

Buyer's Guide

MSK (Musculoskeletal)
Solution Providers



ValidationInstitute

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Welcome to the MSK Solutions Buyer's Guide

The health and wellness industry offers myriad solutions. In particular, MSK vendors are on the rise – which is no surprise given MSK conditions are a major cost driver for employers. It is critical for employers to choose a vendor partner that aligns with the needs of their organization and most importantly their population.

With so many options, it can get overwhelming and difficult to evaluate each vendor's performance. The right choice will not only control rising health care costs but also improve employees' health and well-being.

To simplify making a smart choice, we have curated this buyer's guide. This buyer's guide includes key considerations to keep in mind and potential questions to ask a MSK vendor. In many companies MSK spend is the leading driver of medical costs. This guide helps employers reduce those costs while improving employee outcomes, satisfaction, and retention.

This guide does not rank the MSK vendors. It showcases companies whose outcomes have been reviewed by Validation Institute.

We encourage you to research other vendors beyond what's included in this guide to ensure you choose a vendor that is the best fit for your organization.

Benny DiCecca

Benny DiCecca
President and CEO
Validation Institute



| Key Considerations

When choosing a MSK solution that aligns with your employees' and organization's needs, below are recommended questions to ask prospective vendors and key factors to consider.



What is the scope of services?



What additional services does the vendor offer?
Do they routinely review appropriateness of services?



What is the vendor's preferred group size?
Are there any parameters around employer size?



What is the average treatment cost?



How long does treatment last (on average)?
Does the patient's pain go down and function go up?



How does the program support the patient's return-to-work?
Does the program have data on return to full work capacity and relapses? Does the program use published guidelines to evaluate its success?



How does the vendor provide access to care?



Which networks is the vendor a part of?



Does the vendor assist in employee communications, engagement, and benefit design changes?



What is the annual patient count?



What percent of patients complete treatment?



Does the vendor have performance guarantees or take risk for its results?



Examples Featuring Validated MSK Vendors



How long does treatment last?

One mark of an efficient MSK provider is how long patients are in care – the number of days from day one to day “Done!” is an important factor to consider. A provider whose patients achieve good results in less time is more efficient and may be more cost effective than providers who keep patients longer.

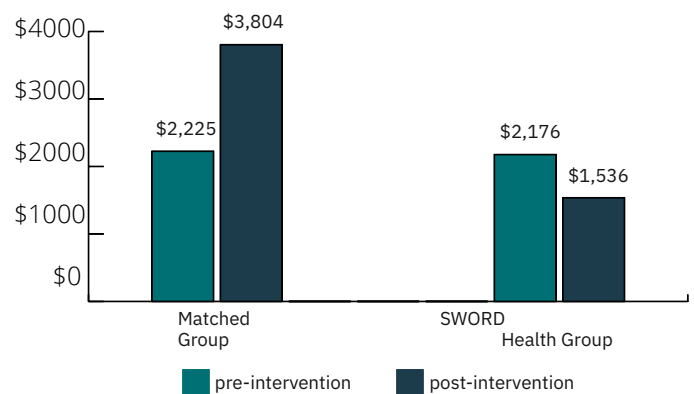


How much does it cost?

Reducing pain and restoring function is the goal of all musculoskeletal care. Doing it cost effectively is the mark of an efficient provider. **One way to assess cost is to compare how much is spent on a patient getting care from the program to similar patients getting care elsewhere.** The total spent should include all of the person’s MSK care for the time period, not just the services the vendor or MSK program provided. This way, you get a picture of the total cost of the program’s patients.

The more work that is done to match program users to non-users, the clearer the picture of the program’s impact. In the chart below, SWORD Health shows how its participants total costs for MSK care changed from a pre-intervention to a post-intervention period; and how this change compares to similar people getting care elsewhere. The two groups were matched on age, gender, body part, and pre-intervention spending on MSK care.

MSK spend per member pre vs. post intervention period



Examples Featuring Validated MSK Vendors



How does the vendor provide access to care?

The pandemic has made telemedicine and virtual care more popular than ever. Even prior to 2020, MSK providers were using technology to deliver physical therapy, coaching, and exercise plan tracking. While some providers offer services in-person others provide services via phone or app.

For example, Integrated Musculoskeletal Care (a validated MSK vendor) provides care both in-person through their clinics and also via telehealth and mobile app.

Another example is Hinge Health (a validated MSK vendor) which is a digital health clinic offering digital therapy to individuals.

Depending on your population's needs, you can choose a vendor that offers MSK care on-site, virtually, or both on-site and virtually.



Does the vendor help in employee communications, engagement, and benefit design changes?

With services changing and delivery methods going high-tech, employees and their families need to know about the MSK program. Some vendors offer services to help employers get the word out and to encourage members to use the new, cost-effective services.

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With any new vendors or products, we ask them either to get validated by the Validation Institute or explain why validation is not necessary. Validation is low cost, low risk, and as sensible as getting audited financials. All employers should require their vendors to be validated to save all of us a lot of time and money.

- **Harris Rosen**, President and CEO, **Rosen Hotels & Resorts**

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| Validated MSK Vendors



Validation Type Savings

About



Digital Musculoskeletal Clinic



Reduces MSK pain, opioid use, and surgeries by integrating advanced wearable technology with a comprehensive clinical care team, including doctors of physical therapy, physicians, board certified health coaches, and more

Validation Claim



Over 2 years, MSK medical claims spend was \$2244 less per Hinge Health participant compared to the matched control group

Findings

88.88%

Significant lower costs (88.88% lower) of Invasive, Imaging, Office Visits, Therapy, and others.



The percent of Hinge Health participants using the targeted services decreased in each service from year 1 to year 2.

68.7%

In year 2, there were 68.7% fewer Hinge Health participants undergoing invasive procedures than the matched control group.



Validated MSK Vendors



Validation Type Metrics

About



Focused on addressing Musculoskeletal Disorders (MSD) before they progress to chronic conditions



Guided exercise therapy program for individuals to address musculoskeletal disorder, including back pain, knee pain, hand arthritis, and hundreds more



Online platform offers
18 pain recovery tracks addressing pain across the entire body 200+ pain management tracks supporting members with MSK resulting from chronic conditions

Validation Claim



People who use the SimpleTherapy program have lower medical costs for their musculoskeletal condition than similar (matched) people who use conventional treatment

Findings

SimpleTherapy users had lower medical claims cost for their musculoskeletal condition than matched non-users.



Validated MSK Vendors



Validation Type Savings

About

SimpleTherapy, established in 2011, **SimpleTherapy** is a pioneer in digital musculoskeletal (MSK) pain recovery and mental health solutions, specifically designed for employers and health plans to provide their employees and members. By integrating evidence-based exercise therapy with cutting-edge artificial intelligence (AI) technology, **SimpleTherapy** delivers highly personalized care tailored

to each participant's condition, limitations, and therapeutic response. As a digital health company, **SimpleTherapy** focuses on offering evidence-based physical therapy solutions that enhance patient outcomes while lowering healthcare costs. The platform utilizes advanced analytics and machine learning algorithms to customize treatment plans for patients, ensuring optimal results.

Validation Claim

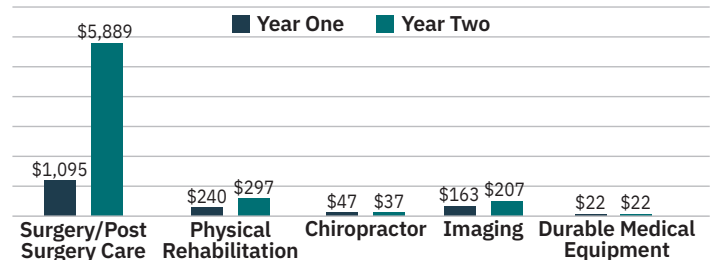
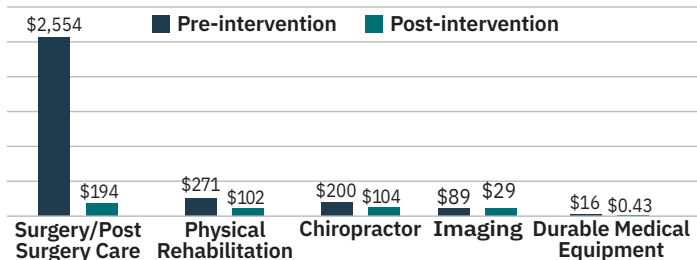


People who actively engage in SimpleTherapy's program have lower musculoskeletal (MSK) costs in the 12 months after their last Simple Therapy session than they had in the 12 months before their first session. People who did not use SimpleTherapy but were similar to users had their costs go up in the same two-year period.

Findings

Chart 1 summarizes the per user costs for the 12-months before users began using Simple Therapy, and for the 12 months after their last Simple Therapy session. 87% of the cost change came from reducing the use of surgical services. In total, users' costs went down by \$2,699 from the pre- to the post-intervention periods.

This decrease in costs contrasts with non-Simple Therapy users' increase. Chart 2 shows the per user costs for two 12-month periods. Non-users increased their use of surgical, physical rehabilitation, and imaging services.



| Validated MSK Vendors



Validation Type Savings

About



Virtual MSK care provider



Digital platform pairs expert physical therapists



FDA-listed wearable technology



Personalized treatment plan

Validation Claim

Users of the SWORD Health program have lower two-year medical costs for musculoskeletal care per person than similar people being treated for the same conditions who use other providers

The lower cost of care in SWORD Health users results from lower expenditure with surgeries, invasive procedures, office visits, and other forms of therapy

Findings

SWORD users per member costs were \$2,143 in the 12-month pre-intervention period and decreased to \$1,383 in the post-intervention period.

The matched (non-user) groups per member costs were \$2,180 in the first 12 months and rose to \$3,892 per member in the second 12-month period.

Costs in the SWORD group were \$2,472 lower than in the matched group. The majority of the cost difference between SWORD users and matched nonusers is from lower use of surgery.



| Validated MSK Vendors



Validation Type Outcomes

About



Virtual MSK care provider



Digital platform pairs expert physical therapists



FDA-listed wearable technology



Personalized treatment plan

Validation Claim

Patients using the app can achieve outcomes comparable to conventional care, and by using the app, reduce the need for in-person visits.

Findings

Hip study: The group assigned to the Sword Health program had better improvement at each of the time points than the conventional care group on the Timed Up and Go test. On the HOOS test, Sword Health patients did better on the sports and Quality of Life components. They also did better on the range of motion tests, except for one component (standing flexion).

Knee study: The usual care and the Sword Health groups improved on their TUG and KOOS scores enough to be considered clinically significant. The Sword Health group had significantly more improvement than the conventional care group on both tests at all of the post-surgery assessments with the exception of one component of the KOOS test (sports).

Low-back pain: Sixty-three percent of the participants adhered to the program. This compares favorably to adherence to traditional physical therapy programs for low back pain, for whom adherence can range from 30% to 86%, varying with how adherence is defined and how many weeks treatment lasts. Patients tend to drop out the longer that treatment lasts.
(Jack & al, 2010) [4]



Validated MSK Vendors



Validation Type Savings

About

Founded in 2007 by 10 private practice orthopedic surgeons, the Connecticut Joint Replacement Institute (CJRI) has become a nationally recognized center-of-excellence for joint replacement surgery.

We are a data-driven organization with over 20 clinical protocols that guide our standardized care delivery and have enabled us to continually measure our outcomes.

With a laser focus on health outcomes, clinical experience and the true cost of care (the healthcare value equation) we have established a relentless commitment to excellence.

Our registry contains outcomes data on nearly 50,000 patients and is our crown jewel. We are proud that over 3,000 patients each year have their surgery performed at CJRI and that we are one of the highest volume arthroplasty institutes in the United States. It is an honor to be a validated program under the Validation Institute.

Validation Claim



CJRI’s total hip arthroplasty, total knee arthroplasty, total shoulder replacement, and reverse shoulder replacement patients have lower rates of Emergency Room visits, hospital readmissions, and Periprosthetic joint infection within 30 days of their surgery than rates found in published peer-reviewed literature.

Findings

The table below summarizes CJRI’s surgeries, 30-day Emergency Room Visits, 30-day hospital readmissions, and periprosthetic joint infections, as well as rates from published literature. Literature citations are included below the table.

CJRI’s rates were below those found in published literature, except for periprosthetic joint infection for hip arthroplasty where CJRI’s rate was just above the lower end of the range. (Empty cells mark rates that had no published literature for benchmarking.)

	# Pts	30 Day ED visit		30 Day Readmission		30 Day Periprosthetic Joint Infection	
		CJRI	Lit	CJRI	Lit	CJRI	Lit
Total Hip	1104	2.63%	6.50%	2.63%	3.40%	0.72%	0.6% - 1.6%
Total Knee	1469	2.65%	11.50%	2.04%	2.20%	0.54%	0.7% - 1.5%
Reverse Total Shoulder	127					0%	0.5% - 6.7%
Total Shoulder	52			0%	1.3% - 2.9%	0%	1%



Validated MSK Vendors



Validation Type Savings

About

DISC Surgery Center at Newport Beach (DISC) is a purpose-built outpatient facility focused on pioneering minimally invasive spine surgery, diagnostic and interventional pain management and orthopedic surgery. Employing rigorous protocols and data-backed benchmarking, **DISC** has set a new standard of care as an ambulatory surgery center, with the safety and outcome of its cases surpassing those in hospitals. **DISC** is a Chicago Pacific Founders portfolio company and a subsidiary of **Trias Global**, a musculoskeletal management company focused on delivering superior care and experiences while reducing healthcare costs.

Trias Global positions facilities to thrive, building a clinically integrated network of providers and monitoring the network's quality. The company's value proposition is built on three key pillars:

- 1) expanding patient access to leading providers and improving outcomes,
- 2) creating collaborative partnerships across payors and health care institutions to optimize the surgical experience,
- 3) standardizing quality assurance for complex surgical procedures in an outpatient setting through business intelligence and analytics.

Validation Claim



DISC Surgery Center had zero patients going to the hospital, getting infections, or having the surgery re-done after having complex spine surgery

Findings

Table 1 summarizes DISC Surgery's complex spine surgery patients' rate per 1,000 patients of three complications: an unplanned hospital visit within one day of surgery, an infection within 90 days of surgery, and reoperation within 90 days of the original surgery.

	DISC Surgery Center (n= 2,531 pts)	Published benchmark
Unplanned hospital admission within one day (1)	0.000	0.281
Infection post operation within 90 days (2)	0.000	9.000
Reoperation within 90 days (2)	0.000	0.000



Validated MSK Vendors



Validation Type Program Validation

About

Kaia Health makes effective musculoskeletal pain therapy accessible to people anywhere and anytime. Kaia is an at-home digital musculoskeletal pain management program that helps people self-manage symptoms and reduce costs for musculoskeletal conditions, like back and joint pain. **Kaia** also offers a pulmonary rehabilitation-based solution effective for pulmonary conditions such as chronic obstructive pulmonary disease.

Through a mobile app on the patient's own smartphone or tablet, the **Kaia** program provides biopsychosocial MSK care including curated physical exercises designed by physical therapists and based on international guidelines for physical therapy, mind-body

content and techniques, and pain education modules without additional sensors or equipment. Using 24/7-available motion analysis technology, the program guides patients through customized, engaging workouts and patients receive real-time feedback, so they perform every exercise correctly and safely.

Patients also have access to 1:1 PT consultants with **Kaia's** team of Doctors of Physical Therapy and coaching sessions with **Kaia's** team of health coaches. PTs and coaches offer motivation and guidance throughout the program journey, as well as physical therapy support and care coordination. Since 2016, Kaia has partnered with employers and payers to deliver care to over 500,000 patients around the world.

Validation Claim

Validation Institute is pleased to award Program Validation to Kaia Health's Digital Low Back Pain program. This validation recognizes the program for achieving better patient outcomes at lower costs. Since back pain is a common and costly condition, the program's impact is far reaching.

Program Validation is reserved for programs that have strong evidence of significant impact on both patient

outcomes and on medical costs. Evidence is assessed based upon the certainty it provides that the result is due to the program and not to other factors, such as recruiting people who are most likely to succeed. When people or groups are assigned randomly to the program or to usual care, we can be more certain that differences in outcomes or use of medical care are due to the program.

Findings

Kaia Health conducted a randomized controlled trial which assigned primary care doctors to offer low back pain patients the Kaia digital low back pain program or to offer low back pain patients usual care. The results of the study concluded that the patients receiving the Kaia program had significantly more:

- Reduction in pain,
- Improvement on physical and mental health, and
- Improvement in physical function.

In addition, Kaia program users' total medical costs were significantly lower than the usual care (control) groups. Kaia's savings and outcomes reports are included below for reference.



Validated MSK Vendors



Validation Type Savings

About

Regenexx is a network of physician experts. We pioneered the use of orthopedic bone marrow concentrate to treat common orthopedic conditions to help people avoid surgery using cells from their own body.

Regenexx is the world leader in research published on the use of bone marrow concentrate for orthopedic conditions, and we created the field of interventional orthopedic protocols, the use of your body's natural healing abilities to repair orthopedic injuries non-surgically. Our approach is rooted in our research and is constantly being refined and developed as we continue to lead the way in finding better methods for harnessing your body's own

healing agents to repair damaged tissue. Our proprietary protocol leads to arguably the world's most advanced platform for in-office interventional orthopedics. **Regenexx** created a program for self-funded employers to help manage orthopedic costs by replacing many common elective orthopedic surgeries with precise image guided injections. **Regenexx** can reduce the cost of individual surgeries by up to 70%.

Learn more about **Regenexx** how they help employers take control of their health care spend. Visit www.Regenexxcorporate.com for more information.

Validation Claim



Patients who use Regenexx services to treat joint problems have lower costs than patients having orthopedic surgery.

Findings

Table 1 summarizes the patients' costs for Regenexx procedures.

	#	Regenexx Proc Cost
Hips	7	\$44,770
Spine	36	\$304,876
Knees	41	\$354,798
Lower extremity	12	\$75,595
Upper extremity	30	\$145,766
Total	126	\$925,806

Table 2 shows the Health Care Blue Book Fair Market Cost of surgery for patients whose procedures failed, using the patients' SANE score as an indicator for the need for follow up surgery.

	Regenexx Procedure Cost	Failure Rate	Regenexx Proc Cost
>50 SANE Score	\$658,018	0	
20-50	\$86,738	33%	\$113,898
<20	\$181,050	66%	\$332,430
Total	\$925,806		\$446,328

Table 3 summarizes the cost estimate if the 126 patients had orthopedic surgery and paid the Health Care Blue Book Fair Market cost

	HCBB Fair Market Cost
Hips	\$92,417
Spine	\$1,036,322
Knees	\$1,126,559
Lower extremity	\$97,435
Upper extremity	\$333,172
Total	\$2,685,905



Validated MSK Vendors



Validation Type Metrics

About

ViewFi is the world's first virtual orthopedic and rehabilitation practice that serves as your front door to orthopedic care.

With **ViewFi**, now you can receive comprehensive orthopedic care from the comfort of your home. Whether you simply need answers as to what's causing your pain, or you need a fully comprehensive experience that requires MRIs, X-Rays, medications, physical therapy, or an in-person visits with an orthopedic surgeon... No matter what, we've got you covered!

ViewFi was built by the best orthopedic surgeons in the world who care for some of the biggest names in sports. Our mission is to simplify the orthopedic care experience and deliver this same level of care provided to top athletes to everyone across the country.

ViewFi is on a mission to scale world class orthopedic care to the masses. By acting as your front door to orthopedic care, we will get you back on your feet and doing what you love faster than ever before!

Validation Claim



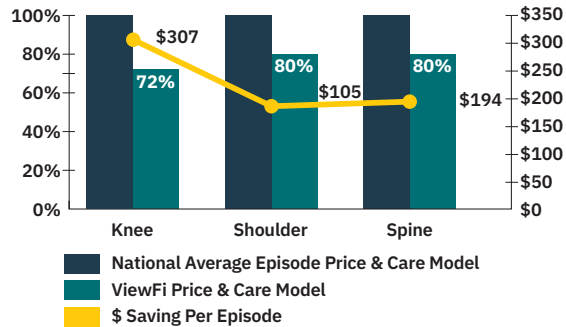
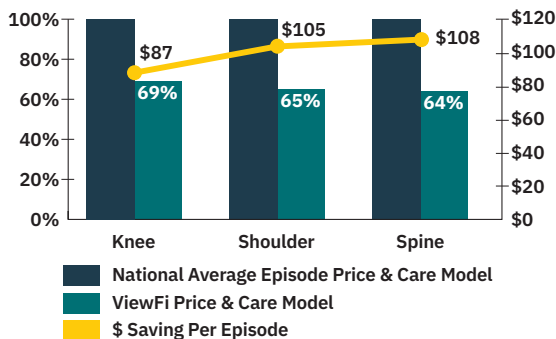
Applying ViewFi's musculoskeletal care model to a group that has usual care will produce a valid estimate of lower service use, which would lead to lower costs.

Findings

Charts 1 and 2 compare ViewFi's care model and pricing to the national sample for level 1 patients (one visit) and level 2 patients (two or more visits). ViewFi's lower cost comes from its lower price for services plus a streamlined, efficient care model which reduces unnecessary services. For level 1 patients, ViewFi's pricing is 31 to

36% lower than the national average. **The dollar savings per episode is also shown and range from \$87 to \$108 for level 1 patients.**

For level 2 patients, ViewFi's price and care model result is cost savings of 20 to 28% compared to the national average. **Estimated dollar savings per episode range from \$187 to \$307 for level 2 patients.**



Validated MSK Vendors



vori health

Validation Type Outcomes

About

Vori Health is an all-inclusive medical practice using a holistic, integrated approach starting with musculoskeletal care. The organization offers full service physical medicine and rehabilitation and sports medicine physician medical care, physical therapy, prescriptions, imaging & lab ordering, health coaching, registered dietitian nutritional guidance, community support and premium instructional content. The team consists of carefully selected, board-certified/licensed clinicians, and provides services that are accessible at the click of a button from the comfort and convenience

of a patient's home. **Vori Health** is different from other virtual companies which offer limited services such as only physical therapy, home exercise programs with health coaching, or physician consultations. They believe a fully integrated approach leveraging the skills of many healthcare professions is optimal to help members on their journey towards wellness.

Vori Health was established to deliver a truly elevated, human-centered, patient care experience through multidisciplinary care teams, cutting-edge technology, premium content, and community support.

Validation Claim



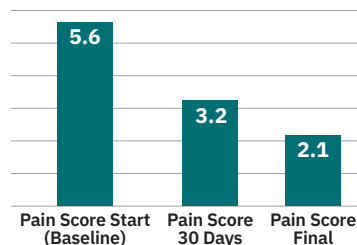
People who use **Vori Health's** telemedicine interdisciplinary care program for low back pain are less likely to use imaging (x-ray and MRI), surgery, or injection services than similar patients. In addition, **Vori Health** program participants reduce their level of pain and improved their physical and mental health.

Findings

	Vori Health	Multi-disciplinary Care*	Usual Care*
Injections	11.1%	19.2%	10.1%
Surgery	2.8%	6.4%	13.0%

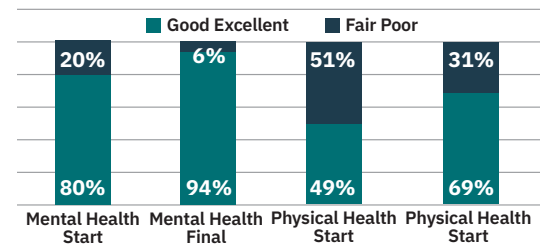
^ Naidu, I.; Rylvlin, J.; Videlefsky, D.; Qin, J.; Mowrey, W.B.; Choi, J.H.; Citron, C.; Gary, J.; Benton, J.A.; Weiss, B.T.; et al. The Effect of a Multidisciplinary Spine Clinic on Time to Care in Patients with Chronic Back and/or Leg Pain: A Propensity Score-Matched Analysis. J. Clin. Med. 2022, 11, 2583. <https://doi.org/10.3390/jcm11092583>

Table 1 summarizes the portion of Vori Health patients who received injections or had surgery and the portion of low back pain patients from a published study (Naidu et al, 2022).



Graph 1: Vori Health Patients Average Pain Score at start, 30 days and final

More patients reported their physical and mental health as “excellent” and “good” at the end of treatment than had at the start. At the final scoring of the PROMIS 10 survey, 68% of patients rated their physical health as excellent or good (compared to 49% at the start) and 94% rated their mental health as excellent or good (compared to 80% at the start). See Graph 2.



Graph 2: PROMIS 10 MH and PROMIS 10 PH scores



| About Validation Institute



ValidationInstitute

Validation Institute is dedicated to providing unbiased, data-driven insights on health care solutions and services by validating performance claims made by solutions providers and educating purchasers to drive transparency in the marketplace and maximize cost-savings. By validating performance claims, Validation Institute guides purchasers in choosing the right solution providers that meet the needs of their population while improving outcomes, strengthening accountability, and saving costs.

To view validated programs and access validation reports, visit www.validationinstitute.com/validated-programs/

CONTACT US:

If you are interested in learning more about the validation process and working with validated vendors, connect with our team.
800-647-7600 | viprocess@validationinstitute.com

