



VistA Modernization

Legacy to Leadership

Agenda

- Working Group Charter
- Background
- Approach
- Executive Summary
- Recommendations
- Sub-Committees
 - Alternatives
 - Modernization and Architecture
 - Models and Extensions
 - Deployment Models
 - Extensions
 - Opportunities and Impacts
 - Governance
 - Reports and Presentations

Charter

- IAC was chartered by the Department of Veterans Affairs (VA) to assess the issues, challenges and opportunities associated with modernizing the VistA system and to address a set of specific questions.

Working Group Members



Approach

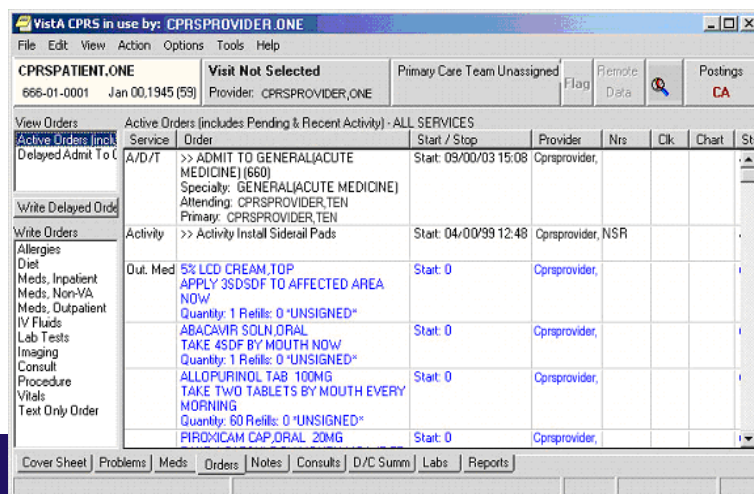
- Three segments of about 60 days each
 - First Segment – informing and educating
 - Weekly meetings with briefings from VA and private sector experts
 - Second Segment – Analysis
 - analyzing the information and knowledge the working group had assembled
 - Third Segment– devoted to the task of answering the questions
 - Created set or recommendations and drafted report

Sub-Committees

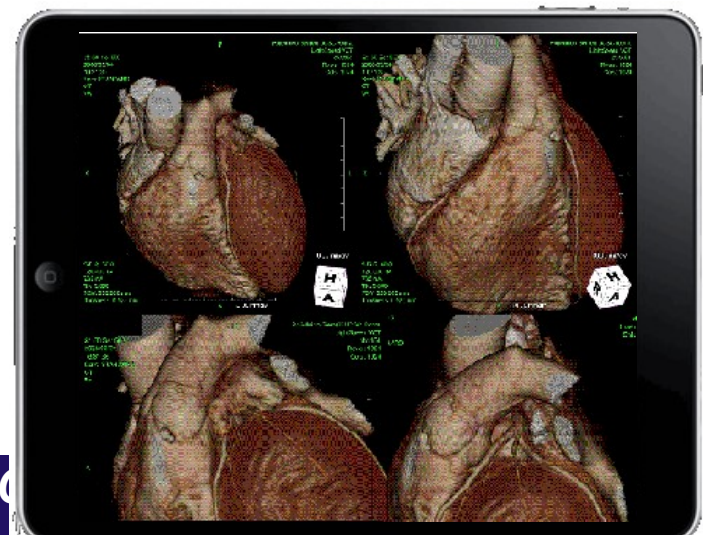
- Executive Committee
- Alternatives
- Modernization and Architecture
- Models and Extensions
- Deployment Models
- Governance
- Opportunities and Impacts
- Terms and Definitions
- Reports and Presentations

The Vision

- What we imagine is a state of the art, open source medical **application development environment** with a comprehensive suite of extensible components and functional applications provided by VA, entrepreneurs, university researchers, commercial medical and non-medical products companies, national health services, etc. with a **superset** of the functionality in today's VistA system.



VS



VistA Working C

Stay True to the Legacy of VistA

- The intent of the recommendations is to keep what is **best** about VistA –
 - High user satisfaction
 - Excellent response time
 - Workflow and clinical practice patterns reflecting how VA does business
- While moving to a new, modern, stable and scalable platform that will allow VA to make future changes rapidly and easily
- Enable VA to maintain its position as the undisputed leader in healthcare informatics

To Achieve the Vision...

- VA needs to reengineer VistA
- VA should commit to a strategic plan to move to an open source, open standards model for the reengineering of the next generation of VistA (VistA 2.0)
- Current VistA must remain in production 'til VistA 2.0 begins to replace large chunks of VistA functionality

Recommendations (2)

- The working group recommends that the VA contract with an appropriate Federally Funded Research and Development Corporation (FFRDC) to assemble and deliver a fully functioning example application based on Open Source, Open Standards
 - Operating environment
 - Application Development Environment
 - Application Building Blocks or Frameworks

Recommendations (3)

- VA contract with an appropriate Federally Funded Research and Development Corporation (FFRDC) to provide an appropriate business model, bylaws, operating principles and organizational blueprint for an independent, not-for-profit Open Source Foundation to manage, operate and maintain the VistA 2.0 Open Source Ecosystem {develop a concept of operations}
- VA charter and fund an independent, not-for-profit, Open Source foundation to manage, operate and maintain the VistA 2.0 Open Source, Open Standards Ecosystem

Answers

- Question: Is VistA a system that could be deployed to a wider community? If yes, what is the most appropriate deployment model: open source code; cloud computing; business process/methodology; other?
- Answer: VistA is currently deployed to a small community of public, private and international users. However, because it is very difficult to operate and expensive to modify it has not been more widely adopted. We recommend that VistA be used as a functional specification and be completely reengineered to become VistA 2.0.

Answers (2)

- Question: If VistA is deployed and used by other government agencies or private sector entities, what organizational and management structure should be developed? Possible questions include:
 - Which organization(s) should have responsibility for maintaining the system?
- Answer: We recommend that VA “sponsor an open-source community” to promote the continued development and extension of VistA 2.0 functionality and associated business rules.

Answers (3)

- Question: Should VistA be established as a national standard? What are the implications of this action?
- Answer: Given the resources that VA has expended to date and can bring to bear in the future, VistA 2.0 could become the international standard for medical center information systems. This could result in huge financial savings in the healthcare community, but VistA 2.0 could result in huge advances in evidence based medicine, medical research and data standardization and portability.

Answers (4)

- Question: What is an appropriate strategy for modernizing VistA and transitioning it to a more current and innovative architecture?
- Answer: VistA should **not** be “modernized” in the sense of upgrading and updating current VistA in a traditional evolutionary model. VistA should be “**reengineered**” into VistA 2.0 in the sense of creating a new, open-source, open standards ecosystem within which the proven functional capabilities of VistA can be replicated in a sustainable, scalable, and secure environment

Answers (5)

- Question: What are the opportunities and impact of modernizing and deploying VistA upon private industry, the healthcare community and other key groups?
- Answer: The national and international healthcare communities desperately want and need an appropriate, consistent and dependable architecture, development environment, and reusable components. While this report focuses on solving VA's challenges, what we are proposing clearly has larger Federal, national and even international implications.

Answers (6)

- Questions: Based on the above, what principles and best practices should be documented and distributed for use by other government agencies considering similar issues?
- Answer: The lessons learned from the efforts of the VistA Reengineering Project are applicable and appropriate for other government agencies facing similar legacy system issues. Many older, large-scale government legacy software systems are in need of reengineering. This working group has developed a series of processes and principles that have been documented and can be directly applied to other Departments and Agencies of the Federal Government

VistA

- Was an incredible accomplishment within the Department of Veterans Affairs
 - Most users of VistA prefer to use it over any other system currently available
 - But VistA is very difficult to change and does not accommodate radically larger “data loads”
- Needs to be **reengineered** using modern software and systems technologies
 - while retaining business processes, rules and user interfaces where appropriate

ACT-IAC Recognizes the Members of the VistA Working Group:

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Ross Martin

Marianne Meagher

Edward Meagher

Ben Mehling

Kathy Minchew

Earl Pedersen

Sanad Pushpakaran

Mary Anne Sterling

Andrew Sweet

Susan Williams

Marc Wine

Back up Slides

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20

Alternatives Analyzed

X Prize
Angel Ventures
Big Bake Off
Big Bang Modernization
Oregon Experiment

Buy COTS
Cope and Hope
Adopt AHLTA
ARPA
FFRDC

Structured Open Source
Manhattan Project
NSF/NIH
Stock Market for Ideas
Skunk Works

Stumble Forward
Healthcare IT Extension Service
“Toucan”
Reengineer VistA
Evolutionary Modernization

Governance

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Reports and Presentations

- Responsible for version control of drafts and the development of the final report(s) and presentation(s) produced by the VistA Committee.
- Ensured access to all drafts for every committee member. This allowed for full and open input into final report and presentation.