



# **HealthCare.gov**

## **Progress and Performance Report**

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## Overview

In mid-October, the Obama administration conducted an assessment of the site HealthCare.gov. The assessment was conducted by experts from across government and private sector. The team identified the problems and necessary fixes and determined that HealthCare.gov was fixable, but only with significant changes to the management approach, and a relentless focus on execution. This report details the substantial progress that has been made to improve and stabilize HealthCare.gov, including hundreds of software fixes and numerous hardware upgrades, so that the system runs smoothly for the vast majority of users.

The status of HealthCare.gov in October was marked by an unacceptable user experience. Consumers were experiencing slow response times and frequent, inexplicable error messages. The website experienced frequent outages. For some weeks in the month of October, the site was down an estimated 60 percent of the time. The assessment determined the root causes for these site flaws to be hundreds of software bugs, insufficient hardware and infrastructure. The system monitoring and response mechanisms were not sufficient for identifying issues or bugs or responding to them in real time. Inadequate management oversight and coordination among technical teams prevented real-time decision making and efficient responses to address the issues with the site.

Improving the user experience for HealthCare.gov required deeper real-time analysis to the system, additional technical expertise, and a strong management structure to drive the prioritization and metric-driven execution of fixes. The Center for Medicare and Medicaid Services (CMS) appointed QSSI as the General Contractor and Systems Integrator. QSSI, with their deep project management expertise, coordinates all activity with CMS and other contractors. With one central command structure and “War Room” meetings of all key parties held twice a day for real-time, data-based decision making, the team has been able to implement high-performance management practices and drive through a priority set of fixes.

The newly installed technical monitoring instruments have allowed for constant real-time analysis of site performance. With this new data and management structure the team has the capacity to rapidly respond to any incidents and to better understand root causes.

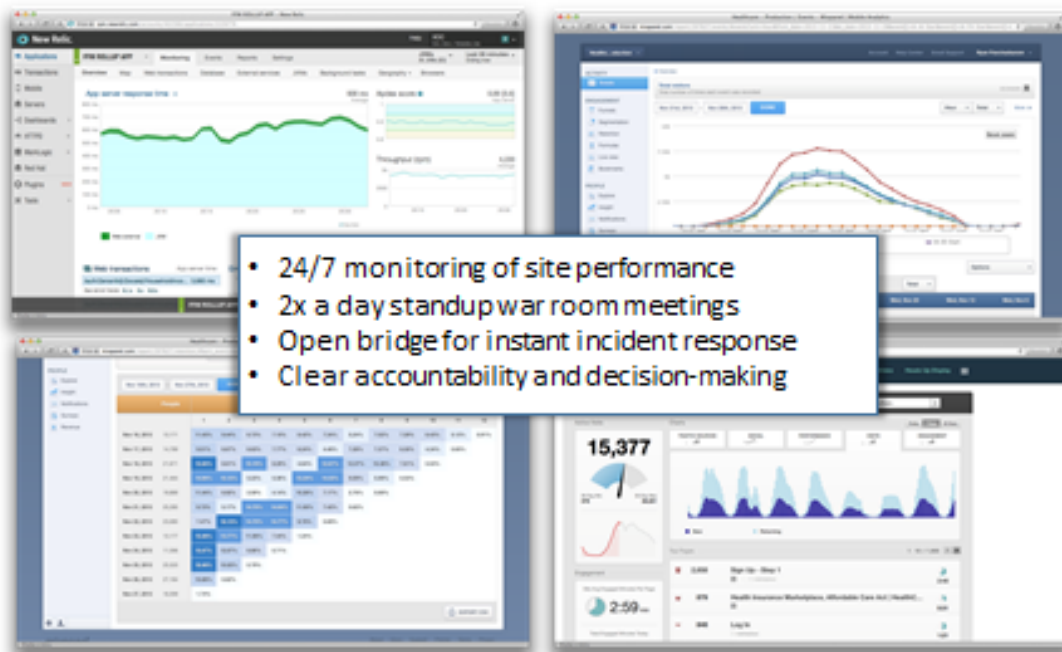
Over the last five weeks, substantial progress has been made improving HealthCare.gov and getting the system to where it needs to be:

- Hundreds of software fixes, hardware upgrades and continuous monitoring have measurably improved the consumer experience
- Site capacity is stable at its intended level
- Operating metrics are greatly improved, and activity levels demonstrate the site is working for consumers

While there is more work to be done, the team is operating with private sector velocity and effectiveness, and will continue their work to improve and enhance the website in the weeks and months ahead. The following charts provide data on the systems enhancements that have been executed, and the resulting improvements in the site’s key operating metrics over the last several weeks.

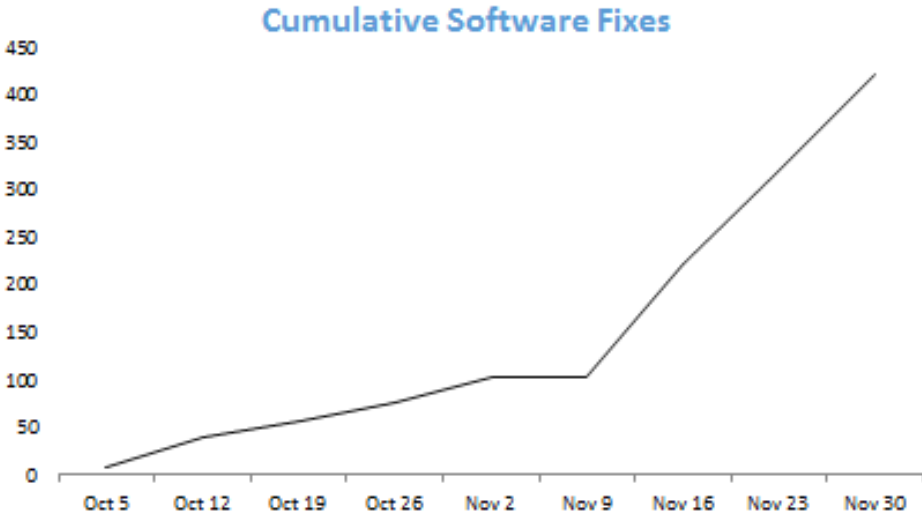
## Real-Time Monitoring

*Dedicated team focused on site monitoring and instant incident response*



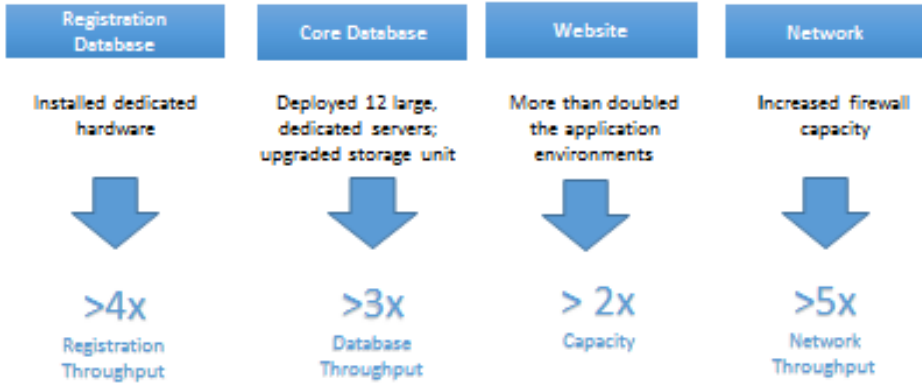
# Software Fixes

The team has knocked more than 400 bug fixes and software improvements off the punch list



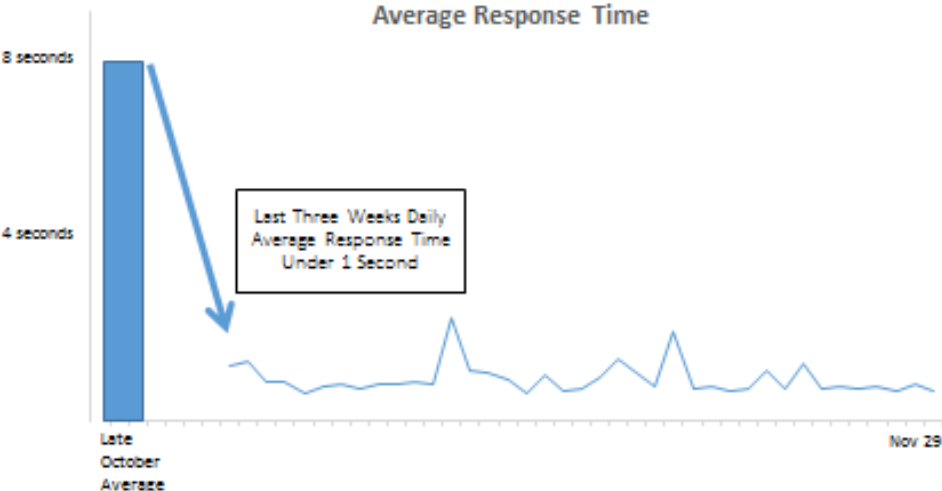
# Hardware Upgrades

A series of significant hardware enhancements have increased redundancy, reliability and scale



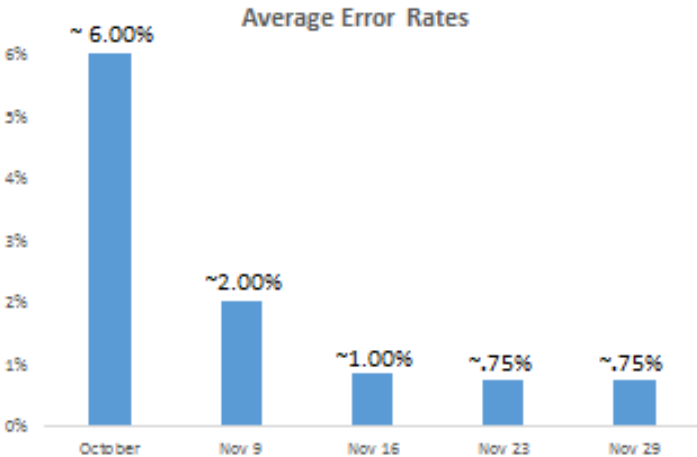
# Response Times

*System speed has increased dramatically, with response time running under 1 second*



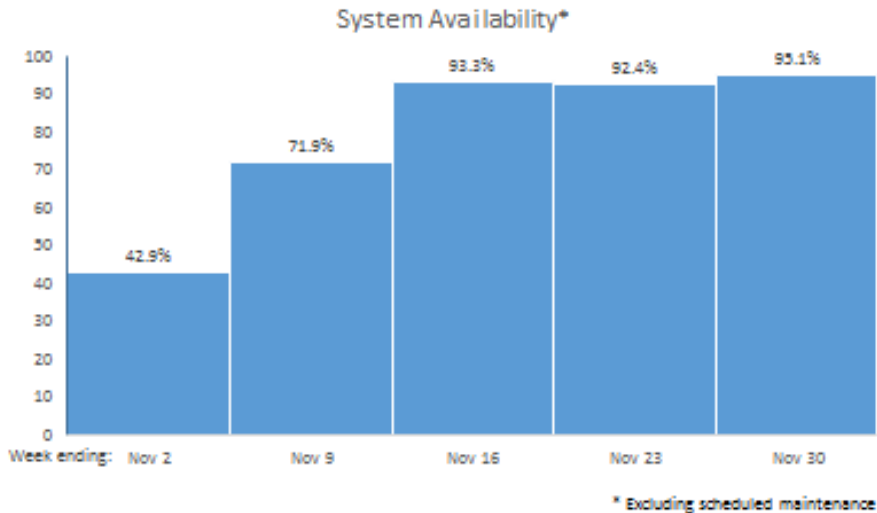
# Error Rates

*Per page system time outs or failures have been driven down from over 6% to well under 1%*



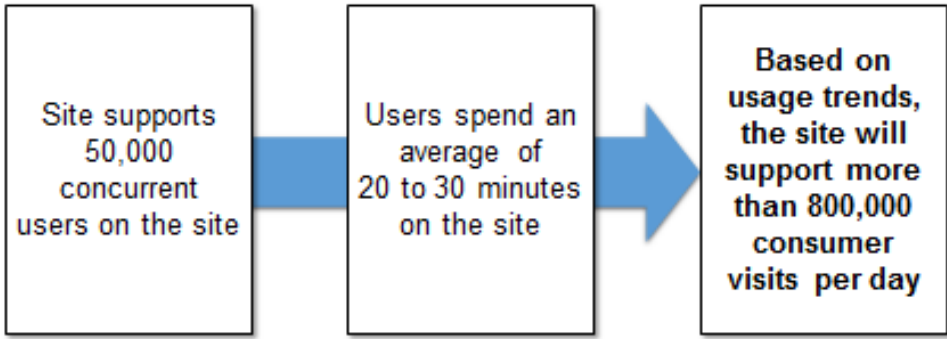
# System Stability

*Uptime is consistently surpassing 90%*



# System Capacity

*Software and hardware upgrades enable the system to support its intended volumes*



## **Summary**

Achieving a system that runs smoothly of the vast majority of consumers

<b>Metrics</b>	<b>Progress Update</b>
Response Time	Average system response time lower than 1 second
Error Rate	Lower error rate, consistently well below 1%
System Stability	Hardware upgrades and software fixes to support system uptime of 90%+
Rapid Response Team	24/7 monitoring and operations center and team in place to ensure optimal system performance and to respond to glitches and unplanned downtimes
Concurrent Users	Capacity for concurrent user target of 50,000. supporting a minimum 800,000 visits per day

## **Conclusion**

As the metrics detailed in this report reveal, dramatic progress has been made on improving HealthCare.gov. There is more work to be done to continue to improve and enhance the website and continue to improve the consumer experience in the weeks and months ahead. The new management system and instrumentation have helped improve site stability, lower the error rating below 1%, increase capacity to allow 50,000 concurrent users to simultaneously use the site and will help drive continuous improvement on the site. While we strive to innovate and improve our outreach and systems for reaching consumers, we believe we have met the goal of having a system that will work smoothly for the vast majority of users.