

What is a MakerHealth™ Space?

Situated inside a hospital, a medical makerspace provides nurses and other health care providers with direct access to robust tools and materials, from 3D printers to Velcro, to create new and better devices that improve the way we care for patients. With a MakerHealth™ Space, nurses can take that epiphany they've had at the bedside for how to improve the patient experience, and actually make it into something they can hold in their hand.

How is a MakerHealth™ Space used?

Medical staff can use the makerspace to prototype a new tool, upgrade an existing hospital device—for example adding a sensor to a take-home pill bottle to monitor use—or customize materials for individual patients.

What's in a MakerHealth™ Space?

The makerspace is stocked with adhesives and fasteners, such as Velcro and zip ties; textiles and electronics, including sensors and microcontrollers; and a range of tools, from pliers and sewing needles to 3D printers and laser cutters. The space is divided into a series of workstations, each equipped to address a specific medical challenge, such as fluid control or assistive technology.

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Who can use a MakerHealth™ Space?

While often spearheaded by nurses, medical makerspaces should be open to all medical staff and health professions students. Nurses may also collaborate with patients and caregivers in the makerspace to create devices.

Why are MakerHealth™ Spaces in hospitals?

Embedding the makerspace inside the hospital ensures ingenuity and making become part of the care delivery process. In the same way that a nurse would go to the pharmacy to pick up prescriptions, nurses can now visit the makerspace to customize a wound dressing to fit a newborn, cut an IV shield down to size or 3D print clips to keep feeding tubes, catheters and other cables organized and out of patients' way.

How can we ensure devices made by nurses are safe and deliver high quality care?

All devices made in the MakerHealth™ Space are sterilized and tested through a quality improvement or institutional review board study before being used on the hospital floor.

How can we ensure nurses are recognized for the devices they make?

A "selfie station" in the MakerHealth™ Space helps medical makers capture and take credit for their devices, and develop "how-tos" so other can recreate their solutions.



Why do we need a MakerHealth™ Space if nurses are already making?

The MakerHealth™ Space at UTMB Health not only helps nurses bring their ideas into realization, it gives nurses tools and materials to amplify the devices they've already created. For example, at UTMB MakerNurse met nurses who had ingenious ways to keep IV tubes and other cables organized and out of patients' way. With The MakerHealth™ Space at UTMB Health they have been able to improve upon that idea. The cup can only hold two cables, but the clip made on the 3D printer can harness many more, looks better, can be reused and easily replicated—nurses just need to hit print!

