

ginger

Value of the Ginger System



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Executive Summary

59%

improvement in anxiety symptoms for members

70%

improvement in depression symptoms for members

3

average increase in number of healthy mental health days, per member, per month

UP TO

\$302k

Estimated savings per 100 engaged employees compared to the traditional model

Based on our cost impact model using claims details for >25M IBM® MarketScan® members

Understanding the value of mental healthcare for an employee population can be a complicated and confusing endeavor. Mental health is inherently subjective, making it difficult for employers to get a clear picture of how, or if, employees will benefit from a mental healthcare solution, or whether it'll ultimately lead to cost savings. To make an informed decision about a mental healthcare solution, employers need a measurement-based, holistic view of the impact – both on their employees' well-being and cost savings for their organization.

Because every workforce has a unique set of needs, we assess the value of our mental health solution from multiple angles through a variety of tools and data to paint a complete picture for employers. Through peer-reviewed clinical outcomes evaluation, cost-impact modeling, and direct claims analysis, we use outcomes and cost data to show how Ginger improves employee well-being and delivers cost savings.

With our multidimensional approach, we have found that employers who implement Ginger's on-demand mental health system have seen significant outcomes improvement.

Introduction

The World Health Organization (WHO) estimates that depression and anxiety disorders cost the global economy \$1 trillion in lost productivity each year.¹ With one in five adults in the U.S. experiencing mental illness each year, and half going untreated, employers are struggling to manage the growing costs of declining productivity and retention.² Beyond managing the costs associated with untreated mental illness, employers want to build happy, healthy workforces and help their employees thrive.

Employers are looking for a mental health solution that will tangibly drive better outcomes and reduce costs. With hundreds of solutions, each with their ROI numbers and limited details on methodology, it's difficult for employers to determine the true impact of solutions and make informed decisions on how and where to invest their benefits budget.

Ginger strives to be different. With more than 10 years of deep commitment to research and science and six peer-reviewed publications of real-world outcomes since 2019, Ginger is dedicated to delivering measurement-based care and validating our outcomes. Ginger's improvement in outcomes drives cost impact, delivering real-life savings for Ginger customers. In this paper, we will discuss the cost of mental health, the Ginger model, and how the model improves outcomes for members and can save employers \$101,000 - \$302,000 per 100 engaged employees compared to the traditional model.

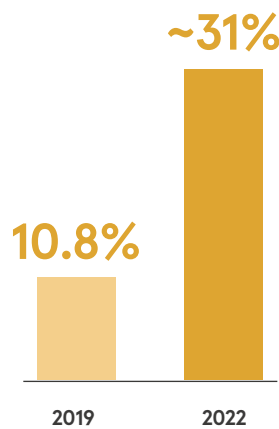


¹ Depression Fact Sheet, [World Health Organization](#), 2021

² Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health, [Substance Abuse and Mental Health Services Administration](#), 2020

The Cost of Mental Health

The high prevalence of mental health conditions has only increased during the pandemic.³



In 2019, 10.8% of Americans had symptoms of anxiety and depression. By March 2022, ~31% of Americans had symptoms of anxiety or depression, according to the CDC Household Pulse Survey.

Individuals with mental health conditions incur higher physical healthcare costs.

Mental health conditions are expected to be the **largest drivers of healthcare** costs among millennials over the next decade.⁴ A 2020 Milliman report found that average annual costs for those with mental health conditions are **2.8–6.2 times higher** than those without a mental health condition.⁵

Despite the increased cost driven by mental health conditions, **actual spending to treat mental health conditions is quite low**. A pre-pandemic Milliman study shows that for individuals with a mental health condition, only about ~4% of total healthcare spending is on mental health. This 4% does not account for the impact that untreated mental health has on other conditions and total medical spend.

There is not just an increase in medical claims cost for those with mental health conditions – there are significant indirect costs as well.

Major depression ranks among the leading sources of health-related productivity loss with **\$44 billion spent on lost work productivity due to depression**.⁶ Overall, including both direct and indirect costs, major depression costs a hypothetical employer with 10,000 employees more than **\$17.2 million annually**.⁷

It is not just those with severe mental health symptoms or diagnoses that incur direct costs. Even those with mild depression have worse productivity when compared to those with no or minimal symptoms.⁸ Additionally, even low and moderate levels of stress are correlated with decreased productivity.⁹

Treating mental health conditions has been shown to reduce direct and indirect costs for employers and health plans, especially for those with physical chronic conditions.

When mental health goes untreated, a member's symptoms are likely to develop into more acute, costly conditions. Untreated mental illness costs the nation as much as \$300 billion each year.¹⁰

³ *Anxiety and Depression: Household Pulse Survey, Centers for Disease Control and Prevention, 2020*

⁴ *The Economic Consequences of Millennial Health, Moody's Analytics, 2019*

⁵ *How Do Individuals With Behavioral Health Conditions Contribute to Physical and Total Healthcare Spending, Milliman, 2020*

⁶ *One Mind at Work, Tufts Medical Center, 2018*

⁷ *Ibid.*

⁸ *Patient-reported Depression Severity Measured by the PHQ-9 and Impact on Work Productivity, JOEM, 2013*

⁹ *Workplace Stress and Productivity: A Cross-Sectional Study, Kansas Journal of Medicine, 2021*

¹⁰ *Health Reform & Mental Illness, National Alliance on Mental Illness, 2017*

When individuals diagnosed with a mental health condition, such as anxiety, depression or substance use disorder receive outpatient care, **costs are reduced by up to \$3,109 per person over a two-year period.**¹¹ Additionally, receiving mental health services was shown to be associated with a reduction in overall healthcare costs, particularly for office-based visits and prescribed medication, among adults with chronic physical conditions.¹² CBT, collaborative care, and telehealth specifically have been shown to be cost-effective.¹³

In addition to the direct savings linked to addressing mental health issues, employers see indirect savings through a reduction in absenteeism, presenteeism, and an increase in employee retention. Research has found that employees with mental health issues are vulnerable to higher-than-average churn events. On average, it costs an employer \$4,000 to replace an employee. Replacing professional and managerial employees costs an average of \$7,000. Additionally, absenteeism due to depression costs \$4,900 per employee, and presenteeism costs \$4,550.¹⁴ By addressing the mental health needs of their employees, employers can expect to see indirect savings and a healthier, happier workforce.

In our current healthcare system, many individuals cannot easily access support. For those that do get support, more often than not, it's low-quality care.

Due to average wait times of ~25 days¹⁵ and the majority of U.S. counties lacking a sufficient supply of care providers,¹⁶ only 40% of those with a mental health need will access mental health treatment.¹⁷ For the 40% of individuals that receive care, the care they receive is often fragmented and not evidence-based. Outpatient, in-network mental healthcare is rarely monitored by traditional insurance carriers, and providers are not often held to strict quality standards for care. The quality evaluation is even less standardized for out-of-network providers and outcomes data is seldom used to measure the effectiveness of care or to inform the individual's treatment plan. Given that fewer than 20% of mental health providers practice measurement-based care, it is unsurprising that only 15% of individuals with mental health needs receive adequate care, and that only 5% fully benefit. In the absence of measurement-based care, 80% of providers miss symptom deterioration,¹⁸ resulting in poor patient outcomes.

¹¹ *Impact of Behavioral Health Treatment on Total Cost of Care*, [Evernorth](#), 2021

¹² *A Reduction in Health Care Expenditures Linked to Mental Health Service Use Among Adults With Chronic Physical Conditions*, [Psychiatry Online](#), 2021

¹³ *The High Cost of Medical Disorders: A Blueprint for Employer Action to Implement Cost-Effective Care Solutions*, [Tufts Medical Center](#), 2021

¹⁴ *One Mind at Work*, [Tufts Medical Center](#), 2018

¹⁵ *Availability of Outpatient Care From Psychiatrists: A Simulated-Patient Study in Three U.S. Cities*, [Psychiatry Online](#), 2015

¹⁶ *Vulnerable Populations: Data by Geography*, [McKinsey Health Institute](#), 2021

¹⁷ *The Digital Mental Health Revolution: Transforming Care Through Innovation and Scale-Up*, [WISH 2020 Forum on Mental Health and Digital Technologies](#), 2020

¹⁸ *Implementing Measurement-Based Care in Behavioral Health*, [JAMA Psychiatry](#), 2018

The Ginger System

Ginger offers members high-quality, on-demand mental healthcare, including text-based mental health coaching, guided self-care, therapy, and psychiatry. Ginger care providers, supercharged by our proprietary electronic medical record, known as Care Hub, and augmented intelligence, work collaboratively to deliver evidence-based care that improves outcomes.



The Ginger offering includes

UNLIMITED 1:1 COACHING:

Members can chat 24/7 with a mental health coach for either in-the-moment support or through regularly scheduled sessions. Our coaches support in a member's moment of need, help members set attainable goals and stay on track, and recommend exercises to encourage consistent self-care. All Ginger coaches are either nationally board-certified by the National Board for Health & Wellness Coaching, certified through an accredited institution or masters-level educated with prior coaching experience – Ginger coaches receive over 200 hours of training to ensure the delivery of high-quality, culturally responsive care to our diverse member base.

1:1 THERAPY:

Through our seamless app experience, 95% of members are offered an appointment with a therapist for a video visit within seven days. With expertise in a broad range of clinical concerns, including depression, anxiety, grief, sleep, substance use disorders, and personality disorders, our therapists deliver evidence-based clinical care and help members work through in-depth issues, all while collaborating with coaches to ensure support between appointments.

1:1 PSYCHIATRY:

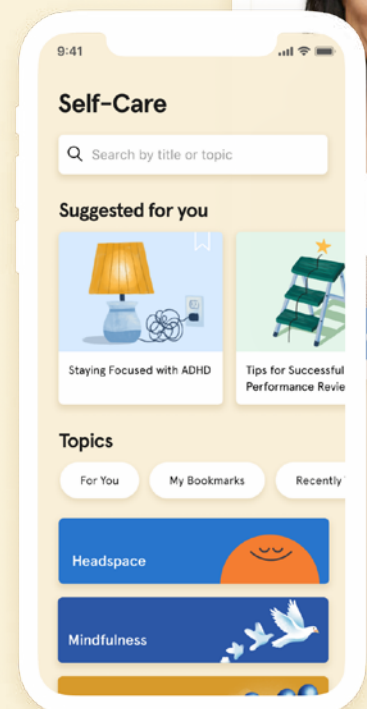
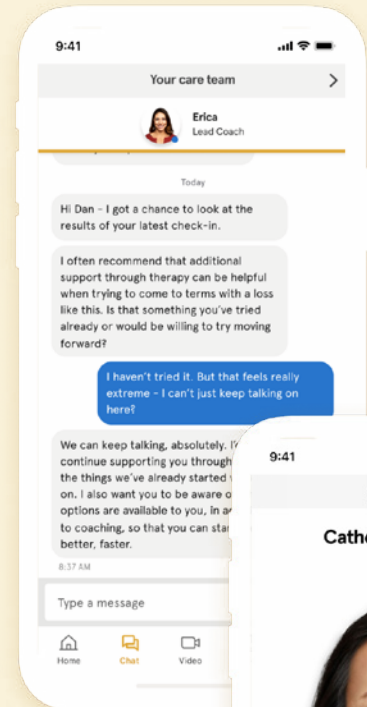
Members who need a higher level of intervention can access evidence-based prescribing and medication management from board-certified psychiatrists via video within 7 days. Our psychiatrists support members in understanding, monitoring, and adjusting medication based on their unique needs and symptoms, and provide psychoeducation and intervention to support overall mental health.

GUIDED SELF-CARE:

Members can access a wide range of clinically validated resources, including videos, podcasts, and guided activities. Along with the freedom to explore all guided self-care, members receive personalized recommendations for content based on onboarding information and coaching conversations. Additionally, coaches may assign activities in the app experience to supplement a member's care plan. With topics that range from mindfulness to sleep to current events, every member can find care that suits them.

ROBUST COMMUNICATIONS:

Employers have access to a comprehensive library of ready-made communications to promote sign-ups and engagement in the Ginger experience. These tailored, timely campaigns normalize conversations around workplace mental health and well-being. Additionally, our communication experts partner closely with each employer's designated Client Executive to develop and iterate on a robust communications strategy for each unique workforce.



Care Model

We're not just an app — we're a system of care. 100% of Ginger coaches and 97% of Ginger clinicians are full-time employees dedicated to our culture, mission, and values. Full-time Ginger care team members receive full benefits and robust training and participate in company initiatives. The result? Happy, satisfied providers who are empowered to practice at the top of their licenses, delivering positive outcomes for members.

Proprietary Care Hub:

With our proprietary electronic medical record (EMR), known as our Care Hub, our coaching and clinical team are easily able to view and share appropriate information such as member identity data, outcomes assessment results, and collaboration notes. The collaboration features allow coaches and clinicians to guide each other in delivering the right care. It also ensures members are supported between sessions and ultimately can help keep the member engaged in therapy, leading to improved outcomes and faster recovery.

Our EMR also leverages advanced machine learning and augmented intelligence to support coach responses, streamline note-taking, and surface insights about member challenges and needs. Different from artificial intelligence which completely replaces the human aspect, augmented intelligence uses data to “superpower” our care team. This allows the care team to deliver personalized care and collaborate on a dynamic, flexible treatment plan that drives the best member outcomes.

Diversity, Equity, Inclusion, and Belonging:

We are highly focused on removing barriers to care and improving outcomes for underrepresented populations. To that end, we intentionally focus on hiring a diverse team of providers that reflects our member base. With 42% of clinicians and 45% of coaches identifying as BIPOC, our members are easily able to find a provider best suited to their needs and experiences. In addition, we train all care team members on the tenets of culturally responsive care, as well as topics relevant to particular issues. Recent examples include cultural humility training, domestic violence in a South Asian context, and gender-affirming care.

QA & Training:

In order to effectively deliver care at scale and ensure maximum benefit to members, we've invested heavily in training and quality assurance. Our investments include human and automated reviews of coaching transcripts and clinical notes based on an extensive set of metrics that reflect best practices, ethical and clinical guidelines, and the latest research in the field. We've also created easily accessible dashboards for managers to regularly review quality metrics and provide staff with relevant feedback in weekly meetings. In addition, Ginger's Behavioral Health Coach Training Program, part of the [Ginger Training Institute](#), has been approved under the auspices of the National Board of Health and Wellness Coaching, which means that we provide rigorous training consistent with NBHWC's standards of accreditation. The Ginger Training Institute also includes a post-doctoral fellowship and practicum training program to advance the field of telehealth training and provide best-in-class training for doctoral students in psychology.

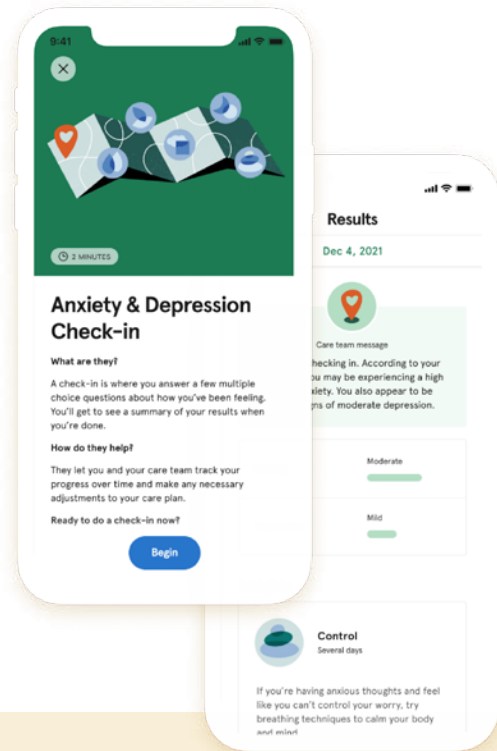
Team-based model:

Care works better, together. Our team-based care approach brings coaches, therapists, and psychiatrists under one virtual roof to ensure no one falls through the cracks. The care team, superpowered by our Care Hub and augmented intelligence, works hand-in-hand around a care plan to provide the right level of care to members when they need it most. This collaboration goes beyond our Care Hub and includes multidisciplinary consultation groups, as well as weekly "rounds" to ensure a shared understanding of a member's treatment plan. Our care team is also engaged in cross-functional work to ensure our product and communications incorporate clinical best practices and drive the right member behavior and outcomes.



Outcomes Assessment

Throughout their care experience, members are prompted via the app and their care team to complete validated clinical assessments, including the PHQ-9, GAD-7, and CD-RISC-10, to track symptom improvement over time and measure the clinical quality of our care. The outcomes of these assessments are shared with the care team, which enables Ginger coaches and clinicians to iterate on member care plans. The data is also shared with our product, operations, research, and data science teams to support the implementation of new enhancements and improvements to the member experience. Finally, this aggregated and anonymized data is shared directly with employers to help them understand the overall health of their organization and make informed decisions on their mental health benefits strategy.



PHQ-9:¹⁹

Definition: 9-question Patient Health Questionnaire to screen adults for the presence and severity of depression symptoms

Score Detail: Scores range from 0–27, with higher scores indicating more severe depression. 10 is a commonly accepted threshold for “clinical depression”

Partial response = 30% reduction in score from baseline to follow-up

Full response = 50% reduction in score from baseline to follow-up

Survey follow-up: If intake score is <10, members receive the survey every 12 weeks. If intake score is ≥10 OR the member is in clinical sessions, they receive the survey every 2 weeks

GAD-7:

Definition: 7-question Generalized Anxiety Disorder assessment used to measure and assess the severity of Generalized Anxiety Disorder

Score Detail: Scores range from 0–21, with higher scores indicating more severe anxiety. 10 is a commonly accepted threshold for “clinical anxiety”

Partial response = 30% reduction in score from baseline to follow-up

Full response = 50% reduction in score from baseline to follow-up

Survey follow-up: If intake score is <10, members receive the survey every 12 weeks. If intake score is ≥10 OR the member is in clinical sessions, they receive the survey every 2 weeks

CD-RISC-10:²⁰

Definition: 10-question Connor-Davidson Resilience Scale used to assess resilience and adaptability

Score Detail: Scores range from 0–40, with higher scores indicating better resilience/adaptability. No standards for “meaningful change”

Survey follow-up: Every 4 weeks

¹⁹ In September 2020, Ginger transitioned to using the full PHQ-9 and GAD-7 surveys to simplify the member experience and give providers more nuanced symptom data. Prior to this transition, Ginger used the PHQ-2 and GAD-2 surveys to screen members and only used the full surveys for those who screened positive based on two-item surveys.

²⁰ More details on how Ginger uses the CDRISC-10 can be found in the following publications: [Resilience in 2021—Descriptive Analysis of Individuals Accessing Virtual Mental Health Services: Retrospective Observational Study](#), [Changes in Resilience Following Engagement With a Virtual Mental Health System: Real-world Observational Study](#)

Ginger Clinical Outcomes

With more than 10 years of deep commitment to research and science and six peer-reviewed publications of real-world outcomes since 2019, Ginger is dedicated to delivering measurement-based care and validating our outcomes.





Association Between Care Utilization and Anxiety

KEY RESULTS

55%

of members who completed GAD surveys at intake with Ginger screened positive for anxiety

59%

of members who completed surveys either screened negative for anxiety at follow-up OR experienced a meaningful reduction (≥ 5 point decrease in GAD-7 score) in their anxiety (GAD) scores²¹

In comparison to members who did not engage in care, members who received coaching or clinical services (therapy or psychiatry) were more likely to show reductions in anxiety symptoms

Members who engaged in multidisciplinary, team-based care (coaching + clinical) showed the highest rates of improvement in anxiety symptoms

BACKGROUND:

Approximately one-third of individuals are affected by an anxiety disorder during their lifetimes, but a large portion of those affected (36.9%) are estimated to go untreated. This study aimed to examine differences in anxiety outcomes in individuals who utilized the Ginger platform. This study also investigated the association between levels of engagement within each care modality and odds of improving anxiety symptoms.

STUDY DESIGN:

A retrospective observational study of individuals who accessed Ginger.

SAMPLE SIZE:

1611 Ginger users aged 18 years or older who screened positive for anxiety on the 2-item Generalized Anxiety Disorder (GAD-2) intake survey.

DELIVERY OF CARE:

On-demand behavioral health coaching, clinical services (therapy and psychiatry), and assessments primarily via a mobile app platform.

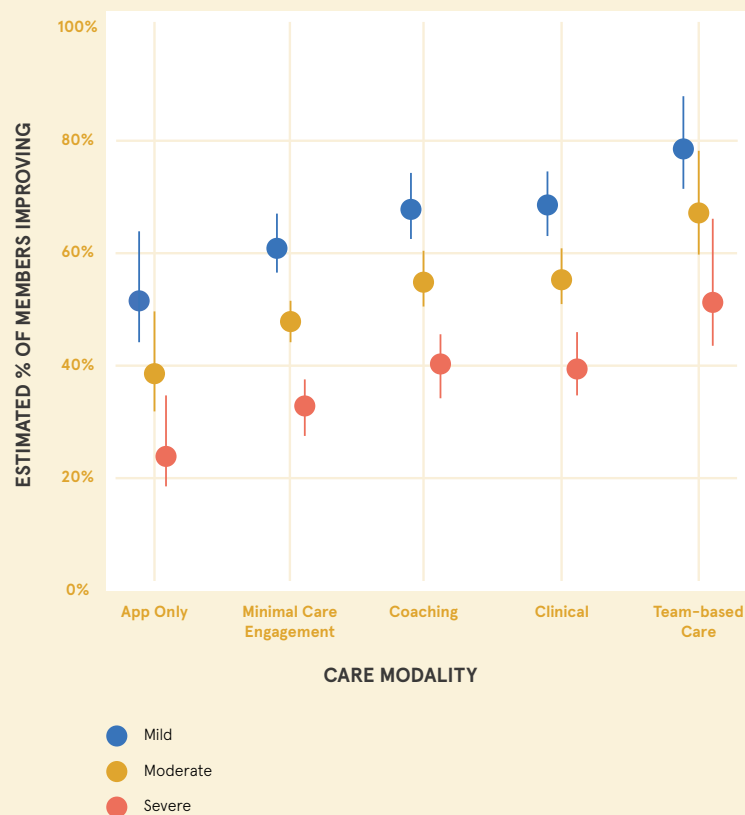
²¹ Average follow-up time for those experiencing significant improvement was 70 days (IQR 29-126). Average follow-up time for the full sample 56 days (IQR 28-105).

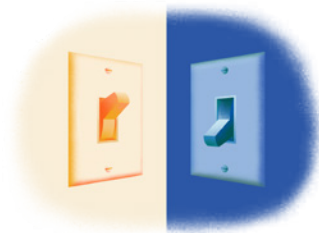
CONCLUSIONS

Findings showed that any care modality (coaching, clinical, or team-based) on the Ginger platform was associated with decreases in anxiety symptoms. Those engaged in coaching reported similar decreases in anxiety symptoms as those engaged in clinical services, suggesting many members might be able to improve their anxiety through coaching alone. Engagement with multidisciplinary, team-based care (coaching + clinical) showed the greatest likelihood of decreasing anxiety symptoms

Read the full study [here](#).

Anxiety Improvement for Ginger Members





Association Between Care Utilization and Depression

KEY RESULTS

37%

of Ginger members who completed intake PHQ-2 surveys screened positive for depression

70%

of these members who initially screened positive for depression at intake and completed follow-up have meaningful improvement (either screened negative for depression at follow-up OR experienced a meaningful reduction in their depression (PHQ-2) scores)

All modalities of care show an increased chance of improvement compared to those not engaged with care services

Those engaged in multidisciplinary team-based care (therapy and coaching) had the greatest chance of depression improvement

BACKGROUND:

Depression is one of the most prevalent mental health conditions in the United States and is ranked second only to hypertension in its impact on longevity and quality of life in Americans. This study aimed to investigate the utilization and effectiveness of the Ginger platform for reducing depression symptoms.

METHODOLOGY:

Sample Size: 1,107 Ginger users aged 18 years or older who screened positive for depression on the PHQ-2 intake survey.

DELIVERY OF CARE:

On-demand behavioral health coaching, clinical services (therapy and psychiatry), and self-guided content and assessments primarily via a mobile app platform.

CONCLUSIONS

Findings showed that any care modality on the Ginger platform was associated with decreases in depression symptoms. Engagement with multidisciplinary, team-based care (coaching + clinical) showed the greatest likelihood of decreasing depression symptoms.

Read the full study [here](#).²²

Depression Improvement for Ginger Members



²² This study summary represents a replication of [this study](#) examining PHQ-2 outcomes (instead of GAD-2 outcomes). Ginger has previously published on its PHQ-2 data here: <https://www.jmir.org/2020/6/e17902/>. In addition to publishing on PHQ-2 data, Ginger has also published outcomes from the full PHQ-9 survey since transitioning to using that assessment in September 2020. <https://preprints.jmir.org/preprint/36956>



Increase in Healthy Days

DEFINITIONS:

Unhealthy days – Unhealthy days are an estimate of the overall number of days during the previous 30 days when the respondent felt that either his or her physical or mental health was not good. To obtain this estimate, responses to questions 2 and 3 are combined to calculate a summary index of overall unhealthy days, with a logical maximum of 30 unhealthy days. For example, a person who reports 4 physically unhealthy days and 2 mentally unhealthy days is assigned a value of 6 unhealthy days, and someone who reports 30 physically unhealthy days and 30 mentally unhealthy days is assigned the maximum of 30 unhealthy days.

Unhealthy days are expensive. One unhealthy day is equivalent to 10 hospital admissions/1,000 patients.

Healthy Days – Healthy days are an estimate of the overall number of days during the previous 30 days when the respondent felt that either his or her physical or mental health was good. This is the difference between 30 total days and the number of unhealthy days noted.

BACKGROUND:

Many individuals that seek out care do not have clinical symptoms. Traditional clinical measures, such as PHQ-9 and GAD-7, may not adequately capture symptom improvement in general well-being. To better understand the impact of Ginger on members with subclinical symptoms, Ginger utilized the health-related quality of life (HRQoL) tool from the Center for Disease Control and Prevention (CDC) “Healthy Days” measure. The “Healthy Days” measure estimates the number of recent days when a person’s physical and mental health was “good” using the following questions:

- 1 **Would you say that in general your health is excellent, very good, good, fair, or poor?**
- 2 **Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?**
- 3 **Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?**
- 4 **During the past 30 days, approximately how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?**

METHODOLOGY:

Sample Size: 288 members who completed the 4-item “Healthy Days” measure at baseline and one month following use of Ginger’s on-demand mental health platform. Baseline anxiety and depression levels were also collected.

CONCLUSIONS

Findings showed that any care modality on the Ginger platform was associated with an increase in “Healthy Days.”

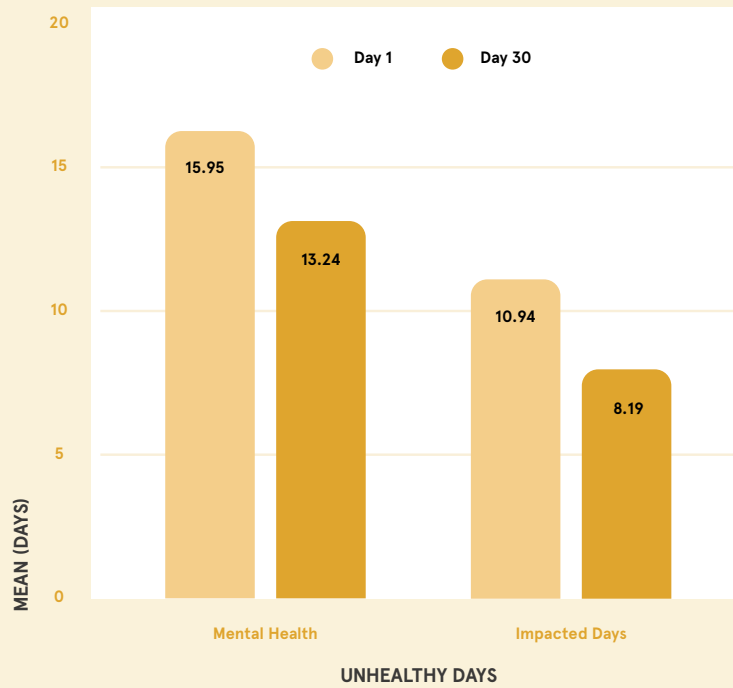
Read the full study [here](#).

KEY RESULTS

Members, on average, reported “frequent distress” at baseline with more unhealthy mental health days (mean = 16) than healthy mental health days (mean = 14).

3 day

Average increase in healthy mental health days. After one month of using Ginger, members experienced statistically significant improvements in the average number of healthy mental health days.



How Ginger's Clinical Outcomes Translate to Cost Savings

To understand and demonstrate the cost savings of Ginger's on-demand mental health system, we developed a real-world cost impact model with Cerebrae, a value-based contracting platform powered by actuarial science.

Ginger and Cerebrae's cost impact model relies on Ginger's peer-reviewed outcomes data coupled with claims data for 25M+ members from the IBM® MarketScan® Commercial Claims Database. By applying Ginger's validated clinical outcomes to real claims, the cost impact model can infer how much an employer may expect to save with Ginger compared to the traditional system.

CEREBRAE

is a value-based contracting platform powered by actuarial science. It helps providers like Ginger model the cost of care impact of their offerings.

IBM MARKETSCAN COMMERCIAL DATABASE

provides one of the longest-running and largest collections of proprietary de-identified claims data for privately and publicly insured people in the U.S.



Definitions:

BASE POPULATION

All eligible members are based on age, gender, and geography criteria. Members selected have full medical and drug coverage.

CONDITION COHORT

All members in the base population are diagnosed with the clinical condition. Members have at least one ICD-10-CM diagnosis code (primary or secondary) in the Clinical Classifications Software Refined (CCSR) List.²⁴

COST OF CARE IMPACT

Impact that adequate mental healthcare has on the total cost of care based on industry knowledge, claims analysis, and clinical research.

PROJECTED COST IMPACT PER PATIENT

Amount saved per member with a mental health-related claim.

PROJECTED PATIENTS

of members with mental health-related claims that will use Ginger.

TOTAL PROJECTED COST OF CARE SAVINGS

Overall cost of care savings an employer can expect for their member population.

Cost-Impact Model Overview

DATA SOURCES

- Ginger peer-reviewed outcomes data
- IBM MarketScan Commercial Database (2019) with over 25M members' eligibility and claims data from employer-sponsored plans

POPULATION SELECTION

- **Age group:** 13 to 65
- **Gender:** Male, Female
- **Geography:** United States of America (excluding Puerto Rico)
- **Condition cohorts & hierarchy:**²³ Depressive disorders, Trauma and stressor-related disorders, Anxiety and fear-related disorders, All other condition areas

METHODOLOGY

The cost and utilization benchmarks for each **condition cohort** defined above is compared to a **base population** benchmark in total and by detailed service categories.

Cost impact assumptions are applied at the service category level to determine the **projected cost impact** for each condition group. These assumptions are based on clinical research, industry experience, and professional (clinical and actuarial) judgment.

Projected patients are calculated based on the prevalence rate of each clinical condition and the engagement rate for Ginger's solution.

Total projected cost of care savings is the combination of all projected patients and their projected savings, respectively. This does not include soft savings such as absenteeism, productivity, access to care, care experience, employee satisfaction, etc.

²³ Members with comorbidities are categorized based on the topmost applicable condition listed to avoid double-counting. Condition hierarchy is assigned in the order listed, based on the highest severity annual cost.

²⁴ The Clinical Classifications Software Refined (CCSR) is developed as part of the Healthcare Cost and Utilization Project (HCUP), a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality (AHRQ). HCUP databases, tools, and software inform decision making at the national, State, and community levels.

Applying the model

To demonstrate our model, we've applied it to three common members of a population who have varying physical and mental health needs.

- **Member A** is a 30-year-old employee. She is feeling anxious and having trouble keeping up with her work.
- **Member B** is a 45-year-old employee who has been battling symptoms of depression for years.
- **Member C** is a 56-year-old employee who is managing chronic conditions and depression. Due to his conditions, Member C sees his physician regularly and has had a few emergency visits over the past year.

For each member, we compare their annual medical costs under three scenarios:

- **No care:** Average cost for someone with these characteristics and NO behavioral healthcare utilization. This amount includes 1) The cost of the member's medical claims and 2) the impact that avoiding mental healthcare has on the member's total cost of care.
- **Traditional Model:** Average cost for someone with these characteristics and behavioral healthcare utilization of 6-10 sessions. This amount includes 1) The cost of the member's therapy claims and 2) the impact that going to therapy has on the member's total cost of care.
- **Ginger's model of care:** Average cost for someone with these characteristics who utilized Ginger's on-demand mental health system. This includes 1) the cost of Ginger care, which is more cost-efficient and higher quality by shifting therapy utilization to behavioral health coaching for those who need it and 2) the impact of Ginger care on the total cost of care.

	NO CARE <i>No therapy sessions</i>	TRADITIONAL CARE <i>6-10 therapy sessions</i>	GINGER <i>Coaching + clinical services</i>
MEMBER A <i>Feeling anxious and having trouble keeping up with her work</i>	\$12,000	\$10,000	\$9,000
MEMBER B <i>Facing symptoms of depression for years</i>	\$18,000	\$16,000	\$15,000
MEMBER C <i>Managing a chronic condition and depression</i>	\$35,000	\$32,000	\$30,000

Population Cost Savings

Now that we have established cost savings for individuals in a given population, let's look at how these savings can be applied to an engaged population of members. Applying a recent McKinsey analysis to a sample engaged population, we see the following distribution of members²⁶:

75 in 100 employees look like Member A and only require support that fosters mental health.

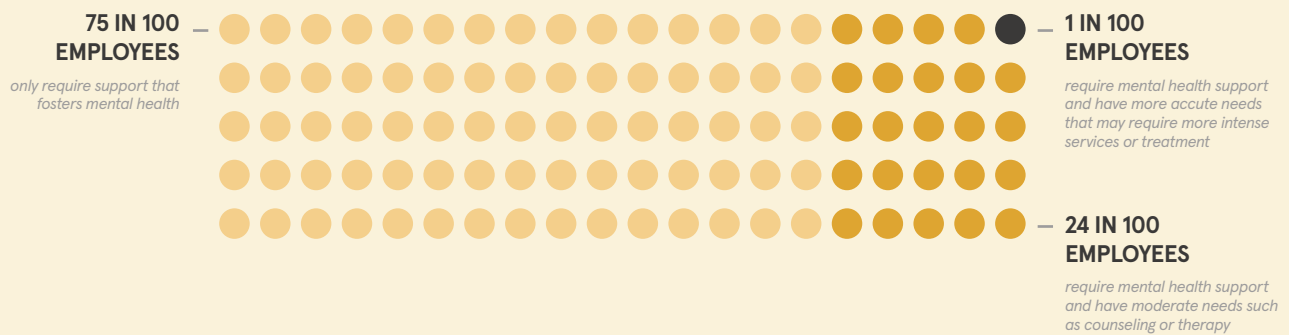
25 in 100 employees look like Member B and require mental health support and have moderate needs such as counseling or therapy.

1 in 100 employees look like Member C and require mental health support and have more acute needs that may require more intense services or treatment.

To calculate savings for the full engaged population, we would apply the following equation:

Low end: $(\$1,000) \times (75) + (\$1,000) \times (24) + (\$2,000) \times (1) = \$101,000$

High end: $(\$3,000) \times (75) + (\$3,000) \times (24) + (\$5,000) \times (1) = \$302,000$



An employer with this distribution of engaged employees can expect between \$101,000 - \$302,000 in savings.

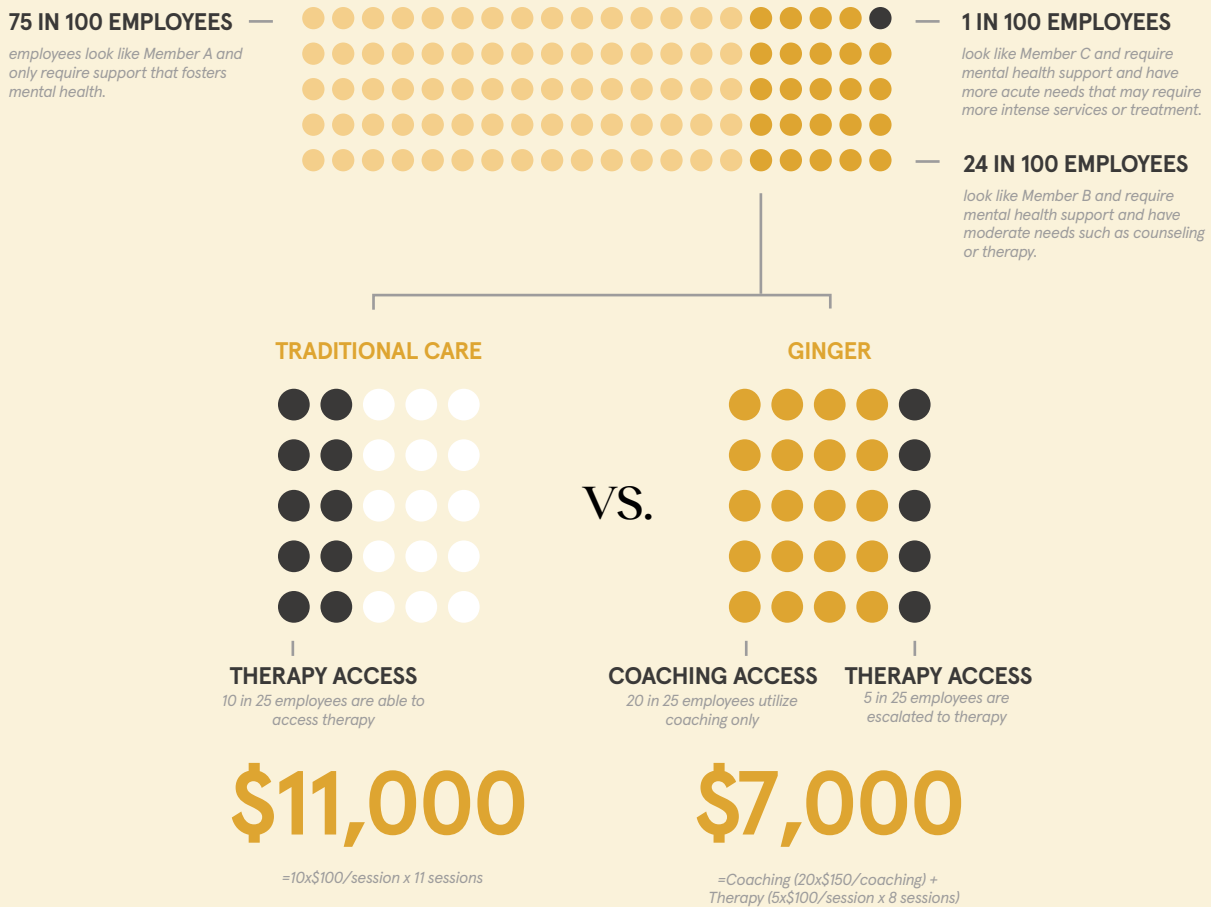
²⁶ Using digital tech to support employees' mental health and resilience, *McKinsey & Company*, 2021

Ginger’s model impacts the total cost of care and improves access.

Let’s zoom in on the 25 employees who need mental health support (Members B and C):

According to U.S data on mental health engagement and need, in the traditional model, only 10 of the 25 employees would receive access to therapy, while 15 would go untreated.²⁶ The 10 employees who receive care would cost the employer \$11,000 in direct spending on mental healthcare.

In the Ginger model, 20 employees would receive access to coaching while the 5 employees who need the greater level of care would receive therapy. With the full population receiving care, the employer only pays \$7,000.



With the Ginger model, more members receive the right level of care at a fraction of the cost.

²⁶ <https://2020.wish.org.qa/app/uploads/2020/09/IMPJ7849-03-Digital-Mental-Health-WISH2020-201103-WEB.pdf>

Conclusion

Employees today are feeling more stressed, anxious, and burned out than ever before. With escalating mental health needs leading to increased healthcare spending, lower employee productivity and retention, and unhealthy workplace culture, employers recognize the need to invest in solutions that support a healthy and resilient workforce and deliver cost savings.

At Ginger, we approach cost-savings evaluation from multiple angles to create a complete picture of the value our offering delivers. With the following approaches, we help our clients understand the overall health of their organization and the impact of our solution.

Clinical outcomes evaluation: Our measurement-based system allows us to report outcomes (not just utilization) on a regular basis to employers to show impact. We also use this data to validate our real-world outcomes in peer-reviewed journals.

Cost-impact model: Beyond clinical outcomes, we are looking at cost and financial outcomes by working with Cerebrae to develop rigorous cost impact models based on IBM MarketScan data. This helps employers and other partners understand the potential impact of our services for their specific population.

Direct claims analysis: Finally, we apply this model to customer-specific claims data to evaluate performance and look at how our services impact the overall cost of care and utilization.

To learn more, contact us at
www.ginger.com/contact

