



JOB DESCRIPTION

Project Director, Autonomous Patient Safety Solutions

An Initiative to Create an Autonomous Patient Safety Industry in Pittsburgh

In 1998, the Jewish Healthcare Foundation of Pittsburgh (JHF) established the Pittsburgh Regional Health Initiative (PRHI), a regional multi-stakeholder quality collaborative. The intent was to reduce the estimated annual 250,000 preventable deaths due to medical error. At this time, autonomous safety technology was reasonably primitive, except for a very few high risk, complex industries and space travel. Consequently, PRHI dedicated 24 years to bringing safety science and quality engineering principles to the frontline of care across care settings. But autonomous safety solutions are widespread now, transforming every mode of transportation, manufacturing, traffic control and energy—but has yet to guarantee continuous, substantive progress in health care. Accordingly, the Foundation intends to identify, connect, and activate Pittsburgh's regional assets, leveraging our strengths in AI, ML, and life sciences innovation, to establish the region as a center for autonomous patient safety solutions.

Responsibilities of the Position: A Summary

The Project Director will have three overarching responsibilities:

1. Provide support to position our region as a national and global leader in autonomous patient safety technology.
2. Construct an Autonomous Patient Safety Blueprint for our region to serve as a local prototype to:
 - a. Identify and foster academic and industrial partnerships in healthcare safety technology.
 - b. Provide support to, and recognition of, a regional conference in AI-Enabled Healthcare in 2022.
 - c. Advance the most promising ideas to emerge from the conference by means of a competitive process for the allocation of seed funding.
 - d. Promote our region as a leader in healthcare technology through deliberate, targeted messaging.
 - e. Accelerate the development (and local implementation) of a new model of healthcare command centers to anticipate and prevent medical errors.
 - f. Build a regional and possibly state cluster of academic and commercial partners interested in advancing healthcare safety technology.
3. Collaborate with interested parties outside the region to build partnerships for specific autonomous patient-safety solutions, modified as appropriate for local conditions.

Duties and Responsibilities

The Project Director will report to the Chief Executive Officer, with a goal to advance an autonomous patient safety industry in Pittsburgh. This position has the option to be either part-time or full-time, depending on the candidate's preference and availability.

The Project Director will oversee multiple work streams related to developing Pittsburgh's autonomous patient safety industry. The first work stream, to be completed during the first quarter of 2022, will be to build an Autonomous Patient Safety Blueprint of the Pittsburgh region, identifying Pittsburgh's assets, talent bases of researchers and developers, and centers of activity and excellence.

This Blueprint will outline the following:

- Problem statements related to patient safety that lend themselves to autonomous technology solutions.
- An overview of the regional assets (academic & industry) currently dedicated to creating autonomous safety solutions in health care and other industries.
- The data sources and data fields that are appropriate to track and anticipate patient safety indicators.
- Potential federal and state funding vehicles that could support the development of the patient safety solutions.
- Government (Fed/State/Local) and industry partners that could be paired with academic researchers to develop commercial-grade solutions to healthcare safety problems.
- Public relations and marketing opportunities to display Pittsburgh's unique capabilities to advance healthcare safety solutions.

This Blueprint will build on the "Technology Infrastructure Blueprint" developed by the Johns Hopkins University's Applied Physics Lab (APL). APL's Blueprint provided a vision and conceptual framework for how AI, big data/predictive analytics, and automation can be used to track patient safety indicators, identify patient safety anomalies with AI/ML, and initiate actions to prevent medical errors. The Pittsburgh Autonomous Patient-Safety Blueprint will provide specifics regarding the regional talent and asset base, laying the groundwork for service and product discoveries.

In addition to developing the Blueprint, the Project Director will also support efforts to prepare for an AI in Healthcare Conference scheduled for the first half of 2022 and assist in developing a local competition for breakthrough product/service concepts with a focus on academic/industry partnerships. In addition to structuring the competition, the Project Director will shape the evaluation process to reward the most promising ideas.

The Project Director will engage appropriate partners in developing a regional and/or state health cluster for autonomous safety that could work with a regional Working Committee on Autonomous Solutions. Finally, s/he will advance research collaborations for strategic grant seeking.

Qualifications

The ideal candidate will have:

- 5-10 years of experience working in academia, technology, healthcare, or another related field, with an interest in autonomous safety applications.
- Strong understanding of the Pittsburgh life sciences, technology, and healthcare delivery ecosystem—including federal, industry, philanthropic funding streams.
- Knowledge of advanced technologies including Artificial Intelligence, Machine Learning, advanced data analytics, etc.
- Experience in and/or an understanding of funding mechanisms for research in academia.
- Strong written and oral communication skills.
- Ability to establish evaluation mechanisms for existing and emerging safety technologies.
- Critical strategic thinking skills – including the ability to both set and execute a large-scale strategy.
- Experience in convening diverse stakeholders and managing communication and outreach to executive contacts.

Background and Mission of Jewish Healthcare Foundation

The Jewish Healthcare Foundation (JHF) is a grantmaking organization formed from the sale of Pittsburgh's Montefiore Hospital. It is the parent organization for three operating entities: the Pittsburgh Regional Health Initiative (PRHI), Health Careers Futures (HCF), and the Women's Health Activist Movement Global (WHAMglobal). Together, these entities work to improve the delivery of health care, the education and preparation of healthcare professionals to deliver high value care, and the policy environment that supports healthcare performance excellence in Western Pennsylvania, state-wide, in the U.S., and internationally. Their collective mission is to produce systems of care that are as safe, reliable, efficient, and compassionate as possible. JHF entities are the recipients of significant national grants to test better methods of healthcare delivery. In particular, their programs and projects advance, and then test, solutions to the safety and quality problems in health care by:

- Educating or coaching health professionals to use Quality Improvement methods.
- Demonstrating better methods of delivering care through demonstrations and research.
- Measuring, analyzing, and reporting on the outcomes of care.
- Advancing evidence-based solutions through policy advocacy.
- Convening experts regionally, statewide, nationally, and even globally to advance safety.

General Expectations:

As expected of all employees of the Jewish Healthcare Foundation, the Project Director will abide by the current laws and organizational policies and procedures designed and implemented to promote an environment which is free of harassment and other forms of illegal discriminatory behavior in the workplace. This job description is intended as a summary of the primary responsibilities of and qualifications for this position. The job description is not intended as inclusive of all duties an individual in this position might be asked to perform or of all qualifications that may be required either now or in the future.

To apply, please send resume and cover letter to careers@ihf.org with the subject line:
“Project Director, Autonomous Patient Safety Solutions”