Suggested Projects: White House Innovation Fellows
 # 14 - Blue Button Plus (a Rapid Learning Genome Option for Citizens): Fast Discovery of Precursor Indicators by Putting VA Data Online.

   I suggest: 1.) Blue Button should include a Blue Button Plus option (i.e., a national Rapid Learning Genome option); and 2.) The VA databases be placed online, with free supercomputing time and analysis software (a rapid-learning idea that I submitted earlier) to discover precursor indicators for diseases and better prevention options.

   VA has about 8 years of data and is moving toward 1 million EHRs with genomic data. Most Vets are over 65. With the VA databanks, outside researchers can look backward to see a full range of precursor conditions (including genetic combinations). These data will begin to empower a new era of business opportunities and services.

   For maximum national benefit, patients (everywhere) need their genomic data. Blue Button Plus will engage a health provider or contractor to obtain a DNA (e.g., saliva) sample for analysis and confidential storage. As we learn about precursor markers, the patient's personal App or designated health provider will receive immediate alerts and customized prevention advice.

   A team can brainstorm financing and co-pay options. Current costs are under $1,000 and dropping. There will be long-term prevention and learning benefits: the Medicare Trust Fund should pay part of the cost. NIH could pay part of the cost if patients provide additional information (as they do in the UK and Kaiser biobank research programs), another part could be tax-deductible, etc.

   General public health recommendations are: eat broccoli instead of cheeseburgers and french fries, etc. But this is general statistical advice, and it often sounds like preaching. A personal App can empower patients and provide customized, refined, and updated estimates of preventive changes in health-related behaviors and their benefits (legally, for discussion with physicians): "Statistically, for your genotype, our best estimate is that you can reduce your risk of Alzheimer's disease by x% if you begin to . . . ."

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