

Build your knowledge as you create  
the healthcare facility of your dreams!

6<sup>d</sup>

FOR

DUMMIES

A reference  
for the rest  
of us!

## Learn:

- ✓ The **current state** of the patient and what they expect from their healthcare facilities.
- ✓ The types of **delivery methods** for building a healthcare facility including the difference between design-bid-build and design-build.
- ✓ The **quickest and easiest approach** for building or remodeling an institution.

**B.A. Eastwood**

*Architect and Design-Build Guru*

**Corde Kurtz**

*Construction Mastermind*



**6<sup>d</sup>**  
FOR  
**DUMMIES**

**by B.A. Eastwood, Corde Kurtz,  
and the DBSI Design-Build Team**



DBSI, Inc. Publishing. Copyrighted material.

# About the Authors

**DBSI** A design-build firm that's out of this world, think of us as rocket scientists — but instead of rockets, we launch exceptional healthcare facilities by fusing design-build, technology, and delivery together.



When you select DBSI, you're working with a design-build firm that is never satisfied with the status quo. We're a company at the forefront of bringing solutions to the market that solve the industry's biggest needs. Having successfully delivered over 1,000 new spaces across the nation, DBSI brings holistic expertise to healthcare facilities looking for a design-build partner.

**(Learn more at [dbsi.com](http://dbsi.com)!)**

**B.A. Eastwood | Director of Architectural Services** delivers transformative designs aimed at attracting consumers and providing an environment conducive to a more effective experience.

- Registered Architect
- 30+ years of design-build experience
- Designed DBSI's industry-exclusive Ideation Center and Collaboratory
- Designed and managed the program that led to the National Hospital of the Year Award
- Orchestrated 6 architectural firms and obtained over 600 permits in a 2-year period
- Designed and developed numerous problem resolution prototypes

**Corde Kurtz | Head of Design-Build** oversees all aspects of DBSI's design-build team to ensure projects are delivered on time and finished to a level that exceeds our client's expectations.

- 25+ years of experience in all aspects of construction
- Worked on numerous types of projects including ground-up, design-build, remodels, tenant improvements, pre-fab, and tilt-up
- Background in working with healthcare, financial, retail, and many other industries

# Introduction

.....

Millions of materials and thousands of tasks go into a healthcare facility transformation project. This book won't tell you how to diagnose a patient or fill a cavity, but it will tell you everything you need to know about the many approaches to building a healthcare facility, the pros and cons for each, and how DBSI has simplified the entire transformation process with our 6<sup>d</sup> approach.

What exactly is 6<sup>d</sup>? While we get into it in great detail in part 2 of this book, for quick introduction's sake, 6<sup>d</sup> is a simplified approach that makes designing and building a new space so simple it can be done in 6 steps. Hence the name!

Before we dive in, you may be wondering,

## *Foolish Assumptions*

We wrote this book with you in mind. Here's what we assume about you, our reader:

- ✓ You've been talking about expanding your footprint to increase access for your patients
- ✓ You're looking for a comprehensive guide that demystifies the building process by focusing on the information important to healthcare facilities like yours
- ✓ You don't live in a 'money-is-no-object' world. You want to make educated financial decisions when it comes to budgeting for your project(s)
- ✓ You want to be involved in the process, but you will rely on professionals to help you to ensure as much of the risk as possible is eliminated
- ✓ You have likely thought about calling your local contractor about your new project but wondering if that is the best approach (You are right to surmise, and we will talk a bit about why later!)
- ✓ You're drawn to solutions that make your healthcare facility patient-friendly and flow of care smooth
- ✓ You want to consider new approaches for building your facilities, or just find a simpler way, as your previous/current methods have been more complex than you would like



## How This Book is Organized

To keep it simple, this book is divided into 3 parts. Jump in wherever you want (we do recommend Part 1 for first-time readers!). The following sections explain what you'll find where.

✓ **Part 1: Leveling the Playing Field**  
**The 411 on Designing and Building a Healthcare Facility**

Get up to speed on the basics of building a new space. What's all involved? What are the different approaches, and pros and cons of each? In this part, you'll be able to easily figure out how you want to tackle your next project, as well as get to know the role of the architects, designers, construction teams, and all the other people who make transformations happen.

✓ **Part 2: Understanding a Best Practice Approach**  
**How Expert Design-Build Firms Manage Projects**

Your project can move from dream to nightmare if you aren't using the right approach. In chapter 1 we talk about the different methods out there and the pros and cons of each. In chapter 2, we focus on DBSI's simplified approach to design-build, known as the 6<sup>d</sup> process, built of only 6 steps to complete a healthcare facility transformation.

## Icons Used in This Book



**Tip** – These tidbits provide expert advice to help you save time and money in the transformation process.



**Warning** - Avoid mistakes by following the advice that appears next to this icon.



**Remember** – This icon highlights important information to store in your brain for quick recall later.



**Pitch** – This icon indicates that the content you are reading may feel a little salesy — but can you really blame us for telling you about at least some of the cool things we offer?

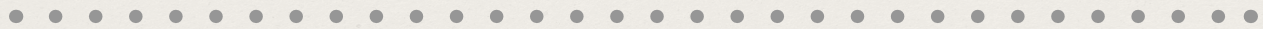
## *Where to Go from Here*

If you're not sure where to go first, you may want to start with Part 1. It gives you all the highlevel details you will need to know in order to understand the different approaches to designing and building a healthcare facility. If you already know the fundamentals and just want to roll up your sleeves to see a simplified approach, skip to part 2.

# Part 1

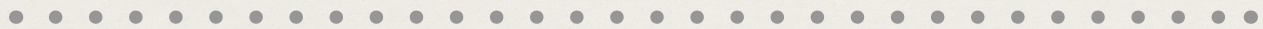
## Leveling the Playing Field

### The 411 on Designing & Building a Healthcare Facility



### *In This Section*

- ▶ The Dichotomy of the Traditional Healthcare Facility and the Modern Patient
- ▶ The Different Approaches to Transformation and Picking the Right One for Your Project
- ▶ Picking the Right Transformation Partner and Understanding the Roles They Play





## *Chapter 1*

### The Dichotomy of the Traditional Healthcare Facility and the Modern Patient


Giving patients a positive experience and easy access to healthcare facilities is more important now than ever. Despite the recent digital acceleration and widespread use of Telehealth medicine, there will always be a demand for in person healthcare services and facilities.

## The Need for Physical Healthcare Organizations

 **80%** of patients will “always prefer” in-person physician visits to telemedicine

 **82% + 91%** of adults + of children had a visit with a doctor or other health care professional in 2021

 **1 Billion** people visited a physician’s office in 2021

 **64% + 87%** of adults + of children visited a dental office in 2021

Sources: Healio, CDC


However, just because patients need care doesn’t mean they will come to your facility to get it. Patients go to healthcare facilities seeking care on some of their lowest days, when they’re feeling sick, or when they need various treatments, so providing them with an experience that promotes healing and limits stress is essential.

The healthcare facilities that are easily accessible and deliver on patient expectations will be the one that retain patients. When it comes to healthcare, patients expect a comfortable environment with an easy flow of care that meets (or exceeds) the standard.


## The Current State of the Healthcare Facility

  
**78%**

are worried about being able to access quality care

  
**65%**

feel overwhelmed managing their healthcare needs

  
**70%**

feel the healthcare system is failing to meet their needs

Sources: Advisory Board, AAPA

### What Causes These Poor Scores?

- ✓ Insufficient healthcare facilities in rural areas. Rural areas comprise about two-thirds of the primary care health professional shortage areas nationwide, even though only 20% of Americans live in rural areas (abcnews).
- ✓ Floor plans that are difficult to navigate, which leads to unpleasant wayfinding experience.
- ✓ Shortage of technology in healthcare facilities to support streamlined processes for waiting room management and appointment scheduling.
- ✓ Enclosed floor plans in waiting rooms that feel confining and uncomfortable for patients.
- ✓ Designs with furniture that only accommodate specific populations of patients instead of the majority.
- ✓ Lack of natural elements incorporated into the design of healthcare facilities leads to unappealing environments.



Patients will always need easy access to healthcare facilities, whether it's a nearby hospital, diagnostic testing center, or dentist office. It's our job as a design-build firm to create facilities that make your job easier, improve efficiency, and make healthcare more attainable, all with a patient-centered experience in mind.

### *The Cost of a Bad Experience*

The difference between a poor and strong performance could result in the difference of

**\$900 million** net revenue.

**2/3** of patients are likely to switch to a new health system if their expectations are not met.

*Sources: Accenture*



If you have any of these features in your healthcare facility (or future plans), it's time to rethink.

- ✓ **Check-in areas with staff sitting behind desks and glass barriers make checking in or out difficult and a frustrating experience.**

Solution: Check-in and check-out spaces with no barriers to support easy communication between staff and patients. These areas should also be located appropriately to ensure patient privacy.

- ✓ **Small waiting rooms make patients feel confined, leading to increased anxiety.**

Solution: Patients already feel uneasy when they go in for a doctor's appointment or to see the dentist, so it's important that there's no added stress. Design an open, spacious waiting room to eliminate factors that increase tension.

- ✓ **Medical facilities that are often a hassle to navigate. This difficulty in navigation can result in your patients getting lost and an overall poor experience.**

Solution: Create a floor plan that is easy to navigate for patients and family members and includes building maps for reference.



## The Cost of a Bad Experience

So, you know you need to change, but where do you start? When getting ready to take the steps toward building or transforming a healthcare facility, there are a few things to consider: market opportunity of the location, the role it plays in your institution, goals/objectives space, area demographics, how you will measure the success, your budget, and your ideal timeline.

The most important of this list, and the catalyst for delivering your entire project, is deciding upon the approach. The next chapter covers the different project-delivery approaches and how you can pick the right one for your project.

## Chapter 2

### The Different Approaches to a Healthcare Facility Transformation & Picking the Right One for Your Project

The Construction Industry Institute (CII) defines two widely known and accepted delivery methods as follows:

### Design-Bid-Build

This is the most traditional process in the U.S. construction industry, where the owner contracts separately with a designer and a contractor. The design firm is hired to deliver design documents and the owner or agent then solicits bids from contractors to perform the work. Designers and contractors bear no contractual obligation to one another, and the owner bears all risks associated with the completeness of the design documents.

### Design-Build

Under this method, an owner typically hires a single entity (like DBSI) to create the design and implement the construction process to completion. This typically consists of all design, millwork, engineering, municipal permit submittals, selection of subcontractors, coordination of vendors, and on-site project supervision. With this method, all parties work together for a common goal without worrying about communication constraints. Plus, if there is a guaranteed maximum price agreed to early on, there's a reduced likelihood of pricing changes throughout the process.

### Choosing the Right Approach

When deciding which project delivery method is right for your project, you should consider:

- ✓ Complexity and size of the project
- ✓ Capacity and technical capability to closely manage the process
- ✓ Individual project drivers
- ✓ Sensitivity to cost and schedule escalations
- ✓ Knowledge of design and construction

Healthcare institutions who possess a strong desire to control the design and construction process, or have the funds to hire sufficient personnel to closely manage the process of their transformation, may be more suited to the design-bid-build process. Especially if they are willing to bear the risk that the design will be complete, include sufficient details for constructibility, and enough room for contingencies to absorb costly change orders.



Even if you have preferred local contractors you want to use for a project, it doesn't mean you have to use a design-bid-build approach. Design-Build firms (like DBSI) can incorporate them into their bidding process so they are included. This removes risk and responsibility from you, while still giving business to your preferred partners.

On the other hand, research efforts indicate that projects completed with the design-build approach regularly outperform their design-bid-build counterparts in terms of cost and schedule performance, quality, reduced risk, change orders and the ability to respond to real-time, needs.

You probably think we're biased, being a design-build firm and all... so we pulled some of those hard facts on why you may want to consider going with the design-build approach.



A study<sup>3</sup> by Penn State found that compared to Design-Bid-Build projects, Design-Build projects had a six percent reduction in change orders, delivered 33 percent faster overall, and cost six percent less.

### *Design-Build vs. Design-Bid-Build*

Schedule Growth	11.4% Less
Cost Growth	5.2% Less
Delivery Speed	33% Faster
Construction Speed	12% Faster
Unit Cost	6% Less

*Sources: Harris Interactives, PWC, American Express, Glassdoor*

A Construction Industry Institute (CII) study<sup>4</sup> of projects submitted by both owners and contractors stated, "Owner-submitted design-build projects outperformed design-bid-build projects in cost, schedule, changes, rework and practice use." Practice use factors include constructability, team building, zero accident technique, design/information technology use and change performance.

And in terms of schedule, another CII study<sup>5</sup> indicated that "an experienced design-build team has the greatest opportunity of succeeding in achieving goals in schedule maintenance, construction speed and intensity."

## Chapter 3

Nobody's website is going to say, "we do a really bad job transforming spaces" which means that you need to do your research before hiring a firm, whether that be a design-build firm, or separate vendors for the design-bid-build approach.



We recommend starting with an interview, where you can get all the answers you need to pick the right partner.

### Some questions to consider asking:

1. What kind of specialists will I have access to as a result of choosing this design-build firm?
2. What is the firm's history when it comes to keeping projects on schedule and on a budget? Is there a reference list that I can call?
3. May I see a portfolio of past projects that are like the one I'm interested in doing?
4. Is the firm licensed, insured, and well-versed in obtaining correct permits?
5. How does the firm handle communication? Will there be a "point person" assigned to my project in case of emergency?

### What to Avoid

- ✓ If they can't confidently answer your questions, that's a bad sign.
- ✓ If they don't have experience with transforming spaces that are designed to enhance experience, don't work with them. It's as simple as that. Your needs are unique, and your average local contractor isn't going to know these nuances which are critical to patient experiences.
  - We have seen many projects fail under a general, local contractor's watch; we've even had to step in and fix a few projects before they reached catastrophic failure. Often times, they find themselves severely over budget, blowing past deadlines, and end up with a project that simply isn't going to work (if it is even completed at all)
- ✓ If their bids are low and their timelines seem too good to be true, it probably is.
- ✓ If your design firm is simply asking how many square feet and offices do you need, be leery. Delivering a great experience involves the right strategy, vision, and understanding of your specific objectives. Just focusing on size and what looks pretty won't achieve that.
- ✓ Don't just pick the firm with the prettiest drawings. A design can look great in the drawings and their presentation may sound nice, but delivering on these promises is a whole different beast.



### What to Look For

- ✓ A partner of high caliber who can confidently answer your questions, and even back up their answers with examples of their work
- ✓ A firm you won't have to teach your business to. Firms specializing in transforming spaces to enhance experiences can provide expert guidance and insights others wouldn't know
- ✓ A partner who can provide you with multiple references as well as have completed projects across the nation
- ✓ A partner with strong communication and project management skills to make your involvement in the project as simple and painless as possible

### Design-Build with DBSI



We're not saying that every other firm is wrong for you, but we are saying that DBSI is right for you. Why? Because we take Design-Build to a new level with our simplified 6<sup>d</sup> process. Part 2 will walk you through this approach.



# Part 2

## Our Best Practices Approach

### How Expert Design-Build Firms Manage Projects

.....

### *In This Section*

- ▶ The Dichotomy of the Traditional Healthcare Facility and the Modern Patient
  - ▶ The Different Approaches to Transformation and Picking the Right One for Your Project
  - ▶ Picking the Right Transformation Partner and Understanding the Roles They Play
- .....

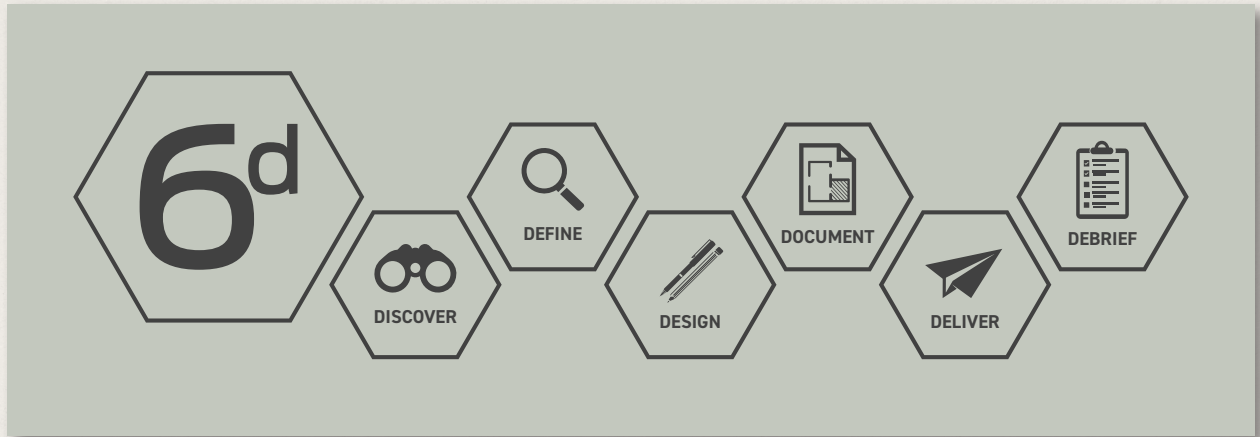
### *Chapter 1*

#### **An Introduction to the 6<sup>d</sup> Design-Build Approach**

Our integrated 6<sup>d</sup> approach is the difference between a “good” project outcome and a “great” project outcome.

Aptly named, 6<sup>d</sup> breaks the process for building a branch into 6 easy phases guaranteed to get the job done at the speed of light, at an affordable cost, and at a beyond-exceptional standard.

Chapter two will dive deeper into each of the 6 steps.



Sources: DBSI

## Chapter 2

### The Intent, Tactics, and Outcome of Each Phase of the Project

#### Phase 1: Discover

You can't build a space that screams YOU, if you don't know who you are, your goals, and what matters most to both your institution and the people you serve. That's why the first phase in this approach is all about gaining executive alignment on what your brand stands for (or what you want it to) and identifying your objectives.

#### Tactics

- ✓ Survey the core team for feedback on wants, wishes, and the vision for the project
- ✓ Conduct 1:1 and small team interviews for full cross-functional feedback
- ✓ Survey the communities you serve to get an understanding of the role your Healthcare Institution plays in the community, as well as the role of your competitors are playing
- ✓ Complete on-site facility visits and scoping to get a baseline for transformation

#### Outcome

You can't build a space that screams YOU, if you don't know who you are, your goals, and what matters most to both your institution and the people you serve. That's why the first phase in this approach is all about gaining executive alignment on what your brand stands for (or what you want it to) and identifying your objectives.

### Phase 2: Define

Using the information gathered from the Discover phase, we create a playbook that serves as the foundation of your transformation by defining your strategic direction, branding and physical appearance, and the timeline of your project.

#### Tactics

- ✓ Finalize the key aspects of your desired future state
- ✓ Put together different pieces of the puzzle to create a cohesive strategy that leverages what is already working with your brand while uncovering any barriers to success
- ✓ Identify the local restrictions or covenants we need to design around
- ✓ Decide on technologies like digital signage that allow for more effective execution
- ✓ Create a variety of budgets that align to your strategy and the ROI of the location
- ✓ Build a timeline with schedules that are realistic and meet your expectations
- ✓ Establish a communication plan for effective execution of every part of the transformation, from the design-build process, to the staff training process, to the client adoption process

#### Outcome

A Transformation Playbook that clearly defines the strategic direction and critical details that will be needed in the next phase.

### Phase 3: Design

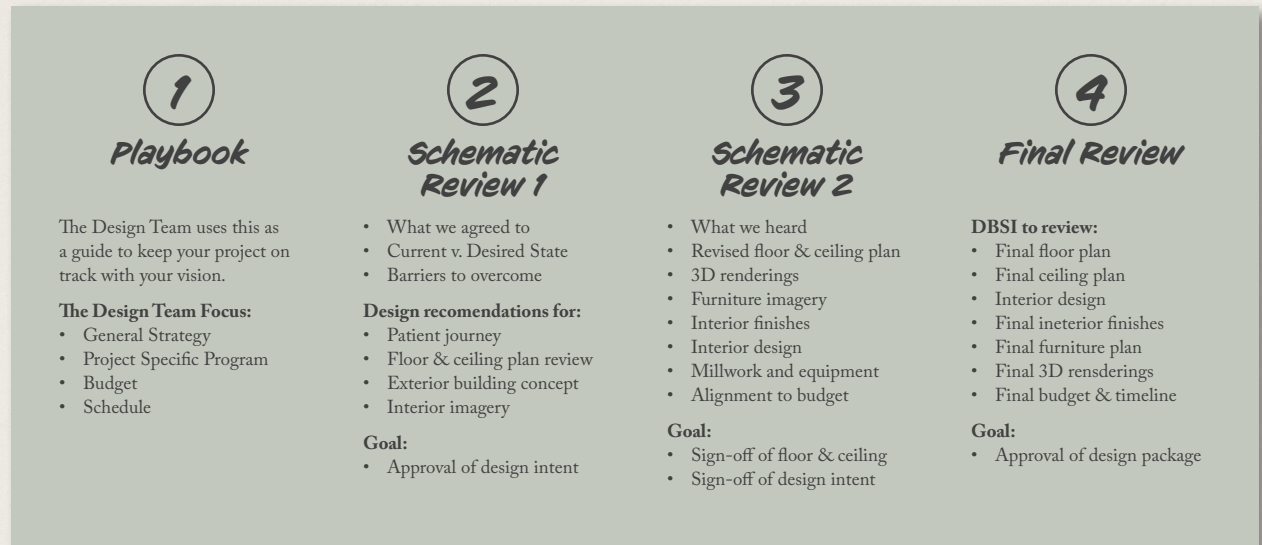
Once you have defined your strategic intent and go-forward strategy, the fun stuff starts—designing your project!

Any good design phase goes beyond just floor plans, including recommendations for the right design elements, digital signage technologies, furniture, safety features, and much more.

#### Tactics

Our assigned Studio Team of Architectural Designers, Interior Designers, Architectural Coordinators, Estimators and Pre-Construction Specialists, Visual Artists, and Production Managers will bring to life the designs that align to your Transformation Playbook and specific program requirements (intent, budget, timeline).





Sources: DBSI



All our design decisions are based off the best practices DBSI has developed over decades of desing-build experience. We don't want to give away our trade secrets in this book, but if there is a specific topic of interest to you regarding any of the below topics, we'd be happy to share them with you in a complimentary strategy session. **Just give us a call at 1-855-ASK-DBSI.**

## Outcome

- A finalized design strategy that is ready to move into the document phase
- A Kit of Parts to serve as a 'catalogue of you' along with the when, where, and how to use all the different design features in future projects (can you say time savings?)

### This kit includes things like:

- Floorplans
- Interior renderings
- Exterior renderings
- Color palettes, finishes, and textiles
- Lighting fixtures and hardware choices
- Furniture choices and pairings
- Best practices for different features

### Phase 4: Document

Once the design has been signed off on, we begin creating the construction documents needed for bids, city permits, and an overall successful project. But don't worry, as we mentioned earlier, we handle the whole 'bidding' process for you—so you can lay back, relax, and be sure we are doing it right!



**Typical** – Most general contractors have a small pool of subcontractors preselected, which means no transparency or choice in who performs the work.

**DBSI 6<sup>d</sup>** – Collaborating together on all aspects of a project is easy when you have a proper process of discovery linked to an open book policy like DBSI. Once plans are done, we allow for a detailed review of actual subcontractors and their bid costs to be done together. You get a voice in the choice of the provider and an understanding of the exact cost.

**Typical** – Even though most ground-up projects have 32-35 trades involved (i.e. framing, drywall, electrical, flooring, plumbing, painting, HVAC, site work, etc.) the typical process bids to only 2-3 general contractors.

**DBSI 6<sup>d</sup>** – Our selection process separates each trade, giving 45-90 small businesses—which we evaluate based on cost, quality, historical performance and insurability—the opportunity to compete for your business. A win-win!

**Typical** – You hire one general contractor who hires several subcontractors to complete the work, but the public only sees one general contractor's name on the project.

**DBSI 6<sup>d</sup>** – We partner with up to 20-30 local businesses, all publicly showcased on the project site, giving you a big marketable win as you are now directly supporting the small businesses that make up your community.

### Tactics

- ✓ All our construction documents include:
  - An outline of engineering needs. Engineering needs varies by project, but typically includes mechanical, electrical, plumbing, structural, landscaping, and civil engineering services as necessary
  - All interior millwork (all cabinetry) detailed for building accuracy
  - Interior finishes dimensioned and drawn out
- ✓ Record of final construction documents are compiled, reviewed for quality, then used and reviewed by the governing jurisdiction in order to obtain required permits



You'll notice we didn't hand the torch over to a different construction firm here, and instead the DBSI team will be able to run the project all the way through from design to build. This is, as we mentioned earlier, the biggest differentiator between DBSI and other providers you may run into when look at building or transforming healthcare facilities. If you skipped the earlier section, or want to read it again, flip back to page 9 to read all about the design-build process and the difference between a single partner and multiple vendors.

### Phase 5: Deliver

The purpose of this phase is all in the name: it's time to put all those documents to work and deliver on everything discovered, defined, and designed.

### Tactics

- ✓ DBSI's Pre-Construction team vets and qualifies between 30 and 90 sub-contractors (local small businesses in your market) for competitive bidding of the work
  - We drive down your price due to competitive bids
  - We qualify their agreement against the scope of work to minimize change orders
  - You get to publicly showcase supporting local, small businesses for this project
- ✓ Provide a detailed construction schedule
- ✓ Provide weekly construction updates that include progress photos, summary of activities, and what's ahead
- ✓ Manage the project through to grand opening

### Outcome

A killer healthcare space that patients love to visit.



### Phase 6: Debrief

After your project is completed, we will check back on a regular basis and complete a debrief to ensure your projects are continuously improving.

#### Tactics

- ✓ Review lessons learned to create a repeatable, sustainable and cost-effective program for future projects
- ✓ Refine the “Kit of Parts” to use consistent design assets going forward
- ✓ Identify any future training needs

#### Outcome

A repeatable, sustainable and cost-effective “Kit of Parts” that aligns and delivers your differentiation strategy

**Congrats on making it to the end.  
I guess you could say you're now a  
'smartie' when it comes to designing  
and building a healthcare facility.**

**As a quick recap, we covered:**

- The current state of the patient, the healthcare facility, and why there is a need to transform (pages 6-9)
- The different delivery methods for transformation, including design-bid-build and design-build (pages 9-10)
- Questions you should ask and what to look for, as well as avoid, when picking the right transformation partner (pages 11-12)
- A simplified approach to design-build composed of only 6 phases (pages 13-18)



**We've got experts waiting  
in the wings to help with  
your next project. From  
transformation strategists  
to architects and designers  
to construction pros and  
technology gurus, your next  
project is in great hands with  
our comprehensive design-  
build team.**

Cover Image: DBSI INC

Call us at **1-855-ASK-DBSI**

Send an email to **info@dbsi-inc.com**

Drop by our website at **dbsi.com**



ISBN 978-1-119-04177-1



www.dbsi.com