

We All Own This!

I have the good fortune to be on the boards of a number of foundations that support cancer research. At a recent meeting of one of these organizations, a lay board member asked if we thought we were making an impact with our grant program. It caused me to pause and think. How do you measure impact? How do you quantify what factors led to a breakthrough discovery for cancer treatment or a new strategy to prevent disease in the first place?

Every breakthrough represents the apex of a virtual pyramid of building blocks: experiments that worked and those that didn't; new bits of knowledge leading to even more findings. Each piece of the puzzle is often funded by a different source. Any accomplished scientist's funding portfolio will be diverse. Funding might come from various agencies within the government, private foundations, industrial sources, or even philanthropy. Can you attribute an accomplishment to a particular grant? That would be hard to do. And what about the dedicated graduate and post-graduate students, usually funded by training grants, who did the "hands on" work at the bench? That funding is pretty important too.

Furthermore, for cancer treatment, a new discovery isn't really a breakthrough until it has meaning for patients and actually works. That means that a company and investors took a chance on the new asset and supported the clinical trials. So when you look in the rearview mirror at improved treatment, you have to credit the scientists and their brilliant ideas, the research team, all the funding agencies and the reviewers who saw something important that needed to be supported, the patients and families who participated in clinical research, and the investment in sweat or equity of all participants throughout the process.

When it comes to prevention, the story gets more complicated. Prevention doesn't work if public health agencies don't promote a prevention practice, if doctors in the trenches don't discuss it with their patients, and if patients or young patients' parents don't put health first in their families. Disseminating and implementing any new strategy for prevention takes a virtual village, and seeing the effects may take a generation.

We are enjoying a good time in oncology. Death rates in the most common cancers are decreasing every year. New drugs are being developed at an unprecedented rate. We are already seeing the fruits of prevention in diseases like lung and colon cancer and are beginning to see declines in viral-related malignancies, such as cervical cancer and hepatocellular carcinoma, due to use of vaccines or antiviral drugs.

Of course, there is still much to be done, and we can't rest or lower our vigilance. For instance, some diseases, such as pancreatic cancer, are growing in incidence, and we are seeing disturbing increases in colorectal cancer in younger adults. It seems that we will always have more work to do.

When we consider who should get credit for good outcomes in oncology, I agree there are clear leaders in science funded by many sources, who definitely deserve accolades. But when we look at the big picture, I think we all had some role and we all deserve some applause. Take a bow!



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