Understanding the IAP Application Process

Phuong-Cac "PC" Nguyen
Design and Strategy Manager, Center for Health Care Innovation
Penn Medicine Lancaster General Health

The signature Innovation Accelerator Program (IAP) at the Center for Health Care Innovation (CHCI) at Penn Medicine Lancaster General Health offers consultative and facilitative services to those working on the frontlines of care who are trying to improve outcomes and patient experience. This invitation to participate in new advances in all areas of LG Health helps stir the culture and mindset of innovation across the system.

Working closely with innovation advisors, teams selected to participate in the program move through three phases of work — introduced to *JLGH* readers in the Fall 2022 issue — to validate solutions and bring successful innovations to scale. This article explains the IAP application process, as well as Phase 1.

IAP APPLICATION PROCESS AND SELECTION CRITERIA

Every IAP project is selected through a process over several months that includes submitting a completed application and attending interviews with the team at CHCI at LG Health.

The Center encourages applicants to submit projects under any theme; for the third round of IAP projects, the team was particularly interested in applicants who believe their ideas can make meaningful and measurable change by one of three avenues:

- Advancing value-based care models.
- Creating consumer-focused health care experiences to reduce friction and drive higher levels of engagement.
- Making LG Health the preferred place for employees by leveraging data and eliminating the burden of health care administration.

A major evaluation criterion by which applicants are judged is whether they have a clear and compelling problem. The IAP is designed to let the problem discovery process guide the team — a key part of the methodology at the core of how the Center's team works. Applicants must explain why the problem is important, as well as why existing solutions have not succeeded.

Further, projects are selected in consideration of other important criteria, such as:

- Whether the applicant can be a committed Champion with capacity to push the work forward.
- The team's willingness to rapidly explore multiple opportunities.
- The project's potential impact once a solution is proven effective and deployed at LG Health.
- The potential to replicate and/or scale the solution in other settings.

All projects also must have an Executive Sponsor — usually an employee with the standing and ability to open doors/remove barriers, ensure capacity, and set the environment for the Champion's success in the project.

Teams selected to participate in Phase 1 of the program receive mentorship and dedicated time from advisors at CHCI at LG Health, along with up to $10,000 in out-of-pocket expenses to test and develop their concepts. At the end of Phase 1, teams present their work to health system leadership for the opportunity to receive additional investment for a Phase 2 of the project.

PHASE 1 APPROACH AND TOOLS

Over a six-month period, teams explore the problem and its potential solutions during which small-scale implementation may prove the solution's viability.

Phase 1 starts with a workshop to orient IAP winners regarding CHCI at LG Health's human-centered-design approaches and innovation framework. This framework, the Double Diamond (see Fig. 1 on page 88), takes an iterative and agile approach in which ideas, assumptions, and concepts are continually refined and improved. The Double Diamond's four stages — Discover, Define, Ideate, and Validate — transition between *divergent* thinking or actions and *convergent* thinking or actions.

Teams then embark on activities to help understand the problem space and how they'll rapidly test solutions and gather evidence to move the needle.

The objective of the first diamond is to define the problem, specifically the problem that will bring about the desired outcome. To achieve this, teams must understand possible drivers. In this "Discover" stage, they will use a variety of tools and approaches of contextual inquiry to understand the users' experiences and uncover unmet or hidden needs. An example of a contextual inquiry method is "A Day in the Life," during which project teams experience a problem area as a user might.

Alternatively, teams may act as a "concierge," accompanying users as they navigate barriers. Project teams may also simply observe users to see how they use a product or service. During this period of contextual inquiry, teams also review existing research to better understand the problem context.

In the next part of the problem definition stage, teams define the problem and what might be causing it by synthesizing the data and insights gathered in the previous stage. This "sense-making" process helps manage complexity and discern patterns and themes. The tools used in "Define" include creating a journey map to visualize a user's experience or creating an assumptions matrix to determine how to de-risk a potential solution. Innovation is inherently risky; embarking on low-cost, quick experiments helps mitigate risk. Another tool, the problem octopus, organizes interconnected root causes and serves to gain consensus on the origins of the problem.

The first diamond culminates in a specific, defined problem. During work on BP Pal, an IAP project currently in Phase 2, the team found there was no efficient way for patients and providers to communicate blood pressure readings between office visits. Without insight into the patient's health between office visits, the patient and provider may not understand the patient's condition, risking a lack of patient participation and investment in their disease management.

Before teams can define solutions, they need to identify the needle, or measurable outcome, they want to move with that solution. In an example of an IAP project, Screen on Time, the measurable outcome was an increase in patient engagement in a way that allows them to respond to outreach around colorectal cancer screening.

Once teams have a defined needle, they move into "Ideation" to look for solutions to move the needle. This is when they experiment with different solutions in the opportunity areas to understand what is needed to target the problem drivers and ultimately change the problem space. Using tools such as "nudging" to steer users to a certain action, they may even look beyond the health care universe and think about how non-medical minds might try solving this problem.

When teams move forward with an idea, they must validate it to determine how it might impact the problem space. This is the stage during which they build proof for additional resources needed to embark into Phase 2. Fake back ends, for example, facilitate the path to run a "mini-pilot." This opportunity allowed testing of a BP Pal intervention with just seven patients, during which the IAP team could quickly gather feedback and metrics.

The types of innovation tools that exist are vast and continually evolving. Which ones to use, and which combination of them to use, is determined by

---

Selection Criteria for IAP Applications

- Is there a clear and compelling problem?

- Does the idea align with the Center's mission and goals?

- Will the applicant be a committed Champion with capacity to push the work forward?

- Is the team willing to rapidly explore multiple opportunities?

- What is the project's potential impact once a solution is proven effective and deployed at LG Health?

- Does the project have the potential to replicate and/or scale the solution in other settings?

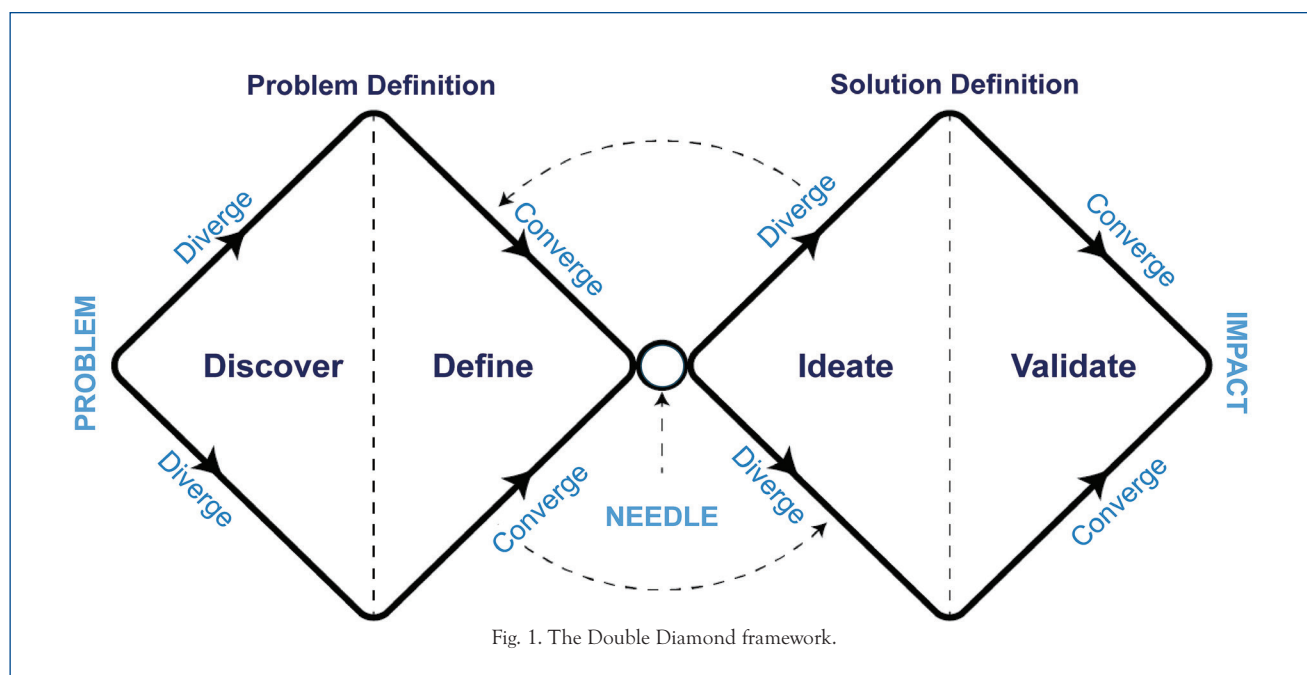- Does the project have an Executive Sponsor?

Fig. 1. The Double Diamond framework.

several factors, among them the problem space context and team time and resources available.

PHASE 1 SUCCESS CRITERIA

At the end of Phase 1, IAP teams participate in a "Pitch Day" in front of a live audience of invited key stakeholders. This event takes place approximately six months after a team begins the program and marks their graduation from Phase 1. It is an opportunity for the team members to persuade stakeholders that a proposed solution might work and is worth the investment to move to Phase 2, where they will go from conducting small experiments to testing on a larger scale and attempting to show sustained impact to help move their solution toward eventual implementation.

The success criteria for graduation includes the team's ability to complete several milestones, as outlined above. The third round of IAP kicks off in January 2023, with winning teams selected from applications submitted during 2022.

Phuong-Cac "PC" Nguyen
Center for Health Care Innovation
Penn Medicine Lancaster General Health
100 N. Queen St.
Lancaster, PA 17603
717-544-5740
PC.Nguyen@pennmedicine.upenn.edu