

Practicum Abstracts 2024

Degree: MPH-45

Field of Study: Health Management

Project Title	Project Summary or Abstract
A literature art-based intervention to raise awareness and promotion of mental health in school settings	The project consisted of running the protocol "Pre-Text" with a focus on mental health for school directors, educators, and health professionals in school settings. This project gathered more than 30 people from public and private schools in Ecuador to receive training in the protocol, but primarily to understand their role in preventing and identifying mental health problems in students. Through this creative literature art-based intervention, educators were able to read, learn, and discuss mental health in a stigma-free space.
Patient Voice Project	The project entails the conduction of qualitative research to assess the level and understanding of quality of care from patients' perspective in Rwanda, specifically in the 3 site hospitals of PIH. To identify quality gaps existing in health care delivery from the patient's perspective. The major objectives are: To design, develop, and implement initiatives to address the main identified gaps, To develop a patient-centered model of quality improvement, To evaluate healthcare service delivery with new tools in PIH-supported hospitals
Research and Implementation Assistant	As a Research and Implementation Assistant at Team Birth, a quality improvement program focused on promoting birth equity in labor and delivery units, I played a pivotal role in advancing maternal health initiatives in hospitals both in the USA and internationally. Under the Delivery Decisions Initiative Team at Ariadne Labs, I directly contributed to three significant programs during my tenure. My responsibilities encompassed collaborating with the Team Birth National Cohort to assess, evaluate, and guide hospital labor and delivery unit staff in implementing, launching, and sustaining the quality improvement initiative. This involved conducting pre-implementation assessments to gauge hospital readiness, offering coaching throughout the program, and post-implementation surveys to measure program efficacy from both patient and staff perspectives.

	<p>Furthermore, I contributed to enhancing patient satisfaction by conducting specialized training sessions for midwives and OBGYN residents. This training aimed at improving communication and shared decision-making skills, particularly during obstetric emergencies. As part of this effort, I collaborated with a team to develop residency training modules and training simulations tailored to these needs.</p> <p>In alignment with Team Birth's global expansion, I was actively involved in preparing for the program's implementation in Nepal, marking our first non-US site. This role allowed me to integrate research, implementation, and training to drive impactful changes in maternal health care delivery and equity both domestically and internationally.</p>
<p>Leveraging biological sequences to increase access to novel medicines</p>	<p>My practicum project was focused on exploring industry applications and approaching potential partners for the technology of the practicum partner., which is used to decode and design biological sequences for the development of novel therapeutics, mainly for rare disease patients. This involved:</p> <ol style="list-style-type: none"> (1) Conducting a needs assessment of the industry (e.g., patient access barriers, R&D cost development) (2) Developing a business development and strategic positioning strategy (e.g., customer prioritisation, relevant stakeholders, go-to-market approaches) (3) Reach out to potential partner organizations and prepare discussions (4) Identify additional technology applications to address unmet needs (e.g., develop proprietary therapeutics, process claims data, indication expansion) (5) Quantitative data analysis to assess previous AI activity and potential partner approaches
<p>Opening Doors to Harvard</p>	<p>The aim of my practice project was to establish linkages between kiskinohtahiwewak - a First Nations-led health professions mentorship program based in Moose Factory, Ontario - and Harvard University. In particular, my goal was to leverage Harvard's leadership training and networking resources in support of kiskinohtahiwewak's growth as an organization. The program's leadership attended a course at the Kennedy School entitled Nation Building during the January term, and an early relationship with the Harvard Project on Indigenous Governance and Development has started to form.</p>

<p>Patient Feedback Processes at BMVSS</p>	<p>Systematically reviewed patient feedback and follow-up processes at BMVSS, Jaipur, India. This organization is the world's largest organization for trauma victims and provides prosthetic limbs (including the Jaipur Foot) across India and further abroad. We made recommendations for improving the patient experience, identifying patients with issues, and improving data collection processes.</p>
<p>Promoting Fairness in Healthcare Language Models: Guided Approaches and Frameworks for Bias Reduction through Prompting and In-Context Learning</p>	<p>We aim to investigate whether biases in healthcare language models can be effectively mitigated by utilizing in-context learning. This inquiry holds significant interest due to the widespread adoption of LLMs for research and patient care in healthcare. As these models become increasingly integral to the healthcare ecosystem, there is a pressing need to address the issue of bias while equipping healthcare institutions with the necessary knowledge and guidelines for proper LLM utilization.</p>
<p>Improving Home Health: Utilizing SDoH Screening and Social Work Support to Reduce Readmissions</p>	<p>MGB's Home Health team was looking at ways to reduce their readmission rate, a quality metric that was important to address as it is closely evaluated for CMS funding. MGB's Home Health program had been relying on their Home Health clinicians' subjective evaluation of the patient to determine whether Social Work support was needed. This unreliable and inconsistent practice may have left some patients with needs that were not addressed, increasing and contributing to their risk of readmission. I developed a risk assessment for SDoH screening tool to more objectively determine a patient's needs that may benefit by connecting them with a Social Worker who could provide supports to address important factors that impact their health and recovery. In addition to better addressing patient's health-related social needs, the data collected can be used to build better predictive machine learning algorithms/models to create targeted interventions to reach patients at high risk of future readmissions.</p>
<p>Reimagining a Return on Investment Model for Community Benefit</p>	<p>As health systems prepare to integrate social drivers of health screening into their clinical operations, systems must understand the value of specific initiatives designed to address social drivers of health. Frequently, programs that offer community benefit have been negatively impacted by the lack of understanding how to measure community benefit in a fiscal manner. This project sought to understand whether it is possible to apply a fiscal lens to community programs and if not, how to</p>

	<p>design a funding model that honors and incorporate non-fiscal social return on investment. In this project, a literature review was performed on models surrounding social return on investment or community benefit to social determinants of health/equity based initiatives. A stakeholder engagement process was conducted and analyzed regarding current landscape regarding social return on investment and outcomes of interest were identified for housing and behavioral health related programs. I created a practical tool that incorporated a social return on investment methodology for prospective evaluation of grant applications related to community programming and pilot tested this tool with a sample grantee. Ultimately, this tool can be utilized by community benefit offices as an additional evaluative tool for grant applications.</p>
<p>Growth & Brand Strategy</p>	<p>mPharma is start-up, founded in Ghana in 2013. Their mission is to increase patient access to primary care and high-quality medications in Africa. They own, operate, and franchise pharmacies in nine countries in Africa. They offer drug benefits services and primary health care services through their branches.</p> <p>As mPharma as grown, they have acquired existing chains of pharmacies. This has led to some confusion on their brand, which could be a barrier to introducing additional primary health services in branches. The objective of my project was to assess consumer awareness of mPharma brand, perception of the brand, and customer key purchasing criteria (KPCs). The output of the project was an assessment of the value of a unified brand, compared to separate sub-brands. As part of the project, I surveyed non-customers, interviewed customers, interviewed pharmacists and branch managers, and interviewed and surveyed employees. I was based in Kenya, at the Nairobi office.</p>
<p>Social Media Listening in Mental Health</p>	<p>This practicum proposed the development of a novel research area aimed at formulating a comprehensive methodology for the identification of mental health issues through social media data analysis, alongside establishing a robust reporting system for relevant authorities. The research utilized advanced social media listening techniques to detect mental health concerns effectively. It also involved the creation of protocols to ensure these concerns were reported systematically to the appropriate entities. Furthermore, the project engaged new stakeholders who had an interest in the data and insights generated. This initiative was expected to enhance the capabilities of mental health</p>

	professionals and authorities by providing them with real-time data, thereby improving the intervention and support systems for individuals experiencing mental health challenges.
Health System Resilience for MCH, RH, SRH, and FP Programs in USAID Countries	The practicum involves providing support to two projects: (1) one addressing implementation of the Resilience for Social Systems (R4S) Approach for maternal, newborn, and child health and nutrition through quantitative and qualitative analysis; and (2) two reviewing, synthesizing recommendations, and adapting the ARC-D health toolkit from facilitated workshops for South Sudan and Niger.
Development of an Orthoplastics Care Coordination Service Framework	The project aims to introduce an Orthoplastics Care Coordination Service led by a healthcare coordinator who will act as the central point of contact in accordance with the orthoplastics coordination framework. We predict that implementation of the coordinator and framework will improve patient outcomes and quality of care at a lower cost to BWH. The financial impact will be determined from the modelling prior to real-time testing.
Remote Patient Monitoring in patients with chronic disease	Using proprietary AI technology to monitor patients in the community using wrist pulse sensors.
Graduate Intern at SteelSky Ventures	SteelSky is an early-stage venture firm that invests in companies that improve healthcare access and outcomes for women. I worked with SteelSky on a variety of projects including LP prospecting, fundraising/marketing efforts, existing portfolio company monitoring, and prospective investment screening. I helped screen and analyze companies through their risk and investment lens; evaluate business models, market potential, competitive landscape, and founder/team capabilities to make recommendations for further diligence.
Designing with Latitude	Transcendent Endeavors is a company that helps improve language access in healthcare settings. I collaborated with the team and helped to perform stakeholder interviews, research, content formation, iterative designs and prototyping, and user validation for several products. I helped work on an app that was helpful to both clinicians and patients/family members to communicate. I also worked on mapping out clinical journeys for patients - to assess where they would need help with communication, what type of information would need to be translated and anticipate other needs. We also started looking at incorporating artificial intelligence to "learn" the patient journeys and help map out more divergent clinical pathways that patients would take.

<p>Reimbursement Model for Medical Specialists in an Academic Hospital at KPJ Healthcare</p>	<p>This practicum project centered on the student learning about Malaysia’s healthcare system while working with KPJ, Malaysia’s largest private hospital system. KPJ had previously partnered with Harvard School of Public Health on a practicum centered on exploring a transition to an academic health centre model. The objective of this project was to work collaboratively with KPJ stakeholders to analyse how to optimize their physician reimbursement to incentivize research and teaching. This included assessing their current fee-for-service reimbursement model and the concerns of clinicians and board members. Part of the practicum consisted of on-site interviews in Kuala Lumpur, Malaysia. The final product was a report on reimbursement recommendations that was delivered to KPJ stakeholders.</p>
<p>LAUNCHING A CHRONIC CARE MANAGEMENT & REMOTE PATIENT MONITORING PROGRAM FOR CKD PATIENTS</p>	<p>Chronic Care Management & Remote Patient Monitoring are a group of current procedural terminology codes that the Center for Medicare & Medicaid Services effected to incentivize physicians to provide consistent out-of-clinic support to high risk patients with chronic conditions. However, there has been low uptake of these services due to significant upfront costs as well as technical and logistical challenges. The aim of this practicum was to support a nephrology practice to implement Chronic Care Management and Remote Patient Monitoring, with the double target of improving the quality of care the clinic provides to its chronic kidney disease population and increasing its revenues.</p>
<p>Qualitative Analysis of the Low Uptake of the HPV Vaccine in Lagos, Nigeria</p>	<p>My practicum focused on understanding the practices and thought processes influencing public opinions about vaccination in Nigeria. Through a qualitative analysis, it examined the circumstances and practices contributing to the low uptake of HPV vaccines in Lagos, Nigeria. By delving into these factors, the project aimed to identify and address the key barriers to vaccination acceptance and participation.</p>
<p>Evaluating Cost-Effectiveness of Incentives and Disincentives in the Supplemental Nutrition Assistance Program (SNAP): A State-Level Analysis</p>	<p>The Supplemental Nutrition Assistance Program (SNAP) plays a crucial role in addressing food insecurity and improving nutritional outcomes for millions of low-income individuals and families across the United States. With an annual budget of \$127 billion dollars, SNAP provides vital support to a significant portion of the population, including 42.2 million supported annually. SNAP programs are administered by individual states, leading to variations in participation and implementation across states. Legislative proposals are seeking to test financial incentives and disincentives across</p>

	<p>various cities and states. The primary objective of this research is to assess the health and economic impact of SNAP F&V incentive policies across individual states.</p>
<p>AI Healthcare Policy - Developments and Investor Implications</p>	<p>The practicum project examined the development of AI healthcare policies globally and specifically in the US, as well as their implications for investors, in collaboration with a venture capital firm in Boston. The analysis focused on regulatory trends and challenges, data privacy, and investment trends within the healthcare AI space.</p>
<p>Assessing Social Determinants of Health in Pediatric Ambulatory Follow-Up Clinic</p>	<p>The primary focus of the project was to assess the impact of social determinants of health on pediatric healthcare access. Key findings include the identification of significant healthcare access disparities influenced by factors such as socioeconomic status, ethnicity, and geographic location. Notably, a high incidence of food insecurity and economic challenges among the patient population underscored the critical role of social support services alongside healthcare.</p> <p>The project highlighted the clinic's vital role in improving access to primary care, with patient access to primary care providers increasing from zero to 70% following clinic visits. This enhancement is particularly significant for marginalized communities, including low income neighbourhoods and patient who reside on indigenous reservations. Data analysis revealed a diverse patient demographic, necessitating culturally competent care approaches and policies tailored to varied community needs.</p> <p>The incorporation of a full-time social worker within the clinic was recommended to address broader social determinants of health, suggesting a more integrated approach to healthcare that combines medical treatment with social support. This project thus provides valuable insights into the complex interplay between social factors and health, proposing actionable strategies for enhanced healthcare delivery.</p>
<p>Telehealth Financing Model</p>	<p>Market research about telehealth services in Southeast Asia context and creating a telehealth financing model for the client of the consulting firm. Whitepaper was also done.</p>
<p>Adaptive Strategies in Hospital Operations: A Qualitative Study Evaluating Shifts in</p>	<p>My practicum project at Harvard involved a qualitative study focusing on Ayder Hospital's operational shifts in response to the armed conflict in Tigray, Ethiopia. The research aimed to explore the adaptive strategies implemented by the hospital amidst the challenging circumstances brought about by the conflict. Despite the official end of hostilities with the signing of the Pretoria Peace Accord, the</p>

<p>Response to Armed Conflict in Ayder Hospital. Tigray, Ethiopia</p>	<p>region continued to experience severe disruptions in healthcare services, marked by shortages of medical supplies and healthcare professionals.</p> <p>The study adopted a qualitative descriptive design, utilizing semi-structured interviews with hospital staff to gain insights into their experiences and the coping mechanisms employed during the conflict. A purposive sampling technique was used to select participants who had firsthand experience of the changes in hospital operations during the conflict. This approach ensured that the data collected was deeply informative and directly relevant to the study's objectives.</p> <p>The findings highlighted the critical importance of leadership and community support in maintaining healthcare operations during crises. It also emphasized the role of humanitarian aid in sustaining hospital functions when resources were scarce. This research not only filled a gap in the literature concerning the effects of conflict on healthcare delivery but also provided practical insights that could inform future policy and operational decisions for healthcare facilities in similar conflict zones. The study underscored the resilience and adaptability of healthcare institutions like Ayder Hospital in the face of severe challenges</p>
<p>Analyzing Client Satisfaction at Community Servings</p>	<p>Analyzed client satisfaction survey with quantitative and qualitative data, displayed results, compared to previous years, and presented learnings.</p>
<p>Healthcare Entrepreneurship: Navigating the idocyou Project</p>	<p>I am the advisor of iDocYou project. The iDocYou project is an innovative healthcare initiative aimed at transforming how residents in urban condominiums access medical services. This project introduces a primary care hub within residential complexes, making healthcare not just a service, but a seamless part of daily living. The central feature of iDocYou is the integration of a dedicated family doctor available directly at the residence, which significantly reduces the need for travel and waiting times that are typical of traditional healthcare settings.</p> <p>This initiative is powered by our proprietary AI model that analyzes lifestyle data and medical records to provide personalized treatment plans and health suggestions. Our Companion Mobile Application supports the ecosystem by enabling residents to make appointments, store health records, receive</p>

	<p>health education, and purchase pharmaceuticals and lab tests conveniently.</p> <p>iDocYou operates on a subscription model where residents pay a monthly fee, covering unlimited doctor visits without any additional costs. Additional revenue is generated through commissions from transactions within the e-health market, including lab tests and drug purchases.</p> <p>Our solution is particularly beneficial for the elderly, parents with young children, and busy professionals who face difficulties in managing travel and wait times for healthcare. By offering medical services within the comfort of one's community, iDocYou not only makes healthcare more accessible but also enhances the overall quality of life for its subscribers.</p>
Collogh Cares Pilot Study	<p>I collaborated with Collogh Cares to spearhead the implementation and program development of their pilot study at Caritas Medical Center in Stockbridge, Georgia. Collogh Cares specializes in digital health technology aimed at improving the well-being of patients with chronic kidney disease. Their innovative approach involves utilizing real-time health data analysis to monitor patients, delivering personalized notifications for timely interventions, and facilitating seamless communication between healthcare providers and patients. Committed to establishing a comprehensive system tailored to individual needs and motivations, they have been granted approval to deploy their technology with 400 patients at Caritas Medical Center, a nephrology center overseeing approximately 3,700 patients with chronic kidney disease.</p>