



**BOLDT**<sup>®</sup>  
BUILD BOLDLY

CASE STUDY

## ADVOCATE AURORA OUTPATIENT COLLABORATIVE (AAOC)

How the AAOC IPD Super Team Redefined Healthcare Project Delivery to Achieve Breakthrough Success in Every Category

## LEAN, INTEGRATED APPROACH TO HEALTHCARE CONSTRUCTION

Advocate Health Care, (now Advocate Aurora Health), had a strategic plan to enhance outpatient care across the Chicago area by establishing 50 outpatient centers within a span of 10 years. The goal was to improve healthcare accessibility for the community. In 2014, they formed a collaborative design and construction team under the Integrated Lean Project Delivery arrangement, which included Boldt, HDR, IMEG, and essential trade partners.

### CHALLENGE

The challenge was multifaceted: they aimed to design a new patient care model that would enhance the patient experience and outcomes, reduce the time spent on primary care visits while increasing face-to-face time with providers, and standardize the program using lean six sigma to ensure efficiencies in repeatability and scalability of architectural design. They also set out to rigorously document KPIs to facilitate continuous improvement, lower costs, reduce waste, improve quality, and speed up schedules from one project to the next, all while achieving 100% compliance with the Healthy Spaces Roadmap and meeting goals for MBE/WBE participation.

### SOLUTION

The solution involved visioning sessions to create a new care model using operational data to refine operational efficiencies, prefabrication and modular construction to quicken schedules, and adaptive reuse of existing structures to cut down on construction time and cost. Design standards were developed for repeatable, scalable uniformity, and an internal evaluation and lessons learned feedback loop was established to foster continuous improvement.

### RESULTS

The results were impressive: an average cost savings of 8%, with some projects achieving greater than 20% savings; prefabrication spend of 21.9% against a target of 14.7%; avoidable change orders at 0.43% versus a target of 1.6%; full compliance with the Healthy Spaces Roadmap; 19% MBE/WBE participation, surpassing the 14.7% goal; primary care visit times reduced from over an hour to 36 minutes; and patient satisfaction scores of over 90%. These outcomes highlight Advocate Aurora Health's successful strategy in expanding outpatient care, which not only met but exceeded their objectives, providing superior healthcare services while promoting sustainability and community involvement.



### KEY OUTCOMES

8% average cost savings across entire program

Five projects achieved > 20% cost savings

21.9% prefabrication spend, beating a target goal of 14.7%

100% compliance with AAH's Healthy Spaces Roadmap for sustainable design and construction

0.43% avoidable change orders, beating a target goal of 1.6%

19% XBE participation, beating a target goal of 14.7%

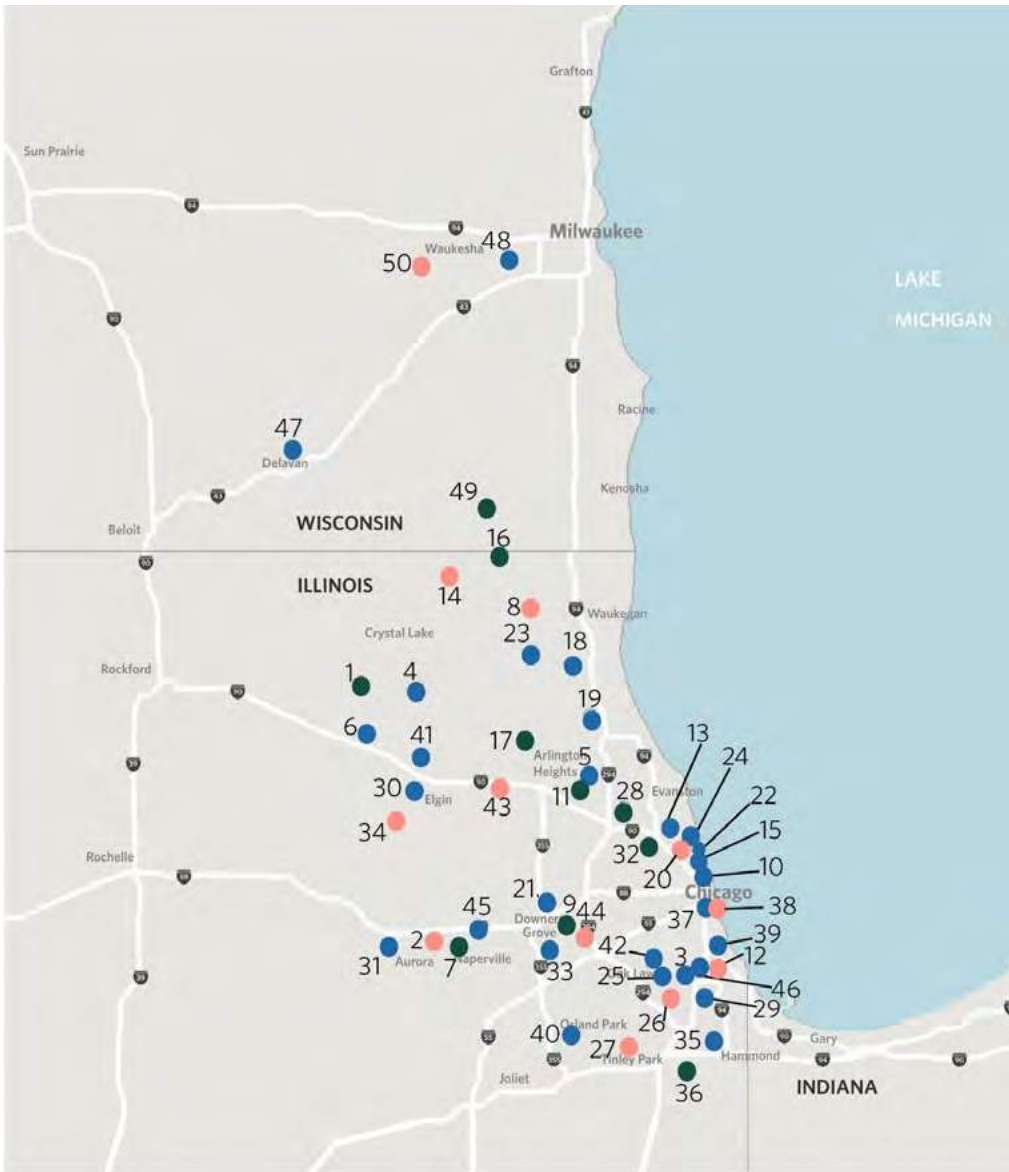
Primary care visit times reduced from more than one hour to 36 minutes on average

>90% patient satisfaction scores

21% projects were adaptive reuse of existing facilities



# OUTPATIENT CENTER LOCATIONS



## ILLINOIS

1. AOC Algonquin
2. AOC Naperville Freedom Drive
3. AOC Christ POB
4. AOC Crystal Lake
5. AOC Des Plaines
6. AOC Huntley
7. AOC Dreyer Naperville
8. AOC Gurnee
9. AOC Good Samaritan
10. AOC Halsted
11. AOC DP Retail Imaging
12. AOC Imani Village
13. AOC Irving Western
14. AOC Lakemoor
15. AOC Lakeview
16. AOC Lake Villa
17. AOC Lake Zurich Exp
18. AOC Libertyville
19. AOC Lincolnshire
20. AOC Webster Ave
21. AOC Lombard
22. AOC Montrose
23. AOC Mundelein
24. AOC North Broadway
25. AOC Oak Lawn
26. AOC Oak Lawn Cardio Exp
27. AOC Tinley Park Peds Sub Exp
28. AOC Park Ridge
29. AOC Pullman Park
30. AOC Randall Road
31. AOC Sequoia
32. AOC Six Corners
33. AOC South Downers Grove
34. AOC South Elgin
35. AOC South Holland
36. AOC South Sub
37. AOC Sykes
38. AOC Sykes Oncology Infusion
39. AOC Trinity
40. AOC Orland Park
41. AOC West Dundee
42. AOC Burbank
43. AOC Hoffman Estates
44. AOC Westmont
45. AOC Naperville
46. ACC Beverly

## WISCONSIN

47. AOC Delavan
48. AOC New Berlin
49. AOC Paddock Lake
50. AOC SW Waukesha

**OUTPATIENT CENTERS COMPLETED THROUGH 2021**

**OUTPATIENT CENTERS COMPLETE IN 2022**

**OUTPATIENT CENTERS IN 2023 AND AFTER**

50 projects have been completed, or are in construction, totaling more than 700,000 SF.

**21%**  
Adaptive Reuse

**45%**  
Tenant Improvement

**34%**  
New construction





21% of all projects in the AOC program were adaptive reuse, including former sporting goods, book and grocery stores.







The team leveraged the full spectrum of prefabrication, from MEP racks, to slide-in rooms pods, to full volumetric modular builds.







Consistent design elements allowed for repeatability and scalability across the program, creating further efficiencies in design, constructability and cost.

**Interested in  
learning more about  
lean construction,  
prefabrication, or adaptive  
reuse in healthcare?**



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