



ValidationInstitute

2024 Validation Report

Review for: Kaia Health
Validation Achieved: Outcomes
Valid through: May 2025



Company Profile



Category:	Musculoskeletal Management
Website:	https://kaiahealth.com/
Public or Private:	Private
Year Established:	2016
President:	Konstantin Mehl
Company contact:	team@kaiahealth.com

Description Provided by the Company:

Kaia Health is the world's largest digital therapeutics company, creating accessible, evidence-based therapies for a range of conditions including musculoskeletal (MSK) pain and chronic obstructive pulmonary disease (COPD). Covering 60M million lives globally, our digital-first therapy programs are powered by motion analysis technology and guided by clinical experts. Patients only need a smartphone or tablet to access care 24/7, with no sensors, wearables, or other equipment needed. Headquartered in New York and Munich, **Kaia Health** partners with leading health plans and employers to deliver care that is proven to be as safe and effective as traditional care.





Claim Assertion for Validation

Patients with low back pain who were randomly assigned to Kaia Health's Digital Musculoskeletal Program have significantly more improvement in pain (greater reduction) and improvement in function than patients receiving usual care.

Since this study was a randomized controlled trial (RCT) in which enrollment was random rather than voluntary, the results are strong evidence that the program makes the difference.





Method / Calculation / Examples

General Practitioners were randomly assigned to offer low back pain patients the Kaia Health Digital Musculoskeletal Program. A total of 933 Patients were included in the intervention group. The staff was trained in the Kaia Health program and its support services. Similarly, 312 patients received usual care without restrictions - following the recommendations of the German National Care Guideline on treatment of non-specific back pain. These guidelines closely resemble United States national guidelines for non-specific back pain. The total patient sample was 1,245 participants.

The Kaia and the control groups were compared on demographic traits to ensure that they were similar to one another. They were compared on gender (% female), age, height/weight, education, employment, use of pain killers, risk of chronic pain, and how they were referred for care.

Pain scores for the Kaia Health and the control groups were measured and averaged at the start of care (baseline) and three months later. Patients were followed for 12 months, however, with additional data forthcoming. The Numerical Rating Scale (NRS) was used for pain measurement; it is a validated instrument for this purpose.

In addition to pain assessment, patients also responded to the questionnaires listed below. (Note: all survey tools are validated, which means they are reliable and credible data sources.)

- Quality of life regarding physical and mental health (Veterans Rand 12)
- Depression, anxiety, and stress (Depression, Anxiety, Stress Scale or DASS)
- Functional capacity (Hannover Functional Ability Questionnaire)





Method / Calculation / Examples

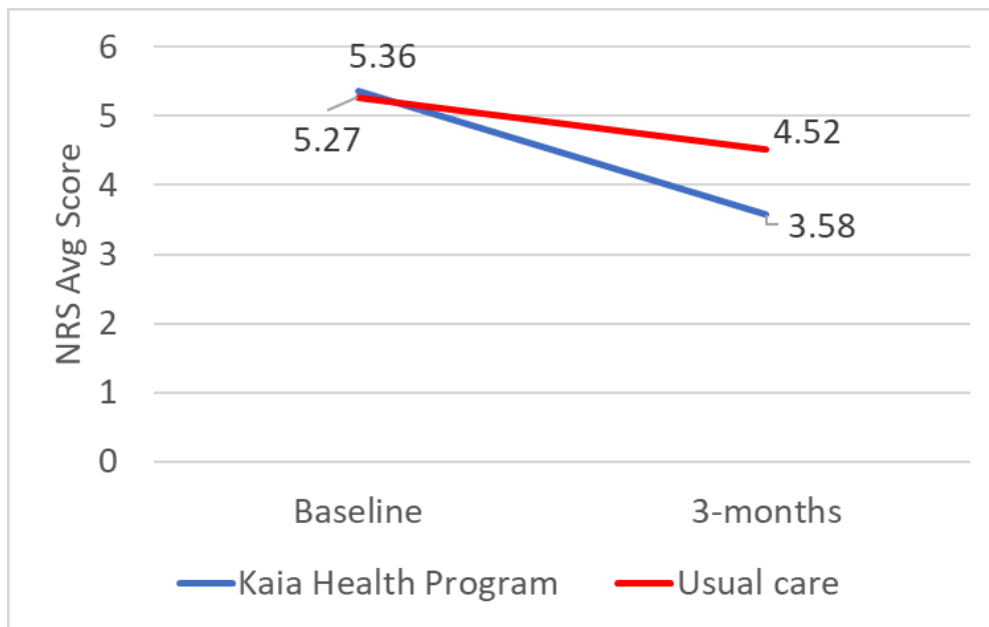
Scores on these questionnaires were taken at the start of care and three months later. Patients were followed for 12 months total with additional data forthcoming. Each patient's change in score was then averaged, and the average change in scores was compared between the group receiving the Kaia program and the group receiving usual care.





Findings & Validation

The Kaia group and the intervention group had nearly identical average pain scores at the start of treatment. The graph below shows the Kaia Health group and control group’s baseline and three-month average pain score, as measured by the NRS tool. The Kaia patients’ pain score declined 33.3% which can be considered a clinically meaningful improvement, and the control group’s pain score declined 14.3%. The Kaia patients had statistically significantly more pain reduction than the usual care patients. In fact, Kaia patients saw more than double the pain improvement of the control group.



Graph 1: Average Pain Scores

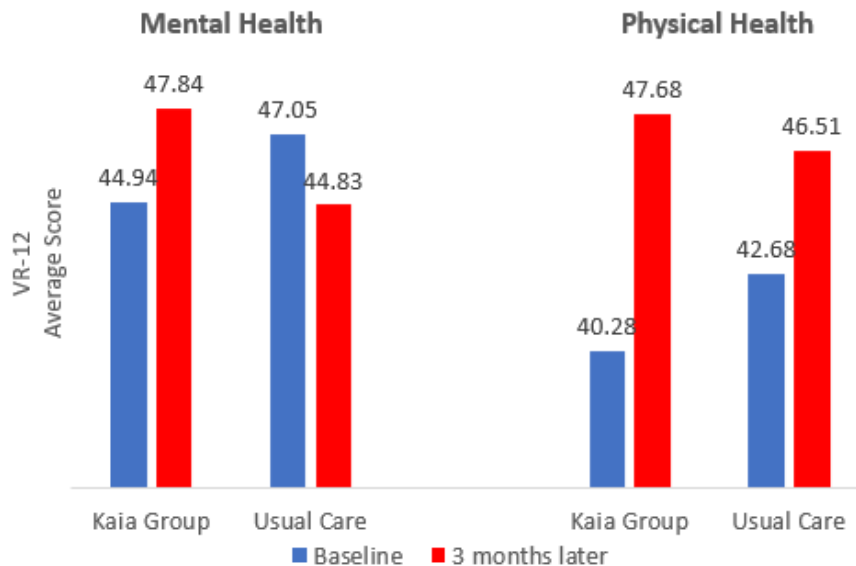
The subset of the Kaia user population who scored at a higher acuity level (as measured by the StaRT Back tool) showed a greater than average pain improvement of 43%. (Note: StarT Back scores were not analyzed here.)



Findings & Validation

Further, Kaia participants used the program on average approximately 1 out of every 3 days during the period of the study.

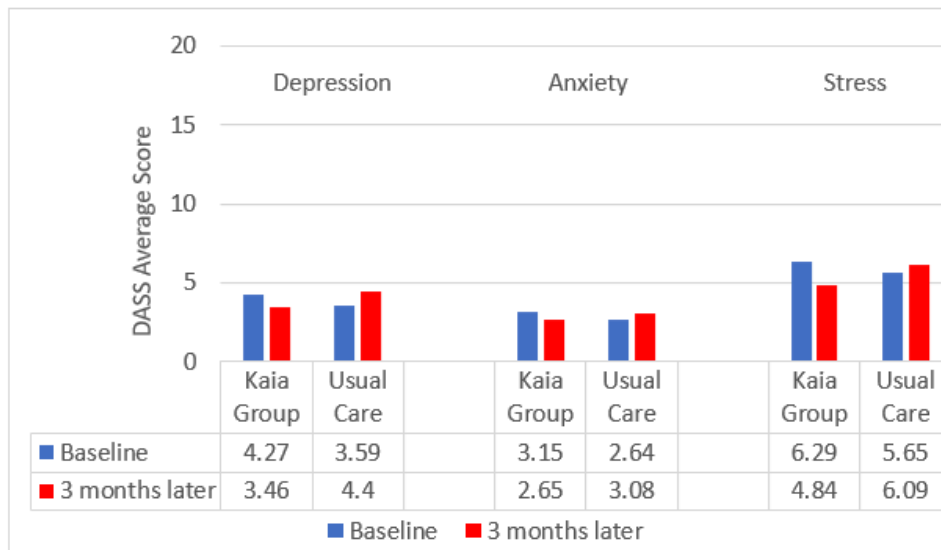
The graph below shows the quality-of-life (VR-12) scores for both groups. The Kaia group improved its scores in both mental and physical health; the control group worsened in mental health on average. In both mental and physical health, Kaia program users significantly outperformed the control group; this means their change in average scores was statistically different than the change for the control group. In physical health, Kaia program users' average change was large enough to mark a clinically-meaningful change in health status (minimum clinically important difference).



Graph 2: Quality of Life VR-12 Average Scores

Findings & Validation

The graph below shows the depression, anxiety, and stress scores (DASS) scores for both groups. The control group on average had an increase in their scores, denoting a worsening of depression, anxiety, and stress. The Kaia group improved significantly on all three. In addition, the Kaia group’s average change in scores for each section was statistically different from the control group’s average.

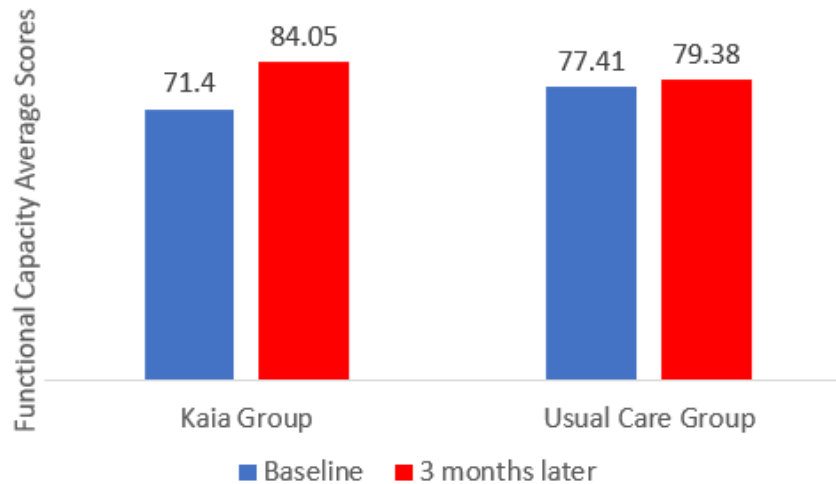


Graph 3: Depression, Anxiety, Stress Average Scores



Findings & Validation

The graph below shows the average scores in functional capacity, as measured by the Hannover Functional Ability Questionnaire. Both groups improved, but the Kaia group's improvement was statistically significantly higher than usual care patients'.



Graph 4: Functional Capacity Average Scores





Limitations

The population analyzed was German, working age adults. It is assumed that the results would be similar for working age adults in other Western countries, such as the United States.





Validation and Credibility Guarantee

Kaia Health's Digital Musculoskeletal Program achieved validation for **Outcomes**. Validation Institute is willing to provide up to a \$10,000 guarantee as part of their Credibility Guarantee Program. To learn more, visit <https://validationinstitute.com/credibility-guarantee/>

Savings

Can reduce health care spending per case/participant or for the plan/purchaser overall.

Outcomes

Product/solution has measurably moved the needle on an outcome (risk, hba1c, events, employee retention, etc.) of importance.

Metrics

Credible sources and valid assumptions create a reasonable estimate of a program's impact.

Contractual Integrity

Vendor is willing to put a part of their fees "at risk" as a guarantee.





CERTIFICATE OF VALIDATION

Applicant:

Kaia Health

99 Wall Street #5880, New York, NY 10005

Product:

Kaia Health's Digital Musculoskeletal Program

Claim:

Patients with low back pain who were randomly assigned to Kaia Health's Digital Musculoskeletal Program have significantly more improvement in pain (greater reduction) and improvement in function than patients receiving usual care.

Validation Achieved:

Validated for Outcomes

Validation Award Date:

July 2022

Linda K. Riddell, MS
Chief Data Scientist
Validation Institute

Vidar Jorgensen
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Validation Institute





About Validation Institute

Validation Institute is a professional community that advocates for organizations and approaches that deliver better health value - stronger health outcomes at lower cost. We connect, train, and certify health care purchasers, and we validate and connect providers delivering superior results. Founded in 2014, the mission of the organization has consistently been to help provide transparency to buyers of health care.

Validation Review Process

Validation Institute has a team of epidemiologists and statisticians who review each program. The team focuses on three components:

- Evidence from published literature that a similar intervention had similar results.
- The reliability and credibility of the data sources.
- The rigor of the approach to calculating results.

To achieve validation, the program has to satisfy each of these components. VI's team then summarizes the review into a report which is publicly available. Details of VI's review are available with the program's permission.

