

Project Vision: Shaping Medicine for the Future

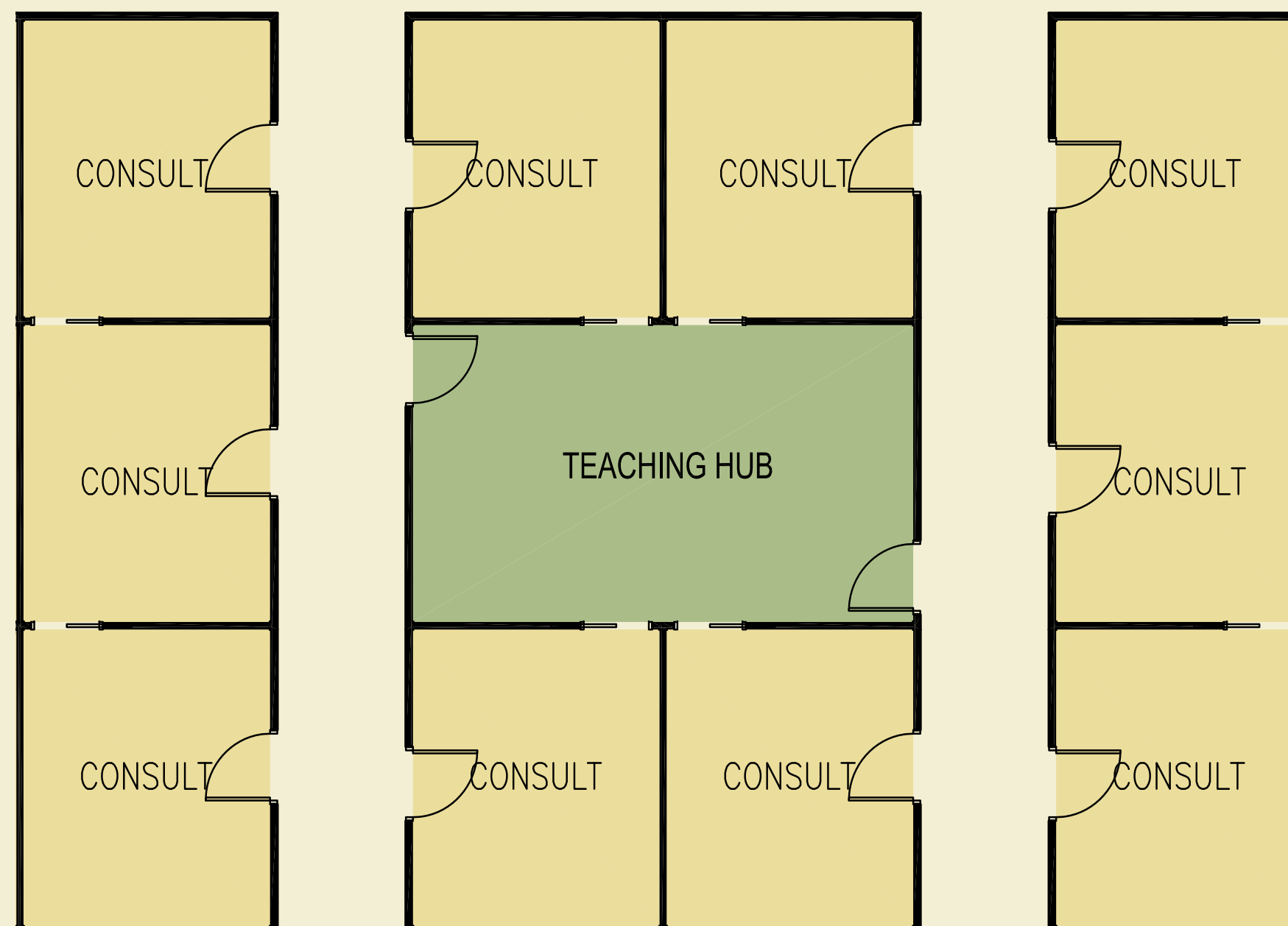
The National University Hospital of Singapore is a 935 bed academic medical center embarking on a 70,000 SM (750,000 SF) building project. The 20 story building will be home to the new National Cancer Institute of Singapore and Specialty Outpatient Clinics (SOCs).

Research Objectives:

Kahler Slater's EDAC accredited professionals recently conducted a rapid prototyping project:

- To understand how undergraduate and post-graduate teaching is conducted in the outpatient clinic setting, specifically in the consult room
- To identify opportunities for consult room design that fosters and enhances teaching, learning and patient care

Project Process



Create and innovate evidence-based concepts:

SOCs are a major component of both undergraduate and post-graduate medical students' education at the National University Hospital of Singapore. Undergraduate students observe, and sometimes participate, in patient consultations. Post-graduate students see their own patients, with supervision from senior physicians. Creating teaching hubs provides imbedded learning space directly in the clinic environment and serves as a home-base for the undergraduate students.

Proposed configuration of consult rooms and teaching hub

Develop a Hypothesis

Teaching hubs adjacent to the consult rooms in the SOCs will improve the patient experience, enhance the learning experience and increase mentoring opportunities.



Patient consultation in existing clinic space



Observing post-graduate mentoring

Collect Baseline Performance Measures

Kahler Slater conducted observational research of the current clinics in the existing hospital. Methods included:

- Video and live observations
- Interviews
- Photo-documentation
- Plan analysis

Following the observations, we created a mock-ups at the Schematic Design Phase of the proposed configuration using:

- Full-scale mock-up of two consult rooms and teaching hub
- Modular furniture
- Puzzle play
- Participant Surveys
- Video and photo documentation of conversations and interactions

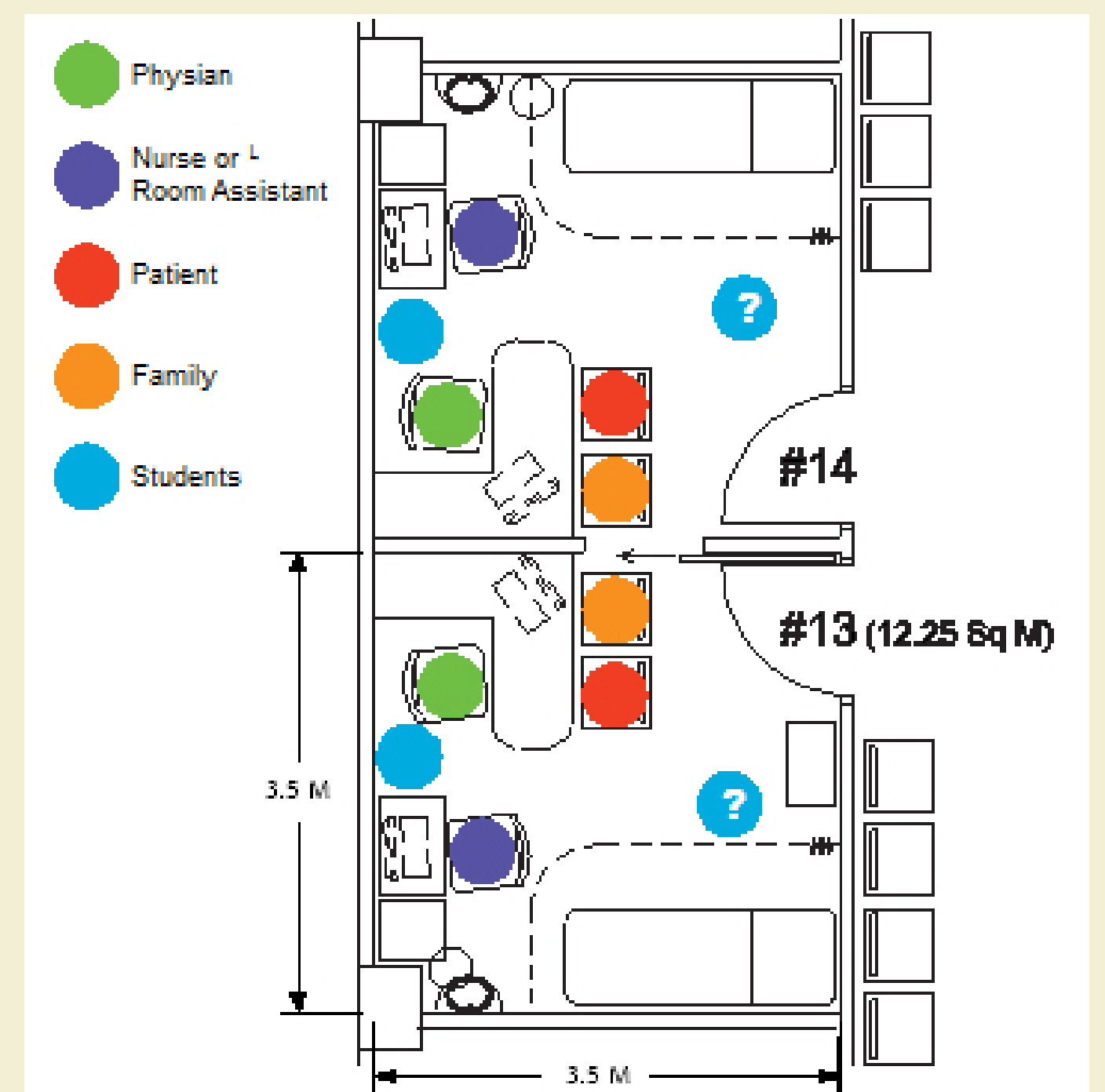
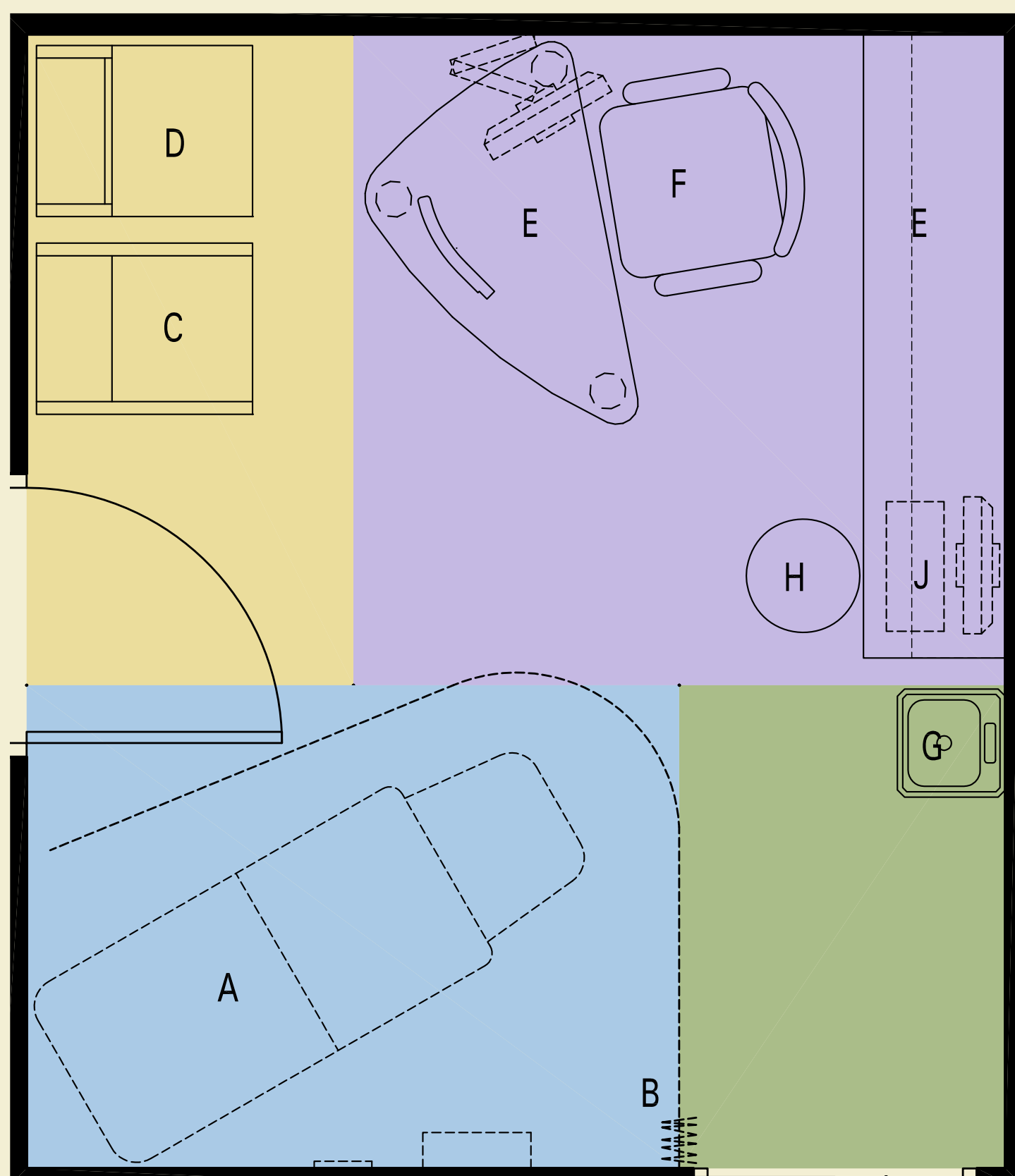


Diagram of existing clinic consult room with participants' usual location identified



Preferred layout of consult room per mock-up participants' feedback



Mock-up of consult room – group modifying the layout



Mock-up of teaching hub – discussion of amenities and how the configuration will work

Project Outcomes

Results:

Kahler Slater's research activities identified building and operational opportunities for the design of the new clinics. Door locations, proximity of medical students to supervising physicians, and patient privacy will influence the design of clinics for the National University Hospital.