

BEST Medicine Project Ideas

Medical Engineering

A few ideas for medical engineering projects:

- Skid-proof bottoms for crutches so they won't slip on ice/water
- And arm positioner to hold your forearm in place during a blood draw
- A cordless (battery powered?) cauterizer for the operating room
- A way to splint a fractured arm/leg when they have a laceration which also needs care
- A surgical cap with an absorptive or coolant headband for sweat
- An alarm for use in nursing homes which would go off if a resident fell out of their chair (pressure sensitive on the seat?)
- A sticky backed roll of exam table paper that won't slip around when a patient sits on the table
- A long instrument with some kind of sticky material on end for foreign body removal from ear
- A way to keep the bell of a stethoscope warm so it's not so cold on patients backs
- Environmentally-friendly tongue depressors (any recyclable version of our many disposable plastics)
- A stethoscope bell/speaker unit so you could take someone's blood pressure & still talk to them (no ear tubes)
- A wedge pillow for use by patients with stomach reflux or nasal congestion
- Some kind of camera/projector for the end of otoscopes so we would show patients what we're talking about
- An alarm for an electrician to wear in case he ever got electrocuted (where time is important)
- A head support system for post-retinal surgery patients (background: They often treat retinal detachment by injecting a bubble of air into the globe of the eye, which if the head is looking down- exerts pressure on the retina and presses it back up against the posterior eye. But, to heal properly, these patients have to keep their head horizontal (re: looking at the floor) for weeks. Their only good option currently is a chair (like a massage chair) which has an open face support. I was thinking they could use a device so they would be ambulatory but keep their face looking at their toes.)

List provided by Dr. Erin Gaugler for BEST Medicine