

Audiometer and Electronic Medical Record Interface

Association of VA Audiologists

Annual Meeting

April 18, 2007

Audiogram Software in VA – Current State

- The current generation of audiogram software is nice...
 - Electronic entry and storage
- ...but every system in use is lacking in some aspect
 - Some don't link with VA systems
 - (NOAH, AudBase/System 20, etc.)
 - (locally developed in-house software)
 - Some require manual data entry
 - (ROES/QUASAR)

ASPS Actions

- Addressed by Field Advisory Council
- Formation of IT Roadmap Task Force
- Discussion of immediate and extended ASPS program needs
- Determination of approach for audiometer interface
 - Selection of audiometric module as the suitable user application

Origins of Interface Partnership

- Related functionality in the Clinical Procedures package
- CP Sr. Project Manager was approached
- OI Field Office management support for working together toward a solution
- Assignment of project team

Project Team Participants

- VHA Provider Systems Team
 - Jolie Renee (Project Mgr)
 - Paul Jurevicius (Analyst)
 - Chad Peterson (Interface Specialist)
 - Brian Juergensmeyer (App Developer)
 - Christine Beynon (Documentation Specialist)
 - Lucy Harmon (Developer)
 - Charmaine Reznik (Quality Assurance)
 - Sue Martini (Admin)
- DALC IRM
 - Kevin Quitmeyer
 - Pam Urrutia
- ASPS Advisory Team
 - Dr. Pat Masone
 - Dr. Steve Gonzenbach
 - Dr. Kyle Dennis

Project Partners

- Audiometer instrument manufacturers/models within scope for phase 1 project
 - Grason-Stadler GSI-61
 - GN Otometrics Madsen Aurical
 - InterAcoustics AC40
- Basis for selection
- Interface architecture allows for participation by additional vendors

Emergence of the Project

- Distinct from Clinical Procedures
- Structured VA project management discipline
- Project planning, requirements definition, system specifications

Interface Considerations

- Architectural Features and Components
- Interface Functionality
- Project Status
- Implementation Considerations
- Interface Demonstration

Architectural Features & Components

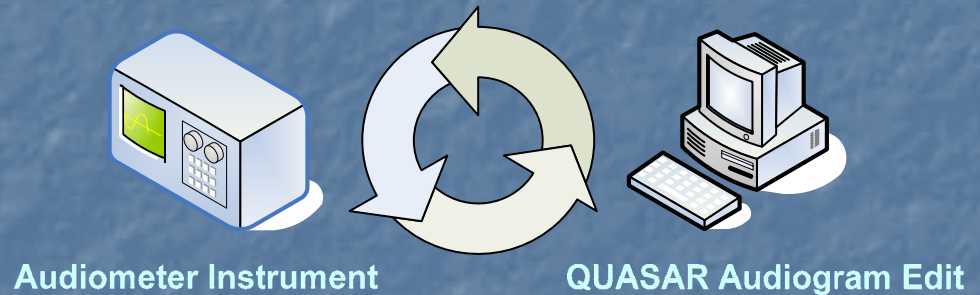
QUASAR Audiogram Edit Application (version 3*13)

- Integrated graphical display
- Audiometer selection
- Data import functionality
- Flexible design for future changes

Architectural Features & Components

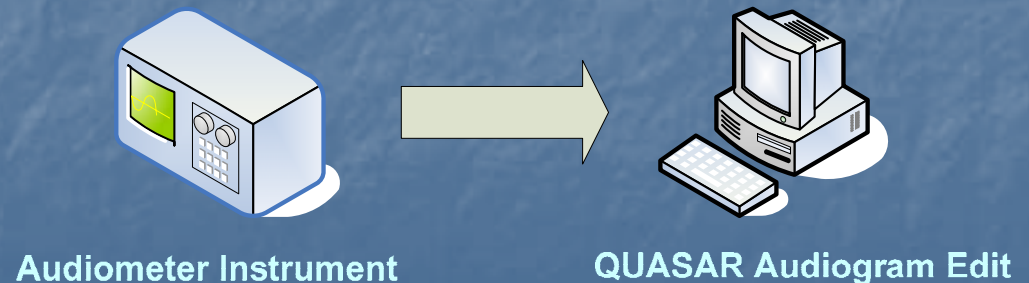
- Grason-Stadler GSI 61
- Interacoustics AC40

Collect Data Point – Transfer Data Point...



Perform Patient Assessment – Transfer Data

- GN Otometrics MADSEN Aurical



Interface Functionality

Import Data to QUASAR Audiogram Edit

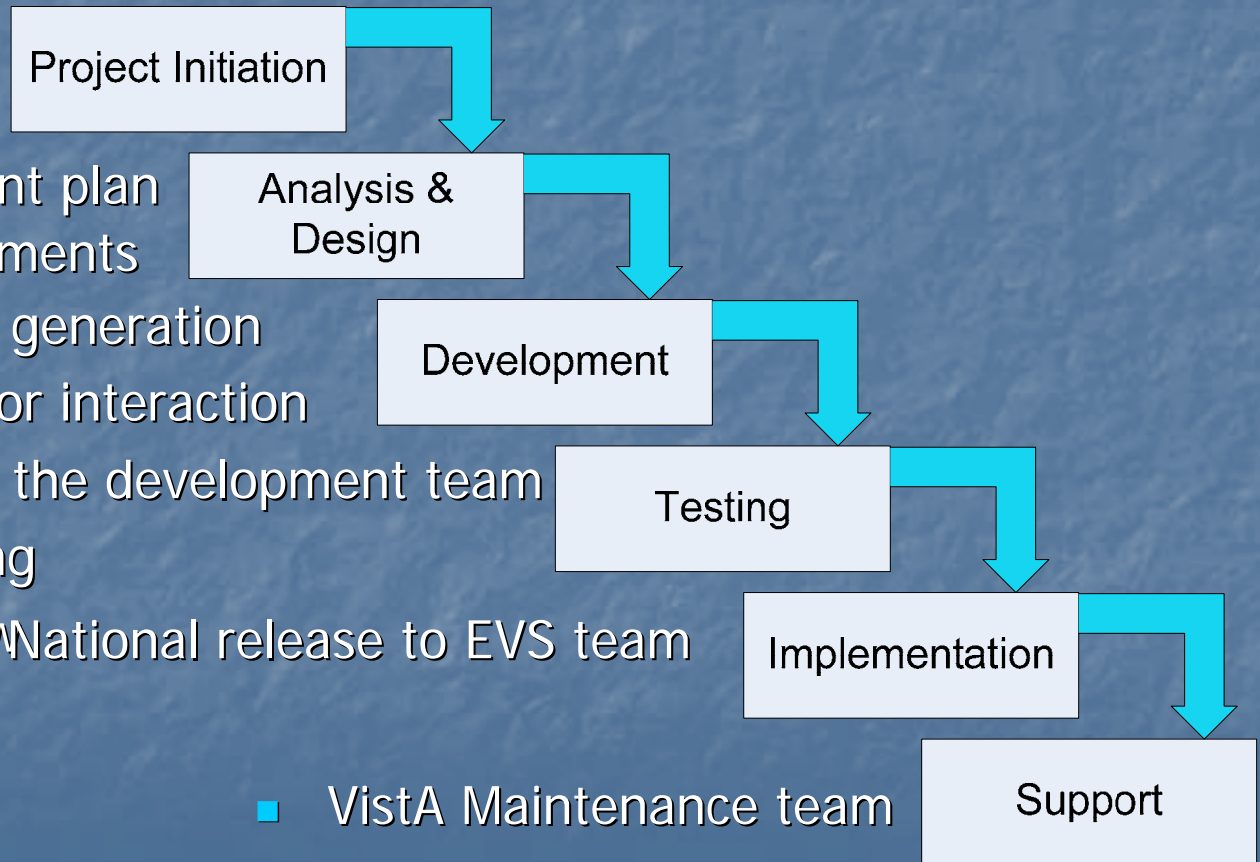
- Air Conduction
 - Threshold & masking
- Bone Conduction Data
 - Threshold & masking
- Speech Reception Threshold
 - Threshold & masking
- Word Recognition Testing
 - Percent correct
 - Threshold hearing level
 - Masking level

Project Status

VA Office of Information Software Development Process

Waterfall Process

- Business case
- Kick-off meeting
- User interviews
- Project management plan
- Software requirements
- Software design
 - Code generation
 - Vendor interaction
- Testing by the development team
- Field testing
- SQA review
- National release to EVS team
- VistA Maintenance team



Current Project Status

[Intentionally left blank]

Implementation Considerations

QUASAR Package

- KIDS Build, ACKQ*3*13
- QUASAR Audiogram Edit Installation Wizard

VistA Document Library (VDL)

- User Manual
- Installation Guide
- Technical Manual
- Release Notes

MADSEN Aurical

- Vendor Interface File
- Cable Connection
- Aurical Application

GSI 61

- Vendor Interface File
- Cable Connection
- Chip Upgrade

AC40

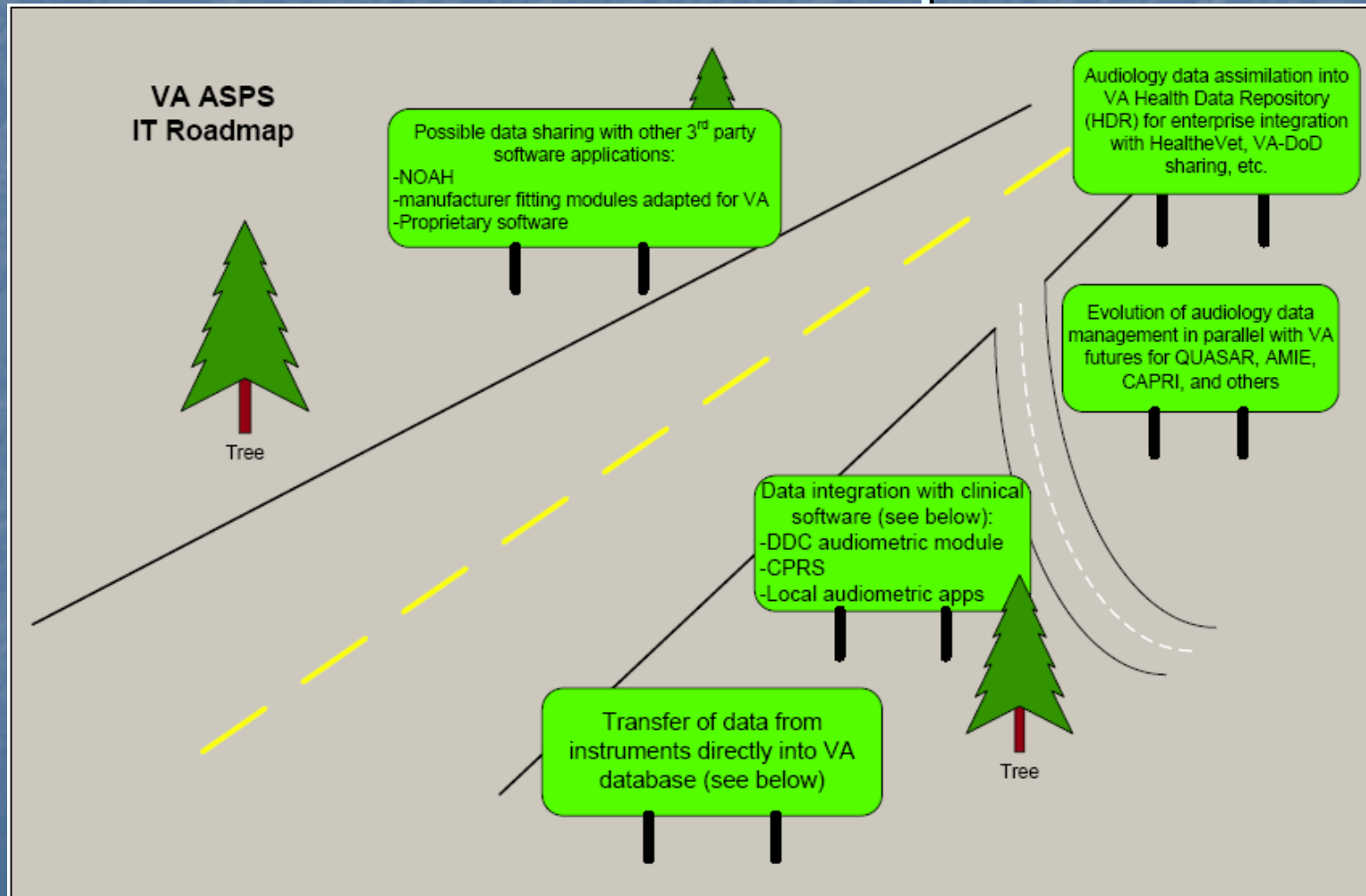
- Vendor Interface File
- Cable Connection

Demonstration of Interface in Action

Strategic Considerations

- Decisions regarding integration with NOAH
- Edging closer to the VA electronic patient record

ASPS Data Management Futures: The Roadmap



Questions?

Thank you!

- Denver Acquisition & Logistics Center
- Hines OI Field Office