# FROST & SULLIVAN

# ENABLING TECHNOLOGY LEADER

IN THE GLOBAL
CLINICAL TRIAL PATIENT
RECRUITMENT IT
SOLUTIONS INDUSTRY

FROST & SULLIVAN

2024

PRACTICES



# **Best Practices Criteria for World-Class Performance**

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. TrialWire excels in many of the criteria in the global clinical trial patient recruitment information technology (IT) solutions space.

AWARD CRITERIA	
Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

# The Role of Artificial Intelligence in Revolutionizing Patient Recruitment

Effective patient recruitment is challenging for the biotechnology and biopharmaceutical sectors. Research highlights that nearly 80% of clinical trials encounter obstacles that result in pauses or terminations due to suboptimal patient recruitment.<sup>1</sup> Low patient awareness and study protocol complexity further decrease enrollment rates. Overcoming these barriers entails simplifying study information, clearly understanding trial objectives, and elucidating participation requirements.

"TrialWire emerges as a problem solver with a solid track record of impactful interventions during recruitment shortfalls. The company's proactive strategy advocates for earlier patient engagement (even preceding study activation), mitigating the risks of delays and study interruptions substantially."

- Manuel Albornoz Best Practices Research Analyst Decentralized and virtual trials and patient-centric methodologies can help reshape the patient recruitment landscape. Artificial intelligence (AI)-driven solutions for clinical trial design and patient retention will reduce costs, increase efficiency, and support the transition to decentralized trials through remote patient recruitment, management, and engagement. Additionally, these platforms are highly beneficial in selecting appropriate investigators and trial sites.<sup>2</sup>

As many information technology (IT) companies strive to address patient enrollment challenges, TrialWire emerges as a problem solver with a solid track record of impactful interventions during recruitment

<sup>&</sup>lt;sup>1</sup> Recruitment and retention of participants in clinical studies: Critical issues and challenges (National Library of Medicine, April 2020)

<sup>&</sup>lt;sup>2</sup> Growth Opportunities and Innovative Use Cases for AI in Clinical Trials (Frost & Sullivan, December 2022)

shortfalls. The company's proactive strategy advocates for earlier patient engagement (even preceding study activation), mitigating the risks of delays and study interruptions substantially.

# TrialWire: Enhancing Study Recruitment through AI-Powered Solutions

Founded in 2001 and headquartered in San Fransisco, TrialWire is a vital solution for sponsors and contract research organizations (CROs) looking for study recruitment solutions. The company leverages advanced algorithms to identify individuals seeking health solutions online, connecting prospective participants and relevant research sites within two minutes through Al-Match.<sup>3</sup> It also offers secure insights to sponsors, CROs, and coordinators, facilitating real-time progress tracking while maintaining patient data confidentiality.

Powered by Salesforce Health Cloud, TrialWire's platform presents a seamless solution for efficient clinical trial recruitment. In 2022, Frost & Sullivan recognized TrialWire's groundbreaking, innovative technology and remains impressed with its continuing innovation and sustained leadership.

# Solving Recruitment Challenges with an All-in-one Platform

Traditional reach-out methodologies fail to enroll up to 50% of prospective patients, resulting in 30% of research sites not meeting their enrollment goals and 10% failing to enroll a single patient. <sup>4</sup> These figures combine with 92% of patients (transcending various study demographics and embracing even the older population) expressing a distinct inclination toward SMS/text communication. <sup>5</sup>

Within this framework, TrialWire developed an innovative solution capable of identifying potential study participants online and approaching them discreetly through generic, non-trial-specific alerts. The company's Al-Match engages these individuals with tailored questions to pinpoint the most fitting analysis for them, whether in their vicinity or virtually. TrialWire bolsters the platform's insights by ingesting study data from recognized trial registries like ClinicalTrials.Gov. This approach leads to an exceptional rapidity in initiating recruitment, often commencing within a mere 24-hour window.<sup>6</sup>

The company's platform leverages dedicated secure portal dashboards to empower study coordinators with real-time patient data access. Its automated Al-match processes swiftly identify patients, while minute-by-minute metrics aid in tracking referrals, contacts, screenings, and enrollments. The solution has multilingual support, adheres to HIPAA compliance, and utilizes Salesforce Health Cloud for reliability. Additionally, Its advanced algorithms, search engine optimization (SEO), search marketing, impactful social media engagement, respected news sites, and wellness blogs facilitate auto-recruitment across diverse therapeutic spheres.

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<sup>&</sup>lt;sup>3</sup> "We Find Motivated People for Clinical Trials" (TrialWire website: <a href="https://trial-wire.com/about-us/">https://trial-wire.com/about-us/</a>)

<sup>&</sup>lt;sup>4</sup> "TrialWire™ Launches Clinical Trial Recruitment Insurance Plan" (TrialWire press release, January 2021)

<sup>&</sup>lt;sup>5</sup> "TrialWire™ Technology Platform Rolls out World First SMS Patient Contact System Across all Studies Globally" (TrialWire press release, February 2023)

<sup>&</sup>lt;sup>6</sup> "We Find Motivated People for Clinical Trials" (TrialWire website: https://trial-wire.com/about-us/)

<sup>&</sup>lt;sup>7</sup> "Advanced & Proven Technology" (TrialWire website: <a href="https://trial-wire.com/">https://trial-wire.com/</a>)

Embracing technologies like geolocation and online profile algorithms, TrialWire ensures clinical trials reach even the most challenging patient populations, including rare diseases and oncology across diverse communities. The result of such design is outstanding: a track record of 480 studies supported across 43 therapeutic areas, with over 2,458,000 patient referrals.<sup>8</sup>

# A Trailblazer's Path: Consistently Enhancing its Advanced and Proven Technology

Rolling out transformative updates, TrialWire has propelled clinical trial processes to new heights in 2023. Foremost among these enhancements, the company launched an advanced data analysis system, now accessible globally. This system allows sponsors and CROs to leverage ranges and key performance indicators to unravel insights about patient contacts, screening bookings, and enrollments.

Additionally, TrialWire unveiled its AI pre-recruitment tool, an avant-garde solution that ensures success before study initiation. Pre-recruit equips recently activated sites with pre-screened eligible patients, slashing recruitment time by over 50%, reducing costs, and enhancing study feasibility from the outset. With this solution, eligible patients, identified online and AI-Match screened, quickly transition to dedicated study site portals within Salesforce Health Cloud.

Finally, the company seamlessly integrated its SMS/Text Patient Engagement System across global studies. This innovative system counters the delays often encountered with phone or email communication. It accommodates diverse languages and conveniently archives all conversations in the study coordinator's dashboard, enabling the arrangement and confirmation of call times and site screening visits.

An adept team of software engineers at TrialWire harnesses Salesforce's tools to guide a roadmap of impactful solution development. The company has weekly brainstorming sessions to encourage the

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Manuel Albornoz Best Practices Research Analyst consistent exploration of new ideas. Mustering over 30 security certifications, Salesforce safeguards patient information and prevents potential breaches. <sup>10</sup> In alignment with this focus on security, TrialWire employs an event monitoring tool to oversee access to sensitive data.

# Roadmap to Success: Paving the Way for Successful Clinical Trials

Unlike traditional models relying on complex consultation fees and diverse referral charges, TrialWire streamlines its approach, focusing solely on

enrollment performance. Customers pay based on the number of enrolled participants, with a fee tailored around factors such as therapeutic area and protocol complexity.

<sup>8 &</sup>quot;About Us" (TrialWire website: https://trial-wire.com/about-us/)

<sup>9 &</sup>quot;Pre-Recruitment" (TrialWire website: https://trial-wire.com/pre-recruitment-solution/)

<sup>&</sup>lt;sup>10</sup> Frost & Sullivan Interview with TrialWire (Frost & Sullivan, August 2023)

After deployment, TrialWire actively seeks feedback on data and analytics, providing sponsors with a real-time view of their studies and empowering them to make informed decisions. Regular communication with clients and increasing analytics features allow for seamless data-driven adjustments. For example, if a sponsor observes a high exclusion of qualified candidates due to minor criteria, TrialWire can quantify the potential impact of relaxing those restrictions.

Many examples showcase TrialWire's commitment to clinical trial success. For instance, the Platform is ideally suited for rare diseases and oncology trials, with TrialWire having recently recruited the remaining 3 oncology patients for a study that was experiencing a considerable delay.

The company also recently addressed a challenging AMD Phase 1 trial situation. In this case, the sponsor engaged TrialWire as a study rescue solution, and the company delivered impressive outcomes. TrialWire collaborated closely with the CRO and five sites, and achieving full patient recruitment within the specified timeline and budget.<sup>11</sup>

Furthermore, in addressing a Diabetes Injectable Phase II trial, TrialWire streamlined patient engagement and online screening and efficiently recruited 490 patients, ensuring the trial concluded on schedule and within budget.<sup>12</sup>

"We were behind, but the platform really works and sets new standards for recruitment...we had 32 sites running on TrialWire, and the study managers found it easy to use, and the patients were online prescreened, saving them considerable time and accelerating recruitment."

- APAC biotech with sites in APAC & AU USA diabetes study. 13

### Positioned for Robust Market Leadership

In 2023, TrialWire demonstrated notable success, strengthening its presence in the United States (US) and Australia. In addition, Europe emerged as a prominent arena, showing increased engagement and a growing demand for the company's services. Similarly, Asian markets, including China, Korea, Taiwan, and Singapore, exhibit heightened interest in collaborating with TrialWire. The dual-phase approach adopted by some biotechs, which consists of conducting early-phase studies in locations like China and Australia and later-stage preparations in the US, underscores TrialWire's strategic value as a cross-regional study partner.

As of 2023, TrialWire's clinical trial recruitment business revenue surged 32%. Patient enrollment metrics also increased by 17%. <sup>14</sup> The company's impressive growth momentum and trajectory are a testament to its customer-centric approach, revolutionary services, and exceptional best practices, earning its client's trust and loyalty and enabling it to capture more market share.

<sup>11 &</sup>quot;AMD - Phase 1" (TrialWire website: https://trial-wire.com/case-studies/amd/)

<sup>12 &</sup>quot;DIABETES - Injectable Phase II" (TrialWire website: https://trial-wire.com/case-studies/diabetes-injectable-phase-ii/)

<sup>13 &</sup>quot;Testimonials" (TrialWire website: https://trial-wire.com/testimonials/)

<sup>&</sup>lt;sup>14</sup> Frost & Sullivan Interview with TrialWire (Frost & Sullivan, August 2023)

# Conclusion

With its TrialWire™ Platform, TrialWire continues to deliver a secure service capable of finding motivated people for clinical trials based on detailed personal, demographic, and location profiles. In 2023, the company revolutionized clinical trial operations further through transformative updates. It introduced a global data analysis system, empowering sponsors and clinical research organizations (CROs) with crucial insights into patient contacts, screenings, and enrollments. Another notable launch was the artificial intelligence pre-recruitment solution, which reduces recruitment time by over 50% by providing prescreened patients to newly activated sites. Further beyond, TrialWire integrated its SMS/Text Patient Engagement System into its platform, overcoming common delays and enhancing communication across global studies.

Advanced algorithms, search marketing, impactful social media engagement, partnerships with respected news sites, and wellness blogs drive TrialWire's recruitment across 43 therapeutic domains. Utilizing geolocation and patient travel support technologies, the company ensures clinical trials effectively engage even challenging patient populations. The result is an impressive track record of supporting 480 studies while generating over 2,458,000 patient referrals.

Ultimately, TrialWire achieved remarkable growth, with clinical trial recruitment business revenue increasing by 32% and patient enrollment metrics by 17%. The company expanded its United States and Australia presence while gaining traction in European and Asian markets, including China, Korea, Taiwan, and Singapore.

With its strong overall performance, TrialWire earns Frost & Sullivan's 2023 Global Enabling Technology Leadership Award in the clinical trial patient recruitment information technology solutions industry.

# What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

# **Best Practices Award Analysis**

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

# **Technology Leverage**

**Commitment to Innovation**: Continuous emerging technology adoption and creation enables new product development and enhances product performance

**Commitment to Creativity**: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

**Stage Gate Efficiency**: Technology adoption enhances the stage gate process for launching new products and solutions

**Commercialization Success**: Company displays a proven track record of taking new technologies to market with a high success rate

**Application Diversity**: Company develops and/or integrates technology that serves multiple applications and multiple environments

### **Customer Impact**

**Price/Performance Value**: Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience**: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience**: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience**: Customer service is accessible, fast, stress-free, and high quality

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty

# **About Frost & Sullivan**

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

# The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$ .

Learn more.

# **Key Impacts**:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- Growth Strategies: Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

# OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities PIELINE ENGINETM GO-TO-MARKET STRATEGY Translate strategic vilternatives into a cogent strategy opportunities

### The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

# **Analytical Perspectives:**

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

