



IBM Health Corps 2018 Application Guide

Thank you for your interest in IBM Health Corps. Applications to host an IBM Health Corps team in 2018 will be accepted between January 17, 2018 and February 13, 2018. Please submit your application at www.ibmhealthcorps.org.

Table of Contents

Introduction	2
IBM Health Corps Overview	2
2018 Focus Areas for IBM Health Corps	3
Your Proposal	4
Responsibilities of Host Organization	6
Eligibility	6
Selection Criteria	7
Selection Process	8
Application for IBM Health Corps	9
Past IBM Health Corps Projects	11
IBM's Dedication to Health	13

Introduction

Innovation in data collection, analytics, and technology has driven major health improvements over the past century, and reduced critical health disparities related to the quality of and access to health services. Yet significant health disparities persist at the local, national, and international levels. Leading global health researchers have declared that, for the first time in human history, we have the financial and technical capacity to eliminate key health disparities between lower and higher income nations, preventing nearly 130 million deaths by 2030.¹ They have called upon the private sector in particular to strategically invest in research and develop health technology to help realize this vision of health equity.

IBM Citizenship has a long legacy of partnering with results-driven and innovative organizations in civil society, government, and academia to help drive social change. The IBM Health Corps program is a social impact initiative dedicated to bringing IBM's tools, technology, and expertise to work in collaboration with deeply-immersed health organizations to address health disparities across the globe.

¹ Jamison, D.T. et al. "Global health 2035: a world converging within a generation." *The Lancet* (2013); 382: 1898-955. Boyle, CF, Levin, C, Hatefi, A, Madriz, S, & Santos, N. "Achieving a "Grand Convergence" in Global Health: Modeling the Technical Inputs, Costs, and Impacts from 2016 to 2030." Published Oct 9, 2015; DOI: 10.1371/journal.pone.0140092



IBM Health Corps Overview

IBM Health Corps, a global pro bono program focused on tackling health disparities, partners with public and civil sector health organizations across the world. Akin to an incubator, Health Corps provides the environment, experts, and services needed to nurture new ideas in public and population health. Our projects focus on using data, technology, and design to expand access to health services and improve health systems and population outcomes.

Organizations awarded an IBM Health Corps engagement receive an interdisciplinary team of five to six IBM experts to live and work at the project location for three weeks. During the three-week engagement, the Health Corps team works to address a mission-driven strategic priority, identified by the host organization. Activities conducted by the IBM team may include gathering and analyzing data, running discovery workshops with stakeholders, and prototyping

solutions. The teams leverage IBM tools (such as data analytics and mobile technology) and methodologies (such as human-centered design) as suited to the nature of the idea being explored. The right fit projects for Health Corps are underpinned in a belief that data, technology, and design are key instruments for improving decision-making and resource optimization in health care and public health.

The Health Corps model is not a traditional consulting program. It is an “incubation” program for ideas, and at its core is an emphasis on close collaboration between IBM and the partner organization. Each partner contributes its own expertise and assets to achieve project goals, and throughout the engagement the teams work together side by side to co-create a path forward.

The objective of the engagement is to equip the organization with the tools, workflow and interaction designs, prototypes, recommendations, and/or roadmap it needs to advance its mission

after the Health Corps engagement.

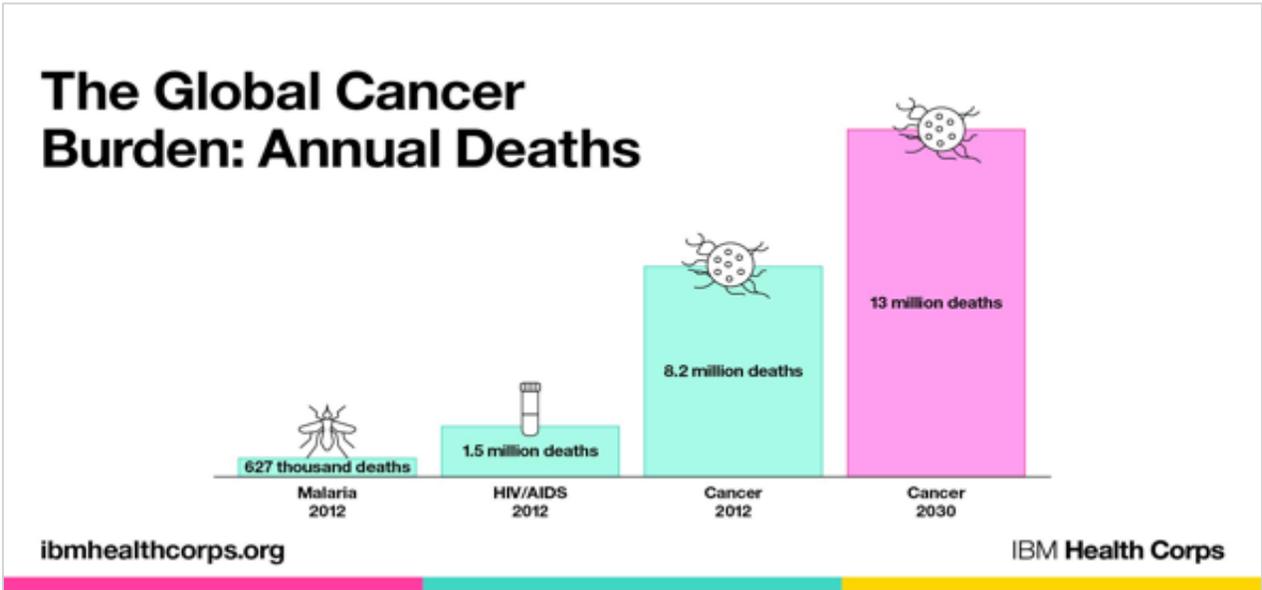
Past recipients of IBM Health Corps teams include the American Cancer Society, Taiwan Centers for Disease Control, Gorgas Memorial Institute for Health Studies in Panama, and Duke Health. You can read more about these projects on page 11.

This year, IBM Health Corps will be accepting proposals to tackle health disparities in the areas of cancer (early detection & access to care) and health workforce strengthening and support.

[IBM Health Corps 2018 Focus Areas](#)

In 2018, Health Corps partnerships will be focused on two areas:

1. **Cancer:** Increasing access to health and public health services, improving the quality of care, and decreasing the cost of diagnosis and treatment in cancer
2. **Health workforce:** Empowering the health workforce around the



world to be better equipped to make decisions in their respective environments

Cancer: The global cancer landscape is complex and rapidly evolving due to shifts in the global burden of disease, and changes in environment and lifestyles. While significant medical advances have been made in cancer treatment, disparities in the prevention and delivery of cancer care persist, especially in low-resource settings. Critical issues underscoring these disparities include inadequate resources for prevention and diagnostics, poor health IT infrastructure to manage awareness, lack of treatment services, limited high-quality patient and population data to inform clinical and public health decision making, and inefficient markets for therapy.

IBM Citizenship's objective is to bring tools and strategies in technology, data and design to increase access to and quality of prevention, detection, and care services in order to reduce disparities and increase survivability of cancer. Projects that focus on improving or scaling access to health promotion, screening, diagnostics, and treatment, through the use of data, technology, and design, provide some of the best opportunities to leverage IBM's expertise and technology within the cancer ecosystem.

Health Workforce: A strong health workforce is essential to achieving universal health coverage. Challenges in the health workforce today, such as insufficient education and training to

reflect today's environment for entry and seasoned workforce; shortages, skills imbalance, and retention issues; and inadequate tools to ensure efficient work, are well suited for incubation by IBM Health Corps.

IBM Citizenship aims to support building the capacity and skills, and improving processes or tools for the health workforce across a variety of sectors. We use the term "health workforce" to be inclusive of clinically-trained workers, community health workers, and people in roles of health management and support, such as ministry of health officials and hospital administrators. We are looking for projects where we can utilize IBM's experience in health IT, analytics, and design to impact the individuals and the systems in which they work, ultimately leading to improved patient care and public health delivery.

Your Proposal

- The proposed project should be focused on **reducing health disparities**. The project may be related to increasing access to health services and/or improving the quality and delivery of healthcare and public health. Projects focused on impacting access to **cancer care** and enabling the **health workforce** -- our strategic initiatives for 2018 -- are preferred.

- The work the IBM Health Corps team will do should be focused on “prescribing” a solution, rather than “diagnosing” a problem. Projects should focus on an applied issue, rather than long-term research questions.
- The challenge should be rooted in a strategic priority related to achieving the organization’s mission. The strongest proposed projects will focus on a challenge directly related to health. Projects related to an internal operational challenge (i.e. board development, marketing, fundraising) are **not** suitable for IBM Health Corps.
- IBM Health Corps provides expertise, not funding. The organization should have a source of funding to support future work on this priority after the three-week period.
- The health challenge being tackled by the IBM team should be a priority for the organization to address in the next 6-12 months, with agreement from organizational leadership that this is a high-need area of inquiry.
- IBM is seeking a project where there is clear alignment with the value IBM can bring with its expertise in data analytics, AI, design, and strategy consulting. Examples of appropriate projects include improving data collection and analysis methods to improve decision making around patient care, public health interventions, or operations for successful health delivery (e.g. supply chain).
- Data (clinical and/or nonclinical) should underpin the proposed challenge. While the organization



need not already have access to all the data necessary to complete the analysis, the organization should have a vision for how data may help address the challenge.

- The project proposed for the IBM Health Corps team must be meaningful, catalytic, and achievable in a three-week period, and should benefit from the collaboration of five to six IBM cross-disciplinary experts.
- The organization should be well positioned to act on the IBM Health Corps team’s recommendations and carry the work forward after the three-week project. This includes having commitment from leadership, resources to drive the work forward, and relationships with relevant stakeholders.
- Up to three project ideas may be proposed for consideration. The Health Corps program staff may work in conjunction with the organization to identify a specific, actionable scope of work for one of the proposed projects after the application is submitted.

- Applications will be accepted between January 17 and February 13, 2018. Please submit the application at <http://www.ibmhealthcorps.org/>.

Responsibilities of Host Organization

As a partner in the Health Corps engagement, the host organization is responsible for garnering support for the project prior to and during the team's three weeks on site. This means assigning select dedicated staff members to work together with the IBM team as one project team, as well as building interest and momentum throughout the organization and its stakeholders for the project.

Key Roles

- **Executive Leader:** C-suite or equivalent (e.g. Minister of Health, CEO, Executive Director), personally committed to the project and available to provide high-level guidance to the IBM team, and receive the final recommendations.
- **Executive Sponsor:** Strategic thinker who is effective at driving change. Has authority over budget, resources, and scope of the proposed project, and affirms that the project is high priority. Provides expertise in the subject matter. Is personally accessible for meetings with the IBM team throughout the project. Ensures logistical components of IBM Health Corps project are met. (*Note: Executive Sponsor may be the same person as

the Executive Leader. If roles are unique, Sponsor and Leader should work together.)

- **Project Leader:** Individual that prepares and executes the Health Corps project. He/She will also build and lead the organization project team that engages with the IBM team. He/She will continue to engage with IBM after the grant in the delivery and follow up reporting activities. (*Note: Project Leader need not be identified in Phase I of the application process).

Project Logistics

Provide a physical working space for the team. The space should be close to key organizational leaders, the population who are affected or will benefit from the execution of the grant, and the other players in the ecosystem. This space should be equipped with internet access.

Reporting

Report progress and impact to IBM Corporate Citizenship on a quarterly basis for 12 months following grant implementation.

Eligibility

- **Organization Type:** Grants will be awarded to public and civil sector organizations. Examples of eligible organizations include governmental, nonprofit and non-governmental organizations that deliver healthcare and/or health services such as clinics, hospitals, and public health departments.

- Nongovernmental organizations must be legally registered as a 501(c)3 nonprofit in the US or the equivalent in the country where the project will take place
- Past recipients of IBM’s Smarter Cities Challenge, IBM Health Corps and Corporate Service Corps grants are eligible.
- **Language:** Because the IBM Health Corps project will be jointly scoped by the Health Corps Program Team and the applying organization, the application must be submitted in English, and the executive sponsor and project leader must speak English as well. This will facilitate conversations that lead to the development of a strong project. The three-week project itself need not be conducted in English. IBM will provide translators if required.
- **Location:** Applications are welcome from all geographies across the globe, however priority will be given to countries in which there is an IBM office. If you have questions about whether the proposed location of work meets IBM’s requirements for safety and accessibility, please contact the IBM Health Corps team.

Selection Criteria

The IBM Health Corps engagement is a partnership between the organization and IBM Corporate Citizenship that brings the knowledge and assets of the organization together with IBM’s unique expertise and tools to create impactful solutions to health challenges. A key objective of the selection process is to

assess the organization’s potential to work collaboratively with IBM Health Corps and its capacity to sustain the work following the three-week engagement. Organizations are encouraged to consider the following selection criteria when submitting an IBM Health Corps application.

Organization Commitment, Culture, and Capacity

- Exhibit buy-in from your executive leadership.
- Demonstrate your organization’s authority or influence to drive change in the ecosystem in which the health challenge exists. You should have a positive and influential relationship with other stakeholders and partners that are involved in the ecosystem.
- Demonstrate a track record of innovation and achievement on key strategic priorities.
- Demonstrate your organization’s readiness to act on this challenge now.

Quality of Proposed Project

Health Corps provides an incubator-like environment to organizations we partner with, bringing IBM expertise and technology to address the most challenging health issues and turn ideas into tangible outcomes. The project should demonstrate potential for an impactful health solution, and the strongest projects will utilize the experiences and assets of both the partner organization and IBM. Proposed projects should:

- Outline a critical strategic challenge and clear vision on what the organization wants to achieve.

- Explain how successfully addressing the topic will improve access to or quality of health services for the target population, and ultimately reduce health disparities,
- Emphasize the role of data, technology, and/or design in the project; outline plans for providing access to all relevant data.
- Ideally, the project should be geographically based where:
 - The challenge can be observed first hand
 - The organization’s staff may already be working on the challenge
 - IBM Health Corps can connect directly to stakeholders (e.g. organization’s staff, partner organizations, policy makers) via in-person interviews
- Aligns with Health Corps 2018 Strategic Priorities of cancer and health workforce
- Close alignment with organization’s work and expertise, with specific outcomes, goals, or strategies in place.

Selection Process

Phase I: Complete Application

- Submit the online written application at www.ibmhealthcorps.org.
- Application portal is open from January 17 – February 13, 2018

Phase II: Project Scoping Discussion with IBM Health Corps program team

- A select number of applicants will be invited to participate in a project scoping discussion with the IBM Health Corps program team. This will be conducted in English via telephone.
- Expected discussion length: 1-2 hours

Phase III: Finalist Interviews

- A subset of applications that show the most promise to yield impact from the collaboration with IBM Health Corps will be selected for finalist interviews.
- Expected interview length: 1 hour

Phase VI: All Applicants Notified

- Applicants will be informed of their selection status

Application for IBM Health Corps

Instructions: Please complete each section. The application must be submitted in English. As a reminder, IBM Health Corps provides in-kind project support, *not* funding. Please take this into consideration when applying for this program.

Section 1: Organization Background

1. Organization: Name, address
2. Contact Person: Name, title, contact email address, contact phone number
3. Organization sector (select either): Government/public sector or Non-governmental organization (NGO/non-profit)
4. Organization type (select all that apply): Ministry of Health/public health department; Other governmental agency; Health provider (e.g. clinic, hospital, physician practice); University/research institution; Community, regional, or national nonprofit organization; Other
5. Please describe your organization's existing capacity and ability to host a Health Corps team (e.g. sufficient human and financial resources), and to sustain the project upon completion of the three-week engagement.

Section 2: Organization Priorities, Culture, and Commitment

Provide a summary statement about your organization's mission, value, and strategic priorities. Provide a few

examples of how your organization has demonstrated leadership and innovation in achieving your strategic priorities. Why are you best positioned to engage with IBM Health Corps? [500 words]

Section 3: Project Proposal

Submit your project idea for a three-week on-site project with IBM Health Corps. Please refer to the "Your Proposal" section in the Application Guide for guidance. If you have multiple strong ideas, you may submit up to two additional proposals.

Please write a 700-word narrative, ensuring that you provide the following key pieces of information:

- **Summary of proposed project:** Describe the nature and extent of the need/problem you seek to disrupt. Your idea should address a health disparity related to access, quality, and cost of care, with priority given to ideas in cancer or health workforce. In your response, please answer the following questions: What is the "as is" state?² What is the desired "to be" state? What are the current gaps/challenges that your organization faces when addressing this challenge? How will an IBM Health Corps engagement advance your work?
- **Is this need within your 2018 strategic plan?** Please comment on the strategic importance of this

² "As is" and "to be" scenarios are tools used in IBM Design to understand how a challenge is currently experienced (potentially by an individual or by a population) – i.e. the "as is", and create what a desired future state would be – i.e. the "to be." You can learn more about design here: <https://www.ibm.com/design/thinking/>

issue, and what your organization has done to date to address this issue.

- **Project Assets:** What assets and resources have you already allocated to addressing this challenge? (e.g. funding, staffing resources, technology resources)
- **Potential impact:** What short-term outcomes and long-term impact do you envision achieving as a result of a successful collaboration with IBM Health Corps on this issue? What will be the impact on the population you serve? What is the value proposition of your idea?
- **Role of data and technology:** What is the value that data and technology could bring to addressing this challenge? Please include any information on the relevant data sources for this project.
- **Ecosystem:** Who are the partners that are key to engage and work with to achieve success on your goal (i.e. regulatory agencies, policy makers, NGOs, health delivery systems)? What roles would they play in your work?

Section 4: Project Logistics & Support

Please answer each question below.

1. **Project Location:** The country and city where the IBM project team would be based during the three-week engagement. The project location should ensure access to stakeholders and your organization's staff for interviews, and the opportunity to observe the challenge first hand.
2. **Executive Sponsor:** Your Executive Sponsor should have authority over

budget, resources, and scope of the proposed project.

3. **Project Leader (if identified):** The project sponsor should have direct buy-in and ownership over the success of the project. Supports executive sponsor in executing terms of grant prior to the three-week engagement, while IBMers are onsite, and in follow-up reporting activities. They should provide guidance and engage relevant internal and external stakeholders while the team is on the ground.

Letter of Support

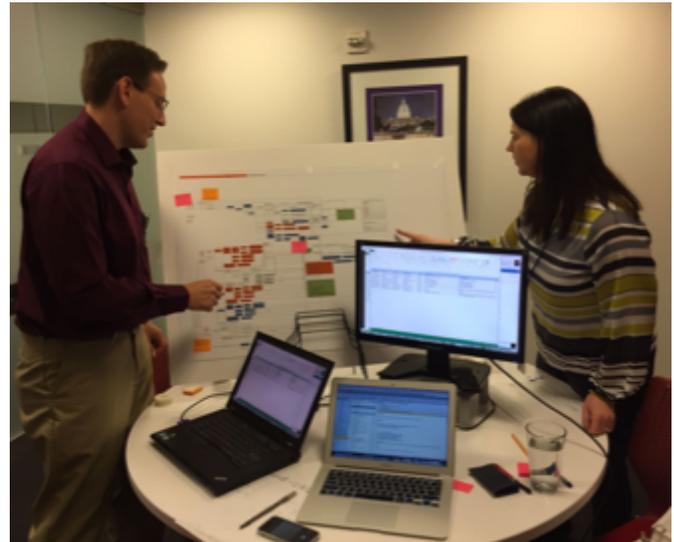
Please submit a letter of support from your organization's executive leader (e.g. Minister of Health, CEO, Executive Director). This letter should demonstrate the leader's commitment to the proposed project(s), and explain how the project(s) will advance the organization's ability to achieve its mission. The letter should be uploaded as a part of your application at www.ibmhealthcorps.org.

Past IBM Health Corps Projects

IBM Health Corps teams have worked with government bodies, nonprofits, and health systems to tackle health disparities from a variety of angles. Examples of past projects follow.

American Cancer Society and IBM Health Corps partnered to create a chemotherapy-forecasting tool for use by ministries of health in Sub-Saharan Africa. One of the greatest global challenges for cancer today is delivering health care in low-resource countries. By pulling together cancer treatment guidelines and epidemiological data, along with the practicalities of how cancer care works in hospitals in Sub-Saharan Africa, the team formed the foundation of a functional, user-friendly tool. This tool, called “ChemoQuant,” allows public health officials to create accurate chemotherapy forecasts and improve the procurement process, which ultimately impacts market transparency and access to life-saving care. (Watch this [video](#) to learn more.)

IBM Health Corps partnered with the **Taiwan Centers for Disease Control** to help improve their capacity to evaluate potential interventions to fight dengue fever. Globally, dengue fever is the most rapidly spreading mosquito-borne disease, and is a major cause of morbidity and mortality across the tropics and subtropics. The IBM team delivered a mechanistic model to predict the impact of introducing Wolbachia-carrying mosquitoes on the case counts for dengue fever and the



mosquito population, and a prototype of a decision support interface to facilitate data visualization for decision makers. (Watch this [video](#) to learn more.)

IBM Health Corps continued its partnership with the **American Cancer Society** to together create a new tool to help oncologists in Africa gain access to the knowledge of their peers and best practices. The tool will assist oncologists in a clinical setting as they treat patients by providing an efficient way to access treatment protocols and options. The IBM cancer care assistant will improve the quality and capacity for lifesaving cancer treatment in sub-Saharan Africa.

Panama has seen the emergence of serious infectious diseases, including Zika and Chikungunya, as well as the re-emergence of dengue fever, in recent years. **Gorgas Memorial Institute for Health Studies**, one of the most prestigious medical research institutions in the world, partnered with IBM Health Corps to build the technical infrastructure to facilitate more rapid and effective decision-making around infectious disease control. They

developed components of a geo-referenced vector-borne disease surveillance system that relays information from field investigators to policy makers. This project received the *Fast Company* Innovation by Design Award for the human-centered design principles applied to enable vector inspectors to easily collect mosquito data. (Watch this [video](#) to learn more.)

As part of its “Advancing Health Together” strategy, **Duke Health** has committed to improving health in the broader geographic community and working beyond medical and clinical care to include the social determinants of health. In partnership with IBM Health Corps, they worked to design a platform that facilitates improved community and population health information-sharing and mapping. The platform will serve as a centralized repository of community and population health activities and inputs, as well as a mechanism to identify potential areas for collaboration among community

stakeholders engaged in population health.

Unity Health Care, Inc. is one of the largest community health centers in the country, providing quality care to more than 100,000 medically underserved and vulnerable patients and families. IBM Health Corps worked with Unity on the launch of an integrated behavioral health-primary care model. To date, Unity’s new model of care has increased patients’ access to services, and increased staff satisfaction. (Watch this [video](#) to learn more.)



IBM's Dedication to Health

IBM has long played a leading role in advancing health through technology. With more than 3,000 researchers in 12 labs around the world, **IBM Research** is one of the world's largest and most influential corporate research labs. The IBM Research Healthcare & Life Sciences team is dedicated to exploring, developing, and improving processes for a broad range of health care challenges, blending a broad set of disciplines across focus areas such as computational genomics, healthcare informatics, and nanobiology.

In 2015, IBM launched the **IBM Watson Health** unit, which leverages AI to solve complicated health and medical challenges for patients, physicians, policy makers, researchers, and health insurers across the globe.

IBM Global Healthcare & Life Sciences industry teams deliver solutions for healthcare organizations, focused on health system performance and optimization, population health insights,

and individual insights and patient engagement. They have a wide breadth of clinical and healthcare expertise, focusing on helping clients to make data-driven decisions.

IBM Corporate Citizenship has a rich legacy of supporting community health initiatives and health research around the world through programs like Corporate Service Corps, Smarter Cities Challenge, World Community Grid, and Impact Grants. Through this work, IBM has seen an increasing need for thought leadership and technical support on complex health issues. This need to reduce health disparities within communities and health care systems around the world has driven the work to date done by the IBM Health Corps.

