

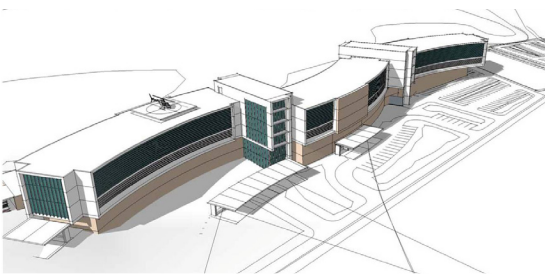
# How to Design a Hospital in Five Days

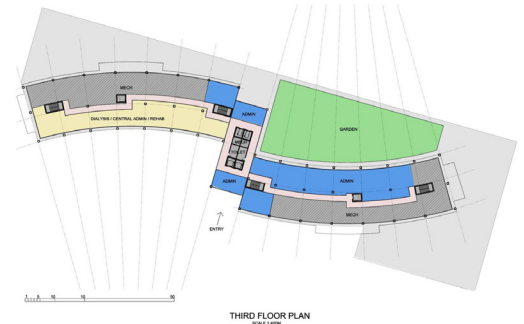
How do you effectively condense a six-month hospital design process into one week? That's the challenge Flad Architects and an international design team faced when they were brought together to program and design a 120-bed tertiary level hospital on the island of Guam.

Designing a hospital of this size is already a challenge; more so when you add in the complexity of working on a remote island with a mix of team members from multiple continents and time zones. In order to make the planning and design process as linear as possible and overcome location barriers, the team utilized Lean principles and tools.

One tool the team put into action is a problem-solving technique called the Obeya process. Obeya is a Japanese term that when translated into the English language means "big room." In the business environment, Obeya translates into "increased coordination among ordinarily disparate groups." Under the Obeya process, teams are gathered from multiple disciplines and meet regularly in a big room, focusing efforts and coordination.

"The theory is simple: Dedicate time and space to coordination and problem-solving while minimizing organizational barriers." said Jeff Zutz, Flad Architects Managing Principal. "The result





was a project design that was developed quickly and met all of the stakeholders' goals."

To kick-off the project, all key team members assembled in Guam for a week-long Obeya planning process. The team included the owner, users, local and off-island architects, hospital planners, MEP engineers, civil engineers, environmental engineers, and construction managers.

"This innovative, real-time process of planning allowed our team members to thoroughly understand the goals and processes up-front and cut out unnecessary steps and communication loops," said Laura Stillman, Flad Architects Healthcare Practice Leader. "It encouraged the team to collaboratively develop solutions, thus removing the need for multiple approvals, presentations, and elaborate cost estimating."

All activities took place in one room – from discussion to documentation. All aspects of the project were planned simultaneously. While site parameters and building locations were being established, the program was developed to align

with the proposed service model. Overlaid on these discussions was the development of a cost model that aligned with the financial operational expectations.

The team often divided into subgroups that focused on various areas of the project. Each subgroup would present its work to the full team, allowing everyone to benefit from the different specialties working on the project.

The big room approach took what should have been three to six months of design work and condensed it down to one week. It gave all the participants a chance to see, hear, and comment in real time, thus eliminating the time delay and looping that can occur in traditional project processes.

"The structured process with daily in/out briefs, aligned with set agendas and an overall five-day schedule, helped guide the team to reach its objective – a conceptual, approved plan for the hospital. The end result is the people of Guam won't have to leave the island for world-class healthcare," said Tom Grove, Flad Architects Senior Medical Planner.