

Healthcare software innovation: Why in-house accelerators are better

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Considering that Boston is home to some of the country's best medical, scientific and technological minds, it is little surprise that the city has a vibrant startup ecosystem. That ecosystem lowers barriers to creating groundbreaking innovations, connecting innovators to funding, mentorship and human capital. Yet, it isn't very well-suited to help health care software innovators, who face a unique set of challenges.

The unique and increasingly complex IT environment within health care institutions is one of the biggest barriers to the development of novel clinical software solutions. To start with, health care delivery IT environments boast complicated safeguards to keep medical information secure. In addition, as these environments grow in scope and complexity, keeping pace with advances in clinical technology, it becomes harder to incorporate new software. Breakthroughs

that enable Boston Children’s Hospital to be a leader in robotic surgery, for example, also make it harder to design technologies that can easily integrate with a hospital’s IT system.

The clinical IT environment is further complicated by a myriad of regulatory requirements. Plotting a course through the IT complexity, while complying with stringent security and HIPAA requirements, can be daunting. Furthermore, [the FDA may soon be regulating](#) clinical mobile apps and novel software as it does medical devices and pharmaceuticals. With regulatory concerns and complexity, it’s not difficult to see why many potential health care software innovators can get stuck in the early stages of the [innovation lifecycle](#).

And the IT environment is not the only challenge for innovators wanting to develop new clinical solutions. Innovators need not only time and resources, but also highly specialized technical skills. Typically, innovators will reach out to their institution’s IT developers for help—only to discover that those developers have limited bandwidth and are busy working on higher priority projects.

As a result, innovators may seek an external software development vendor to build the solution they have in mind. But finding the right vendor is not easy. And even when there is a good health care software developer with which to partner, there are hurdles to negotiating contracts—and that is assuming there is money available to pay for the work.

Looking inward for answers

At Boston Children’s Hospital, we have built a unique program to help free aspiring innovators from many of the traditional challenges in building new clinical IT software. Known as [FastTrack Innovation in Technology \(FIT\)](#), part of the hospital’s [Innovation Acceleration Program](#), it offers annual software development awards in the form of time with a special team of Boston Children’s project managers, business analysts and software developers.

The FIT team can rapidly translate a clinician’s idea into functional software that can be piloted in the hospital setting—and generally does so more efficiently and at a lower cost than most traditional software development vendors. FIT solutions have ranged from clinical software to mobile apps, and from clinician to patient-oriented solutions. Here are three examples:

- A Twitter-inspired app, called [BEAPPER](#), allows emergency department staff to easily share and update information about their patients in real time and to get lab results on their mobile device.
- Another mobile app, [MyPassport](#), helps inpatients communicate with their clinicians, access their care plan and track their progress toward discharge.
- [ALICE](#), a digital “smart board,” has replaced the white boards and hand notations Boston Children’s clinicians used to keep track of patients in each unit.

A harvest of solutions

Having an in-house incubator has allowed Boston Children's to rapidly create and test novel software solutions. Because our FIT developers understand the hospital's IT environment, their technologies integrate far more smoothly than most vendors' solutions to the same problem.

Innovating around clinical software solutions has traditionally been difficult. Because we can provide dedicated healthcare software development resources, our staff's ideas are bearing fruit and helping us to enhance the delivery of pediatric care. To see so many innovators embrace these resources is not only gratifying to all of us in the IAP, it is also tremendously beneficial to the people who matter most—our patients.

Read more: <http://medcitynews.com/2014/01/healthcare-software-innovation-house-accelerators-better/#ixzz34plydYb0>