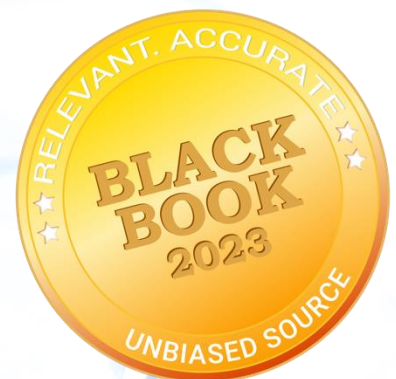


TOP MANAGEMENT SERVICES VENDORS

Equipment Maintenance, Clinical & Biomedical Engineering Outsourcing

Comparative Performance Result Set of Operational
and Clinical Departmental Support Vendors

Survey Period: Q4 2022 – Q3 2023





Black Book™ annually evaluates leading health care/medical software and outsourcing service providers across 18 operational excellence key performance indicators completely from the perspective of the client experience. Independent and unbiased from vendor influence, more than 1,300,000 healthcare IT users are invited to contribute to various annual customer satisfaction polls. Suppliers also encourage their clients to participate in producing current and objective customer service data for buyers, analysts, investors, consultants, competitive suppliers, and the media. For more information or to order customized research results, please contact the **Client Resource Center** at **+1 800 863 7590** or **info@blackbookmarketresearch.com**

FIERCELY INDEPENDENT

Black Book™, its founders, management and staff do not own or hold any financial interest in any of the vendors covered and encompassed in the surveys it conducts. Black Book reports the results of the collected satisfaction and client experience rankings in publication and to media prior to vendor notification of rating results and does not solicit vendor participation fees, review fees, inclusion, or briefing charges, and/or vendor.

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SURVEY PARTICIPATION: EQUIPMENT MAINTENANCE, BIOMEDICAL & CLINICAL ENGINEERING OUTSOURCING

This segment of the Black Book™ Biomedical Engineering Outsourcing survey for providers included insights from 2,291 users from 1,694 hospitals, physician groups, ambulatory centers, long term care facilities and healthcare delivery networks.

Respondent Title	Respondents
Facilities Manager, Supervisor, Coordinator	295
Engineering & Maintenance Staff	277
Engineering and Facilities Management Director, VP	659
Materials Management & Purchasing Management	250
Clinical, Nursing and Medical Management	338
Information Systems and Technology Staff	76
Hospital Vice President, Administrator, C-Level	185
Other	211
TOTAL	2,291

Source: Black Book™





2023 BLACK BOOK™ METHODOLOGY

How the data sets are collected

Black Book collects ballot results on 18 performance areas of operational excellence to rank vendors by engineering services and product lines. The gathered data are subjected immediately to an internal and external audit to verify completeness and accuracy and to make sure the respondent is valid while ensuring that the anonymity of the client company is maintained. During the audit, each data set is reviewed by a Black Book executive and at least two other people. In this way, Black Book's clients can clearly see how a vendor is truly performing. The 18 criteria on operational excellence are subdivided by the client's industry, market size, geography, software and technology niche, and functions outsourced, and are reported accordingly.

Situational and market studies are conducted on areas of high interest such as e-Prescribing, Health information Exchange, Accountable Care organization, hospital software, services providers, educational providers in e-health, bench markers and advisors. These specific survey areas range from four to 20 questions of criteria each.

Understanding the statistical confidence of Black Book data

Statistical confidence for each performance rating is based upon the number of organizations scoring the electronic medical and health records service. Black Book identifies data confidence by one of several means:

- Top-10-ranked vendors must have a minimum of 10 unique clients represented. Broad categories require a minimum of 20 unique client ballots. Data that are asterisked (*) represent a sample size below required limits and are intended to be used for tracking purposes only, not ranking purposes. Performance data for an asterisked vendor's services can vary widely until a larger sample size is achieved. The margin of error can be very large, and the reader is responsible for considering the possible current and future variation (margin of error) in the Black Book performance score reported.
- Vendors with more than 20 unique client votes are eligible for top 10 rankings and are assured to have highest confidence and lowest variation. Confidence increases as more organizations report on their vendor. Data reported in this form are shown with a 95% confidence level (within a margin of 0.25, 0.20 or 0.15, respectively).
- Raw numbers include the quantity of completed surveys and the number of unique organizations contributing the data for the survey pool of interest.



Who participates in the Black Book Ranking process?

More than 1,300,000 hospital leaders and other users ranking from system executives, clinicians, IT specialists and front-line implementation veterans are invited to participate in the 2023 healthcare technology and services satisfaction surveys. Non-invitation receiving participants must complete a verifiable profile, utilize a valid corporate email address, and are then included as well. The Black Book survey web instrument is open to respondents and new participants periodically for several surveys at <http://blackbookrankings.com>, <http://blackbookmarketresearch.com> and <http://blackbookpolls.com> Only one ballot per corporate email address is permitted and changes of ballots during the open polling period require a formal email request process to ensure integrity. Follow up surveys were conducted from February 1 to March 31 to analyze the replacement market phenomenon within the financial solutions marketplace. Additionally, from January 15 to May 15 to collect data on Financial Management solution satisfaction.

Equipment Maintenance, Clinical & Biomedical Engineering Outsourced Services vendor rankings and results – 2023

2,291 qualified users of systems with validated corporate/valid email addresses ranked 56 managed services and outsourcers, and SaaS suppliers offering individual or bundled arrangements as part of the Black Book annual survey, which was conducted via web and mobile app survey instruments. Additionally, 149 users answered questions about budgeting, vendor familiarity and vendor selection processes. The four most highly utilized systems of financial solutions are included as subsets. 404 participants identified themselves as replacement market prospective buyers.



STOP LIGHT SCORING KEY

Figure 1: Comprehensive outsourced biomedical engineering vendors are defined as being comprised of four surveyed user groups

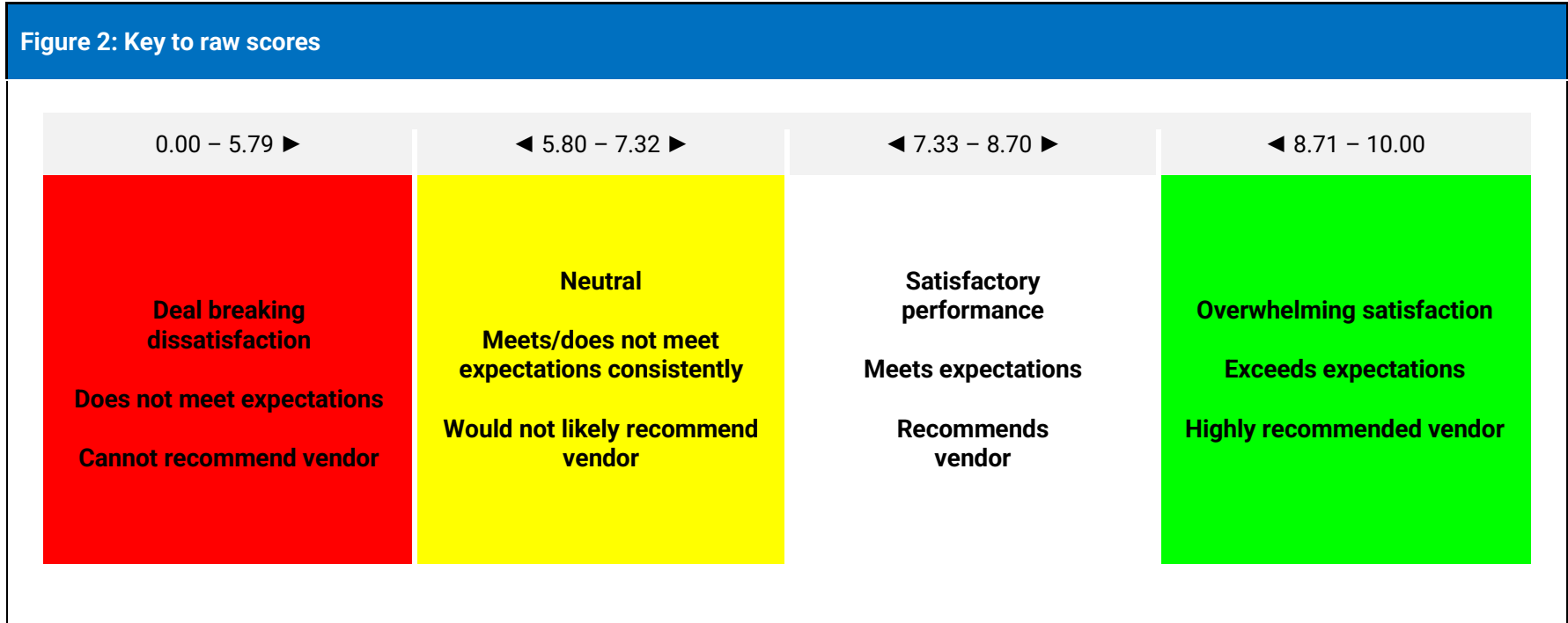
<p>SMALL HOSPITALS</p> <p>UNDER 100 BEDS RURAL HOSPITALS CRITICAL ACCESS FACILITIES</p>	<p>COMMUNITY & LARGE HOSPITALS</p> <p>OVER 101 BEDS ACADEMIC MEDICAL CENTERS REFERRAL CENTERS TRAUMA & ED CENTERS</p>	<p>HEALTH SYSTEMS</p> <p>IDNS CHAINS CORPORATIONS</p>	<p>ALTERNATIVE DELIVERY SITE ORGANIZATIONS</p> <p>LONG TERM CAR FACILITIES REHAB CENTERS MULTI-SPECIALTY CLINICS BEHAVIORAL CARE</p>
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Black Book™





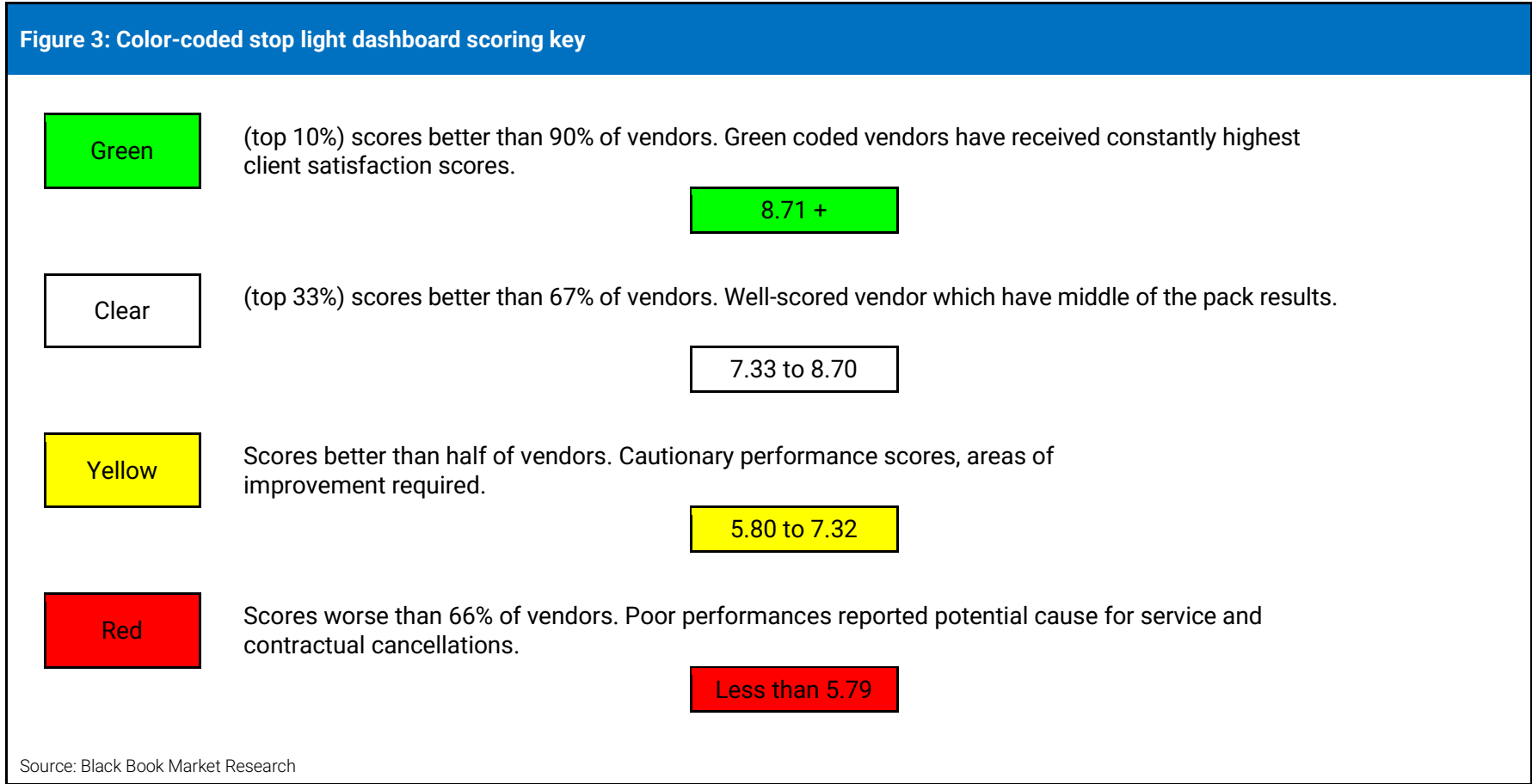
STOP LIGHT SCORING KEY



Source: Black Book Research

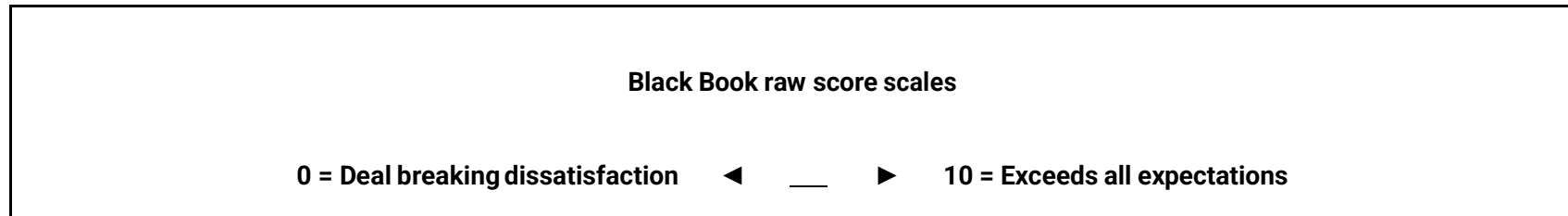


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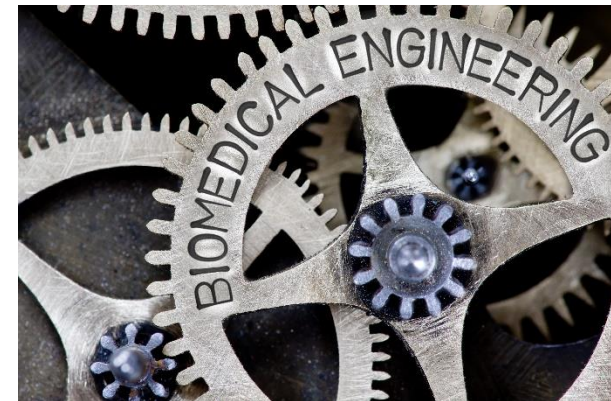
STOP LIGHT SCORING KEY

Figure 4: Raw score compilation and scale of reference



Source: Black Book Market Research

Individual vendors can be examined by specific indicators on each of the main functions of Biomedical Engineering Management as well as grouped and summarized subsets. Detail of each subset is contained so that each vendor may be analyzed by function and software services collectively.





OVERALL KPI LEADERS

Figure 5: Scoring key

OVERALL RANK	Q6 CRITERIA RANK	VENDOR	SMALL HOSPITALS	COMMUNITY & LARGE HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
	1	HOSPITAL CLINICAL ENGINEERING CORPORATION	9.02	7.56	5.59	5.59	7.00

Source: Black Book Market Research

- **Overall rank** – this rank references the final position of all 18 criteria averaged by the mean score collectively. This vendor ranked fifth of the 20 competitors.
- **Criteria rank** – refers to the number of questions or criteria surveyed. This is the sixth question of the 18 criteria of which this vendor ranked first of the 20 vendors analyzed positioned only on this criteria or question.
- **Company** – name of the Financial Management Technology Solutions vendor (sample name).
- **Subsections** – each subset comprises one-fourth of the total vendor mean at the end of this row and includes all buyers and users who indicate that they contract each respective service subsection with the supplier, specific to their enterprise.
- **Mean** – congruent with the criteria rank, the mean is a calculation of all four subsets of functions surveyed. As a final ranking reference, it includes all vertical industries, market sizes and geographies.



OVERALL KEY PERFORMANCE INDICATOR LEADERS

SUMMARY OF CRITERIA OUTCOMES

Table 1: Summary of criteria outcomes		
OUTSOURCED CLINICAL & BIOMEDICAL ENGINEERING SOLUTIONS VENDORS		
Total number one criteria ratings	Vendor	Overall rank
13	TRIMEDX	1
2	PRIME HEALTHCARE	2
1	EDGE BIOMEDICAL	3
1	ADVANTAGE BIOMEDICAL	5
1	MED-STAT	8



TOP SCORE PER INDIVIDUAL CRITERIA:

BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

Top score per individual criteria

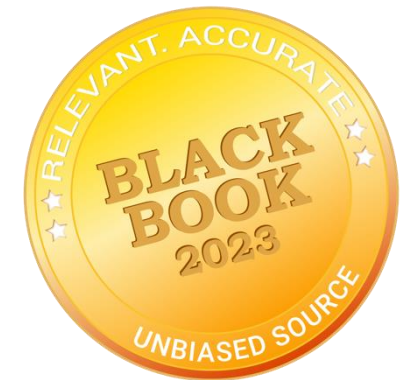
Table 2: Top score per individual criteria			
Questions	Criteria	Vendor	Overall Rank
1	Strategic Alignment of Client Goals: ONC, MIPS, VBC, Clinical Improvement Initiatives	TRIMEDX	1
2	Innovation	TRIMEDX	1
3	Training	ADVANTAGE BIOMEDICAL	5
4	Client relationships and cultural fit	TRIMEDX	1
5	Trust, Transparency, Accountability, Ethics	TRIMEDX	1
6	Breadth of offerings, client types, delivery excellence	TRIMEDX	1
7	Deployment and implementation	TRIMEDX	1
8	Customization	TRIMEDX	1
9	Integration and interfaces	PRIME HEALTHCARE	2
10	Scalability, client adaptability, flexible pricing	TRIMEDX	1
11	Compensation and employee performance	TRIMEDX	1
12	Reliability	MED-STAT	8
13	Brand image and marketing communications	TRIMEDX	1
14	Marginal value adds	TRIMEDX	1
15	Viability, Managerial Stability	EDGE BIOMEDICAL	3
16	Data security, privacy and backup services	PRIME HEALTHCARE	2
17	Support and customer care	TRIMEDX	1
18	Best of breed technology and process improvement	TRIMEDX	1



PART TWO: RANKED VENDOR PERFORMANCE

2023 INDIVIDUAL KEY PERFORMANCE:

CLINICAL & BIOMEDICAL ENGINEERING EQUIPMENT MAINTENANCE OUTSOURCING SERVICES



Published May 2023



Individual Key Performance

CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING VENDORS

Table 3 : Top Ranked Vendors – raw scores 2023

Rank	Outsourced Vendor	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Mean
1	TRIMEDX	9.74	9.75	9.20	9.75	9.81	9.78	9.62	9.80	9.72	9.84	9.80	9.74	9.87	9.82	9.22	9.71	9.92	9.83	9.72
2	PRIME HEALTHCARE	9.16	9.07	9.25	9.41	9.65	9.27	9.29	9.68	9.87	9.18	9.66	9.22	6.20	9.73	9.43	9.76	9.27	9.57	9.26
3	EDGE BIOMEDICAL	9.26	9.11	9.24	9.29	9.44	9.08	9.05	9.34	9.49	9.48	9.43	8.83	9.10	9.04	9.50	9.06	9.25	9.47	9.25
4	AGILITI	8.95	9.03	8.67	9.49	9.07	9.52	9.12	8.64	9.11	8.97	9.63	8.10	9.30	9.04	9.46	9.50	8.69	9.52	9.10
5	ADVANTAGE BIOMEDICAL	8.95	7.13	9.26	8.89	8.78	9.54	9.20	9.73	9.47	8.86	7.24	6.47	8.18	9.53	8.41	9.27	9.05	8.70	8.70
6	ALTHEA	8.60	8.75	8.63	9.17	7.20	9.50	8.72	9.19	8.90	9.20	9.21	9.36	6.99	9.43	8.77	8.49	7.50	8.55	8.68
7	SODEXO	8.61	9.11	8.08	6.47	9.61	9.47	8.42	8.53	9.31	6.91	7.06	7.86	8.64	8.82	8.52	9.06	9.50	9.11	8.51
8	MED-STAT	8.32	9.21	7.77	9.23	8.15	8.97	8.35	7.03	8.35	7.17	9.16	9.79	9.20	6.84	8.64	8.49	9.01	8.75	8.47
9	MED ONE	7.69	8.74	8.68	7.08	8.52	7.54	9.19	7.89	8.14	6.43	9.35	7.64	8.79	9.13	8.16	9.28	7.03	8.53	8.21
10	ISS SOLUTIONS	7.58	8.62	8.20	7.00	8.59	7.63	8.20	8.67	7.33	6.03	8.62	7.04	7.74	7.98	8.76	8.04	9.06	8.39	7.97
11	INTERMED GROUP	8.04	7.20	7.40	8.49	8.37	6.44	9.30	8.03	8.21	6.71	6.18	8.13	8.56	8.21	8.52	7.84	8.80	8.45	7.94
12	MEDINVENTIVE	7.99	7.59	9.21	8.45	5.96	6.22	8.11	8.72	8.63	6.92	8.16	7.93	5.80	7.80	8.25	8.47	8.24	7.27	7.76
13	TBS GROUP	8.40	7.63	6.41	6.73	8.60	8.13	6.93	6.40	7.82	7.69	6.30	8.97	8.42	8.29	8.92	8.09	6.40	8.43	7.70
14	UHS	8.01	6.39	8.67	6.44	6.91	7.34	9.15	7.24	7.03	7.86	6.71	7.29	7.94	8.98	9.23	5.99	9.33	7.14	7.65
15	KMC	5.99	6.66	6.70	6.35	8.43	7.99	8.24	5.89	8.07	6.57	8.04	7.01	7.02	6.80	8.38	7.70	8.64	7.50	7.33
16	CROTHALL	7.21	5.89	6.55	6.13	6.43	8.22	5.99	6.34	7.68	5.94	8.32	8.92	9.84	8.38	5.97	7.18	8.69	7.30	7.28
17	NOVO	8.66	6.99	7.51	6.97	5.94	6.86	6.02	6.08	6.55	6.00	7.50	8.79	8.01	6.32	7.66	8.08	6.33	7.03	7.07
18	ZOETEK	5.79	5.51	7.29	7.53	4.97	7.80	7.77	8.30	7.01	8.85	8.15	5.67	4.92	7.62	5.58	8.91	4.59	5.70	6.78
19	QUALITY MEDICAL	8.08	8.14	7.50	5.90	5.97	6.00	6.45	5.56	6.75	7.24	6.71	7.06	5.78	6.47	5.05	7.97	5.93	6.08	6.57
20	JLL	5.92	5.99	5.66	5.72	4.89	5.94	5.07	6.76	5.44	5.43	5.58	6.34	4.40	5.80	4.18	6.40	7.41	4.99	5.66

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

1. Strategic Alignment between vendor and provider client goals

Table 4: Organizational structure meets the needs of stakeholders or customers, and stakeholder satisfaction is the most important priority. Biomedical engineering transformation solutions client is likely to recommend the vendor to similar sized provider organizations within the same geography, specialty, or delivery setting.

OVERALL RANK	Q1 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.77	9.87	9.57	9.79	9.74
3	2	EDGE BIOMEDICAL	9.30	9.12	9.11	9.11	9.16
2	3	PRIME HEALTHCARE	9.22	8.93	9.21	9.23	9.15
5	4	ADVANTAGE BIOMED	9.08	9.16	8.20	9.35	8.95
4	5	AGILITI	9.05	9.22	9.02	8.52	8.95
17	6	NOVO	8.49	8.91	8.26	8.97	8.66
7	7	SODEXO	8.90	9.03	8.19	8.31	8.61
6	8	ALTHEA	8.74	8.04	9.08	8.52	8.60
8	9	MED-STAT	8.78	8.21	8.11	8.19	8.32
19	10	QUALITY MEDICAL	8.13	8.29	7.97	7.91	8.08

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

2. Innovation

Table 5: Customers are also continuing to push the envelope for further enhancements to which the vendor is responsive. Engineering solutions clients also believe that their vendors' technology is helping them manage business and care units more effectively, generate improved outcomes and cut their overhead in ways that were difficult or impossible to accomplish before innovation solutions were implemented. Vendors are responsive to make client recommendations with cutting edge improvements.

OVERALL RANK	Q2 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.64	9.77	9.79	9.80	9.75
8	2	MED-STAT	9.11	9.74	9.10	8.9	9.21
7	3	SODEXO	9.34	8.86	9.14	9.10	9.11
3	4	EDGE BIOMEDICAL	9.12	9.00	9.38	8.92	9.11
2	5	PRIME HEALTHCARE	9.15	8.74	8.61	9.77	9.07
4	6	AGILITI	8.87	9.35	8.72	9.19	9.03
6	7	ALTHEA	8.74	9.19	8.46	8.59	8.75
9	8	MED ONE	8.59	8.41	9.18	8.78	8.74
10	9	ISS SOLUTIONS	8.27	9.10	8.96	8.14	8.62
13	10	TBS GROUP	7.35	8.00	7.16	8.01	7.63

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

3. Training

Table 6: Outsourced engineering vendor leadership provides significant and meaningful training opportunities for internal employees and client staff. Leadership strives to develop technology staff, client service and customer servicing consultant employees. Training modules are effective and practical so that minimal post-implementation training is required on or off site. Regular updates are timely and require minimal additional training to implement.

OVERALL RANK	Q3 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
5	1	ADVANTAGE BIOMED	9.40	8.69	9.32	9.62	9.26
2	2	PRIME HEALTHCARE	9.17	9.35	9.07	9.40	9.25
3	3	EDGE BIOMEDICAL	9.01	9.35	9.39	9.21	9.24
12	4	MEDINVENTIVE	9.56	9.67	8.10	9.49	9.21
1	5	TRIMEDX	9.09	9.00	9.45	9.26	9.20
9	6	MED ONE	8.10	9.14	8.49	8.97	8.68
4	7	AGILITI	9.25	8.07	9.11	8.26	8.67
14	8	UHS	8.51	9.15	8.76	8.26	8.67
6	9	ALTHEA	8.63	8.53	8.82	8.54	8.63
10	10	ISS SOLUTIONS	8.76	7.90	8.03	8.09	8.20

Source: Black* Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

4. Client Relationships and Cultural Fit

Table 7: Engineering solutions vendor leadership honors customer relationships highly. The relationship with the vendor elevates the customer's reputation. Improving practice and healthcare delivery efficiency and effectiveness is a priority of the supplier. Governance of engagement is neither complex for buyers nor does it require vendor management attention regularly. There is no regular transparency or quality issue. There are no culture clashes or misfits that threaten relationship's success or client's satisfaction.

OVERALL RANK	Q4 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.74	9.86	9.61	9.79	9.75
4	2	AGILITI	9.30	9.38	9.47	9.81	9.49
2	3	PRIME HEALTHCARE	9.49	8.90	9.80	9.44	9.41
3	4	EDGE BIOMEDICAL	9.47	9.07	9.71	8.92	9.29
8	5	MED-STAT	9.42	9.67	8.86	8.95	9.23
6	6	ALTHEA	9.05	9.59	8.85	9.17	9.17
5	7	ADVANTAGE BIOMED	8.65	8.55	9.05	9.31	8.89
11	8	INTERMED GROUP	8.47	8.14	8.72	8.64	8.49
12	9	MEDINVENTIVE	8.51	8.19	8.79	8.29	8.45
15	10	KMC	7.95	8.41	8.81	8.22	8.35

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

5. Trust, Accountability, Ethics and Transparency

Table 8: Trust in enterprise reputation is important to engineering solutions clients as well as prospects. Client possesses an understanding that its vendor organization has the people, processes, and resources to effectively deliver the desired business and clinical results, based on its industry reputation and past performance. There are no disconnects between promises and delivery.

OVERALL RANK	Q5 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.80	9.88	9.88	9.70	9.81
2	2	PRIME HEALTHCARE	9.85	9.57	9.57	9.61	9.65
7	3	ALTHEA	9.78	9.70	9.52	9.44	9.61
3	4	EDGE BIOMEDICAL	9.32	9.69	8.97	9.79	9.44
4	5	AGILITI	9.21	8.69	9.68	8.70	9.07
5	6	ADVANTAGE BIOMED	8.83	8.02	9.42	9.72	9.00
6	7	ALTHEA	9.41	9.07	7.97	8.67	8.78
13	8	TBS GROUP	8.92	8.84	8.40	8.25	8.60
10	9	ISS SOLUTIONS	8.41	8.64	8.91	8.39	8.59
11	10	INTERMED GROUP	9.25	7.96	7.13	9.12	8.37

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

6. Breadth of Offerings, Varied Client Settings, Delivery Excellence Across all user types

Table 9: Biomedical engineering transformation solutions vendor offers industry recognized horizontal functionality and vertical industry applications and manage bundled services and developing new healthcare technology initiatives. Vendors routinely drive operational performance improvements and results in the areas they affect. Comprehensive offerings are constructed to meet the unique needs of the client's IT initiatives. The breadth of vendor contract management modules offers comprehensive system services and broad modules.

OVERALL RANK	Q6 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.83	9.87	9.75	9.67	9.78
5	2	ADVANTAGE BIO	9.17	9.74	9.62	9.63	9.54
4	3	AGILITI	9.40	9.65	9.75	9.29	9.52
6	4	ALTHEA	9.82	9.72	8.67	9.79	9.50
7	5	SODEXO	9.71	9.31	9.14	9.72	9.47
2	6	PRIME HEALTHCARE	9.26	9.46	8.91	9.45	9.27
3	7	EDGE BIOMEDICAL	8.97	9.42	8.81	9.12	9.08
8	8	MED-STAT	9.32	8.87	8.89	8.79	8.97
16	9	CROTHALL	7.91	8.52	8.26	8.17	8.22
13	10	TBS GROUP	8.21	7.95	7.71	8.64	8.13

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

7. Deployment and Engineering Solution Implementation & System-Wide Standardization

Table 10: Engineering solutions client deploys at a pace acceptable to the client. Biomedical and clinical engineering solutions eliminate excessive supervision over vendor implementations. Vendor overcomes client implementation obstacles and challenges effectively. Technical, organizational, and cultural implementation obstacles are handled professionally and punctually. Software implementation time meets standard expectations. Implementations are efficient and sensitive to users' specific situations, which may cause delays.

OVERALL RANK	Q7 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.37	9.61	9.63	9.85	9.62
2	2	PRIME HEALTHCARE	9.19	9.29	8.97	9.70	9.29
5	3	ADVANTAGE BIOMED	9.22	9.60	8.87	9.09	9.20
9	4	MED ONE	8.98	9.08	8.92	9.76	9.19
14	5	UHS	9.35	9.42	8.96	8.86	9.15
4	6	AGILITI	9.55	9.19	8.65	9.08	9.12
3	7	EDGE BIOMEDICAL	9.31	9.01	9.26	8.61	9.05
6	8	ALTHEA	8.64	9.22	8.27	8.75	8.72
7	9	SODEXO	8.90	8.73	8.23	7.82	8.42
8	10	MED-STAT	8.37	8.61	8.36	8.05	8.35

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

8. Customization

Table 11: Engineering services are customized to meet the unique needs of specific provider client purpose, processes, and care delivery models. Little resistance is encountered when changing performance measurements as clients' needs vary. Extraordinary efforts are made to adapt and convert client special needs into workable solutions with efficient cost and time considerations. Outsourced clinical engineering allows for modifications that are not costly or complex.

OVERALL RANK	Q8 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.79	9.79	9.87	9.72	9.80
5	2	ADVANTAGE BIOMED	9.67	9.94	9.47	9.83	9.73
2	3	PRIME HEALTHCARE	9.82	9.54	9.56	9.80	9.68
3	4	EDGE BIOMEDICAL	9.51	9.17	9.08	9.61	9.34
6	5	ALTHEA	8.86	9.55	9.51	8.84	9.19
12	6	MEDINVENTIVE	8.90	8.44	8.74	8.81	8.72
10	7	ISS SOLUTIONS	9.23	9.14	8.26	8.05	8.67
4	8	AGILITI	8.95	8.98	8.44	8.17	8.64
7	9	SODEXO	8.73	8.47	9.08	7.83	8.53
18	10	ZOETEK	8.55	8.51	8.02	8.10	8.30

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

9. Integration and Interfaces

Table 12: Clinical engineering vendor supports interfaces so information can be shared between necessary applications. Solutions are easily integrated to existing backend systems as needed and integration feasible. Seamless interfaces to legacy applications are performed as required for optimal functioning. Human integration and interface activities are administered precisely. Systems communicate effectively among provider groups and ancillaries. True interoperability with other healthcare organizations is factored into implementation.

OVERALL RANK	Q9 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
2	1	PRIME HEALTHCARE	9.97	9.95	9.74	9.81	9.87
1	2	TRIMEDX	9.85	9.67	9.86	9.89	9.82
3	3	EDGE BIOMED	9.50	9.65	9.02	9.78	9.49
5	4	ADVANTAGE BIOMED	9.74	9.25	9.12	9.75	9.47
7	5	SODEXO	9.18	9.48	8.97	9.62	9.31
4	6	AGILITI	8.91	9.47	8.90	9.14	9.11
12	7	MEDINVENTIVE	9.10	9.17	7.50	8.76	8.63
6	8	ALTHEA	8.52	8.90	7.54	8.50	8.37
8	9	MED-STAT	8.94	8.53	7.87	8.04	8.35
11	10	INTERMED GROUP	8.28	9.09	7.85	7.62	8.21

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

10. Scalability, Client Adaptability, Flexible Pricing

Table 13: Engineering vendor provides flexible pricing allowing the client to choose and pay for the precise functionality and services needed. Vendor invests in significant infrastructure and can provide services to enterprise organizations. IT-related products and services meet the changing and varied needs of the respective customer. Pricing is not rigid or shifting and meets needs of client.

OVERALL RANK	Q10 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.91	9.83	9.99	9.61	9.84
3	2	EDGE BIOMEDICAL	9.77	9.20	9.45	9.49	9.48
6	3	ALTHEA	8.98	9.19	8.89	9.74	9.20
2	4	PRIME HEALTHCARE	9.23	9.27	9.21	8.99	9.18
4	5	AGILITI	8.99	9.02	8.87	9.00	8.97
5	6	ADVANTAGE BIOMED	8.48	9.03	8.06	8.77	8.86
18	7	ZOETEK	8.95	9.43	8.18	8.83	8.85
7	8	SODEXO	9.13	8.47	8.34	8.10	8.51
9	9	MED ONE	8.73	8.25	8.74	8.00	8.43
8	10	MED-STAT	8.10	8.47	7.76	8.34	8.17

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

11. Vendor Staff Expertise, Compensation, and Employee Performance

Table 14: The engineering services vendor team of employees is considered top in industry for professionalism and skill. Vendors attract and retains high performing staff. Vendors are focused on building and developing a strong employee team of producers. Employees act like owners/leaders. The company is moving towards leveraged pay at all levels. Vendors are using effective tools to tie performance metrics to compensation policy and compensating top leaders. Human resources-related criteria are scored from the client perspective on this indicator.

OVERALL RANK	Q11 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.90	9.76	9.68	9.90	9.80
2	2	PRIME HEALTHCARE	9.86	9.79	9.54	9.43	9.66
4	3	AGILITI	9.49	9.91	9.39	9.72	9.63
3	4	EDGE BIOMEDICAL	9.73	9.59	9.32	9.08	9.43
9	5	MED ONE	9.46	9.69	9.05	9.21	9.35
6	6	ALTHEA	9.43	8.95	9.53	8.94	9.21
8	7	MED-STAT	9.41	8.80	8.93	9.51	9.16
10	8	ISS SOLUTIONS	8.56	8.60	9.07	8.23	8.62
16	9	CROTHALL	9.07	8.82	7.29	8.09	8.32
13	10	TBS GROUP	8.14	9.55	7.47	8.03	8.30

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

12. Reliability

Table 15: Engineering services vendor meets agreed terms as evidenced by routine, acceptable service level reporting and industry expectations. Depth and breadth of applications/solutions are acceptable in meeting client needs. Online reliability meets expectations, and outages/downtimes are minimized. Solid product and service capacities are demonstrated consistently. Service levels are consistently met as agreed. Services and support response is expedient and provided with appropriate resources by vendor team.

OVERALL RANK	Q12 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
8	1	MED-STAT	9.97	9.74	9.69	9.77	9.79
1	2	TRIMEDX	9.69	9.90	9.84	9.53	9.74
6	3	ALTHEA	9.16	9.32	9.77	9.17	9.36
2	4	PRIME HEALTHCARE	9.36	9.05	9.27	9.19	9.22
13	5	TBS GROUP	8.79	9.23	9.21	8.63	8.97
16	6	CROTHALL	8.80	8.63	8.72	9.54	8.92
3	7	EDGE BIOMEDICAL	8.88	9.34	8.68	8.40	8.83
17	8	NOVO	8.66	8.19	9.41	8.91	8.79
4	9	AGILITI	8.35	8.06	8.21	7.76	8.10
12	10	MEDINVENTIVE	8.36	7.72	7.64	7.99	7.93

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

13. Brand Image and Marketing Leadership and Communications

Table 16: Engineering services vendor's marketing and sales statements/pitches are accurately and appropriately represented by actual product and service deliverables. The image is consistent with top software and services rankings. Sales presentations and proposals are delivered upon and corporate integrity/honesty in marketing and business development are highly valued. Company image and integrity are values upheld top-down consistently. An elevated level of relevant client communications enhances the vendor – customer/user relationship.

OVERALL RANK	Q13 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.91	9.99	9.90	9.67	9.87
16	2	CROTHALL	9.76	9.82	9.99	9.79	9.84
4	3	AGILITI	9.45	9.23	9.03	9.47	9.30
8	4	MED-STAT	9.35	9.52	8.99	8.93	9.20
3	5	EDGE BIOMEDICAL	9.17	9.35	8.88	9.00	9.10
9	6	MED ONE	9.16	8.89	8.49	8.61	8.79
12	7	MEDINVENTIVE	8.54	8.99	8.69	8.34	8.64
11	8	INTERMED GROUP	9.09	8.24	8.49	8.40	8.56
13	9	TBS GROUP	8.72	8.21	8.39	8.37	8.42
2	10	PRIME HEALTHCARE	7.19	6.13	7.14	8.24	7.18

Source: Black Book Market Research



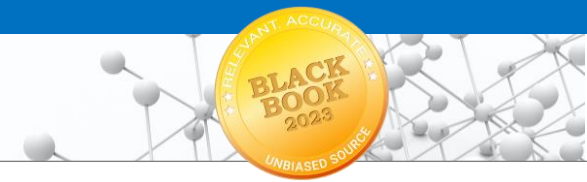
Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

14. Marginal Value Adds

Table 17: Beyond stimulus achievement, the vendors' cost savings are realized as generally estimated and not over-positioned or over/underestimated in ways that effect major client satisfaction or costs. Vendor offers value-adds as a engineering partner in cost savings and avoidance initiatives and creative programs through bundled product design. Provides true business transformation opportunities to physician practices, hospitals and other healthcare delivery settings utilizing outsourced solutions.

OVERALL RANK	Q14 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.80	9.88	9.90	9.69	9.82
2	2	PRIME HEALTHCARE	9.99	9.57	9.67	9.67	9.73
5	3	ADVANTAGE BIOMED	9.90	9.71	8.94	9.58	9.53
6	4	ALTHEA	9.69	8.97	9.58	9.47	9.43
9	5	MED ONE	9.91	9.11	8.30	9.19	9.13
4	6	AGILITI	9.21	9.09	9.07	8.80	9.04
3	7	EDGE BIOMEDICAL	9.36	8.57	8.38	9.83	9.04
14	8	UHS	8.74	8.75	9.08	9.35	8.98
7	9	ALTHEA	9.38	9.11	8.67	8.12	8.82
16	10	CROTHALL	8.26	9.03	8.06	8.17	8.38

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

15. Financial Viability and Managerial Stability

Table 18: Vendor's viability, employee turnover, financial stability and/or cultural mismatches do not threaten relationship. Senior management and the board exemplify strong leadership principles to steward appropriate resources that impact buyers. Client is confident of long-term industry viability for this vendor based on investments, client adoption, exceptional outcomes, and service levels. Field management is notably competent, stable, and supportive of clients. The vendor demonstrates and provides evidence of competent fiscal management and leadership.

OVERALL RANK	Q15 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
3	1	EDGE BIOMEDICAL	9.14	9.89	9.43	9.55	9.50
4	2	AGILITI	9.57	9.62	9.43	9.22	9.46
2	3	PRIME HEALTHCARE	9.70	9.82	8.84	9.37	9.43
14	4	UHS	9.17	9.33	9.81	8.99	9.23
1	5	TRIMEDX	9.03	9.49	9.22	9.13	9.22
13	6	TBS GROUP	8.96	9.40	9.07	8.24	8.92
6	7	ALTHEA	8.71	8.79	8.94	8.62	8.77
10	8	ISS SOLUTIONS	8.91	9.01	8.25	8.87	8.76
8	9	MED-STAT	8.54	8.77	9.27	7.99	8.64
7	10	ALTHEA	7.74	8.63	8.89	8.81	8.52

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

16. Data Security and Backup Services

Table 19: In order to provide secure and constantly dependable service offerings for affiliated business units and provider entities, a vendor has to provide the highest level of security and data back-up services. The vendor's service in these two areas is superior to the security and back-up system of past internal systems of the provider organization, Cybersecurity practices and protections meet or exceed industry standards and regulations.

OVERALL RANK	Q16 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
2	1	PRIME HEALTHCARE	9.44	9.89	9.99	9.72	9.76
1	2	TRIMEDX	9.62	9.77	9.66	9.78	9.71
4	3	AGILITI	9.67	9.28	9.77	9.27	9.50
9	4	MED ONE	9.39	8.76	9.53	9.43	9.28
5	5	ADVANTAGE BIOMED	9.24	9.45	9.17	9.20	9.27
3	6	EDGE BIOMEDICAL	9.14	9.09	9.53	8.49	9.06
7	7	SODEXO	9.24	9.54	9.36	8.10	9.06
18	8	ZOETEK	8.67	8.84	9.15	8.99	8.91
8	9	MED-STAT	8.48	8.49	9.23	7.76	8.49
6	10	ALTHEA	8.73	9.36	7.63	8.24	8.49

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

17. Support and Customer Care

Table 20: Account management provides an adequate amount of onsite administration and support to clients. There exists a formal account management program that meets client needs. Media and clients reference this vendor as engineering solutions and services leader and top vendor correctly. Customer services and relationship satisfaction is manifested through significant flagship clients as well as smaller and newest customers similarly. Vendor provides an appropriate number of accessible engineering support and customer care personnel.

OVERALL RANK	Q17 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.94	9.88	9.93	9.91	9.92
7	2	ALTHEA	9.69	9.63	9.24	9.03	9.40
14	3	UHS	8.96	9.39	9.76	9.19	9.33
2	4	PRIME HEALTHCARE	9.25	9.01	9.88	8.93	9.27
3	5	EDGE BIOMEDICAL	9.39	9.48	9.13	9.01	9.25
10	6	ISS SOLUTIONS	9.12	8.91	9.04	9.16	9.06
5	7	ADVANTAGE BIOMED	8.99	8.81	9.09	9.32	9.05
8	8	MED-STAT	8.96	8.98	9.38	8.71	9.01
16	9	CROTHALL	9.32	8.07	8.27	9.09	8.69
11	10	INTERMED GROUP	9.08	8.15	8.31	8.84	8.60

Source: Black Book Market Research



Individual Key Performance: CLINICAL & BIOMEDICAL ENGINEERING OUTSOURCING SOLUTIONS

18. Best of Breed Technology and Process Improvement

Table 21: Vendor management and related engineering technology services are considered best of breed. The vendor technology elevates customers via capabilities, equipment, processes, deliverables, professional staff, leadership, quality assurance and innovative initiatives. Vendor services are delivered at or above current/former in-house engineering service levels. Technology is current and relevant to exchanging health information among providers, as well as sufficiently offering patient access and interoperability.

OVERALL RANK	Q18 CRITERIA RANK	BIOMEDICAL ENGINEERING SERVICES VENDOR	SMALL HOSPITALS	COMMUNITY HOSPITALS	HEALTH SYSTEMS	OTHER INPATIENT PROVIDERS	MEAN
1	1	TRIMEDX	9.78	9.93	9.79	9.81	9.83
2	2	PRIME HEALTHCARE	9.41	9.70	9.57	9.59	9.57
4	3	AGILITI	9.41	9.43	9.67	9.58	9.52
3	4	EDGE BIOMEDICAL	9.96	9.35	9.53	9.02	9.47
7	5	SODEXO	9.17	9.03	9.06	9.18	9.11
5	6	ADVANTAGE BIOMED	8.82	9.24	8.35	8.38	8.70
6	7	ALTHEA	8.16	8.13	9.13	8.78	8.55
9	8	MED ONE	8.13	9.08	8.65	8.24	8.53
8	9	MED-STAT	8.17	8.12	9.32	8.20	8.45
10	10	ISS SOLUTIONS	9.03	8.27	8.14	8.10	8.39

Source: Black Book Market Research



APPENDIX

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