

## Patient Identification Solution to Boost High-Risk PCI Patient Identification

### Client Overview & Business Requirement:

A global leader in advanced cardiac care needed a solution to improve trial enrolment and accelerate adoption of their device.



Our client is a leading MedTech company specializing in innovative devices for revascularization procedures. They aimed to enhance the adoption of their device for High-Risk Percutaneous Coronary Intervention (HR-PCI) and support a multi-center randomized controlled trial (RCT) to generate robust clinical evidence. However, many patients who could potentially benefit from HR-PCI are either overlooked or lost to follow-up in current practice, leading to suboptimal outcomes. In response, the client sought to develop a solution for accurately identifying HR-PCI candidates, with the goal of improving patient outcomes and increasing the adoption of their device.

### Challenge

Identifying high-risk patients eligible for HR-PCI is challenging due to complex clinical criteria and the time-consuming process of manually reviewing patient records for eligibility. The extent to which these patients are lost to follow-up is also unclear, with multiple challenges complicating their identification, such as:

Identification criteria for HR-PCI eligibility is complex and requires a multidisciplinary approach to weigh the risks and benefits of the procedure

The decision criteria for labeling patients as "high-risk" and eligible for HR-PCI varies across clinicians

Many of the criteria used by clinicians to identify high-risk patients are not consistently documented in structured formats, making it difficult to standardize patient eligibility

Lack of clarity on where and how relevant information from patient records was used to assess eligibility for High-Risk PCI surgery

Screening large patient populations with limited clinical and administrative resources makes timely identification challenging

### Solution:

Leveraging technology, data-driven insights, and strategic collaborations, Graticule developed a customizable solution tailored to the complexities of clinical decision-making. Key components of the solution\* included:

**Stakeholder Engagement:** Engaged clinicians, administrators, legal, and technical teams through iterative feedback loops to ensure cross-disciplinary alignment while designing the tool

**Data Analysis & Mapping:** Analyzed diverse data sources to assess availability and conducted a data mapping exercise to identify where and how relevant information is recorded in patient records

**Tool Development:** Leveraged retrospective EHR data and NLP to analyze patient populations, extract insights from unstructured sources, and build customizable logic adaptable to clinician and health system preferences

*The tool generates comprehensive patient summaries and actionable population-level insights, enabling clinicians to prioritize patients for review or outreach*

### Graticule's Value Add

Graticule's approach combines expertise, innovation, and flexibility to deliver impactful solutions for addressing complex challenges



Brought together multidisciplinary expertise to navigate the intricacies of HR-PCI eligibility

Demonstrated agility in leveraging diverse data sources, including unstructured data, to create a comprehensive view of patient eligibility

Delivered a flexible tool adaptable to varying clinical definitions & health system needs

Interested in learning more? [Reach out to us at info@graticule.life](mailto:info@graticule.life)