

Degree: MPH-45

Field of Study: Health Management

Practicum Project Abstracts 2023

Project Title	Project Summary or Abstract
Advancing a Hospital to an Academic Health Center in Malaysia	<p>Malaysia currently maintains a two-tiered healthcare system with heavily subsidized public universal healthcare available as well as a separate, private system supported by private insurance and out-of-pocket payments. Medical education and research are primarily conducted at government and public university hospitals, and private hospitals are involved with academic work to a very limited extent. This project was conducted as an independent review and analysis of the current position and ability of KPJ Healthcare Berhad and KPJ University College to advance as the country's first private academic health center (AHC) in a government dominated healthcare landscape. The findings provide an analysis of KPJ's current positioning to advance as an AHC, and it makes recommendations to enhance the transformation of KPJ's private hospital system into an AHC using US AHCs as benchmarks. The project was split up into three parts. The first part involved remote collection of background research on the Malaysian healthcare system and history of KPJ. The second part of the project was conducted in Malaysia as a month-long onsite stakeholder analysis and review of the organization and current climate of the Malaysian healthcare system. The third part of the project was done in the US as a comparative analysis using US academic health centers as a benchmark for KPJ. The analysis and recommendations serve as a guide for leadership at KPJ Healthcare Berhad and KPJ University College to transform KPJ to an AHC.</p>
Ariadne Labs Delivery Decisions Initiative	<p>Through the Maternal Child Leadership program, I was fortunate to join the Delivery Decisions Initiative (DDI) at Ariadne Labs, a joint-center for health systems innovation between Brigham & Women's Hospital and Harvard Chan School of Public Health. DDI designs and implements solutions promoting quality, equity, and dignity in childbirth. On the DDI team, I worked on a project implementing shared-decision making practices in the Labor & Delivery setting at 9 Massachusetts hospitals. The funding for this project included development of a TeamBirth recognition process for past, current, and future birth centers and hospitals that adopted this patient-centered care model (TeamBirth). In order to develop a prototype recognition process, I conducted research on hospital</p>

	<p>certification programs, interviewed Labor & Delivery leaders, and consulted Ariadne team members. I also employed my policy and management classroom learnings to consider the benefits and unintended consequences of hospital incentives and certifications. Strategizing how to scale a relatively low-tech birthing care innovation to all hospital settings provided the opportunity to integrate my passion for perinatal health and my Health Management field of study.</p>
<p>Patient Perspectives on Artificial Reproductive Technology: A Qualitative Analysis</p>	<p>TITLE: Patient Perspectives on Treatment with Assisted Reproductive Technology: A Qualitative Analysis AUTHORS: Angela Li MD1, Emma Mayette1, Ariel Scalise MPH1, Nicolette McGeorge PhD3, Shruthi Mahalingaiah MD1,2</p> <p>Affiliations: 1Department of Environmental Health, Harvard T.H. Chan School of Public Health, 665 Huntington Avenue, Boston, MA 02115, USA 2Division of Reproductive Endocrinology and Infertility, Department of Obstetrics and Gynecology, Massachusetts General Hospital, 55 Fruit Street, Yawkey 10, Boston, MA 02114, USA 3Charles River Analytics, 625 Mt Auburn St # 3, Cambridge, MA 02138, USA</p> <p>OBJECTIVE: To evaluate the experiences and perspectives of patients who underwent fertility treatment with assisted reproductive technology (ART) in New England. MATERIALS AND METHODS: Fifteen patients participated in semi-structured interviews evaluating their experiences of ART care at fertility clinics in New England. The inclusion criteria were patients over the age of 18 who utilized ART, including embryo transfer(s), between July 2017 and April 2022. Interviews were recorded, transcribed, and anonymized. Transcripts were analyzed using NVivo 12 software by two independent coders. The constant comparative method with inductive coding was performed to create a codebook identifying important concepts in the text. All discrepancies were reviewed and resolved with a third-party mediator. Reflexive thematic analysis was then performed to identify predominant themes present in the data. RESULTS: The three categories evaluated were: 1) factors participants found made their care experience more difficult, 2) factors participants found made their care experience more helpful, and</p>

	<p>3) emotions participants experienced during care they received. Under factors participants found made their care experience more difficult, the main themes identified were: 1) the high burden and complexity of financing fertility treatment, pertaining to the cost of ART and navigating insurance policies, 2) negatively perceived provider attitudes and behaviors toward the patient, 3) unsatisfactory provider-patient communication, and 4) the complex and unpredictable nature of fertility treatment (medication administration, frequency of investigations, unpredictable IVF outcomes). Dominant themes under factors participants found made their care experience more helpful were: 1) strong provider-patient communication and facilitation of informed decision making, 2) strong operations and organization of the clinic in coordinating care, 3) social support networks with family, friends, and other people undergoing ART, and 4) alternative health therapies involving acupuncture. For emotions participants experienced during care they received, the primary theme identified was anxiety and general emotional strain due to the uncertain and high-stakes nature of fertility treatment.</p> <p>CONCLUSIONS: This study provides insight into the various system factors and patient perceptions that can have a positive or negative impact on a patient's experience while undergoing treatment with ART. The strongly identified challenges in financing ART due to cost and insurance policy factors may represent an issue that is particularly emphasized in the United States, where public funding of ART does not currently exist. Fertility clinics and providers are encouraged to utilize the findings from this study to inform upon ways they can improve the patient care experience by addressing factors within their control.</p> <p>IMPACT STATEMENT: This is the first qualitative study evaluating patient experiences while undergoing ART at New England area clinics. The findings from this study provide insight into various factors impacting patient perspectives on ART that can help improve the quality of fertility care.</p>
SDOH at BCP	<p>Boston Community Pediatrics (BCP) is a nonprofit private practice in downtown Boston. Its providers work with underserved children and their families. Their model is holistic, and they address both medical concerns and behavioral/social needs. They have case managers who help connect patients with outside resources (social workers, family therapists, after-school programs).</p> <p>My primary responsibility was a research project on the social determinants of health of the</p>

	<p>practice's patients. BCP's providers enter patient SDOH data into the EMR (Athena), but the data is not readily accessible, so I organized all of that data into Excel. I also evaluated the practice's workflow for SDOH data collection, looked for pain points based on qualitative data collection and secondary research, created an improved workflow, and presented and implemented that workflow within the practice. BCP uses SDOH data to obtain grants from different organizations, including the CDC, so having an efficient, organized process for data collection and management is essential to the success of the practice.</p> <p>I also worked closely with Dr. Robyn Riseberg, the owner of BCP, to learn more about the business side of the practice. I asked her about many topics, including funding, insurance coverage/reimbursement, partnerships, finances and accounting, and pros/cons compared to for-profit practices. As someone applying into pediatrics and hoping to own a practice in the future, this information is very useful to me.</p>
<p>Opportunities for Next Generation Therapies in Women's Health: An Evaluation and Value Proposition</p>	<p>Upon joining the healthcare and life science practice at Deloitte Consulting, I was given autonomy to complete a research project of my choosing related to next generation therapies. Through combining my professional interest in women's health, I decided to explore the potential for these futuristic therapeutics to be utilized across women's health services. Over the course of six months, I conducted subject matter expert interviews and reviewed academic/financial reports to find answers for my research prompt. This work was complemented by attending training sessions hosted by Deloitte on executive interviewing, storyboarding and public speaking. During the project I summarized my findings, which highlighted insufficient work in the women's health space and proposed solutions, before presenting my work live to senior Deloitte healthcare leaders across the US offices.</p>
<p>Increasing Awareness of Cardiovascular Health Among Indonesians</p>	<p>The practicum will consist of two parts, of which the first is the on-site work which will be done at the headquarters of Indonesia Heart Foundation in Jakarta, Indonesia, and second part will be the remote work, which is follow-up work from the progress made during the on-site work.</p> <p>The on-site work will include being involved in all of the activities of Indonesia Heart Foundation during December 19, 2022 to January 22, 2023, as determined and assigned by the preceptor.</p>

	<p>Activities include managing health promotion campaigns, visiting offices and schools to provide promotive and preventive health education, as well as coordinating with possible companies who want to form any sort of partnerships with the foundation. These routine activities will be the daily routine during the on-site working experience.</p> <p>One of the biggest projects that the foundation is doing is a new initiative that will be focusing on increasing awareness about rheumatic heart disease in Indonesia, which is a novel area of focus as previous and existing efforts have always focused on coronary heart diseases. This new initiative will require a lot of coordination among different stakeholders, including the Ministry of Health, the regional chapters of the foundation, the association of cardiologists, other NGOs, and existing as well as potential donors. Future expansion of this initiative include conducting screenings for rheumatic heart disease in school children, starting with a pilot project confined in the Jakarta area, and subsequently designing a screening program that can be done across the regional chapters.</p>
<p>Clinical research analyst (digital health)</p>	<p>I interned with SideKick Health, a digital therapeutics company based in Iceland. Their vision is to provide a technology-powered app, driven by gamification principles, that is built on science and rooted in behavioral economics to maximize patient engagement and improve health outcomes for patients suffering from chronic conditions.</p> <p>As a clinical research analyst intern, my main tasks involved analyzing major disease areas, including their epidemiology and policy-making, as well as understanding the underlying pathophysiology, health economics, and clinical pathways as critical factors in reducing the burden of disease.</p> <p>During my internship, I gained a deep scientific knowledge of multiple indications, including their clinical pathways, current standards of care, and treatment innovations. I also developed the ability to work with research scientists and communicate scientific insights in a concise and synthesized way.</p>
<p>PHC Community of Practice at World Bank Group</p>	<p>I worked on two projects. The first one is to facilitate the delivery of courses on health system strengthening to ministries of health and other stakeholder. The task included translation of material, design and analyze final course survey for future improvements. The second is to edit a lending document on NCD projects.</p>

<p>Optimizing Billing Accuracy for Lynn Community Health Center</p>	<p>My practicum project was aimed at supporting the Lynn Community Health Center's transition to value-based care. LCHC is a freestanding, nonprofit, federally qualified health center that has served as the primary source of primary care and behavioral health services in the community of Lynn, Massachusetts. LCHC has been in the midst of a radical transformation as MassHealth transitions to a Value-Based Payment model. My practicum project focused on conducting an analysis to determine the most effective method for accurate and efficient billing. This included comparing the traditional clinic model to a wellness clinic model to an external auditor model. The wellness clinic allowed providers more time to care for patients and appropriately document the encounter. The idea was that the extended time would lead to more accurate diagnosis coding, resulting in better reimbursements. The external auditor model required auditors to go back into the chart, read the clinician's notes, and apply the appropriate coding. Through my practicum, I had the opportunity to work closely with the CEO and CFO of the health center, gaining valuable insight into the work of the health center's c-suite.</p>
<p>Assessing Organizational Needs at Commonwealth Care Alliance</p>	<p>We conducted a Needs Assessment to expand understanding of opportunities for innovation at Commonwealth Care Alliance (CCA) using input from multiple levels of CCA employees and the membership CCA serves. CCA, as a globally capitated care delivery organization and health plan for those dually-eligible for Medicare and Medicaid, has been at the forefront of health care innovation for the last forty-five years. CCA is best known for deploying home-based medical and social resources to improve the health outcomes of traditionally marginalized and often vulnerable patients. The advent of technology-enabled health care improvements has led to advances in care delivery and process improvements that could benefit CCA; CCA has not, however, consistently matched organization- and population-specific needs with available technology and innovation opportunities. We identified key opportunities that will both improve the organization and help promote CCA's reputation as an innovative company. Given the multiple domains in which CCA operates as a payer and provider, we aim to connect with diverse parts of the organization and the members served by CCA to capture the participants' opinions about the successes and needs of the organization.</p> <p>The Needs Assessment involved Listening Sessions that consisted of group-based, in-depth interviews</p>

	<p>of key informants (KIs). We used a set of open-ended questions about topics including work experience at CCA, observations, and suggestions and needs required for future innovations and organization success.</p> <p>An innovative health plan and care delivery organization for high-cost, high-need patients has the potential to influence health and social systems. Through the information obtained in the Innovation Listening Sessions, we identified the innovation successes at CCA, areas for further improvement, and community-driven ideas for effective innovations.</p>
<p>Transforming Men's Healthcare: A Holistic Approach</p>	<p>One of the biggest issues in the realm of men's health is the fact that men seek care much less frequently than women do. Further, the first time many adult males seek medical care is with a urologist, often for an issue such as erectile dysfunction that could have been diagnosed and treated earlier, if not entirely prevented, with better primary care. Through this project, I worked with 5 subject matter experts, urologists and primary care physicians, to develop a model for a holistic men's health center that could better transition males from pediatric to adult care, with comprehensive services available to properly care for male patients. By providing both medical and non-medical services, we can create more impactful care centers that address issues early on and help begin to close care gaps in our society.</p>
<p>Care model innovation: Incentivizing high value surgical care.</p>	<p>Introduction : Aggregate surgical expenditures have also been modeled to grow to 7.3 % of the US GDP or 1/14 of the US economy in 2025. Surgical care is particularly suited to a value-based care framework. These observations serve to highlight the salience of value-based care to surgical practice and the following project will assist in exploring various remuneration models to assist hospital systems in selecting the most appropriate method.</p> <p>Methods : The current study will take the form of a 12-month prospective trial with the option for renewal. We will select two, subspecialty surgical groups: Minimally Invasive Surgery and Plastic Surgery, given their relatively elective nature, high frequency of procedures, accessibility under the same department of surgery and compensation plan, and higher direct costs of disposable equipment and implants. Every month, each surgeon participating in the pilot trial will be given data regarding their cost per procedure and complication profile. Along with this data, they will be given a de-identified rank list of where they stand in relation to their surgeon-peers who are doing the same</p>

	<p>procedure. Data will be tabulated at a division level quarterly and posted in monthly faculty meetings.</p> <p>Deliverables : The following practicum study presents a blueprint of processes to encourage surgeons to make cost-effective choices. This includes real-time information about spending, divisional reporting of individual surgeon cost and complication outcomes, and radical transparency.</p>
<p>Re-imagining Augnito Spectra for the Patient</p>	<p>I worked at a health tech company called Augnito, which is a SaaS company offering a suite of products to the provider to reduce administrative workload. My project was to develop use cases of their products with patients as the end user. I got to develop a value proposition, scout the competitive landscape, explore the scope of the problem. As a bonus, I also got to do a project exploring the uses of generative AI in reducing clinical workflow.</p>
<p>Product Development with Mass General Brigham - Population Health</p>	<p>Mass General Brigham is a large health system in the northeast, created in the era of fee-for-service payment, and has recently committed to transitioning a large portion of their contracts to value-based care over the next several years. Working directly with the Product Team within Population Health at MGB, I initially aided the team in work to help the enterprise improve its performance on several quality measures for a Medicaid ACO the enterprise operates. This involved understanding the key specifics of quality measures and determining how a health plan and a provider system may join efforts to plan for better outcomes and improved coordination of care.</p> <p>The latter half of my work centered around vendor appraisal as we considered how the system may optimize efforts to improve care, while at the same time creating an ROI.</p>
<p>Modelo Health: Supporting the Fundraising and Value Proposition Definition of a mHealth Application Improving Maternal Health Outcome</p>	<p>Modelo Health™ is the first preventive care app that monitors across all health determinants, and provides an inclusive, multilingual and personalized experience to every mom and her birth team.</p> <p>During my practicum I supported the definition of the business model including: the value proposition for each stakeholder, the profit formula and, to a lesser extent, the processes and features the technology would need to include to deliver on its value proposition.</p> <p>When I joined the company, its business model was not finalized and the willingness of providers to pay for a risk stratification technology without evidence was not demonstrated. This would have been an important challenge considering providers (the main target)'s increasingly constrained</p>

	<p>budgets.</p> <p>I worked on understanding the app’s initial value proposition reviewing the problem at stake, the current standard of care, selected unmet needs, analyzing the competitive landscape and interviewing people at Modelo (CEO, CMO, Advisors).</p> <p>In parallel, I analyzed possible payments systems leveraging my US Payment System class and came up with four possible business models:</p> <ol style="list-style-type: none"> 1. FFS 2. Disease management platform (per member per month - PMPM) 3. FFS providing access to alternative payment models such as Masshealth’s Comprehensive Quality Strategy (CQS), Flexible Support Program (PMP) and BSBCMA’s Alternative Quality Contract (AQC) 4. FFS to address DEI <p>Considering the size of the available payment, the evidence needed to trigger the payment, the mission of Modelo and after interviewing several health systems CMO, we selected 4 as an early stage model and 2 as commercial model.</p>
<p>Mental Health Toolkit for Youth and Young Adult with Special Health Needs</p>	<p>My practicum involved working with the Division of Child & Youth with Special Health Needs at the Massachusetts Department of Public Health on the mental health section of the Health Transition Toolkit project. The goal was to provide resources for youth and young adults with special health needs to ensure a smooth transition to adult care.</p> <p>Addressing the overemphasis on clinical diagnoses in the initial draft, I introduced a new framework that conceptualizes mental health as a continuum, prioritizing prevention and promotion. Incorporating this new perspective, I restructured the toolkit's outline to differentiate between youth with pre-existing mental health conditions and those with emerging concerns. Additionally, I collaborated with a fellow team member to develop a caregiver survey, collecting valuable insights regarding needs and strategies for promoting their children's mental health. The new framework also</p>

	<p>facilitated the inclusion of a broader range of support and resources, such as peer-to-peer groups, digital-aided services, and community educational programs, which are more accessible and affordable for youth to foster mental health and resilience.</p> <p>The continuum framework and supportive system not only encourage a more nuanced and comprehensive understanding of mental health but also promote a more tailored and effective approach to meet the unique needs of youth with special health needs. This work has the potential to normalize mental health and encourage increased utilization of resources and support available to youth and young adults with special health needs during their critical transition to adult care.</p>
How Top Leadership Teams Regenerate Beyond COVID-19	Helped conduct a qualitative analysis on leadership structure and organization for a large community healthcare organization abroad. Interviewed C-suite leaders and policymakers.
Inhealth Market Analysis	Developing a market access strategy and financial models for a new concierge medicine service in London
QI projects in Latin America	<p>A Practicum at the IHI will allow you to be involved in the development, deployment and evaluation of QI projects around the world. You would gain a lot of experience in project management and at developing improvement packages for different topics. The Latin America team works with different topics such as pediatric cancer, HCPs well-being and resilience, maternal mortality and much more.</p> <p>The work environment although it's completely remote, is a very nice place to be. Every partner and teammate is motivated to do the best they can for the projects' results. The IHI has a framework for Joy in Work and it completely lives by it on a daily basis.</p> <p>You can collaborate as much as you want and opportunities will follow your interests if you ask and negotiate them. It is a wonderful professional growth environment.</p>
Streamlining and Automizing the Flow and Analysis of Production Data	During the production process, large amounts of data are generated. This data must be processed, analyzed, and documented for compliance purposes. The internship's main focus consisted in automating, accelerating, and streamlining this data analysis flow. This increases the production unit's capacity to influence and react to the production process and minimizes response times when

	<p>interventions are required. It also increases the visibility and availability of data, enabling deep-learning approaches and advanced analytics.</p> <p>Effective data management is critical to the company's mission in several ways:</p> <ul style="list-style-type: none"> a) data-driven insights allow for and improve the output of research efforts and the development of new or improved products. b) on the operational side, inefficiencies and potential improvements are identified, allowing for optimizing the production process in general and its cost-efficiency in particular c) with regard to compliance, effective data management increases the trust of regulatory bodies and decreases the lead time for compiling applications for regulatory approvals as well as their positive return rate from the national authorities.
<p>Right Care, Right Place, and Right Time in Maine</p>	<p>This qualitative research project aimed at collecting information on health care barriers in Washington County, Maine, through semi structured interviews with a diverse coalition of care providers, social workers, community members and various other healthcare stakeholders. These interviews were analyzed using NVivo analysis software and summarized in a final report with findings and recommendations to the funder.</p>
<p>Strategic development and implementation of digital educational curricula and telehealth interventions for humanitarian emergencies</p>	<p>Global humanitarian crises, from natural disasters to armed conflict, have led to the rise of displaced populations. My project at HTWB, a nonprofit that provides digital health aid to disaster zones by partnering with local institutions, aimed to serve displaced refugee and migrant communities in Pakistan. The population has faced unprecedented floods since summer 2022, causing limited access to healthcare despite increased prevalence of health issues such as contaminated water and mosquito-borne illnesses. HTWB thus partnered with the National Institute for Kidney and Urological Diseases (NIKUD) Research Hospital in Karachi, Pakistan, to develop and implement the Pakistan Flood Response, a community-led program that aims to equip local clinicians and villagers with additional knowledge and specialized skills for managing flood-related health problems. A collaborative network of local healthcare providers, subject-matter experts in disaster medicine and global health, and nonprofit volunteers was established to build the program. The program has resulted in a digital educational curriculum of clinician-to-clinician and clinician-to-patient educational videos delivered to clinicians and villagers, telehealth interventions, and combined remote and on-site support for communities impacted by devastating floods. Future program</p>

	<p>directions include evaluation of service quality and ability to scale the intervention. In sum, the use of health technology for specialized education and training in humanitarian disasters has potential to aid in disaster response through an adaptive volunteer network and support from necessary on-site partnerships.</p>
<p>Literature for Public Health</p>	<p>I undertook a self-organised writing practicum, conducting preliminary fieldwork for a mixed-methods work of creative nonfiction incorporating reportage, ethnography, memoir and primer under the working title 'What They Teach You At The Harvard School of Public Health' ^[L]_[SEP]</p> <p>Alongside 50 credits of coursework, I attended over 100 extra-curricular academic events (panels, conferences, fireside chats, seminars, film screenings, etc.), engaged in hundreds of conversations with staff, students, and the wider community in Boston, Wyoming and Atlanta (the latter through the CDC program evaluation practicum), and prepared over 70,000 words of field notes. I participated in biweekly symposia as a member of the climate leaders program and published three pieces of public health advocacy and journalism in Harvard Public Health Magazine, the Harvard Crimson, and The Missouri Review. I was nominated for the Pushcart and Perkoff Prizes for non-fiction writing, prepared a book proposal and several draft chapters.</p> <p>^[L]_[SEP]Very few people have the opportunity to come to Harvard, but all stand to benefit from understanding what public health is about. Public health is well-served by those able to communicate complex ideas clearly to lay audiences, especially when such practitioners listen as well as speak. I have sought to do that.</p>
<p>A Comprehensive approach to cultivating student mental well-being and resilience through meditation, community, and leadership</p>	<p>This project focused on implementing SKY programming, a series of psycho-social retreats that empowered students by teaching them breath work and meditation, deep reflection and rest in silence retreats, and empowerment through leadership training.</p>