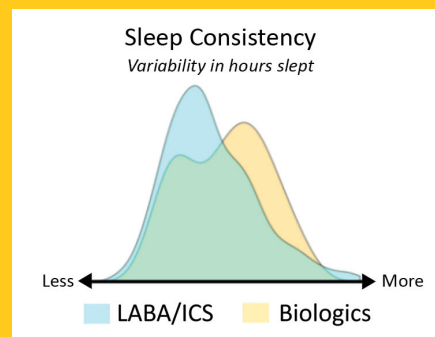evidation

CASE STUDY: ASTHMA

PGHD delivers a roadmap to optimal treatment

—

Identify and segment patients based on real world behaviors and disease impact

Sleep Consistency
Variability in hours slept

Less ⬅ ➡ More

▇ LABA/ICS   ▇ Biologics

Challenge

The objectives were to clearly identify the needs and management behaviors of asthma sufferers, to assess their interest in digital support tools, and clarify differences in symptom control both **across** and **within** cohorts of these individuals.
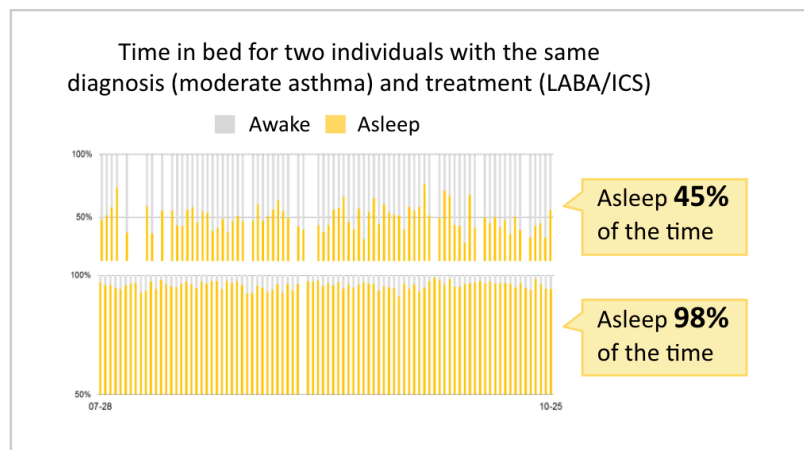
Solution

Within one week, Evidation was able to quickly recruit over 14,000 individuals with asthma from its 4.2 million member base via its Achievement app. By tracking and recording person-generated health data (PGHD), Evidation was able to identify and describe target patients based on real world behaviors and disease impact.

Results

Evidation's research demonstrated **distinct differences in symptom control** that were not captured by traditional real world evidence.

We identified **real world behaviors and disease impact measures** that split based on condition severity and treatment choice.

While 47% of the 1705 asthma sufferers surveyed wanted to share their respiratory symptoms with their healthcare providers, the vast majority (82%) do not currently keep track of them.

Time in bed for two individuals with the same diagnosis (moderate asthma) and treatment (LABA/ICS)

▇ Awake   ▇ Asleep

Asleep **45%** of the time

Asleep **98%** of the time

07-28   10-25

SEGMENT & IDENTIFY
The group was able to objectively segment and identify patients by symptom control

EARLY IDENTIFICATION
By identifying specific patient behaviors sooner, patients can be put on the right treatment faster

AGILE RESULTS
Actionable insights and information were provided in under 12 weeks

evidation

In under one week, Evidation was able to create and permission data from a cohort of over 14,000 asthma sufferers from our 4.2 million Achievers

Participating cohort

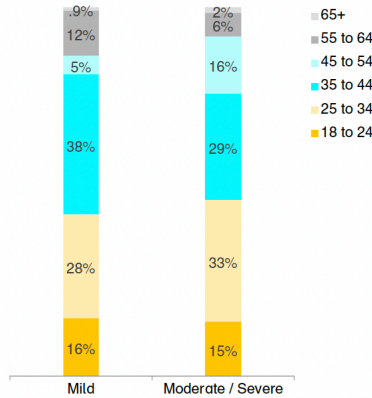| Category	Responses
Mild asthma	2,537
Moderate/severe asthma	1,705
Total	4,242

The cohort was built through through Evidation's consumer app, Achievement. The consent and questionnaire was available for <1 week, beginning from October 28, 2019.

A total of 14,067 consents and complete responses were gathered. 4,424 are included in this analysis (all those with persistent asthma; others had intermittent asthma and were not the focus of this work).
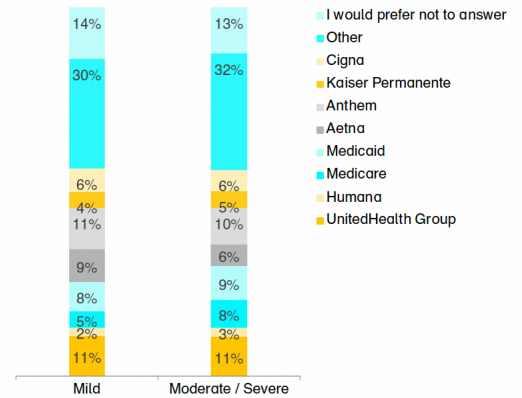
Not intended to be representative.

Participants by age group
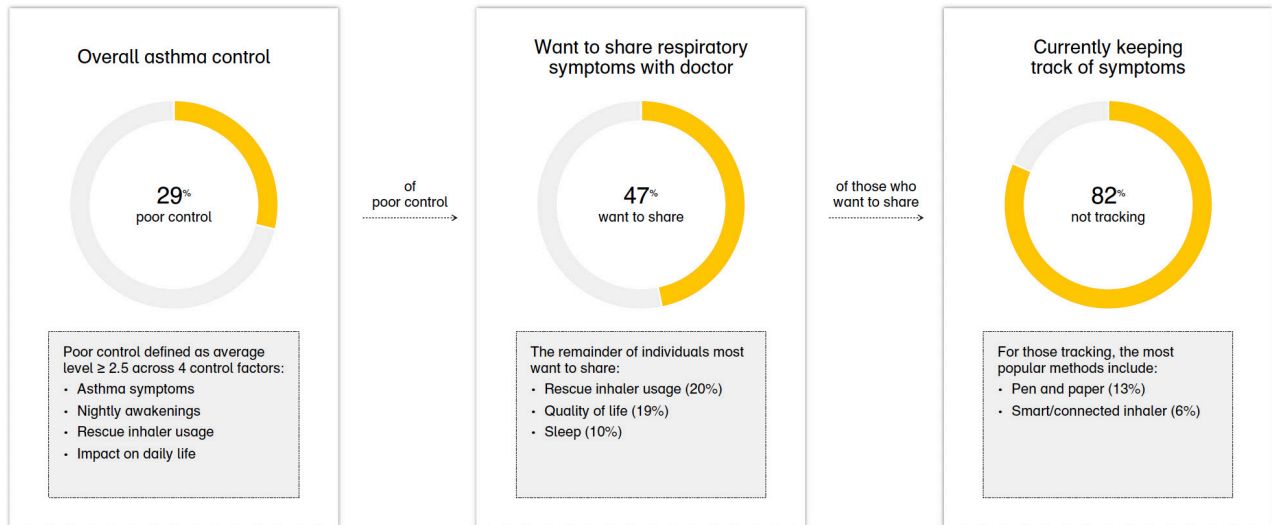N = 4,242, % DISTRIBUTION

Legend: 65+, 55 to 64, 45 to 54, 35 to 44, 25 to 34, 18 to 24

Mild: 9%, 12%, 5%, 38%, 28%, 16%
Moderate / Severe: 2%, 6%, 16%, 29%, 33%, 15%

Participants by insurance carrier
N = 4,242, % DISTRIBUTION

Legend: I would prefer not to answer, Other, Cigna, Kaiser Permanente, Anthem, Aetna, Medicaid, Medicare, Humana, UnitedHealth Group

Mild: 14%, 30%, 6%, 4%, 11%, 9%, 8%, 5%, 2%, 11%
Moderate / Severe: 13%, 32%, 6%, 5%, 10%, 6%, 9%, 8%, 3%, 11%

Person-generated health data (PGHD) provides deep, actionable insights that can help get individuals on the right treatment in a timely fashion

Overall asthma control

29% poor control

of poor control →

Poor control defined as average level ≥ 2.5 across 4 control factors:
· Asthma symptoms
· Nightly awakenings
· Rescue inhaler usage
· Impact on daily life

Want to share respiratory symptoms with doctor

47% want to share

of those who want to share →

The remainder of individuals most want to share:
· Rescue inhaler usage (20%)
· Quality of life (19%)
· Sleep (10%)

Currently keeping track of symptoms

82% not tracking

For those tracking, the most popular methods include:
· Pen and paper (13%)
· Smart/connected inhaler (6%)

Evidation works across a broad spectrum of therapeutic areas delivering a diverse population of engaged individuals who are interested in better health outcomes. Contact us today to learn more about how we can partner with you.

Evidation's mission is to empower everyone to participate in better health outcomes.

We measure health in everyday life and enable anyone to participate in ground-breaking research and health programs. Built on a foundation of user privacy and control over permissioned data, Evidation's Achievement platform is trusted by millions of individuals—generating data with unprecedented speed, scale, and rigor.

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