

App measures anemia with light, makes blood checks safer



Designed to help rural and remote communities, the [HemaApp](#) - created by researchers from the University of Washington's Computer Science and Engineering department - checks users' levels of hemoglobin without needing to draw blood. Hemoglobin carries oxygen throughout the body, and different amounts of it in the blood indicate different conditions, including childhood malnutrition and anemia.

Users place their finger over the phone camera, and then the app checks the intensity of the color of the blood. HemaApp's results were correct 62 percent of the time when using only the phone's camera and improved to more than 80 percent accurate when used with an additional light source.

Further development will focus on strengthening lighting options and improving the app's accuracy. Mobility often increases convenience, and at-home tests are becoming more popular - like this [smart medical kit](#) that provides check-ups and this [on-demand clinical testing](#) platform. Could at-home treatments be the next development in on-demand, personalized healthcare?

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