



AiRCare™

Find. Help.

MEET AIR HEALTHCARE

Who are these guys? I've never heard of them...

We use predictive analytics, chronic care management, and telehealth to dramatically improve behavioral health outcomes and reduce costs.

YEARS IN
BUSINESS

16

COUNTRIES
WORLDWIDE

8

INDIVIDUALS
IMPACTED

100,000+

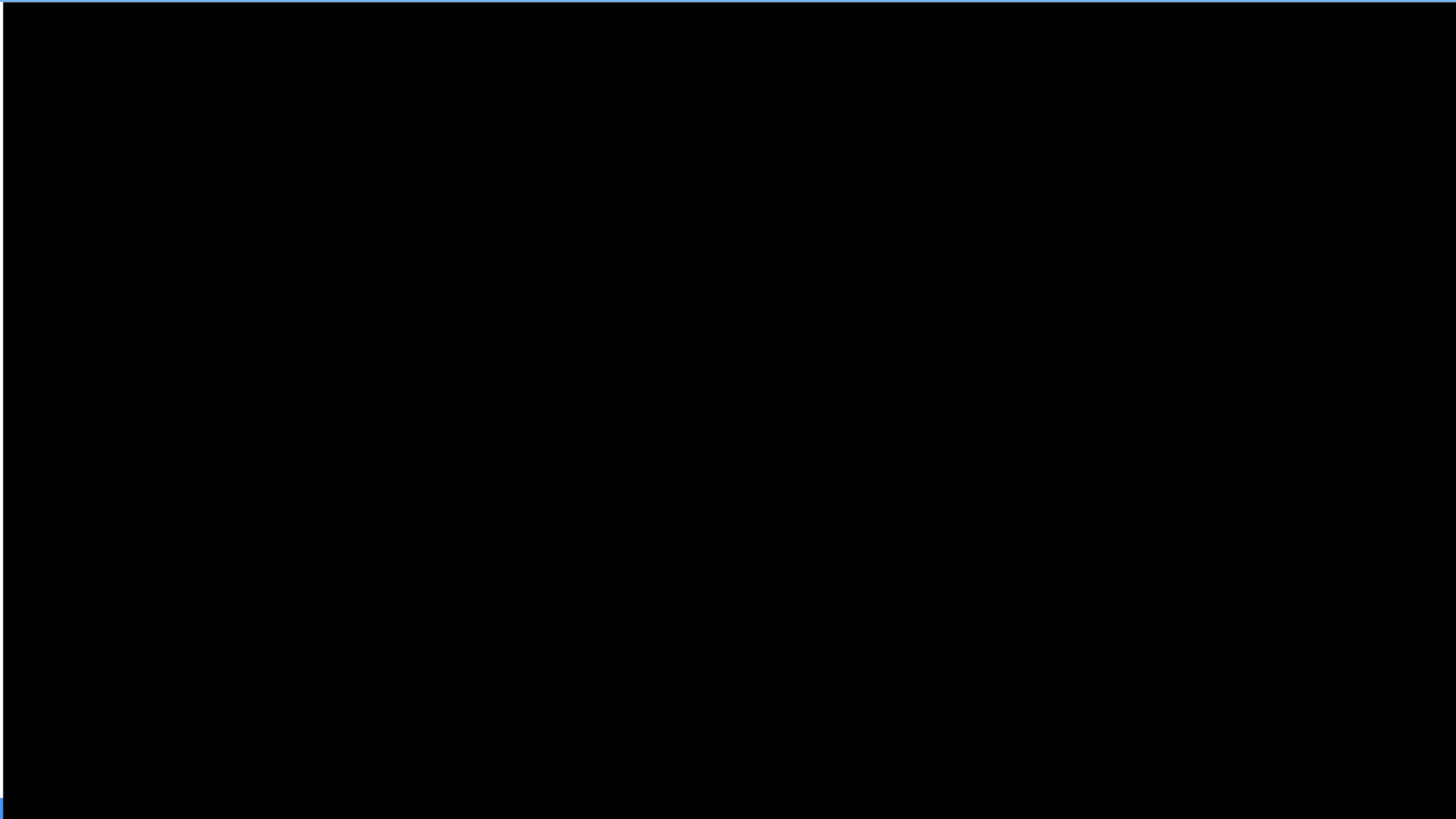
PHYSICAL
CLINICS

0

Companies who choose AiRCare
(Maybe you have heard of these...)



BRENDA'S STORY



BEHAVIORAL HEALTH

Single greatest contributor to the chronic disease epidemic

Behavioral Health conditions, including substance use disorders, are a significant and widespread problem.



More 25% of the population experience some type of behavioral health disorder in a given year¹



70% of individuals with a behavioral health disorder never receive treatment despite the fact that increased spending has made it the single most expensive medical condition in the US.



Cost three times more to treat the physical health of a patient with underlying behavioral health issues than it does to treat the same physical health issues in a patient without a mental health disorder.

HOW ARE WE DOING?

Additional metrics for measuring treatment efficacy for SUD



Research suggests that attendance rates for initial appointments in substance abuse facilities range from 33% to 52%¹



The first weeks of substance-use treatment are critical. It is estimated that approximately 15 to 28 % of individuals do not return for the second session of treatment² and 30 % drop out within the first month³



About 60% relapse within 6 months after treatment⁴



About 76% relapse in the year after treatment⁴

¹Festinger et al. 1996, Festinger et al. 2002, Blow et al. 2010; Festinger, D.S., Lamb, R., Kirby, K.C. and Marlowe, D.B. (1996) "The accelerated intake: A method for increasing initial attendance to outpatient cocaine treatment", Journal of Applied Behavior Analysis, 29(3), pp. 387-389. Festinger, D.S., Lamb, R.J., Marlowe, D.B. and Kirby, K.C. (2002) "From telephone to office: intake attendance as a function of appointment delay.", Addictive Behaviors, 27(1), pp. 131-137. Blow, F.C., Walton, M.A., Murray, R., Cunningham, R.M., Chermack, S.T., Barry, K.L., Ilgen, M.A. and Booth, B.M. (2010) "Intervention attendance among emergency department patients with alcohol- and drug-use disorders.", Journal of Studies on Alcohol & Drugs, 71(5), pp. 713-719.

² Coulson, C., Ng, F., Geertsema, M., Dodd, S., & Berk, M. (2009). Client-reported reasons for non-engagement in drug and alcohol treatment. Drug and Alcohol Review, 28, 372–378. doi:10.1111/j.

³Palmer, R. S., Murphy, M. K., Piselli, A., & Ball, S. A. (2009). Substance user treatment dropout from client and clinical perspectives: A pilot study. Substance Use and Misuse, 44, 1021–1038. doi:10.1080/10826080802495237.

⁴ Wilbourne & Miller. (2003). Treatment of alcoholism: Older and wiser? In McGovern & White (eds.), Alcohol Problems in the United States: Twenty Years of Treatment Perspective. New York: Haworth Press, pp. 41-59

IT'S TIME FOR A NEW MODEL

AiR Healthcare's approach to
better behavioral health



FIND | HELP

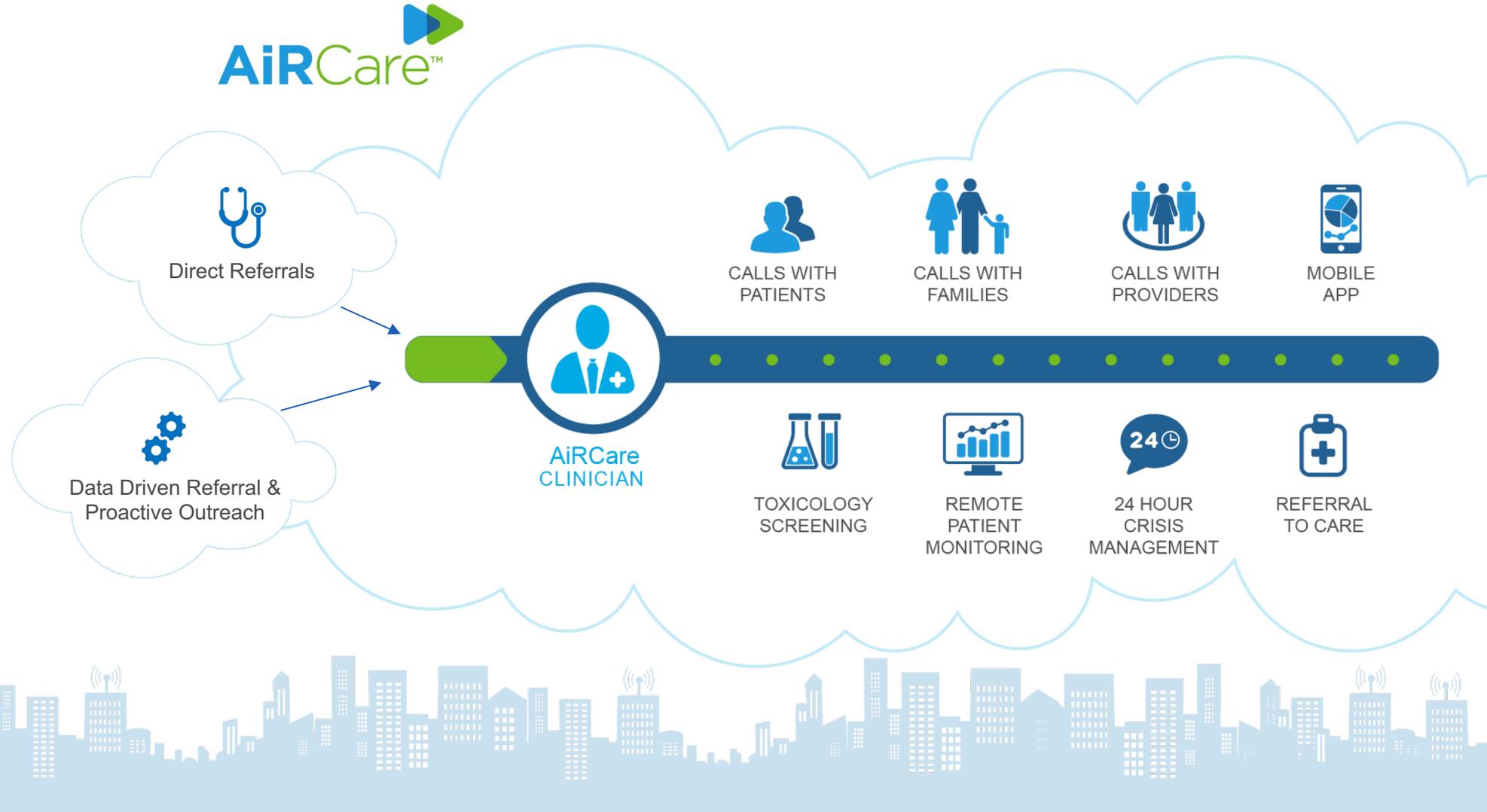
We use predictive analytics, chronic care management, and telehealth to **dramatically** improve behavioral health outcomes and reduce costs.

FIND. A data driven, proactive approach to better health



This is a proactive, long-term, systematic approach to managing chronic behavioral health disorders.

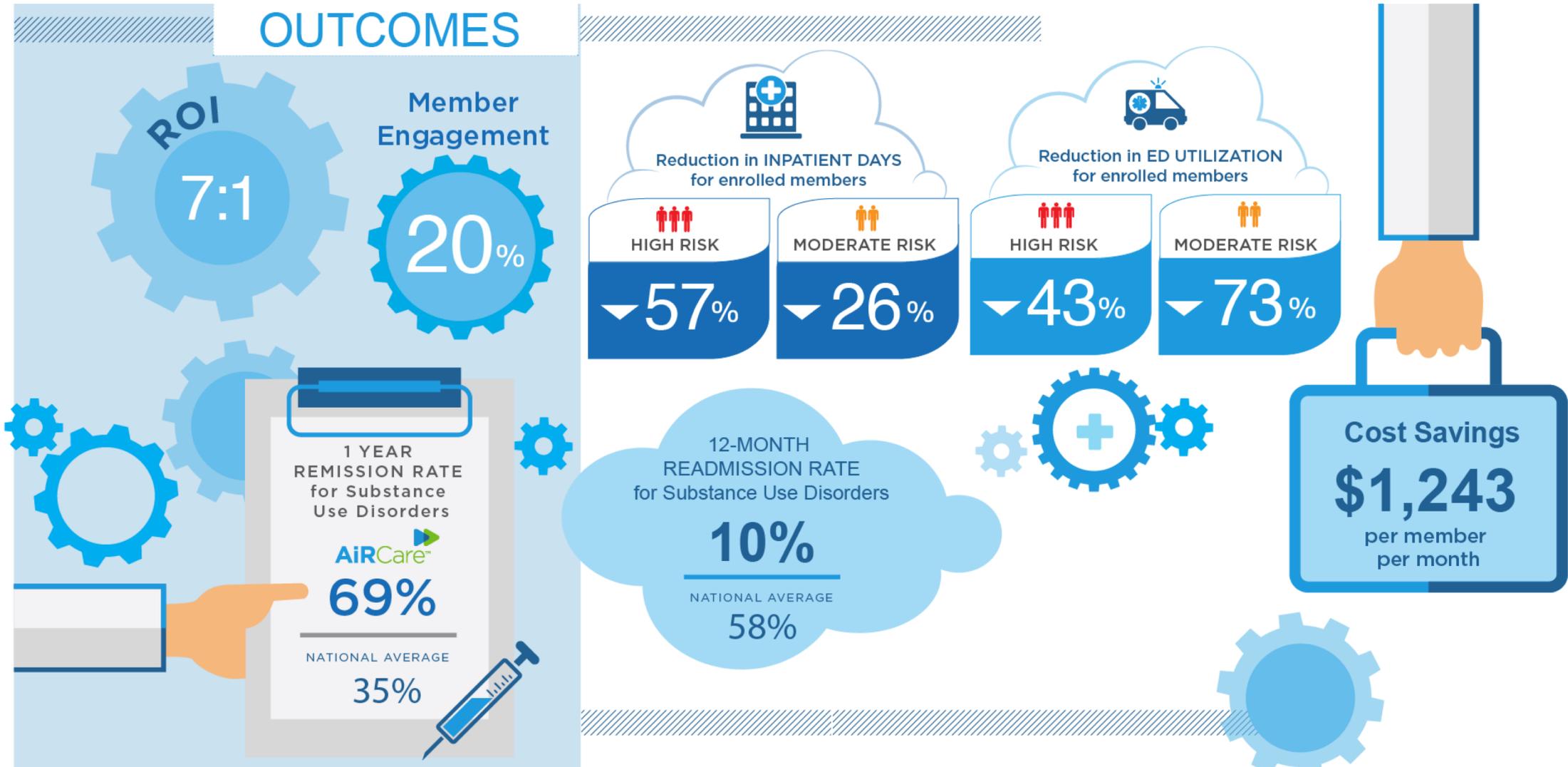
HELP. Powered by Clinicians. Proven to work



AiRCare is an outsourced **clinical solution** which delivers high-quality support through telehealth and coordinated health care interventions for identified rising risk individuals.

It is based on a proven model of accountability that anticipates patient behaviors to help reduce recidivism and to keep patients engaged in treatment - **the result is dramatically improved outcomes.**

IMPACT. Changing the world one individual at a time



WITH KNOWLEDGE COMES RESPONSIBILITY...

The **BIGGEST LIE** in
healthcare is that costs
can't be controlled.

The biggest lie we tell ourselves is
that it isn't our job to change
healthcare.

...If not US, then who?







BRUTAL FACTS

75-90% of all physician
office visits are related to
STRESS



BRUTAL FACTS

STRESS Is Linked To The 6 Leading Causes Of Death

(heart, respiratory and Alzheimer's diseases,
cancers, stroke and unintentional injuries)



BRUTAL FACTS



80% Of People Say They Have
STRESS In Their Daily Lives



BRUTAL FACTS

Annual Economic
Impact Of **STRESS**
\$300,000,000,000



BRUTAL FACTS

% due to **STRESS**

Group Health	22%
Turnover	40%
Absenteeism	50%
Presenteeism	50%
Workers Comp	33%
Disability	50%

\$4,888/Employee/Year





#1 MODIFIABLE RISK FACTOR

OMITTED FROM:

Chronic Disease Management Programs

Wellness Programs And Health
Risk Assessments

Employee Assistance Programs

Employee Engagement



THE GAP

Employee
Engagement



EAP



STRESS



Wellness



Chronic Disease
Management



MISSION

Fill The Gap With A Stress
Number To Assess Individual
Stress, **Aggregate** Populations,
Engage Behavioral Health
And **Hand-Off** To Partner
Solutions



STRESS NUMBER®

home

53

work

53

social

43

carbon monoxide

carbon dioxide

oxygen



ENGAGEMENT

Facebook	..17:30
You Tube	..13:55
Amazon	..10:31
STRESS NUMBER®	..10:25
ESPN	..08:04
Twitter	..07:18
Fox News	..05:47
Instagram	..04:02
OPRAH	..03:48
Cleveland Clinic	..03:27
WebMD	..03:03



*Average Length Of Time Spent/Visit
Media Metrix. Rolling 3 Month Average 2015*



CLINICAL VALIDATION RESEARCH



292 Qualifying Observations

STRESS NUMBER®
Tested With Two Clinically
Validated Assessments

Strong Correlations With
Beck Depression Index II
And Symptom Checklist-90

Research Conducted
By Mayo Clinic



FINDINGS

	<u>r</u>	<u>C.I.</u>	<u>p-value</u>
Beck Depression Index II	.68	95%	p<.01
Symptom Checklist-90	.58	95%	p<.01

CLINICAL VALIDATION PUBLISHED





CLOSING



What's Your
STRESS NUMBER[®]?

What's Your Oxygen Plan?

Live In The Green[®]

Let's Partner

American Psychiatric Association App Evaluation Model

Source: American Psychiatric Association.

<https://www.psychiatry.org/psychiatrists/practice/mental-health-apps/app-evaluation-model>. Accessed 7/17/18

Our approach to rating mental health apps is grounded in the belief that any decision between you and a patient is a **personal decision based on many factors**, for which there is rarely a binary ‘yes’ or ‘no’ answer. For example, cognitive behavioral therapy is often appropriate for many patients, but certainly not all and it requires knowing the patient to make the best decision. However, selecting an app is slightly different in that the information necessary to make the best decision is not what psychiatrists and mental health clinicians are classically taught or used to ¹.

Thus the goal of a hierarchical rating system and rubric is simply to make APA members aware of very important information that should be considered when picking an app that is not exactly the same as the information used to judge a medication or therapy. Ensuring that all important information is considered will result in a better informed decision being made.

To learn more about each level, click to expand.

Step 1: Gather Background Information

The first step of the model is to help ensure that as much useful background information about the app is known **before you evaluate it**. This information helps create a useful context in which you can consider using the app and provides a framework for your decision making. The questions below are to help you decide whether to proceed with the app evaluation. You do not need to have an answer for each question in order to proceed with evaluating an app.

- What is the business model? If the app is free, then how does it support its own development?
- Who is the developer?
- Does it claim to be medical?
- What is the cost? Does it require in-app purchases to unlock certain features? Is it free?
- Does it integrate advertising into its usability?
- On which platforms does it work (e.g., iOS, Android)?
- When was it last updated? How many updates have there been? What were the reasons for the updates (i.e., security updates; software glitches or bugs; improved functionality or added services)?

Step 2: Risk/Privacy & Security

While nearly any measurement or intervention contains some risk (e.g., physical, psychological, legal, social, and economic), apps present some unique risks that may often be overlooked. Risks

may include data costs associated with app use (i.e., depending on your data plan with your wireless provider), profiling, loss of benefits or insurability — all of which are associated with privacy and security. Digital privacy and security are not often high level risk factors when prescribing a medication or conducting in-person therapy when deciding to use an app, however, they are extremely important and should be the first area evaluated.

The questions below are intended to help you and your patient consider many aspects of app security and privacy. Note that they are not all-inclusive, as there is currently no “gold standard” for rating apps’ privacy and security. Many of your answers to these questions should be found in the app’s privacy policy. If there is no privacy policy then that is a very good reason to be concerned about that app.

For certain questions, like what security measures are in place, it is necessary to take the app’s description at face value at this time. There is no cut-off or score for this level of the model; instead you and the patient will need to decide if—based on the answers to these questions—you feel the app meets your standards. **However, if you cannot find answers to many of these questions, or again there is no privacy policy, that is a good indication that you may want to avoid this app.** The ultimate goal of this level is to ensure an app will not cause harm by violating patient safety, security, and privacy.

- Is there a privacy policy?
- What data are collected?
- Are personal data de-identified?
- Can you opt-out of data collection?
- Can you delete data?
- Are cookies placed on your device?
- Who are data shared with/What data are shared?
- Are data maintained on the device or the web (i.e., “the cloud”)? Both?
- What security measures are in place? Are data encrypted on the device and server?
- Does it purport HIPAA compliance? / Does it need to be HIPAA-compliant?

Scoring the App

- 1: advise user not to proceed (bad)
- 2: advise user to proceed with caution (some concern)
- 3: advise user to proceed (appears ok)

Step 3: Evidence

App developers often make many claims even though there is currently little clinical evidence to support such. This does not mean that apps don’t work, but rather that there is much we still do not know. If you decide that an app has sufficient privacy and security at Level 2, then your task at Level 3 is **to evaluate any evidence for potential benefits.**

While some apps’ benefits have been documented in clinical studies, many — if not most — have not. In that case, we recommend that you download and try the app to see what it is actually doing and if the content and information it offers appear at least reasonable and not harmful (i.e.,

evidence of “face validity”). Again, few apps will have a gold standard, randomized double blinded placebo controlled study to suggest they are effective, so the questions presented below are designed to help you think of other ways you can make the best informed decision about an app’s evidence base.

- What does it claim to do vs. what does it actually do?
- Is there peer-reviewed, published evidence about tool or science behind it?
- Is there any feedback from users to support claims (App store, website, review sites, etc.)?
- Does the content appear of at least reasonable value?

Scoring the App

- 1: advise user not to proceed (bad)
- 2: advise user to proceed with caution (some concern)

Step 4: Ease of Use

To recap, if an app has satisfied criteria in Steps One and Two, then you may assume that:

1. It offers minimal risk in terms of digital safety and privacy
2. It appears to have some benefit.

Thus, Step 4 helps evaluate ease of use because an app is only as useful as you and your patients find it to actually use. Ease of use is a more subjective category and so different people will have very different ideas about what ease of use means to them. The questions below are, again, designed to help you think about the app’s interface and overall functionality and then make an informed decision about how usable an app will be for the case and patient at hand.

- Is it easy to access for the patient at hand (i.e., based on patient diagnosis or other factors)?
- Would it be easy to use on a long-term basis?
- Is the app or are features of the app customizable?
- Does it need an active connection to the Internet to work?
- What platforms does it work on?
- Is it accessible for those with impaired vision or other disabilities?
- Is it culturally relevant?

Scoring the App

- 1: advise user not to proceed (bad)
- 2: advise user to proceed with caution (some concern)
- 3: advise user to proceed (appears ok)

Step 5: Interoperability

Finally, the last step in the model is Interoperability. This is the topmost level, as the ability to share data only matters if this is an app that you and the patient want to use (based on background information in Step 1); if it is safe and secure (Step 2); has some evidence base (Step 3), and is easy to use (Step 4). The reason why interoperability becomes important in this model is because apps should not fragment care and the patient and psychiatrist should be able to share and discuss data or feedback from the app as appropriate.

In some cases, the ability for apps to share data may not be relevant. For other apps, however (e.g., mood trackers and medication management), ensuring that such data can be easily shared and accessed by those who need to see it is an important factor to consider. While the specifics of interoperability will vary for each patient (e.g., with respect to the devices they use, and your medical record system) the following questions can you to think about how interoperable an app is.

- Who “owns” the data (i.e., patient, provider, developer)?
- Can it share data with the EHR?
- Can you print out your data?
- Can you export/download your data?
- Can it share data with other user data tools (eg, Apple HealthKit, FitBit)?

Scoring the App

- 1: advise user not to proceed (bad)
- 2: advise user to proceed with caution (some concern)
- 3: advise user to proceed (appears ok)

The foundation of the evaluation model rests in the maxims of 'do no harm' as well as a risk-benefit analysis. The four areas comprising the model (beyond gathering basic background information) are:

1. Safety/Privacy
2. Evidence (i.e., effectiveness)
3. Ease of Use
4. Interoperability

These four areas are presented in an ordered manner so that if Privacy/Safety is unsatisfactory, then it is not necessary to consider the others, and therefore the app should probably not be used.

While a better app will meet more criteria at each step of the model, there is no minimum or maximum number of levels necessary for an app to be considered “good” or “useful”. There may be cases where an app fills few levels but you and a patient still want to use it — and in that case the hierarchical model is useful as it highlights important features of apps about which the patient should be aware when using them. On the other hand, an app that satisfies criteria in all four steps of the model may also be one that you and a patient decide not to use, and in this case the model is useful as it helps ensure that you have made an informed decision based on the best available information.

Of note, while we offer examples of how to use this model, we do not explicitly rate apps. Given that apps are constantly updating and changing, such information would quickly be out of date. Also, determining the inherent usability is very subjective and depends on how both you and the patient experience and feel after examining it.