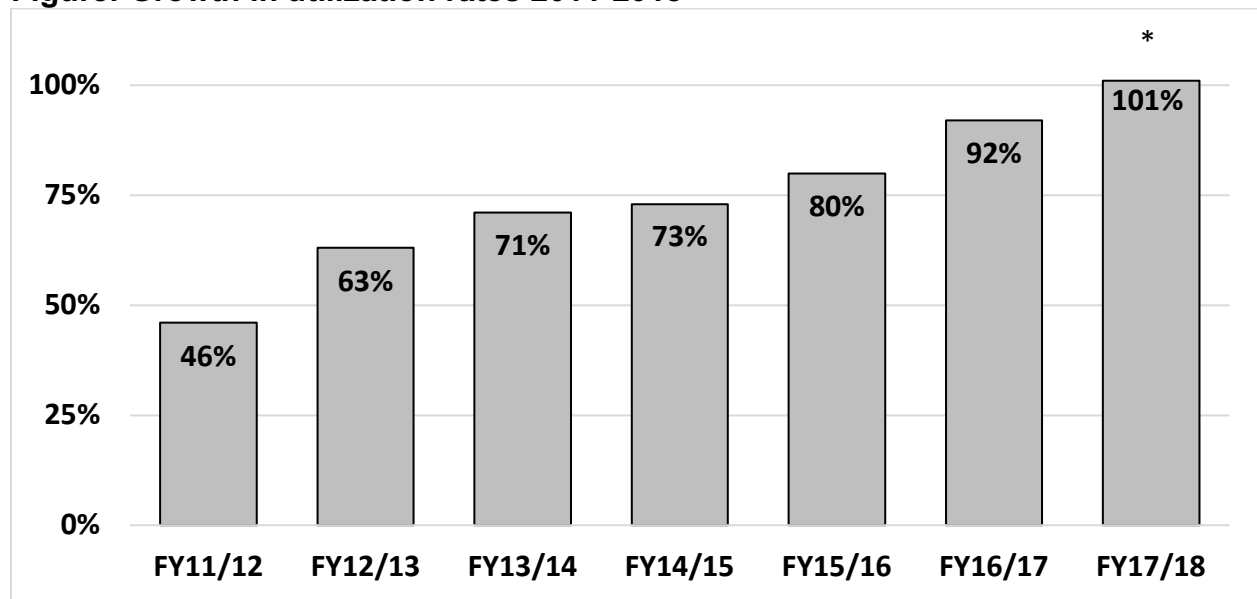


## Kanbar Center for Simulation – Expansion of Facilities Space Needs

**Background and justification:** The Kanbar Center for Simulation and Clinical Skills serves all learners across the UCSF campus across the continuum of education by providing the facilities, equipment and support for simulation-based education. This includes activities utilizing actors known as standardized patients (SPs), mannequin-based simulations, as well as activities with procedural task trainers. The Center's current foot print consists of 4,000 sqft on the second floor of the library, with 12 clinical exam rooms, 2 simulation rooms, 3 monitor control rooms (one for the exam rooms, and one each for the simulation rooms), a staff office and a storage closet. Since the opening of the current facility in January 2011, the Kanbar Center has seen tremendous growth in both the number of programs and annual number of learner visits. Since the 2017-18 academic year, the Center is operating at or above full capacity most of the time. The average utilization rate is greater than 100% because program activities are booked in time intended for maintenance and administrative work, and as a result staff often has insufficient time for set up, breakdown and maintenance. Moreover, this is compromising our ability to accommodate further programmatic growth despite growing interest in simulation on our campus.

**Figure: Growth in utilization rates 2011-2018**



**Expansion of simulation space is needed to address deficiencies in the current space and to accommodate further growth.**

### **Projected growth:**

The use of simulation has grown significantly over the past few years, in particular in medical student and nursing education. In addition, the Kanbar Center became an American Heart Association Training Center in 2017, and subsequently the use of simulation-based education for basic and advanced life support training for learners as well as medical center staff has increased. With ongoing curricular reform, we anticipate further expansion of use in the 4<sup>th</sup> year SOM curriculum, the SOP, and various SON programs. In addition, there is increasing interest in using simulation in GME and CME

## **Kanbar Center for Simulation – Expansion of Facilities Space Needs**

programs, as well as staff training. As expertise in simulation expands across our institution, our ability to provide simulation-based courses for the community is growing, and only hampered by the availability of space.

### **Additional simulation space should encompass**

- A. Additional space at the Parnassus Campus
- B. A satellite center at Mission Bay
- C. Designated space in clinical facilities to accommodate in-situ simulation (see separate proposal for Designated Academic Areas)

### **A. Space at Parnassus:**

As the majority of health professions students are primarily located at the Parnassus campus, and the current facility is consistently overbooked, expansion at Parnassus is essential. Space at Parnassus should also include space for surgical skills training, since the current surgical skills laboratory at Mt Zion (~3,000 sqft) is faced with closure related to seismic concerns. Co-locating surgical skills training with procedural skills training for other fields optimizes efficiency and promotes interdisciplinary and interprofessional collaboration and learning. Similarly, the School of Nursing has a 6 room simulation facility that faces elimination with seismic upgrades. The specific targets for additional space at Parnassus include:

1. Decompress current scheduling constraints on exam rooms, caused by peak interest in scheduling sessions on Tue/Wed/Thu (fully booked throughout the year) and allow for expansion in use of exam rooms, to accommodate projected growth for GME, SON and SOP programs using SPs
2. Decompress the current space issues related to mannequin/task trainer maintenance and repair, and equipment storage
3. Allow for growth in simulation activities using mannequins
4. Incorporate dedicated space for procedural skills training, which can/will be shared with surgery.
5. Incorporate a small class room, similar to the classroom embedded in the Anatomy Learning Center, which has opened up opportunities for hands-on and classroom-based knowledge consolidation
6. Incorporate additional desk spaces for staff expansion and “hotel” space for center faculty, simulation fellows and scholars

If additional space at Parnassus is established in close proximity to the current Kanbar Center facility (e.g. in the library), optimization of space use can be accomplished without major remodeling of the current space. If additional space is established in a different building, remodeling of the current facility will be required to optimize co-localization of activities with similar needs. For example, inefficiencies are introduced if activities utilizing mannequins occur in two geographically distinct locations and/or are physically removed from repair and maintenance facilities.

## Kanbar Center for Simulation – Expansion of Facilities Space Needs

**Table 1 Parnassus Space Needs**

| <b>Space</b>                     | <b>Sqft/ea</b> | <b>Number</b> | <b>Total sqft</b> |
|----------------------------------|----------------|---------------|-------------------|
| Exams rooms                      | 150            | 12            | 1,800             |
| Exam room monitor control        | 300            | 1             | 300               |
| Standardized Patient locker room | 400            | 1             | 400               |
| Simulation room                  | 200            | 3             | 1,200             |
| Simulation debriefing room       | 200            | 2             | 600               |
| Simulation control room          | 150            | 2             | 300               |
| Procedural skills training       | 1,000          | 2             | 2,000             |
| Storage/repair/maintenance       | 300            | 1             | 300               |
| Office space incl hotel desks    | 400            | 1             | 400               |
| Small class room                 | 400            | 1             | 400               |
| <b>Total</b>                     |                |               | <b>7,400 sqft</b> |

### **B. Satellite Center at Mission Bay:**

Among current learners that utilize the Kanbar Center at Parnassus, several groups are now primarily located at Mission Bay. These groups primarily consist of learners in graduate medical education programs (pediatrics, Ob/GYN) for whom the distance creates logistic challenges that compromise the sustainability of this vital part of their training. In addition, there are UCSF education programs primarily located at SFGH, for example Family Medicine, that currently do not use simulation in their curriculum although they desire to do so, because of logistical challenges related to distance. A site at Mission Bay will accommodate such programs. Lastly, a location in close proximity to the UCSF Mission Bay Hospitals enables utilization for training of hospital staff and families of patients, as well as community outreach. This will aid with securing funding for the operating budget of the satellite site from hospital administration, and allows us to offer fee-bearing courses targeting community providers to off-set some of the Center's costs.

**Table 2 Mission Bay Space Request**

| <b>Space</b>    | <b>Sqft/ea</b> | <b>Number</b> | <b>Total sqft</b> |
|-----------------|----------------|---------------|-------------------|
| Simulation room | 400            | 2             | 800               |
| Exams rooms     | 150            | 6             | 900               |
| Control rooms   | 150            | 3             | 450               |
| Debriefing room | 300            | 1             | 300               |
| Storage/repair  | 200            | 1             | 200               |
| Office space    | 300            | 1             | 300               |
| <b>Total</b>    |                |               | <b>2,950 sqft</b> |

A satellite site at Mission Bay does not mitigate the need for additional space at Parnassus.