There is a much-discussed topic which seems to baffle most people. I have discovered a very easy and foolproof cure for it that I would like to share with you. When you hear it, you'll marvel at its simplicity.

For many years, there has been language in the Joint Commission's and now the Centers for Medicare & Medicaid Services (CMS) standards concerning the prohibition of extension cords, outlet strips, and now the new term “relocatable power taps.” This is a far-reaching issue, and it also includes octopuses, the multi-outlet waterproof “things” that sit on the floor in many operating rooms allowing for the connection of devices. These are all subject to failure or degradation. Outlets are checked periodically, and so are medical devices, but outlet strips and extension cords are almost never checked. They also are frequently subjected to rough treatment such as coiling, uncoiling, and getting stepped on. It is believable that these items would be banned by CMS, because of this lack of routine care.

Extension cords (and similar devices) are used for only three reasons in a hospital: First, there are often more things to plug in than there are electrical outlets to accommodate them (just look in the back of your computer; odds are you are using one or more multioutlet strips as you read this.) Second, in many hospitals, lots of medical devices in surgery are outfitted with industrial grade AC plugs, which must be adapted for traditional straight-blade outlets. Special adapter-type extension cords meet this need. Third, medical devices often equipped with 6- or 8-foot power cords are standard issue. These often just aren't long enough to reach all the way from the equipment to an available outlet in a 25-square-foot operating room. Thus, an extension cord lengthens the standard cord to the correct length.

To summarize, extension cords are used for three main reasons in hospitals—to increase the number of outlets, to adapt between incompatible electrical connections, and to increase the effective length of power cords. There are several steps which should be taken to rid hospitals of these issues permanently.

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First, renovate all areas of the hospitals and add three or four times as many electrical outlets to the equipment-intensive areas such as surgery and intensive care. This is expensive, involves ripping into the walls, and sometimes adding more breaker boxes because of the need for more branches. As these additions are made, it is necessary to remove all twist-lock and explosion proof outlets.

Next, replace all existing power cords on...
every medical device used in surgery (including cath labs and special procedures) with 20-foot cords. This is very time consuming, but well worth the effort in the long run. (You should also require long power cords on all new equipment, or be prepared to change them yourself.)

There. Problem solved! Simple. Wrong!

This is a very expensive and long-term project to complete. We did it in a hospital with 28 operating rooms and about 1,000 items of equipment in surgery. It cost many thousands of dollars in parts, and many more thousands in after-hours labor for the biomed who did most of the work, and yet more money for the electrical contractors who had to work when surgery was closed to retrofit the rooms. But, in the end, we had a workplace where not a single extension cord was needed, used, or stored. Electrical branches were distributed so that breakers did not become overloaded. Nobody tripped over cords across the floor.

But, your chance of getting this magnitude of project approved in your hospital, especially in these tight economic times, is almost nil. So what do you do? Banning all extension cords and outlet strips is not practical or possible. There is an alternative we should lobby CMS for—use extension cords and relocatable power taps where needed, but control them. But how?

Let's step back and examine an extension cord, outlet strip, or relocatable power tap. It is, in reality, just a very simple device, similar to an infusion pump or heart monitor. It has only three components—a male plug, a cord, and a female receptacle (or two or six). What is to prevent us from classifying any extension cord as a medical device, giving it an asset number, putting it into our computer program, and applying the exact same risk assessment criteria to it as any other medical device?

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and outlet strips (many are homemade) which failed either the ground integrity test, the polarity check, or the tension test. Eliminating them is best, but treating them as medical devices (tag, inventory, assess, schedule PMs) is a good fallback.

Let's lobby CMS to not just ban these items, but to treat them with the same exact evaluation, risk assessment and PM requirements as every other medical device. Who will take the lead on this issue?