Fact Sheet

Advancing Respiratory Research: An Integrated Approach to Clinical Trials

How IQVIA delivers a holistic view of lung disease by combining patient-reported outcomes and objective data

Challenge

Respiratory diseases such as asthma and Chronic Obstructive Pulmonary Disease (COPD) significantly impact patients' daily functioning and quality of life. Clinical trials in this therapeutic area must capture both subjective symptoms and objective measures of lung function to generate meaningful, patient-relevant evidence. These trials are inherently complex — symptoms can fluctuate daily or worsen rapidly, and patients may experience fatigue or difficulty completing study tasks. Sponsors must balance the need for frequent, high-quality data collection with minimizing burden on patients, sites and study teams.

While connected medical devices provide critical objective data, they do not measure how patients feel, function or manage symptoms in daily life. Conversely, Patient-Reported Outcomes (PROs) can be enhanced with objective context to be clinically meaningful. For these reasons, sponsors need a cohesive strategy that integrates electronic Clinical Outcome Assessments (eCOAs) and digital measures, ensures data quality and compliance, and enables proactive monitoring throughout the trial lifecycle. In addition, FDA guidance to incorporate the patient voice into drug development supports the use of COAs and PROs to capture how patients experience treatment.

Solution

IQVIA brings together eCOAs, connected devices, and deep therapeutic expertise within its Patient Suite to help sponsors design and execute respiratory trials that

are patient centric, data rich, and regulator ready. Our teams integrate eCOAs and devices into a single, patient-centric ecosystem — delivering a holistic view of disease experience while supporting operational efficiency.

Integrating COAs and digital measures

Drawing on therapeutic area expertise, IQVIA helps sponsors define fit-for-purpose respiratory endpoint strategies — aligning device selection, COA instruments, and assessment cadence with protocol objectives and regulatory expectations. IQVIA then combines eCOAs with connected device data to capture both subjective and objective aspects of respiratory disease.

Additional features of IQVIA's eCOA capabilities include BYOD support, regulatory-grade scoring, and interoperability with other data collection systems. eCOAs collect patient-reported symptoms, functional status, and quality of life indicators, while connected devices such as spirometers and peak flow meters provide quantifiable measures of airflow and lung function (e.g., FEV1, FVC, PEF). Together, these data sources give sponsors deeper, more complete insight into treatment impact and disease progression.

Integrate faster with best-in-class processes

IQVIA streamlines integration by combining eCOA and connected devices within a unified platform. Standardized workflows, preconfigured integrations, and proven governance models accelerate study startup while maintaining data quality and compliance. This best-in-class operational approach enables sponsors to move faster — from implementation through ongoing study execution — without compromising rigor or patient experience.

IQVIA supports respiratory trials across both site-based and home-based settings, enabling flexible, scalable study designs and a unified trial experience for patients and sites. Key aspects of implementation include:

eCOA design and configuration, including daily symptom diaries and validated respiratory PRO instruments, tailo.red to protocol requirements (includes IQVIA-owned respiratory instruments such as the ACT and AIS-6).

Proactive data monitoring with standardized devices and real-time data transfer, reducing variability across sites and improving data comparability.

Home spirometry and peak flow testing, integrated with eCOA daily diaries to support remote monitoring and early detection of symptom fluctuations.

Device-agnostic approach, giving sponsors the flexibility to select the respiratory devices that best fit their protocol, patient population, and study objectives.

Seamless workflow integration, allowing patients to complete symptom diaries and device measurements, reducing confusion and burden.

Expert quality control, with real-time review of spirometry data.

In addition, IQVIA's Allergy & Respiratory Center of Excellence (COE) provides scientific guidance and ongoing medical, operational and technical oversight, supporting sites and sponsors throughout study execution. These COEs and operational leads oversee the entire process from solution design to endpoint strategy.

Results

By integrating eCOAs with connected respiratory devices, IQVIA helps sponsors:

Improve study quality and reliability through ongoing real-time data collection, centralized oversight, and real-time reviews.

Capture the patient voice and enhance compliance with intuitive interfaces that support patient workflow and minimize burden.

Detect exacerbations earlier, using proactive monitoring of symptom diaries and device trends to trigger site follow-up.

Reduce operational burden, streamlining data collection, review and reporting across global studies.

IQVIA has supported multiple respiratory studies across a myriad of lung diseases with its combined expertise in eCOA, connected devices, and therapeutic strategy.

RESPIRATORY DEVICES

- Spirometry/PFT (FEV1, FVC, FEF) — site and home
- Peak Expiratory Flow (PEF) — home monitoring
- FeNO — site-based airway inflammation
- DLCO — site-based gas exchange
- Supported platforms
  - » ndd EasyOne
  - » ZEPHYRx Breathe Easy (home)
  - » ZEPHYRx Kiosk (site)
- Remote support
  - » Video coaching
  - » Real-time dashboards and alerts

RESPIRATORY COAs

- Asthma Control Test (ACT)*
- COPD Population Screener (COPD-PS)
- Daily symptom diaries
- Quality of Life (QoL) measures
  - » Disease-specific asthma and COPD PROs

Design respiratory trials that capture the full patient experience.

*IQVIA Owned

Partner with IQVIA to bring a unified, patient-centric solution to your next respiratory trial. Contact us at www.iqvia.com/solutions/technologies/patient-engagement-suite/.

IQVIA TECHNOLOGIES

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