

Top 3 Medical Advancements of 2021

2021 was a year backed by innovation in technology and healthcare. The team at The Rounds highlighted three of the many medical advancements brought to life this past year.

Continue reading to learn more...

mRNA Vaccine Technology

mRNA vaccine technology has been studied for decades but only recently hit the market with help from the COVID-19 pandemic. The build of mRNA vaccinations is easily adaptable and could offer a range of treatments and vaccines for some of the most pressing illnesses currently affecting the population – at a fraction of the time and cost.

Early Cancer Detection

A Multi-Cancer Early Detection (MCED) test, known as The Galleri test, is a simple blood sample that screens DNA for more than 50 types of cancers. The test can pinpoint cancer's place of origin with high accuracy, if/when a cancer signal is found. Early cancer detection can change the course for many cancer victims and offer a stronger chance of recovery.

Antiviral Oral Pills

Antiviral Oral Pills are soon to change the way COVID-19 and many other flu-related diseases are treated. Designed to stop a virus from replicating, antiviral pills can be administered at any stage of infection but find the most success when taken early on. The pill format makes treatment for COVID-19 and other viral diseases exponentially more accessible — alleviating stressors for many.

How will these advancements impact healthcare?

Let's break it down:

75%

of scientific papers on COVID-19 and vaccine research were published with open access.

The "we need it now" mentality stemming from the urgency of bringing a COVID-19 vaccine to market forced scientists to collaborate and share research amongst each other to get the job done quickly. More now than ever, researchers are sharing their findings through conference calls, email chains, and web-postings — changing the culture of science through democratization.

71%

of cancer deaths are caused by cancer types not commonly screened.

Early cancer detection allows patients and physicians the opportunity to be proactive in addressing treatment courses. Galleri Tests can remove the limits on treatment options in cases of late-stage diagnosis, increasing overall survival rates.

89%

of total hospitalizations were cut after the use of the antiviral pill in mildly affected COVID-19 patients.

The technology used in an antiviral pill helps treat and shut down the spread of the virus, reducing hospitalizations and serious cases of illness. The reduction in the need for hospital care takes the strain off healthcare workers and institutions, as well as makes the treatment process for patients much less daunting.



Honourable Mention:

COVID-19 Booster Shot

The Booster shot provides heightened immunity, protecting an individual against the original strain and its variants.

With protection against the virus falling from 90% to 70% in the span of 6-months post-vaccination, the Booster shot is key to keeping waning immunity from Coronavirus.

References:

<https://sciencebusiness.net/covid-19/news/covid-19-triggered-unprecedented-collaboration-research>
<https://www.healthline.com/health-news/this-new-test-can-detect-50-types-of-cancer-from-a-single-blood-draw#What-Galleri-could-mean-for-cancer-patients>
<https://www.nature.com/articles/d41586-021-03074-5>