MY BESHIE:

Telepresence Terminals for COVID-19 Response Team

HeaRTNovation
DOST-PCHRD INNOVATION PORTFOLIO

THE PROBLEM

The COVID-19 pandemic brought forth an unprecedented increase in the number of patients being admitted in hospitals. Since COVID-19 is a highly-contagious disease, COVID-19-positive patients are isolated and physical interactions are limited, reducing risk of exposing medical personnel to contracting the COVID-19 virus.

As patients are rarely visited by nurses and doctors, the limited human contact may also add to the anxiety of patients. To address this, a bedside healthcare device that will allow medical personnel to constantly and remotely monitor and talk to their patients may be beneficial in these situations.

THE SOLUTION

The University of the Philippines Manila and the University of the Philippines Diliman, designed and developed **My BESHIE** – a medical telepresence device that allows autonomous monitoring and managing of a patient with or without the use of the internet. This device was created by a team of researchers led by Dr. Nathaniel S. Orizalla Jr. through a project that was funded by the Philippine Council for Health Research and Development (PCHRD).

My BESHIE uses artificial intelligence (AI) to monitor patients and allow sending of distress signals to a predefined contact health care worker when needed. The head of the device is equipped with a monitoring camera that is connected to a processing computer. This mechanism serves as the eyes and the brain of the device allowing it to autonomously record and process the movements of a patient. This also aids in identifying positions and events that may be considered hazardous to the patient (i.e. prolonged lying down or falls).

Telepresence devices have been already used in a variety of industries. For healthcare in the time of a pandemic, this provides a versatile solution as it requires less effort to protect and decontaminate healthcare personnel while still providing personalized care to patients and give the impression of being present in an area of need.

TECHNOLOGY GENERATOR

University of the Philippines Manila
University of the Philippines Diliman
Project leader: Dr. Nathaniel Orillaza, Jr.

TECHNOLOGY DEVELOPMENT

My BESHIE medical telepresence device is currently at Technology Readiness Level (TRL) 5 and ready to scale up. The technology generators are looking for commercial partners to optimize the production and for marketing the device. Potential partners are preferably those with experience in procurement, assembly and/or production of robot parts.

A patent application for My BESHIE has already been filed in the Intellectual Property Office of the Philippines (IPOPHIL) through PCHRD's IPROTECH Program and DOST's Science and Technology (SciTech) Superhighway Program.

Interested technology adopters may send a letter of intent addressed to:

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