

## GUIDE

# The Value of Self-Reported Population Health Data

## Tips for Gathering Reliable, Actionable Insights

Health Risk Assessments (HRAs) use self-reported data to provide potentially life-saving information about an individual's current and future health risks. This data is a critical component of understanding population health and provides health and wellness professionals the insights they need to make targeted and informed population health decisions. By gathering data right at the source—from the individual—wellness and population health professionals shape impactful programs based on information that's often harder to gather than biometric data.

Let's examine why self-reported data is essential for population health initiatives, and how you can be assured that the information you collect will provide the necessary insights to create impactful wellness programs.

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## Self-Reported Data: A Critical Component of Understanding Population Health

Health professionals rely on self-reported data nearly every day—whether it's a dental office asking a patient about flossing, a physician inquiring about symptoms or pain level, or a wellness coordinator administering an HRA.

HRAs provide essential information such as health risk feedback and change readiness to both individuals and health professionals. To do this, an HRA must gather data from individuals—data that only the individual knows, such as how stressed they feel, how many hours they sleep, or whether they eat a lot of red meat.

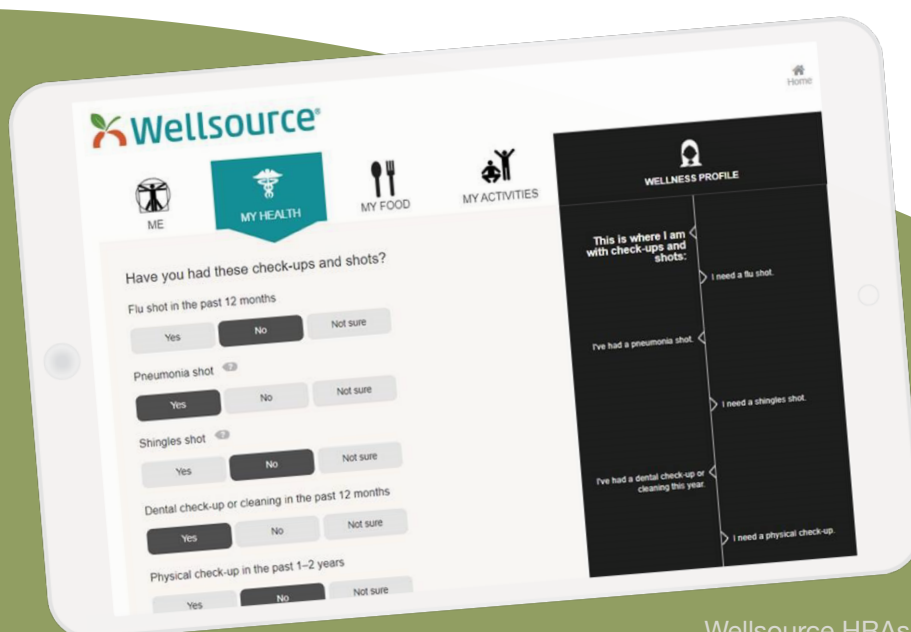
This self-reported data complements biometric or clinical data a healthcare provider may gather. And while the empirical data that physicians obtain—such as blood pressure or lab results—are good indicators of a person's current health, only the individual can provide details on other aspects of their wellbeing that indicate their future risk, such as their mental health status or lifestyle habits that play a significant role in their future health. This type of data is not generally available in their medical chart.

In fact, there are some aspects of individual health that you can't measure without self-reported data.

## A Note About Self-Reported Data and Wellsource HRA Solutions

Wellsource HRAs for commercial, Medicare, and Medicaid populations collect self-reported health and lifestyle data such as diet, sleep, happiness, and change readiness. This information is used to calculate a population's risk for developing chronic conditions. Lifestyle behaviors can have a significant effect on long-term health.

Our clients use this data to map out targeted, effective next steps for their populations.



Wellsource HRAs are able to be viewed via mobile, desktop, and tablet formats.

For example, there's no single biometric data point that can indicate whether an individual is at risk for—or already living with—mental health issues such as depression. It's more direct and accurate to simply ask the question. The common tool used by clinicians to screen for depression—the two-question Patient Health Questionnaire (PHQ-2)—relies on self-report.<sup>1</sup> It asks:

1. Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless?
2. Over the past two weeks, how often have you felt little interest or pleasure in doing things?

The Wellsource HRA asks a series of similar questions to assess someone's risk for depression, anxiety, or poor health due to high or chronic stress.

Sometimes the results can be surprising. For example, through an analysis of Wellsource data<sup>2</sup>, we've found that **17% of respondents may be at high risk for depression** based on their answers—that's nearly three times the reported prevalence in the United States.<sup>3</sup>

This insight from self-reported data indicates that depressed feelings are much more common than you may expect. And while the Wellsource HRA doesn't then *diagnose* these individuals with depression, it does help population health professionals analyze if there are other contributing factors to consider, such as a lack of sleep, feelings of loneliness, or availability of social supports that may or may not put individuals at risk. This kind of insight might inform programs that target the underlying factors, which could lead to a positive impact on overall population health.

1. <https://pubmed.ncbi.nlm.nih.gov/14583691/>

2. <https://go.wellsourc.com/2018-data-review>

3. <https://www.nlm.nih.gov/health/statistics/major-depression.shtml>



## *What do we mean by self-reported data?*

Self-reported data is collected when respondents are directly asked how they see their own health status.

### *Why is self-reported data a critical component for improving population health?*

Think of self-reported data from an HRA as one dataset in your arsenal, giving additional insights into the claims and medical data you're seeing, or corroborating the story told there. It adds layers of understanding and nuance.

This data is also one of the only ways you will get lifestyle information, which is critical to understanding not only a person's history of health, but their future outlook on health. This is especially true when it comes to their readiness to change health habits.



## How Reliable is Self-Reported Data?

Over the past 40 years, we at Wellsource encountered time and again some reservations about the reliability of self-reported data. When you're asking an individual to report on their habits, there can be room not only for error but bias—especially if an individual is concerned that their responses could impact their employment or health insurance eligibility.

Concerns around the accuracy of self-reported data are understandable and include:

- Employees misrepresenting their health for fear of judgment or losing insurance/employment eligibility.
- Respondents misinterpreting or not understanding the question, or having low health literacy.
- Individuals not trusting the privacy/security of their responses and therefore feeling less compelled to share their data.

Understanding where your population is coming from is one of the first steps in addressing these concerns. **Having a quality, reliable HRA that recognizes and actively mitigates these factors is the next step.**

Wellsource CEO Chris McReynolds addressed the issue of bias during a webinar in partnership with the Population Health Alliance entitled “High Quality Data for High Quality Population Health Programs.” He stated, simply, that the first step to handling bias is to *acknowledge that it exists*, and then to employ proven strategies and data structures to minimize it.

When these scenarios are appropriately addressed, questions are worded clearly, and HRA respondents are reassured that their information is subject to a variety of data privacy and protection regulations, the accuracy of their responses increases.

It's worth noting that reliability increases as recall duration decreases, that is to say that asking respondents to recall information that pertains to a large stretch of time (a year, for example) is less reliable than asking them to recall something that happened last week. In fact, a recall duration of one month or less holds about a 90% accuracy rate.<sup>3</sup>

This is one reason why the Wellsource HRA asks people to recall their feelings over the past month or how many servings of poultry they eat in a week. Doing so not only helps them keep a pulse on wellness trends but it also helps improve the recall accuracy for the individuals taking the HRA.

3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2745402/>

## BIG DATA

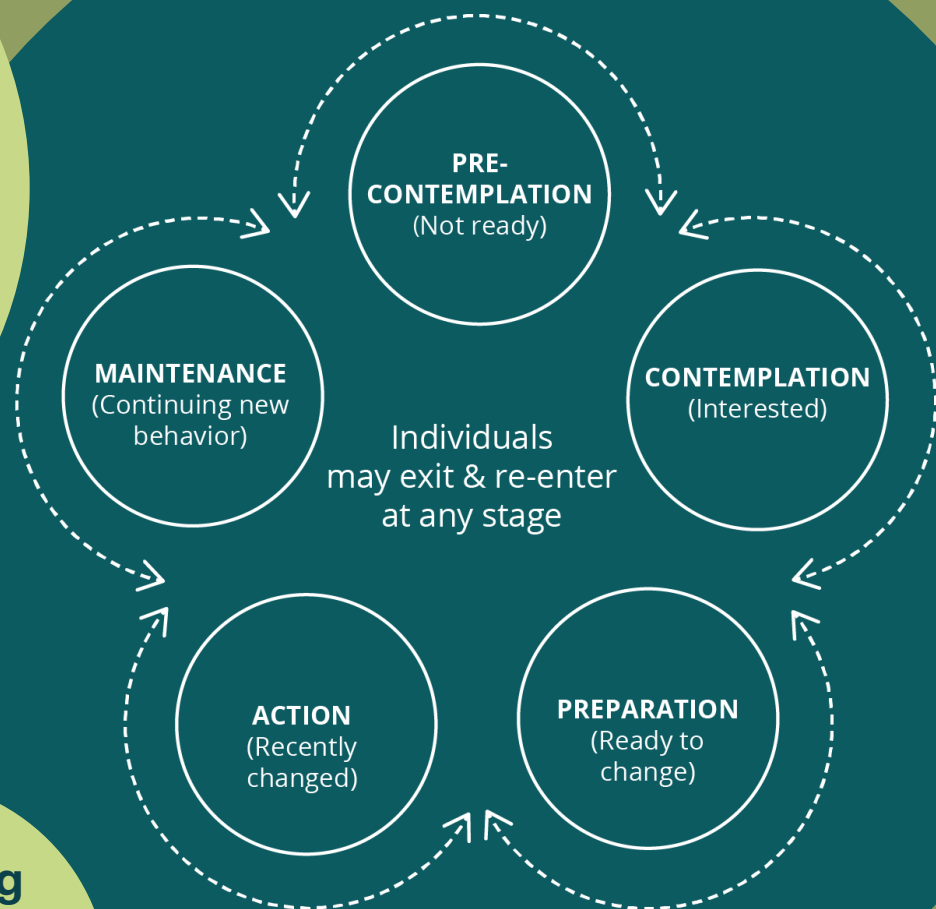
Population health professionals have more data than ever before to get a full picture of their population's health.



## SELF-REPORTED DATA

# Evaluating Readiness to Change Lifestyle Habits

Readiness to change is the measurement of where an individual or population falls on the change journey. Population health professionals use this information to focus intervention efforts on areas where programs are likely to have success.



## Measuring Change Readiness

[Download guide](#)

# Tips to Ensure Your HRA Collects Reliable, Accurate Data

## Use Quality, Reliable Tools

A vetted, quality HRA will increase the accuracy of your self-reported data. The wording of questions and possible answers is an essential component in increasing efficacy and diminishing recall bias. Paying careful attention to HRA terminology increases the likelihood that individuals respond honestly, as they better understand the question—while also recalling the information correctly.

For example, asking how active someone is may elicit a very different response than asking how many minutes per week they spend exercising. If you are considering active minutes, you might include routine daily activities—such as taking the stairs or walking your dog. However, if the question is phrased as exercise minutes, you may likely only consider the times you are explicitly exercising—generally a much smaller number.

Without carefully considering how a question is worded, you may leave too much open to interpretation, leading to less reliable results.

Similarly, a successful HRA will collect data based on a more personalized approach. For example, an HRA that uses branching logic means participants will only see questions that pertain to them based on their answers to other questions. If they answer “no” to a question asking if they drink alcohol, they will not see follow-up questions about how many drinks they have in one sitting. By limiting the number of questions a participant must answer, you reduce the mental load and remove some of the barriers to their completing the assessment.

## HRA Data Provides Insights into Social Determinants of Health



The **Second Annual Wellsource Data Review** analyzes self-reported health and lifestyle HRA data from more than 24,000 individuals covered by Medicaid to see the influence common social determinants of health measurements might have on overall population health.

[Download the Report](#)

## Address Social Desirability Bias

One factor to consider when asking individuals to self-report their health and lifestyle habits is social desirability bias, or the tendency of survey respondents to answer questions in a way that will be viewed favorably by others.

A few examples of this: employer-administered HRAs may cause participants to worry that their responses could jeopardize their jobs. Or an HRA administered by health insurance providers or health plans may cause concern that unhealthy responses will disqualify them from coverage.

By providing participants with a safe, private environment to complete their assessment—such as at home, away from the “prying eyes” of nosy cube-mates or patients in a busy lobby—and assuring them that their privacy is of utmost concern (there are, in fact, many regulations in place to protect their confidentiality, employment, and insurance eligibility), they’ll be more likely to respond truthfully.

When collecting sensitive personal health information, strict adherence to privacy and security laws (e.g. HIPAA, GINA, ADA) builds trust.

## Educate Participants

Information is a powerful tool. Population health professionals rely on information to build impactful wellness programs. Likewise, information given to your population can be an asset in administering your HRA. When members understand why they’re completing the HRA and how the data will be used to their benefit, they are more likely to answer truthfully. Their results will provide them with their risk for chronic diseases as well as ways they can lower the risk. These same results will provide wellness coordinators with information to develop and improve programming. Win-win.

To get the reliable and honest answers that lead to trustworthy data, use an HRA that:



Phrases questions in a way that allows people to feel comfortable answering them honestly while not putting an undue burden on an individual to recall every depressive episode they’ve had over a lengthy period.



Keeps each question simple and to the point, so that someone with low health literacy can still understand the questions and how to answer them accurately.



Ensures there are no superfluous questions—each question contributes to the overall health score, paying careful attention so the individual isn’t burdened with trying to remember things that don’t contribute in meaningful ways to an understanding of heart health, depression, obesity risk, overall wellness, etc.



Is grounded on solid science, such as PHQ-2 and findings from systematic reviews and peer-reviewed research.



Presents questions through a medium—the HRA—that provides individuals with a level of confidentiality and privacy that makes them comfortable enough to answer truthfully.

At the end of the day, the data you collect—in any form—has limitations and bias. But some kinds of data you collect provide invaluable insights into your population that may be otherwise unavailable. Self-reported health data is incredibly important to gaining a full understanding of a person's current health status and also provides otherwise difficult-to-track insights into lifestyle information, future outlook on health, and willingness to change health habits.

As you make use of self-reported data sets, it's important to recognize that all data, self-reported or not, comes with bias and risk of error; by minimizing these biases and errors, we improve the quality of the data. Around Wellsource, we say “ask the right question in the right way to get the data that will change lives.”

Using a quality health risk assessment that's built to bring greater objectivity to self-reported data is the best way to get the data you need.



For more information  
about Wellsource products,  
[request a consultation](#)

[well@wellsource.com](mailto:well@wellsource.com) 1.800.533.9355

## Additional Resources



### GUIDE

## Increase Medicaid Engagement with HRA Data

*To best engage Medicaid populations, we must build personalized approaches that speak to an individual's specific health risks.*

[GET THE PDF >](#)



### CASE STUDY

## HRA Delivers \$85,000 in direct ROI

*A large employer with 37,000+ employees partnered with Welltok to build a health and wellness program that centered on administering a Wellsource HRA.*

[GET THE PDF >](#)



For four decades, Wellsource has been personalizing population health by designing innovative Health Risk Assessments that are grounded in modern evidence-based medicine. Wellsource uses the power of technology to drive informed decisions with actionable data for health plans, wellness organizations, and companies committed to improving wellness.

Our Health Risk Assessments for the Workforce, for Medicare, and for Medicaid are NCQA certified and used for predicting health risks and reducing avoidable costs.

Learn more at [wellsource.com](https://wellsource.com)