Written Statement of The Honorable Roger W. Baker Before the House Veterans Affairs Committee Subcommittee on Technology Modernization March 7, 2023

Thank you Chairman Rosendale and Ranking Member Cherfilus-McCormick for holding this hearing today. With over \$50 billion at stake, misinformation regarding VistA has been rampant. Numerous parties, largely those with no expertise in VistA, medical care, or software development, continue to repeat misinformation designed to convince Congress that VistA is a problem in need of their solution.

Not that I need to remind this committee, but I served four years as the Assistant Secretary and CIO for VA, from 2009 to 2013. In that role, I was responsible for all investments in VistA, including budgeting, daily operations, bug fixes, improvements, modernizations, and strategic direction. I was responsible for analyzing and then stopping the failed HealtheVet program. I was the VA lead for the iEHR program and dealt with all of its complexities. Perhaps most useful for our discussion today, I analyzed why VA continued to fail in its software development efforts, and introduced a program management approach that increased the rate of on-time software deliveries across the development portfolio from under 30% to over 84%.

Several years ago, I published three articles regarding the EHRM program and VistA, which I have linked below. I believe the information in these articles is still largely relevant.

Why VA's Electronic Health Record Mega Project is Failing https://fcw.com/it-modernization/2021/07/why-vas-electronic-health-record-mega-project-isfailing/259229/

How VA Can Succeed with its EHR Mega-Program https://fcw.com/acquisition/2021/08/how-va-can-succeed-with-its-ehr-megaprogram/258949/

Why VA Must Keep VistA Healthy https://fcw.com/acquisition/2021/08/why-va-must-keep-vista-healthy/259006/

The primary success measurement for an electronic health record (EHR) system at VA should be Veteran health outcomes. The fundamental reason that VA, VHA, and the EHR exist is to provide Veterans with superior health care. An EHR should be an aid to clinicians and medical staff in doing their jobs, help speed their work, provide them with information to make better decisions, reliably communicate work orders such as lab tests, prescriptions, treatments, and specialty referrals, and coordinate and track the medical activities of the entire medical center needed to improve health outcomes.

The EHRM program has effectively run a controlled experiment over the last six years, complete with a hypothesis, control group, and metrics. This experiment has provided concrete proof that Veterans achieve better medical outcomes when VA facilities use VistA than when they use the commercial alternative. And while service impacts should be expected in the initial days of an EHR swap, I have seen no projections from VA as to when productivity and medical quality measurements using the new EHR will exceed those previously seen in the same facility using VistA.

Because Vista excels at medical care, and it sets a high comparative bar. Vista, and the work processes encoded in it, was designed, implemented, and honed by VA clinicians to do exactly what a clinician needs and what a clinician expects. That is both its blessing and its curse.

Independent surveys show that VistA is the most liked EHR by clinicians nationally.

Medscape EHR Report 2014

Medscape EHR Report 2016: Physicians Rate Top EHRs

However, as an IT product, VistA is complex and difficult to change. But <mark>which would we rather have for medical care, a system that clinicians love and IT people hate, or one that IT people love and the medical staff hates?</mark>

Some lobbyists would have you believe that the IT difficulties of VistA are more important than the medical care advantages. That VistA is a problem because of its age, complexity, and the language it is written in. In fact, at least one lobbyist would have you believe that "Vista cannot be made better."

This is provably false. During just my four-year tenure, many improvements were introduced to VistA, including bed management, blood bank, Pharmacy re-engineering, registries, and numerous others including, fairly notably, Cerner Labs.

In fact, VistA can be difficult to modernize. But the difficulties in modernizing VistA stem not from the software itself, but from three root causes that come from VA itself.

First, every time VA has attempted to replace VistA, first from 2000 to 2009 under HealtheVet, and second from 2017 until now under EHRM, VA has prohibited investment in VistA. This has included eliminating promising technologies such as VistA Exchange by terminating the EHMP program when it was in beta test. The fact that you are told that "VistA cannot be made better" as an argument for why \$50 billion needs to be spent to replace it, when the primary issue is that VA has cut off investment in VistA improvements for 16 of the last 24 years, is rich indeed.

Second, years ago VHA made the decision that veterans receive better medical care if each VA is allowed to tailor its care to local needs. That Veterans in Fort Harrison can have different

care needs from those in Palm Beach. This local control of medical care is a fundamental part of the medical culture of VHA. As you would therefore expect, VistA was specifically designed to easily support that local customization. I am certainly not qualified to tell you whether localization is a good medical decision. For that discussion, I would suggest a discussion with Dr. Ken Kizer as well as numerous other medical professionals who have given this topic much more thought than I ever could. I can tell you that it is where the sound bite "VistA is not a single system, it is 130 separate systems" comes. Local customizations were a celebrated part of VistA development for many years, until the advent of the "Gold Disk" program. But these local customizations are what make designing, programming and testing changes to Vista more difficult, because every change must be tested to work with each VistA system.

VA's experience with Cerner Labs is a good example of the effects of the VHA culture on VistA. In (approximately) 2007, VA decided to replace the VistA Laboratory module with one from Cerner. Integration of the cloud version of Cerner Labs into VistA proceeded, and by 2012 VA had completed a successful introduction of the package at the Huntington, WV VA, where it is (to the best of my knowledge) still in use today. The functionality was well received, and a plan was presented to roll-out across the rest of VA. Unfortunately, that plan was wildly expensive and would take many years. When asked why, the program team explained that all of the customization parameters in the lab package, which had been a significant portion of the development work, would need to be re-discovered, re-verified, re-entered, and re-tested for each VA hospital, since business process and even the names used for each drug vary at each VA. As a result, Huntington remains the only VA running Cerner Labs (again, to the best of my knowledge).

As noted above, VA began its "Gold Disk" program in 2011, as part of the decision to move VistA to an Open Source model. The goal of the Gold Disk was to eliminate the variations between VistA instances by identifying software differences and working with VHA to agree on which business process, and therefore which software modules, could be used at all VA's. By 2015, this had reduced variations in the VistA software to under 5% across all instances. It is my understanding that VA has continued this effort and has further reduced software variations, possibly to the point of achieving our goal, a single "Gold Disk" version of VistA to be distributed to all VA facilities.

Third, federal pay grades and procurement practices have eroded the base of skilled software developers needed to maintain a complex EHR product. Capping salaries at GS 13/14 levels for the most skilled federal IT staff has caused them to seek other employment. And VA continuously awards contracts for complex VistA improvements to companies that lower their prices to win the work, and then cannot employ the necessary skills at the rates that were bid. They would rather tell VA "we can't find MUMPS programmers" than "we underbid the work" to justify why they failed to deliver.

VA has repeatedly failed at efforts to replace VistA. HealtheVet, iEHR, and now EHRM were each attempts to replace VistA, not to make it better. Each failed, in part, because the difficulty in making the software better is not in the software, but in the fundamental VHA culture. VistA is tightly attuned to that culture, and well liked by the medical staff for exactly that reason. Unless and until a decision is made that software standardization is more important than local control of healthcare, attempts to replace the VistA product with a commercial product that does not support that fundamental part of the VHA culture are doomed to certain failure.

Mr. Chairman, there is much misinformation regarding VistA being promulgated in an effort to justify the \$50 billion needed for the EHRM program. I have attempted to address only a few of them. But the EHRM program has provided the best proof that they are either wholly or partially untrue. After six years, Veterans continue to achieve better healthcare outcomes in VA facilities that use VistA versus the alternative. That remains the single most important fact you will hear. I commend this committee for demanding to deal with the actual facts regarding VistA, its role in veteran healthcare, and its ability to be modernized, and I look forward to working with you and answering your questions as you further search out those facts.