Today the nation faces stark facts not recognized by the general public. For example according to a 2013 report by researchers at Washington University, up to 40,000 breast biopsies a year may be read for the wrong patient! In prostate cancer over 20,000 biopsies a year may be read for the wrong patient! In pancreatic cancer from 2001 to 2006, over 60 percent of patients in large hospitals in California received the wrong treatment! The 2012 study found the poorer you are the higher the risk of receiving inappropriate care, with lower survival rates. A tragic form of medical apartheid.

How could we ever hope to improve care and reduce costs when patients, caregivers and payers alike have no real time clarity of what is the right treatment to administer BEFORE treatment begins? How do we provide cognitive support for doctors who cannot keep up with the deluge of new scientific insights, and create a "learning system" of healthcare?

With much of the political discourse in this country centered still on myriad intricacies of the Affordable Care Act, one might assume that Washington is giving the most pressing healthcare issues of our time the attention and thought they deserve. In one fundamental facet, too many continue to miss the mark. As Washington focuses on the same hashed out arguments over state insurance exchanges and new insurance regulations, it is woefully ignoring much-needed reforms to the underlying network that connects doctors and patients - including the government's own ability to connect medical records.

The enduring question remains: how can we harness the power of medical information if leaders
in Washington fail to cultivate the national infrastructure that is required to share it? At first blush, this concern sounds trifling and overly technical. But in truth, the medical community and the transformational advances we are poised to make depend altogether on an efficient and effective system - on an open, secure, interoperable platform - that medical professionals anywhere can readily access at the first point of patient care; particularly in instance of decisions affecting clinical outcomes in life-threatening states.

Today, Washington is actively subsidizing the purchase of medical record systems for major health providers - having spent $26 billion taxpayer dollars to date and a further $6 billion to be spent - without solving interoperability and sharing of vital data, nor providing a system of information sharing to empower both physician and patient with the wisdom of 21st century care. What does this mean? Effectively, we are buying billions and billions worth of medical data coded in a plurality of languages, with no Rosetta Stone to translate it; data that separate government agencies, physician practices and hospital systems which do not know how to read to, share with, or deploy for each other.

This denotes a severe and inexcusable disservice to hospitals, medical research, and, ultimately, patients in this country.

Imagine a family member being diagnosed with a terminal condition - a stark reality that will confront countless individuals in America today. An innovative treatment option, a potentially life-prolonging case study, or a key piece of genomic information in the patient's own history could exist in one of the many databases of digitized records across the country.

With incompatible, woefully outdated software systems and an inferior infrastructure, we will never know if that information exists; patient care will and does suffer immeasurably as a result.

With health care providers taking cues from government purchasing decisions, this problem affects real-time care delivery as well: a patient seeking care in California is not guaranteed that their medical history in Boston will be accessible to the California physician in real time. And when every minute counts in medical care, no one has time to wait for a hard-copy to be faxed and re-processed from one health system to another.

The bottom line: physicians and their patients don't have failsafe access to the medical information they need when they need it. And researchers, ready and waiting to solve the medical challenges of today, simply cannot turn the trove of data the government is sitting on into the healthcare advancements of tomorrow. Indeed, the government could solve this infrastructure problem. To date, it has chosen to ignore it. And when progress is stifled, it is patients who suffer. We have to do better. That is why healthcare entrepreneurs across the country are stepping forward to solve this problem. Over the last seven years, I have worked with a critically acclaimed team to build a National Information Health Highway for medical records and for the digital genomic revolution that is upon us. It is - in scale, scope, and significance - a modern day Manhattan Project. We are on our way to affecting millions of lives, not just for our generation, but generations to come.

The National Information Health Highway provides infrastructure and digital technologies that can be accessed by medical research hubs and hospitals from coast to coast. This communal approach to analyzing mass data brings the medical community's best minds and insights together to advance groundbreaking disease and cancer research. It promotes advanced scientific endeavors - like The Cancer Genome Atlas - that have the demonstrable potential to transform healthcare as we know it.
Just take our development of molecular based chemotherapy. From discovery to date - a 17-year process with hundreds and hundreds of research contributors - we have learned that we could target a single protein receptor (GP 60) with a single drug (Abraxane) to make a major impact on breast cancer, lung cancer, melanoma and pancreatic cancer treatments. Doctors across the country can access this information to bring the most innovative and promising treatments to patients and families whose lives rely on their timely expertise. Imagine if we developed the infrastructure to enable similar discoveries and developments not just in genomics, but proteomics. We would see medical advances as revolutionary as penicillin, expedited. We would advance beyond treatment and evolve down the path toward cures. This process has already started.

Establishing a workable records system as a first step to applied innovation, we have provided over 200 hospitals and 8,000 oncologists nationwide access to our medical "Manhattan Project," an open and vastly interoperable software platform. Our mission moving forward - our commitment - is to expand that so every patient in America can benefit from this new technology.

Moving forward, we need government to help healthcare providers in this historic effort. Without a renewed commitment to intensifying an integrated coordinated care system for medical records, the data that could advance innumerable studies, that could inform the medical community's transformative research endeavors, and could save countless precious lives will continue to sit in separate silos - untouched and unused.

That is unacceptable. We must come together and make a meaningful investment that will reinvigorate the intersection of medical innovation and medical infrastructure in this country. We cannot afford to wait.

The Cornerstone, of the Lister Hill Center at the National Library of Medicine said it all - "We must develop a communications system so that the miraculous triumphs of modern science can be taken from the laboratory and transmitted to all in need." The problem is that statement was made by United States Senator Lister Hill...in 1965!