5 Results are generated instantly upon test completion

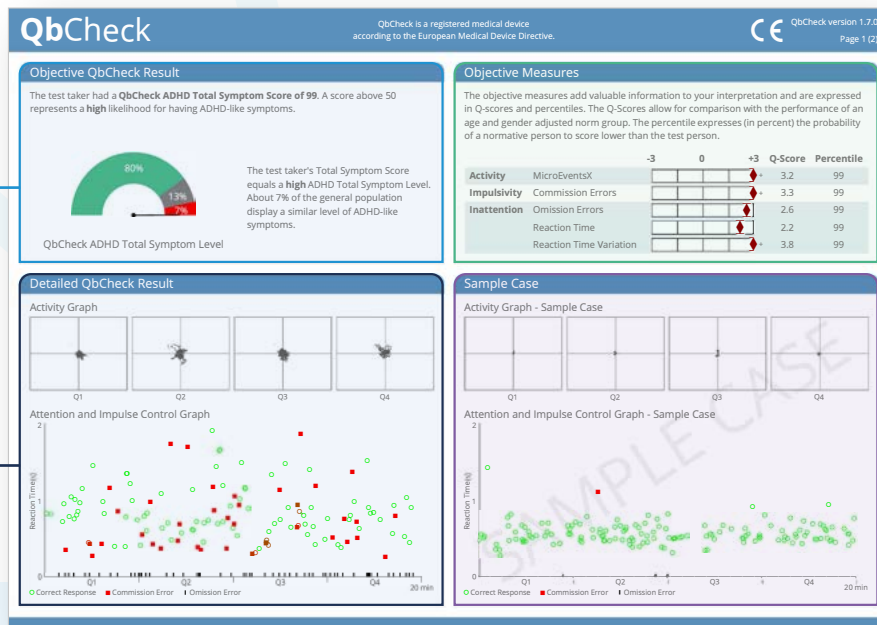


After test completion, the patient's test result is compared with individuals of the same age and gender (sex-at-birth), with and without a diagnosis of ADHD and presented in a visual 2-page report.

# QbCheck report

**The QbCheck report consists of two pages indicating the level of typical ADHD symptoms, it does not provide a diagnosis.**

This is a quick reference guide only, to receive full training please access QbTraining via [www.qbcheck.com](http://www.qbcheck.com) or contact Qbtech via [info@qbtech.com](mailto:info@qbtech.com).



**1** This section provides an ADHD Total Symptom Score and Level, indicating if the test taker presents with typical ADHD symptoms and how this corresponds to the approx. prevalence of ADHD symptoms in the general population.

**2** This section shows you, in scores, how the test taker performed compared to their norm group on activity, impulsivity and inattention. This information helps to establish if and to what extent they resemble or deviate from their peers.

**3** These graphs show the test taker's activity levels, attention and impulse control, and if/how these changed over time. Green reflects a correct and red an incorrect response, whilst a black bar reflects a non-response to a target.

**4** These graphs represent an age and sex matched individual without a clinical diagnosis of ADHD. By comparing the test taker's graphs to the Sample Case you can see how similar or different they performed compared to a peer.



# QbCheck report continued

**QbCheck**
QbCheck is a registered medical device according to the European Medical Device Directive.
CE
QbCheck version 1.7.0  
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**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 8 items in the Inattentive category and 5 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: Self**

	Never or Rarely	Sometimes	Often	Very Often		Never or Rarely	Sometimes	Often	Very Often
<b>Inattention</b>					<b>Hyperactivity/Impulsivity</b>				
Difficulty paying attention to details or makes careless mistakes unless interested	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Fidgeting, or squirming in my chair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Difficulty staying focused unless interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Finding reasons to leave my seat when expected to remain seated	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty listening when spoken to directly	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Moving about excessively or feeling restless	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Difficulty following through on tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Difficulty engaging in leisure activities quietly	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Difficulty organizing and managing tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Feeling uncomfortable being still for extended time periods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Avoiding sustained mental effort unless interested	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Talking excessively	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Losing things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Blurting out answers or thoughts	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easily distracted by the environment or by unrelated thoughts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Difficulty awaiting my turn	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Interrupting or imposing on others	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Sum of Items rated Often or Very Often</b>			<b>2</b>	<b>6</b>	<b>Sum of Items rated Often or Very Often</b>			<b>3</b>	<b>2</b>

**1**

This section summarises how the Rating Scale has been completed and how this should be interpreted in line with the DSM-5 criteria.

**It should be noted that the Rating Scale Results and objective data are calculated separately.**

# Getting started

## QbCheck device requirements

- Windows laptop or MacBook with an inbuilt camera
- Inbuilt camera should have a resolution of at least 640x480
- Most up to date version of Google Chrome or Microsoft Edge web browser
- Internet connection via Wi-Fi or modem
- Operating system of Windows 10 or later, Mac OS 11 or later
- Display system of at least 1024x768

An automated performance check is in place to ensure that the device is meeting the minimum requirements, and it should be noted that the following devices are incompatible: Smartphones, Microsoft Surface devices, Chromebooks, iPads and tablets.

Further information about other requirements, such as patient consent and appropriate test conditions, will be provided in the QbCheck User and Technical Manuals, which are made available upon purchasing QbCheck.

# Purchase process

A one-time start fee applies when purchasing QbCheck. This fee includes account setup for in-person test administration, the online e-learning modules and one QbCheck test to be used within 90 days from the date of purchase.

After this a pay-as-you-go model will apply and a 'per test fee' will be charged for each subsequent test. The test fee is charged automatically on test completion, and you will not be charged for discontinued tests.

There are no additional monthly or fixed fees and more information about local pricing can be found [here](#). If you wish to add the functionality for the remote use of QbCheck, please reach out to your Qbtech contact.

**QbCheck can be purchased [here](#) and by following the four steps outlined below.**

## **Step 1** Registration

Please enter your Company / Organization details as well as the first / last name, email and password to be used for the QbCheck user account.

## **Step 2** Email Verification

To continue with the purchase process, please verify your email address by entering the verification code sent to your email (entered during Step 1).

## **Step 3** Performance Check

Please complete the Performance Check to ensure that your device meets the requirements for QbCheck.

## **Step 4** Details

To complete the purchase process, please enter the relevant payment details.

Note: only cards supporting Strong Customer Authentication (SCA) are accepted by QbCheck. Other payment methods may be available upon request.

## **Our dedicated team is here to help**

After completing your purchase, you will instantly receive an email with detailed guidance on how to get started with QbCheck. However, please don't hesitate to discuss any queries with your Qbtech contact or feel free to email us via [info@qbtech.com](mailto:info@qbtech.com).

## References

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