

# Patient-Centered Care, One App At a Time

A Complete Guide to Building Targeted Mobile Apps for Specific Patient Groups

**MobileSmith**

Your Quickest Path from Idea to App

- What kind of mobile experiences do your patients expect and embrace?
- How can you capture their mobile moments at each turn in their patient journey?
- 4 core principles of an agile, sustainable **multi-app strategy**.



## Is Your Mobile Strategy Patient-Centered?

More and more healthcare providers are realizing that **patients are customers**, and healthcare services should be marketed and tailored to their specific needs at each turn in their patient journey. Insurance payments are increasingly linked to the provision of patient-centered care. Offering easy, secure access to health information **when and where it's needed most** is the key principle of the patient-centered approach.

**Mobile engagement** is quickly becoming one of the best tools for bringing personalized care, by giving **targeted, relevant** information in the palm of your patients' hand. A recent Accenture study (1) has highlighted the patients' high demand for mobile:

- Today, **33 percent** of U.S. consumers are using mobile health apps, compared with just 16 percent in 2014.
- At the same time, only **2 percent** of patients use apps offered by their hospital. Evidently, few currently available healthcare provider apps meet consumers' expectations and needs.
- Roughly **7 percent** of patients have switched healthcare providers due to a poor experience with digital customer service channels, such as mobile apps.

**It's no longer enough to build an app for your healthcare system.** Various groups of patients require specific, targeted apps. Moreover, patients may want different apps for each encounter with your healthcare brand, at each turn in their patient journey. It's all about capturing your patients' mobile moments - and delivering the right information and tools for a smooth, rewarding patient experience.

*Consumers want ubiquitous access to products and services as part of their customer experience, and those who become disillusioned with a provider's mobile services - or a lack thereof - could look elsewhere for services.*

**Brian Kalis,**  
Accenture Health Practice



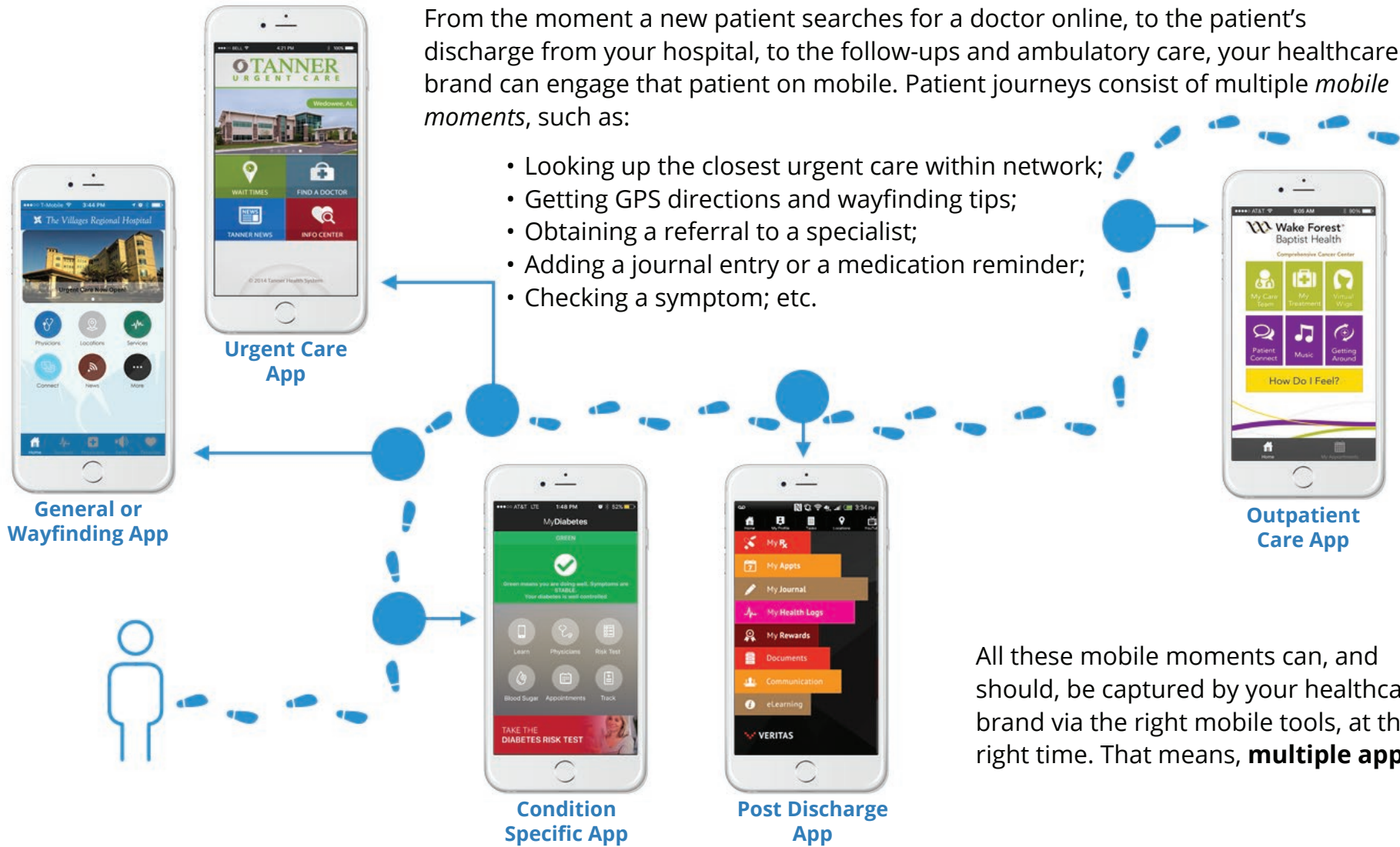
*The Patient Journey - with an App at Each Turn*



# The Patient Journey – with an App at Each Turn

From the moment a new patient searches for a doctor online, to the patient's discharge from your hospital, to the follow-ups and ambulatory care, your healthcare brand can engage that patient on mobile. Patient journeys consist of multiple *mobile moments*, such as:

- Looking up the closest urgent care within network;
- Getting GPS directions and wayfinding tips;
- Obtaining a referral to a specialist;
- Adding a journal entry or a medication reminder;
- Checking a symptom; etc.



All these mobile moments can, and should, be captured by your healthcare brand via the right mobile tools, at the right time. That means, **multiple apps!**

Are Your Patients Ready for Apps?

## Are All Patient Demographics Ready for Mobile?

When trying to address the mobile needs of specific patient groups, you want to investigate, are those groups ready for mobile health apps? Let us look at some recent numbers:

- Today, nearly two thirds – **64 percent** – of U.S. adults own a smartphone, according to Pew Research.
- Certain groups, such as **younger adults, minorities, and lower-income Americans**, depend on their smartphones for internet access. Thus, 12 percent of African Americans and 13 percent of Latinos are smartphone-dependent, compared with just 4 percent of whites.
- Out of smartphone owners, **62 percent** have used their phone to **get information about a health condition** in the past year, according to the same Pew Research study. (2)
- Baby boomers (ages 50-69) have shown solid smartphone adoption – **56.3 percent**, though still not as rapid as the younger generations: 84.3 percent of all millennials and 78.5 percent of all Gen Xers own smartphones, according to eMarketer. (3)
- **What about apps?** According to Nielsen, Americans have anywhere from 20-30 mobile apps on their smartphones, with minority populations keeping 30 or more at any given time, and spending more time in apps. (4) It's still an app world!
- Almost two-thirds (**66 percent**) of Americans would use a mobile app **to manage health-related issues**. Millennials are more than twice as likely to use a mobile app to manage their health compared to those Americans 65 and older, according to the 2015 Makovsky-Kelton Survey. (5)
- Health professionals say patients are more willing to integrate mobile apps into their daily routines if **physicians prescribe the apps**, compared to health apps that consumers download and use without their physicians' involvement. (6)



*Your Patients are Ready for Mobile! Are You?*



## What Kind of Mobile Experiences Do Patients Want?

A 2014 McKinsey survey has found that **“starting small”** and **“acting fast”** is what patients really want when it comes to digital experiences. Highly innovative, fancy apps were found to be less important to patients than simple, straightforward mobile health tools. (7)

Despite a perception that patients expect access to their electronic health records on mobile, providers are understandably wary of releasing complex, connected apps. Data security and patient privacy concerns; data integration challenges etc. necessarily complicate the roll-out of such highly integrated mobile solutions and drive up the development costs.

However, few providers realize that they can efficiently engage patients on mobile **outside of their EHR system**. We have worked with many health systems and found dozens of engaging interactive functions that patients enthusiastically embrace. These functions can be just as easily implemented without direct integration with electronic patient records.



### Engaging Mobile Features - no EHR Required!

#### General Health System Apps

- Info, contacts, insurance, virtual tour
- Dynamic searchable directory
- Streaming ER/UC wait times
- Interactive gallery, news, social

#### Condition-Specific Apps - CHF, Diabetes etc.

- Searchable library – articles, images, video
- Personalized care team; tap-to-call
- Easy symptom/medication trackers
- Connect to patient support community

#### Pregnancy & Maternity Apps

- Illustrated weekly pregnancy calendar
- Kick counter; contraction timer
- Appointments and medications
- Postpartum and newborn care resources

#### Wayfinding Apps

- Geofencing and beacons
- Location-specific push messages
- 2D and 3D Maps, overlay photo pointers
- Relevant tips and alerts

*Foster Patient Loyalty with Your Branded Apps*



# A Lifelong Loyalty to Your Mobile Brand



Mike, 26, is searching for a new provider for his annual physical and finds a mobile app for the local

XYZ Health System. He uses their **mobile directory** to quickly find a physician who accepts his insurance. Scheduling his appointment from the mobile app is a breeze.

On the day of his appointment, Mike is running late, but XYZ Health app's **wayfinding** feature points him in the right direction and offers a quick **mobile check-in**.

Mike walks into the waiting room with minutes to spare and kills time exploring the hospital's mobile **virtual tour**.



2 years later, Mike's wife Kayla is researching Ob/Gyn providers for her new pregnancy.

Mike recommends XYZ Health – their mobile portfolio is outstanding!

Kayla's new doctor mentions their **Pregnancy app**, complete with easy-to-use trackers, video calendar, and educational resources.

This fun app makes Kayla's motherhood journey easy and entertaining.

The app even has complete information on postpartum and newborn care!



Mike's extended family finds out about these cool mobile apps from XYZ Health and decides to switch

providers. Grandpa Bob has downloaded the branded XYZ **Diabetes app** to monitor his Type 2 Diabetes, get daily healthy eating tips, and record his weight loss progress.

Grandma Beth uses the XYZ **Wellness app** the healthcare system has just launched for their brand-new Wellness center.

It has a food journal, an exercise guide, and even an interactive gallery to share her outdoor tai-chi photos!



5 Tips for Creating Compelling Patient Apps



## 5 Tips for Creating Compelling Patient Apps

With **websites**, users expect that everything you need should be easily accessible from the home page, with dropdowns or links to help you navigate to the section you're looking for.

**Mobile apps are different.** Cluttered, all-in-one apps result in poor user experience. Rather than diluting your app by trying to accommodate as many features as possible, we recommend creating a streamlined, focused user scenario for each of your apps. Multiple, **targeted apps** for various patient groups tend to perform much better and enjoy higher engagement rates than "one app to rule them all."

### Key Characteristics of a Compelling Patient App:

- 1 Personalized** – The UI and functionality are tailored to a specific audience: seniors; children; busy executives; moms; athletes; etc.
- 2 Less is More** – Don't try to make your app do too much – stick with 2-3 key features and 2-3 secondary features.
- 3 Dynamic** – New content can be added regularly by your in-house team, without having to resubmit/re-download the app.
- 4 Has a "Mobile Hook"** – Performs a helpful and frequently needed function that makes the app indispensable
- 5 Easy to Navigate** – UI elements are optimized to make the user experience easy for the target audience. There are no unnecessary steps, bulky splash screens, upfront registration, or annoying ads.



*I'm Ready to Get Started, What's the First Step?*



## Building your Multi-App Strategy: 4 Core Principles

Dozens of our customers have built successful patient-facing and internal apps. Here are some core principles we have distilled from all this experience for an efficient, **sustainable multi-app strategy**.

### 1 Use In-House Talent

A truly patient-centered strategy cannot be bottle-necked through one department at your healthcare system. The best mobile app ideas should be sourced company-wide. Physicians, nurses, marketers, administrators, IT professionals can all come up with excellent app ideas. Build a cross-functional Mobile Center of Excellence.

### 2 Iterate, Iterate, Iterate

Spending the bulk of your effort and budget before you have a chance to get user feedback is a risky proposition. Hospitals are adopting agile development methodologies – for their app strategies, too! Use **rapid prototyping tools** to get your app into the hands of a focus group as quickly as possible. Process the feedback and push the next iteration – until your reviewers rave about the user experience.

### 3 Go Code-Free

What happens when a new version of iOS is released and you can't track down that iOS developer that created the first version of your app? With a **code-free MADP** – mobile app development platform – your in-house team can access and version existing apps easily, and never have to rebuild from scratch. You can also quickly prototype, test, build, launch, and manage many new apps.

### 4 Worry About App Adoption Early

Even the most cost-efficient app is a waste of your time and money if nobody ends up using it. Start thinking about **app marketing** even before you start drawing up the list of functions for your new app. Watch out for user reviews and iterate, iterate, iterate!



#### 1. Love the new look!

★★★★★ Klineart - Jan 23, 2015

This version is a big improvement over the last one. Being able to see the closest practicing physician is very helpful, as well as scheduling appointments! Love the new design.

#### 2. Easy navigation

★★★★★ mnuno1 - Mar 20, 2015

The navigation is easy to follow. You can quickly get to the main areas of interest such as doctors and office locations listing. Loving the new look too!

What about the Data?





## Connecting Your Apps to Data

Your apps are only as useful as the data they provide. Managing mobile data manually, via a **Content Management System**, may be an option for relatively static apps. But what if you want to provide dynamic data? How can you securely hook multiple mobile apps to your data sources, so each of your apps provides only the relevant information? Below are the industry-standard technologies we recommend to our clients:

### 1. Data Integration

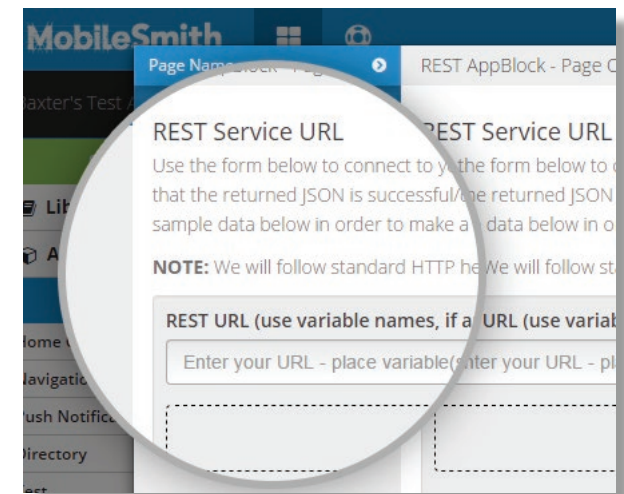
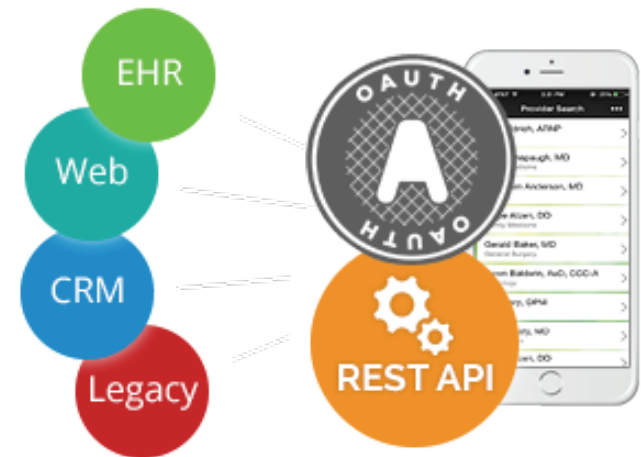
For dynamic, fast-loading apps, **REST API** is the industry standard method of data integration. Once your data sources are REST-enabled, hooking up multiple apps and setting up **on-demand exchange** of only the relevant data is a matter of a couple of hours. In MobileSmith, the same REST service, e.g. physician directory, can be reused in multiple different applications.

### 2. Secure Authentication

Where HIPAA applies, some apps may need an **extra layer of security**. It's important to have authentication capabilities such as **OAuth** – allowing app users to securely authenticate via 3rd party systems such as your patient portal or social media. MobileSmith enables OAuth based authentication.

### 3. Embedded Functions

Do you have a piece of cool functionality running on your website, such as an interactive **calorie calculator** or **streaming ER wait times**? Consider incorporating it into your app. We offer flexible platform extensions to seamlessly include your custom code.

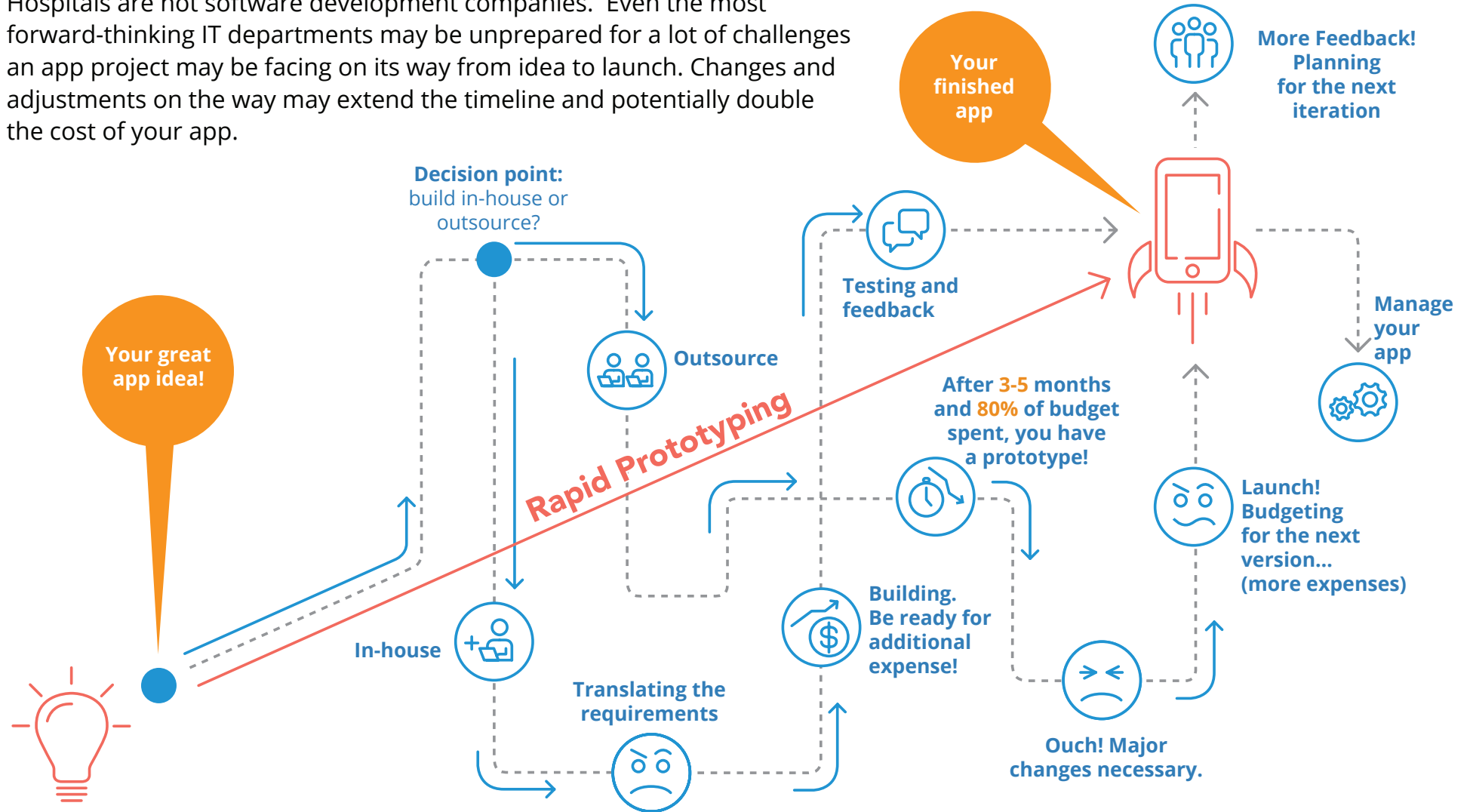


*Multi-App Strategy, the Agile Way*



# Multi-App Strategy, the Agile Way

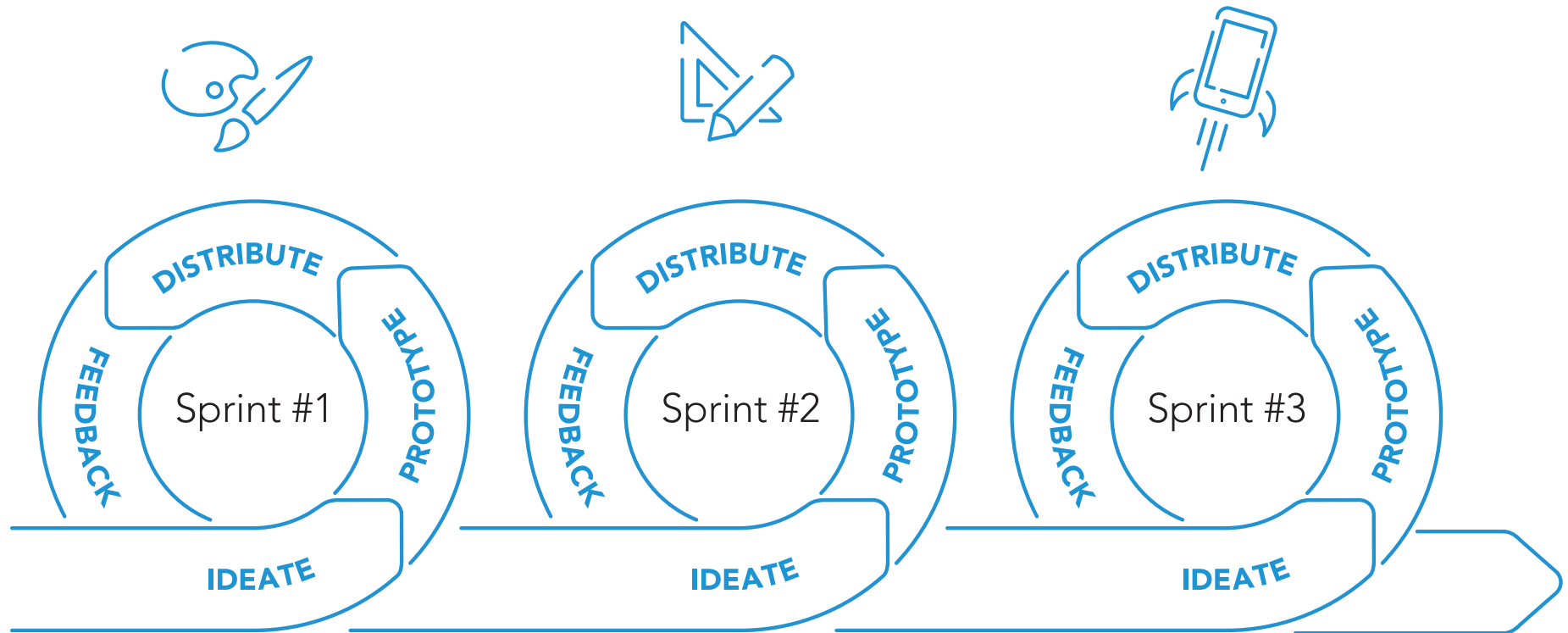
Hospitals are not software development companies. Even the most forward-thinking IT departments may be unprepared for a lot of challenges an app project may be facing on its way from idea to launch. Changes and adjustments on the way may extend the timeline and potentially double the cost of your app.



**Rapid prototyping** and **agile methodologies** may save you a lot of trouble, cost, and delay.

*How Does Agile Work?*

## Agile App Development Process

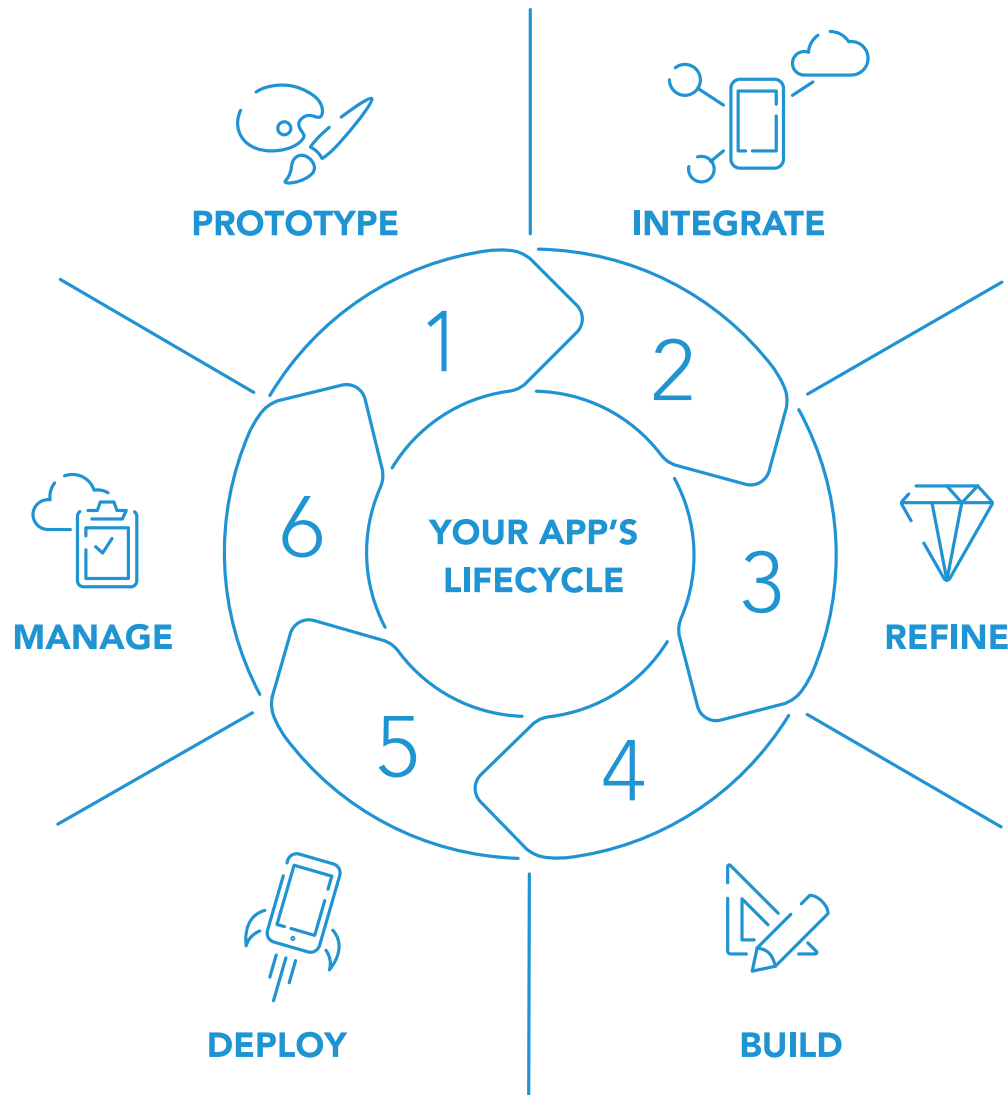


Forward-thinking hospitals are adopting **agile methodologies** for mobile app development. An agile methodology is characterized by **short sprints**, **iterative development**, and MUCH faster app prototyping so you can **gather feedback** at an early stage. Initial discovery and ideation is usually followed by building a very quick prototype, which is then quickly tested with a focus group. Then the feedback is used in the next iteration. Every sprint takes less than two weeks, and sometimes as little as one day. That way, by the time you launch the final product, you are confident that it meets the expectations and requirements of your target audience.

*MobileSmith App Cycle - Build Apps in Days*



## MobileSmith App Cycle – Build Apps in Days



Here' is an example of an **agile app lifecycle** in the MobileSmith platform, which most of our customers' app projects follow.

Our code-free platform enables this cycle to run in a matter of days, or weeks depending on the speed of gathering the necessary content and data on the customer's end. Test app builds are sent to reviewers via an email download link, and feedback is incorporated quickly in the next iteration.

MobileSmith's rapid prototyping capabilities are perfectly suited for an agile app development methodology that hospitals require today for a sustainable, patient-centered mobile app strategy.

Need help strategizing?  
We would be thrilled to help!

**Contact us:**  
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