

## NEWS

**Monitoring Seniors At Home**

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By Carolyn Johnson

**May 1 - KGO (KGO) -- Science is taking health care to a new level, with the invention of high tech underwear that can monitor a senior citizen's well-being practically anywhere.**

The garment was demonstrated today, at a health care conference hosted by On Lok, which is celebrating 35 years of helping seniors to live independently.

What appears to be a standard tank top is actually a wearable health care system capable of monitoring a patient's vital signs anytime from virtually anyplace.

Dr. Rita Paradiso: "The idea is to have something very simple, so simple to be confused with standard clothes, but in the meantime, to have a very sophisticated electronics."

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Dr. Rita Paradiso is an Italian bioengineer who's spent the last five years developing these high-tech garments with a team of experts.

She discovered conductive yarns were already being used in the fashion industry to give a crimped effect. Those same fibers are now used to help monitor vital signs.

You can see the transmitter flashing on the undergarment worn by Dr. Paradiso. Her ECG is captured in real time.

Dr. Rita Paradiso: "The idea is to transmit not to a computer, but to a palm and to use the palm to transmit to the doctor."

One shirt is similar to the one Dr. Paradiso is wearing. It has two small sensors that feel like a sponge. Another model collects even more data, but requires the user to wear small gel pads on each sensor.

Stainless steel filaments are used on the underside of the garment to protect the wiring. It is completely machine washable, only the connector needs to be placed in a plastic baggie before throwing it in the washer.

For the elderly, the technology could bring more independence, with doctors or even family members able keep tabs on their vitals at any time, something that appeals to Liz Tarzon of On Lok, the San Francisco nonprofit that helps seniors live on their own.

Liz Tarzon, On Lok: "It would allow them to feel independent even though there might be somebody watching, but they have the sense of independence and the freedom to live their life the way they want to as long as they possibly can."

Dr. Paradiso hopes to be in mass production within a year. Shirts are expected to cost around a hundred dollars, plus the costs associated with the monitoring.

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