

SAM W. MESKE, MS, MBA

AI Product Strategy & Innovation Leader | Healthcare Technology | Research-Driven Digital Products

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EXECUTIVE SUMMARY

Product strategy and innovation leader with 8+ years of experience spanning AI-enabled product development, healthcare research, analytics, and cross-functional digital transformation. Proven track record translating patient insights, organizational priorities, and emerging technologies into scalable digital products and operational systems. Expert in leading AI exploration initiatives, product discovery, governance design, and innovation roadmaps within mission-critical healthcare environments. Technically fluent in SQL, Python, and AWS with hands-on experience building production AI agents, agentic orchestration systems, and automation workflows.

CORE COMPETENCIES

Product	AI & Technical	Leadership
<ul style="list-style-type: none">Product Strategy & RoadmappingProduct Discovery & ValidationMVP Development & Pilot DesignUser Research & Insight SynthesisInnovation GovernanceGo-to-Market CollaborationAgile / Product Operations	<ul style="list-style-type: none">AI Product Strategy & GovernanceGenerative AI & LLM SystemsPrompt EngineeringAI Workflow & Agent DesignSQL · Python · AWSAgentic Orchestration (Claude)Dashboard & Reporting SystemsAutomation & CRM Systems	<ul style="list-style-type: none">Cross-Functional LeadershipStakeholder & Executive AlignmentStrategic PlanningResearch Design & ValidationIRB / Clinical GovernanceProgram ManagementInnovation Program Design

PROFESSIONAL EXPERIENCE

Breastcancer.org

2022 – Present

Associate Director of Research | Expanded Responsibilities: Product Strategy, AI Innovation & Digital Product Development

Product Strategy & Innovation

- Defined and operationalized an AI and digital product innovation roadmap aligned with organizational mission, board priorities, and evolving patient needs.
- Led product discovery for multiple AI-enabled healthcare tools — spanning user research, feasibility analysis, MVP design, and pilot validation — establishing repeatable frameworks for evaluating digital health opportunities.
- Designed internal innovation governance frameworks establishing product evaluation protocols, experimentation guardrails, and cross-functional accountability structures.
- Translated patient community insights and behavioral research into actionable product concepts spanning conversational logging, AI-assisted search, treatment education, and peer story retrieval systems.

AI Leadership & Implementation

- Directed organization-wide exploration and adoption of generative AI across research, content, operations, and patient engagement workflows.
- Built production AI agent systems and agentic orchestration workflows — including parallel multi-agent pipelines — supporting content scalability, operational efficiency, and product delivery automation.
- Developed organizational AI education and enablement initiatives focused on governance, responsible use, and measurable workflow improvement.
- Established guardrail architectures for AI systems operating in healthcare contexts, ensuring medical trust, sourcing transparency, and escalation pathway compliance.

Research Leadership & Analytics

- Direct the annual research program including survey design and psychometric validation, data collection, statistical analysis, and executive-level reporting to board and senior leadership.
- Built analytics and reporting pipelines in AWS and SQL supporting strategic planning, cross-functional decision-making, and organizational performance tracking.
- Designed longitudinal data frameworks capturing patient experience patterns across treatment journeys, informing both research output and product strategy.

Cross-Functional Leadership

- Serve as primary liaison between Research, Technology, Content, and Operations for all AI and digital product initiatives; facilitate alignment on goals, timelines, and success metrics.
- Communicate product vision, AI strategy, and innovation progress to senior leadership and the Board; translate organizational priorities into testable product concepts and MVPs.

Main Line Health

Feb 2021 – 2022

Department Business Manager, Obstetrics & Gynecology

- Designed and implemented departmental information systems for extracting, aggregating, and analyzing operational and clinical metrics, enabling data-driven service line strategy.
- Led cross-functional service line initiatives, coordinating quality and safety reporting, clinical operations, and executive communications on behalf of the Department Chairman.
- Managed department research oversight including faculty and resident project coordination, compliance tracking, and IRB/regulatory adherence.
- Developed SMART goal frameworks, project tracking systems, and executive presentations aligned with organizational strategic imperatives.

Main Line Health — Center for Population Health Research

Jan 2019 – Feb 2021

Project Manager, Coala-T-CBD Study (Phase III IND) | Research Assistant I

- Managed end-to-end operations for an investigator-initiated Phase III IND clinical trial — IRB submission and approval, FDA clinical trials application, SOP development, and regulatory compliance.
- Designed survey instruments, conducted focus groups, developed statistical and power analyses, and coordinated manuscript submission and peer-review processes.
- Supervised research staff; coordinated training for clinical research coordinators; managed a portfolio of 17 resident research projects.
- Prepared and monitored grant applications and budgets; ensured compliance and reporting standards across all active studies.

Bloomsburg University — Institute for Concussion Research

Jan 2017 – Jan 2019

Grant-Funded Program Coordinator

- Led clinical operations for a multi-study concussion research program; managed database of 800+ student athletes and coordinated return-to-activity protocols with team physicians.
- Designed and maintained data collection and analysis systems; completed audits and quarterly compliance reports.
- Delivered continuing education lectures on neurology rehabilitation and concussion management to undergraduate and graduate students.

SELECTED AI & PRODUCT INNOVATION INITIATIVES

- **AI Innovation Program & Product Incubator** — Developed and led organization-wide AI education, governance frameworks, and a formal product incubation process — establishing structured evaluation criteria, pilot sequencing, and stakeholder alignment protocols for AI-enabled digital health experiences.
- **Patient Experience AI Products** — Led concept development, user research, and pilot validation for AI-assisted patient engagement tools including natural language treatment search, conversational symptom logging, peer story retrieval, and side-by-side treatment navigation with clinical trust guardrails.
- **GEO Audit Intelligence Platform** — Designed and built a parallel-agent AI system orchestrating 5 simultaneous specialized agents for Generative Engine Optimization audits — synthesizing results into composite scoring, client-ready PDF reports, auto-generated proposals, and a CRM pipeline.
- **Agentic Agency Delivery System (Vision Venture AI)** — Engineered a complete agentic workflow suite automating contractor lead prospecting, multi-stage outreach, proposal generation, client delivery build specs, and monthly retention reporting from a single lead input.
- **Healthcare Data & Analytics Infrastructure** — Built AWS/SQL-based reporting and analytics systems supporting annual patient research programs, board-level strategic planning, and longitudinal trend analysis.

EDUCATION

M.B.A. Bloomsburg University, Bloomsburg, PA	2020
M.S., Exercise Science Bloomsburg University, Bloomsburg, PA	2016
B.S., Human Biology Duquesne University, Pittsburgh, PA	2014