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## Remedy for the Common IV Pole

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The last thing doctors, nurses, and patients need is to be inconvenienced by inefficient and unsafe IV poles, which are among the most ubiquitous fixtures in medical settings. Enter Safepole I.V., an antitip IV pole engineered by [Safepole LLC](http://www.safepole.net) (Los Angeles) that features covered wheels; a sturdy, ergonomic handlebar; space for multiple infusion pumps; a central power strip; and a basket for holding bedside essentials such as tissue and alcohol swabs.

"The Safepole is safe and easy to use," remarks Paul Hatch, president of [Teams Design](http://www.teamsdesign.com) (Chicago), which helped design and manufacture the device. "It's the first pole of its kind to be truly designed around the users—both the patients and staff."

For patients, the pole's covered base and easy-to-steer handle rail improve the hospital stay, while its rollability facilitates movement over ridges and carpeting, according to Hatch. Aesthetically, the device's curvy details, looped frame, and approachable feel help place patients at ease. For caregivers, on the other hand, the presence of two poles and staggered-height hooks keep infusion pumps and tubes safely organized, making them easier to track. The unit's transport hook, for example, facilitates attachment to beds or gurneys and enables multiple Safepoles to daisy-chain together for group transportation along hospital corridors. In addition, the sculpted handle and base are easier and safer to clean than the spider legs or drop-in trays commonly associated with IV poles, according to Safepole.

"It was during a hospital stay that I saw the need for an improved IV pole," recalls Cari Ugent, founder and president of Safepole. "The stand I was hooked to kept tipping over, I tripped over the wheels, and the cords and tubes were a constantly tangled mess. I also cut my finger on a rusty screw, which is never a good scenario, especially when your immune system is compromised." Researching the matter, Ugent learned that very few improvements had been made to IV poles since World War II, when poles were first mounted on wheels. In response, she decided that something had to be done.

After interviewing hundreds of nurses, doctors, transporters, inventory staff, and others that handle IV poles each day, Ugent determined the range of features she hoped to see in a modernized pole. Approaching numerous industrial design firms with medical device or healthcare experience, she noticed that Teams Design stood out from the rest. "These colleagues understood my mission and approached the process with interest and passion," she says. "We went on missions to Northwestern Memorial Hospital in Chicago, watched people try to maneuver the standard poles, and studied how they faltered."

While accompanying Ugent on these facility tours, Hatch's team observed how IV poles were used in patient rooms, corridors, and storage and cleaning facilities. In the course of interviewing patients, they found that many complained of gashes on their feet caused by traditional metal spider legs. Many patients also noted that it was difficult to push and steer IV poles and expressed discomfort and frustration at being tethered to archaic steel poles while visiting the bathroom or taking a shower.

No less dissatisfied than their patients at this state of affairs, caregivers noted that traditional poles often lacked space for the multiple infusion pumps that many patients require. "We saw an entanglement of tubes and also observed that when IV poles were wiped down after use, the nooks and crannies remained untouched—even after use in the OR," Hatch comments. "One of the biggest complaints we heard from caregivers was that traditional poles have short life spans, typically because low-quality parts led to wheel problems and bent poles."

The initial phase of designing a new IV pole consisted of bringing together the right combination of features into a comprehensive system that would benefit both care-givers and patients, according to Hatch. However, one of the project's biggest breakthroughs occurred when the team discovered that it could create a standard double-pole design. "This design," he adds, "instantly solved many of the issues we had previously observed with the traditional pole." Teams Design also devoted attention during the development phase to producing components exhibiting the right quality and strength while maintaining affordability. "The end result," Hatch adds, "was the perfect blend of quality design and strategic feature



selection.”

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