

IITians' medical chair can measure vital signs

Runa Mukherjee Parikh | TNN

Ahmedabad: Imagine you are at a clinic and it is a long wait before you get to see the doctor. Inside, the doctor is equally consumed by mundane jobs like taking the patient's blood pressure readings or measuring BMI. A group of IITians in Gandhinagar has developed a 'bio-medical chair' that will do all of this during the wait at the public health clinic itself.

Six MSc cognitive science students of IIT-Gn; Dr Ashwani Mishra, Ujjawal Pamnani, Kinley Mehra, Samyak Shah, Ratna and Rajat Shukla have devised this bio-medical chair after researching its feasibility in the largely crowded public healthcare setup in India.

Mishra, as a doctor, has field experience in both rural and urban areas and came up with the idea. "We wanted to make a vital stats measurement system that would reduce the doctor's load, improve staff productivity and utilize the time patients spend waiting outside the general OPD," said Mishra.

After visiting several hospitals and doctors, the team decided to make a simplified yet fundamental design, keeping the rural Indian user in mind. "We took various circuits with LED displays for the vital stats and attached them to a



The 'bio-medical chair'

wooden chair built during a workshop," said Shah. While it was made to cater to the public healthcare system, the functionality is very basic and can be taken over by the private sector as well. The bio-medical chair, that was made as a part of the Design and Innovation Lab at IIT-Gn was spearheaded by Professor Bhaskar Bhatt. "Typically, a public healthcare doctor has to treat 150-200 patients in a three-hour shift. The simple measurements of blood pressure, pulse rate, saturation rate of oxygen and weight can be done by this bio-medical chair. This will save time for the physician and he can focus on treatment thereafter," said Bhatt.

The team will file a design patent soon.