

**Management Information Systems:
Client Tracking & Web-based Resource Database**

Monday October 4th, 2:00-4:00

Moderator:

Krista Boston, Project Director and Supervisor - Consumer Information, Assistance and Advocacy Team for the Minnesota Board on Aging and Department of Human Services Aging and Adult Services Division

Minnesota's Integrated Resource Database and Client Tracking

Krista Boston, Project Director and Supervisor - Consumer Information, Assistance and Advocacy Team for the Minnesota Board on Aging and Department of Human Services Aging and Adult Services Division

South Carolina's Online Eligibility, Client Tracking & Resource Database

Barbara Kelley, Deputy Director of the Lieutenant Governor's Office on Aging

Arkansas' Web-Based Resource Database and Plans to Integrate with Client Tracking

Debbie Hopkins, Program Administrator for the Arkansas Division of Aging and Adult Services

Expert in the Audience:

Alan Geltman, formerly of Just1Call in Mecklenburg County, NC

Michael Taylor, Just1Call in Mecklenburg County, North Carolina

Speaker Biographies

Krista Boston is an honors graduate of the University of Nebraska at Kearney with a degree in Criminal Justice and Communications. She attended Hamline School of Law and was admitted to the Minnesota State Bar in 1994. In 1994, she became Project Director of the Minnesota Children's Initiative, a Pew Charitable Trusts-funded systems change initiative for children and families that involved implementing a statewide information and referral system. She subsequently held the position of strategic policy analyst for First Call Minnesota, the statewide First Call for Help and now 2-1-1 system. She currently holds the position of Project Director and Supervisor - Consumer Information, Assistance and Advocacy Team for the Minnesota Board on Aging and Department of Human Services Aging and Adult Services Division. In that position she is leading a team that manages the Senior LinkAge Line®, Minnesota's State Health Insurance Assistance Program (SHIP) and also provides assistance to the newly developing Disability Linkage Line and Family Linkage Line. The team also manages a statewide information and referral system and web site for people of all ages which can be found on the web at www.minnesotahelp.info. She can be reached by contacting the Mn. Board on Aging at (651) 296-0378 or by email at krista.boston@state.mn.us.

Barbara Kelley is Deputy Director of the Lieutenant Governor's Office on Aging in South Carolina. In addition to serving as Project Director for the Aging and Disability Resource Center grant and Co-Project Director of the Real Choice Options for Community Living grant, she oversees the Family Caregiver Support program, the South Carolina Alzheimer's Resource Coordination Center and the statewide information and assistance network. Before joining the staff of the state unit on aging in South Carolina in 1991, she had served as program coordinator for continuing education at Penn State Mont Alto and coordinator of education services at the University of Kentucky's Sanders-Brown Center on Aging. She also has served as an adjunct faculty member at Wilson College and Kentucky State University, trained supervisors at the Toyota Motor Manufacturing plant, and counseled at-risk adolescents. She holds an undergraduate degree in English from Emory University in Atlanta, and a Master of Arts degree in counseling psychology from the University of Wisconsin in Madison.

Debbie Hopkins, MPA, is the Program Administrator for the Arkansas Division of Aging and Adult Services, which is part of the Department of Human Services (DHS). In this capacity, Ms. Hopkins administers the Real Choice Systems Change grant, the Aging and Disability Resource Center grant, and the Direct Service Community Workforce grant. In her career with DHS, she has had extensive experience in state and local program development and administration and has also worked with management information systems, including the State Automated Child Welfare Information System, and Arkansas' Medicaid Management Information System. As part of the activities of the Aging and Disability Resource Center grant, she is currently overseeing development of the ADRC's management information system. That system is based on a web based information system developed under the Real Choice grant, taking advantage of knowledge gained from other Systems Change grants.

Alan Geltman, the former Project Coordinator of Just1Call, is a 1973 graduate of the University of North Carolina at Charlotte, Bachelor of Science in Mathematics. He was employed with the Mecklenburg County Department of Social Services from 1975 until his retirement from county government in 2003.

Mr. Geltman held social work positions in Child and Adult Protective Services and served on a national consortium to integrate public and private sectors to provide services for homeless adults and families in the 1980's. In 1998 Mr. Geltman began the coordination of the design of the Single Method of Access, now known as Just1Call, which was launched in September 2000.

To facilitate the design and implementation of Just1Call, he traveled across the United States visiting venues to learn methods and technology. Mr. Geltman headed a team of local providers and stakeholders to bring those best practices to Mecklenburg County. He coordinated the business plan, technology, marketing & outreach and community integration of Just1Call. Just1Call has won numerous awards, locally, statewide and nationally. Mr. Geltman was named the 2003 Individual of the Year by the North Carolina Alliance of Information and Referral Systems.



Lessons Learned From Minnesota

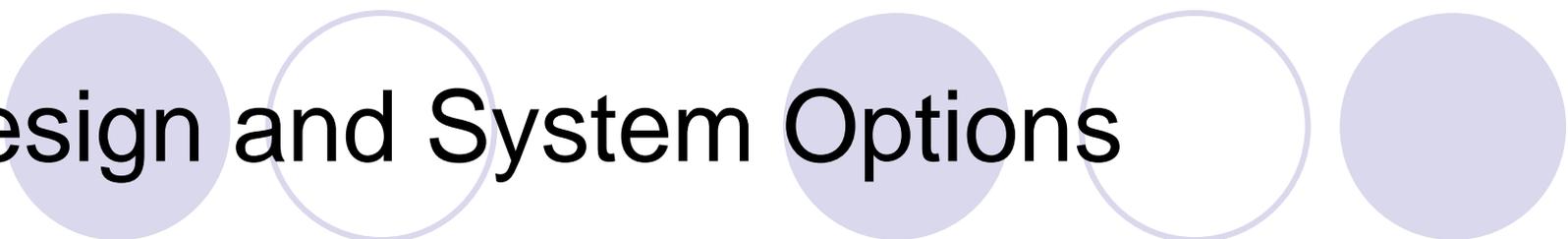
- Objectives

- Review requirements development process
- Using fundamentals of Project Management
- Managing custom design
- Data maintenance challenges and protocols
- Roll out - Identifying targeted users and developing tools for those users
- Cost/Benefit Information for Policy Makers

Minnesota

- **Population 2000:** 4,919,479
- "North Star State"
- **Capital:** Saint Paul
- **County governments:** 87 (87 County Human Svcs Offices)
- **Municipal governments:** 854
- **Townships:** 1,794
- Name derives from Sioux term for "cloudy water"
- **F Scott Fitzgerald** - "Vitality is not only the ability to persevere, it is the ability to start over."
- **Database?** – 36,000 Services delivered by 16,000 agencies
- Thanks to www.epodunk.com





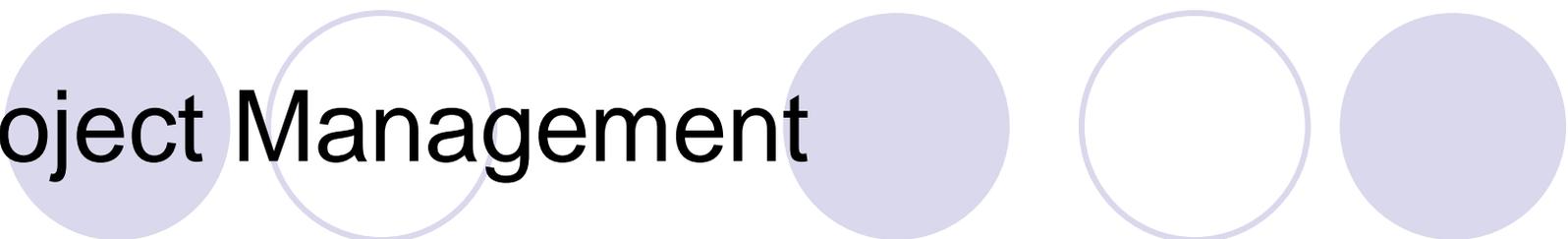
Design and System Options

- Fully web based
 - Pros: Allows for a completely centralized Model, Internet is your network
 - Cons: Security Issues, can be inflexible for those that was some local control
- Desktop and web based – Hybrid
 - Pros: Allows the system to select which data will be maintained locally (data privacy) and which data can be maintain in centrally on a single or multiple servers.
 - Cons: Requires some level of local IT support to assist in installation of software
- Fully desktop based
 - Pros: High level of security generally although security issues remain, can still use the web to make the resource data available on the net through regular FTP of resource data files
 - Cons: Can require a high level of intensive IT support, limited flexibility with respect to moving data around - data integration issues, many OTS solutions are not using internet to full capability and some are being used very ineffectively

Lifecycle of a Web Site Roll Out

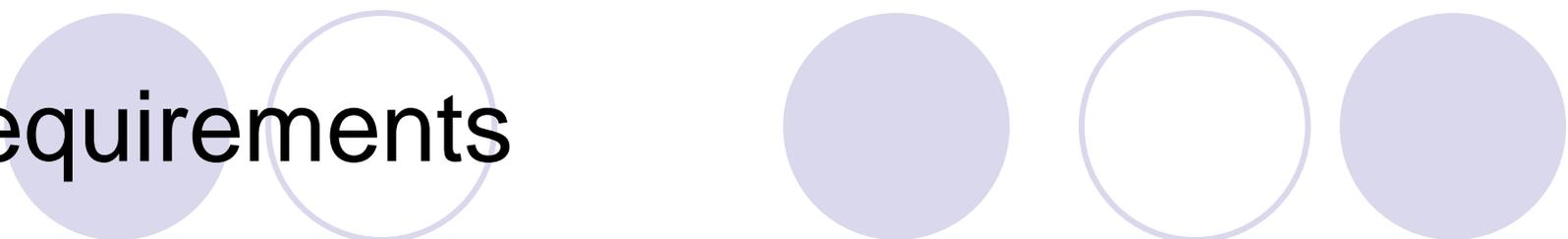
- Preproduction
 - “setup of focus groups, schedule development, and risk assessment”
- Production
 - “hold regular meetings to ensure open communication, keep the schedule up to date, watch for potential obstacles, and find solutions to problems or delays that occur”
- Publication
 - “Feedback groups are again reconvened and attempt to “break” the site. Essential repairs, upgrades, and necessary changes are made in the first week of a site's life.”
- Post-Publication
 - “Unlike other forms of media, such as print, Web sites are live entities. They grow and change; they must be revamped and revised at various stages of their existence. Maintenance, updates, and redesigns should all be planned well in advance of the need to do so”
- Quotes are from *Turning Chaos into Order: Managing Web Projects*
By Molly E. Holzschlag

Project Management

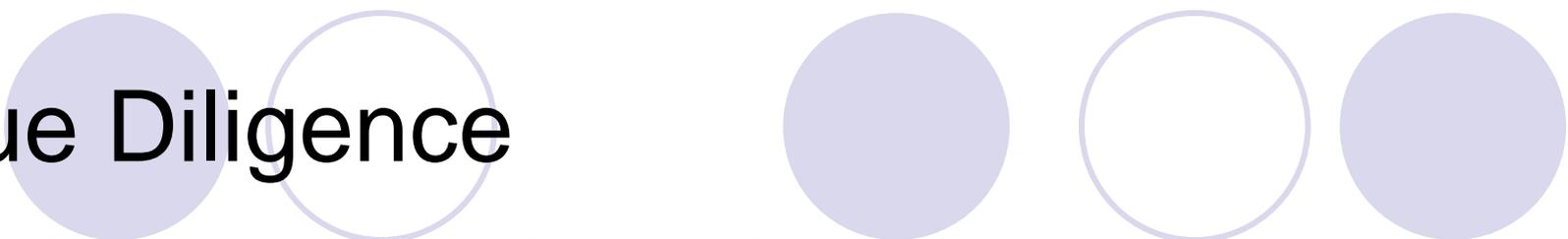


- Find and use people who have core competencies.
- Use the fundamentals of Project Management
- The concept of core competencies was developed in the management field. [C. K. Prahalad](#) and [Gary Hamel](#) introduced the concept in a [1990 Harvard Business Review](#) article. They wrote that a core competency is "an area of specialized expertise that is the result of harmonizing complex streams of technology and work activity."

Requirements



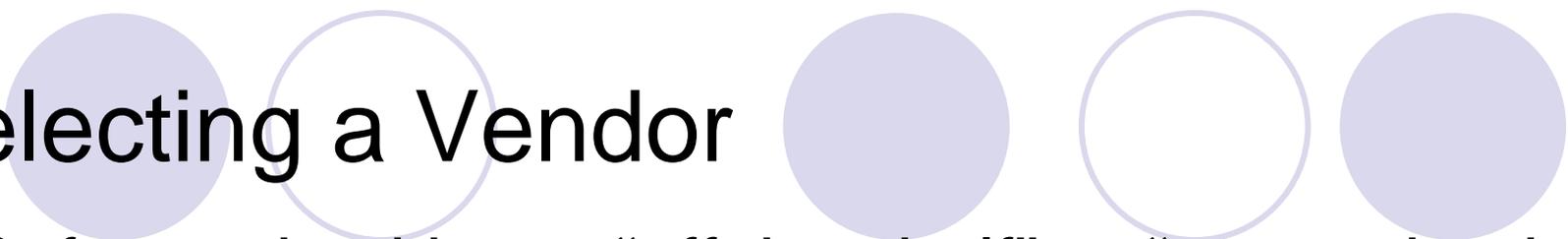
- Don't allow the existing software capabilities or vendor to drive the requirements development
- Software bibliographies are good for conducting an environmental scan, but not for developing requirements
- May want to use the services of an outside consultant – no agenda, issues or alliances
- System Design – Requirements should clearly lay out the specifications of the design you are seeking – specifications should be clear and detailed
- Data privacy issues – throughout the process
- Assess your areas of risk – Either manage risk or reduce it as you are thinking about requirements (it will always be there.)



Due Diligence

- “discover all risks and implications regarding a decision to be made.”
- "Due diligence is going in and digging a hole in the ground and seeing if there's oil, instead of taking someone's word on it," says Joseph Bankoff, a partner in the intellectual property and technology practice at law firm King & Spalding in Atlanta. "If you don't do a sufficient amount of due diligence, you don't really know what questions to ask." *Computer World* at www.computerworld.com

Selecting a Vendor

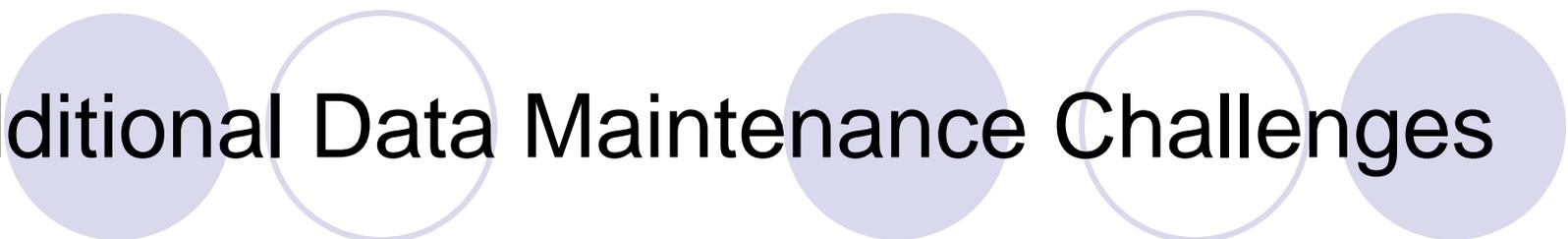


- Software is either a “off the shelf” or “customized off the shelf product”
 - OTS solutions typically have a hard time meeting the needs of a variety of users
 - COTS solutions are more flexible as they potentially have a solid foundation to work from, but allow for custom application development in order to meet the needs of the end user
 - Custom solutions – to do this well – very expensive
- Make sure the solution fits your requirements
- Don't reengineering your system in order to fit the mold of an OTS solution
- Don't fall victim to the “sell”

Data maintenance challenges and protocols



- Implement a data management initiative
 - Know your user intimately – what should your data offer to help them make a choice or decision
 - Maintain data quality implement standards and policies to promote accurate data entry
 - Data integration is fundamental to the ADRC initiative (integrating across platforms requires flexibility in programming up front)
 - Data enhancement – what additional data do you need to collect
 - Data Review – consistently monitor and review for data integrity



Additional Data Maintenance Challenges

- Regularly review standards and policies and tweak if necessary
- Conduct ongoing training of your data integrity partners
- Collect feedback from your all of your users and act on it as appropriate
- Consider core competencies in all aspects of data management

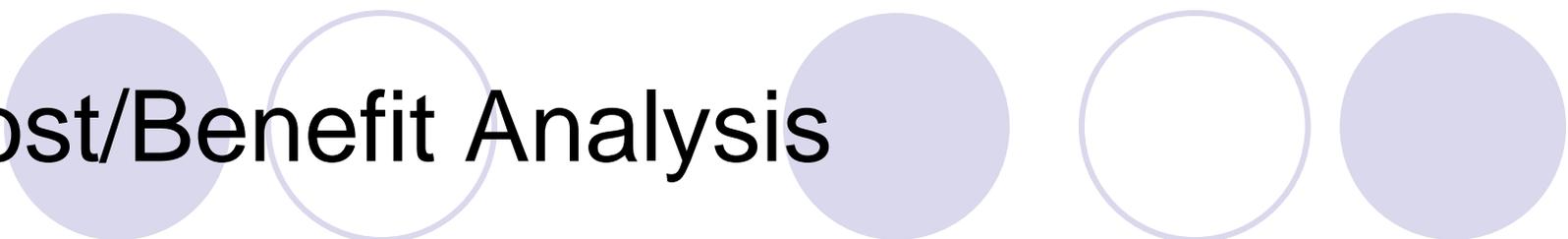


Roll out - Identifying targeted users

- Develop a marketing plan that is realistic within your budget. There are lots of free ways to increase traffic to your site.
 - Strategically identifying other web sites that can link to your site
 - Place on business cards, voice mail, in newsletters and all the other places that people connect with you.
- Conduct a focused search engine strategy – “Metadata” is critical

New Developments – How we are using our data/web portal

- Consumer decision tools with assessments
- New Power User Interface for professional workers
- Provider Portal
- Downloadable to a PDA with decision support documents
- Web services – API
- GIS
- Different languages



Cost/Benefit Analysis

- Include everything. Look at recurring (ongoing support costs) as well as non-recurring (initial development costs).
- Be fair, don't vote with analysis.
- Identify assumptions.
- Quantify as much as possible.
- Test perceptions on others.

Management Information Systems Development

The South Carolina “Real Choice”
MIS Experience:

- 1) Web-based Resource Database
- 2) Online Eligibility
- 3) Client Tracking

Infrastructure Investment for Systems Change

- To support consumer directed services and provide consumers with uniform information
- To empower individuals to make informed choices
- To streamline access to long-term support and provide a process for accessing programs and services
- To monitor outcomes and quality through centralized data collection and evaluation

Build?

Or Buy?

Building to Spec

- Get just what you want - compact
- Build to your work flow - more efficient
- Add and change functionality quickly

- Often a longer time to launch
- Requires development resources

Buying Software

- Often a lower total cost of ownership
- Usually quicker to implement

BUT

- Company may have financial instability
- May not have all the functionality you desire or you may have to change your processes to fit the software

Hosted versus Local

- Local brings speed and full control over your data
- Hosted brings near universal access, version management, backups, etc. handled by Hosting company

The Building Process

- Analyze organizational processes-workflow
- Design an interface that works for you
- Build a system for electronic information flow

Benefits of a Web Based System

- Browsers are present everywhere
- Updating the application happens once (on the server), not on every users machine
- Data is centralized, not dispersed in pieces on every computer

SC Web Based Resource Database – SC Access

Developed through Real Choice Community
Options Grant to:

- provide a universally accessible system
- connect consumers to needed services
- partner with community organizations
- ensure effective use of resources

On-line Eligibility

- Through the ADRC grant, SC is adding a web based consumer data collection and electronic forms management process
 - to streamline Medicaid long term care eligibility application
 - and application for AoA funded services
- Consumer may store information and update as needed
- Additional provider applications can be added

Client Tracking and Case Management

- Consumer demographics
- Services needed or sought
- Service gaps
- Provider referrals
- Follow-up assistance activities
- Access to services
- Coordination among ADRC partners

“When you come to a fork in
the road, take it.”

- Yogi Berra

Restructuring leads to a change in plans.

“The Middle Path” Buy and Customize

- Software search
- Purchase and customize to incorporate some design features
- Plan for future connectivity and technical integration and expansion of forms management component

Krista Boston – Presentation Resources

Suggest web sites and articles for managing software and web site deployment

<i>Software Design Best Practices</i>	www.sdbestpractices.com/	Turning Chaos into Order: Managing Web Projects By Molly E. Holzschlag
<i>Marketing your web site</i>	www.coyotecom.com/webdevo/webmrkt.html	Marketing Your Organization's Web Site (also applicable to marketing all online activities)
<i>Web Portal to Research</i>	www.bitpipe.com	A web portal that provides access to latest research/articles in the software/network management sector
<i>In depth introduction to Metadata</i>	http://www.getty.edu/research/conducting_research/standards/intrometadata/index.html	From the J. Paul Getty Center – an depth discussion and online introduction to Metadata
<i>Critical Business Issues in the Transformation to Electronic Government, NECC, December, 2000</i>	www.ec3.org	
<i>Eight Imperatives for Leaders in a Networked World: Guidelines for the 2000 Election and Beyond, by the Harvard Policy Group on Network-Enabled Services and Government</i>	www.ksg.harvard.edu/stratcom/hpg	A seminal series of 8 policy papers by a partnership among: the Kennedy School of Government; American Management Systems; Cisco Systems; EDS; IBM's Institute for Electronic Government; the MITRE Corporation, and Unisys. Currently, the overview and 5 of 8 policy

		papers released.
<i>eGovernment Leadership: Rhetoric vs. Reality—Closing the Gap, 2001</i>	www.accenture.com (Go to industries, then to government, then to publications.)	A 22 nation survey on the extent of national government services available on-line. A comprehensive view of Egovernment maturity in 2001.
<i>E-Government Strategic Planning: A White Paper, NECC Annual Conference, December 13, 2000, Las Vegas, Nevada</i>	www.ec3.org	
<i>Project Management Institute (PMI)</i>	www.pmi.org	An international association for the field of project management. Activities include certification (PMP), training & development, newsletters, and magazine (PM Network). Currently, membership cost is \$100 per year.
<i>Project Management Institute – Government Special Interest Group (SIG)</i>	www.PMI-GovSIG.org	A PMI Special Interest Group (SIG) focused on government project management. On-line newsletter written by practitioners in the field.

AR-GetCare



From Web-based Service Directory to ADRC Management Information System

BEGINNINGS

- In 2002 the Division of Aging and Adult Services (DAAS) partnered with Area Agency on Aging of South West Arkansas (AAASWA) on Robert Wood Johnson Community Partnership grant
- One goal was to develop and implement a web-based directory of services in 2 counties
- SA-HELLO was the result

SA-HELLO Basics

- SA-HELLO is a web-based directory of services and resources primarily for 2 counties in southwest Arkansas
- Intended to help consumers and family members locate service resources 24/7
- Developed with consumer and stakeholder input
- Developed and maintained by contractor as application service provider (ASP) model

From SA-HELLO to AR-GetCare

- Real Choice grant goal: develop a single point-of-contact to provide consumers with comprehensive, up-to-date, unbiased resource information for decision-making and choice
- The SA-HELLO project success convinced us that a Web-based information system would help meet this goal

AR-GetCare Basics

- Real Choice collaborated with C-PASS and Transitions to fund AR-GetCare from 3 Systems Change grants
- Used Real Choice and C-PASS consumer task forces to guide development
- Used RFP process to procure contractor
- AR-GetCare contractor operates as an application service provider (ASP)
- Costs: \$130,000 year one (dev/impl)
\$ 60,000 annual hosting fee

Key Features of AR-GetCare for Users

- 24-hour access through any web browser
- Self-assessment
- Variety of search features
- On-line feedback for QA purposes
- Health Insurance Portability and Accessibility Act (HIPAA) compliant
- Accessibility
- On-line reporting for administrative use
- Map link to locate providers

AR-GetCare Provider Database

- **provider/agency name**
- **service location address**
- **contact person, phone #, email address , & web site**
- **types of services provided**
- **hours of operation**
- **restrictions or accommodations for participants**
- **ages served**
- **availability of slots**
- **payment methods**
- **licensing, certification, & accreditation**
- **complaint resolution**

From AR-GetCare to ADRC

- AAASWA is our partner for the Aging and Disability Resource Center
- AR-GetCare operates statewide with 917 provider listings (251 from AAASWA service area)
- AAASWA contracted with the AR-GetCare vendor to develop MIS for ADRC based on AR-GetCare system

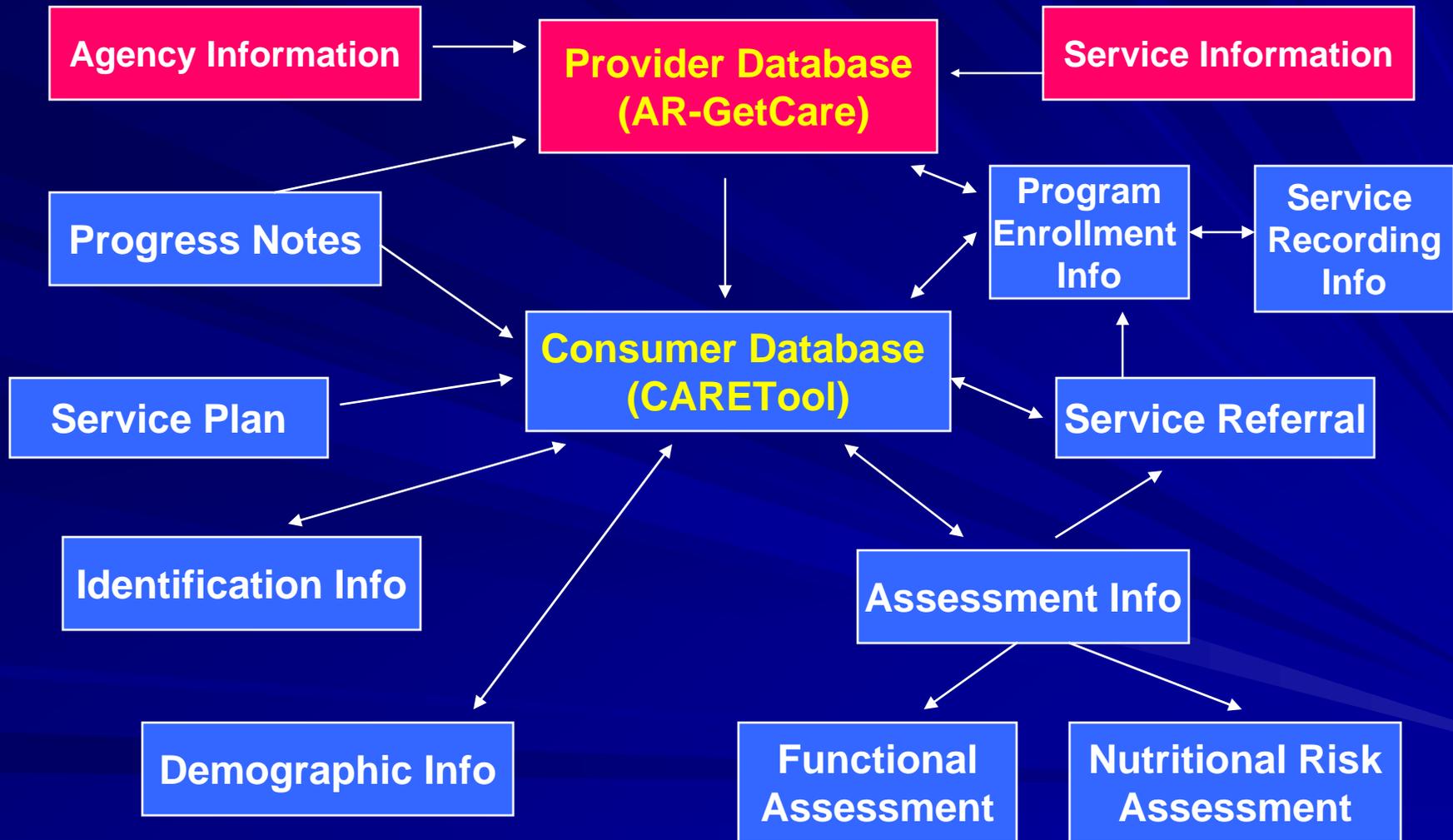
ADRC cont.

- Vendor adding consumer database module to AR-GetCare for use as MIS for the ADRC (called CARETool)
- The MIS/CARETool component is adapted from vendor's existing tool
- The MIS/CARETool will record, track, and report information on clients, services, and costs
- The MIS/CARETool will be used for client assessment, referral, and enrollment

ADRC cont.

- Cost: \$254,250 over 3 years
- Stakeholders are participating in adapting and testing MIS/CARETool for the ADRC
- ADRC staff will use laptops and cell phones with internet connectivity to input directly into CARETool from consumer's location
- ADRC staff will begin using the CARETool by December 31, 2004

ADRC Management Information System



Lessons Learned

- Consumer and stakeholder participation is crucial
- Plan carefully for provider enrollment
- Test and retest your data (building from an existing system doesn't mean it is foolproof)
- Test, test, and retest your system's functions
- Competitive procurement can illuminate options you might not have considered

Contact Information

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AR-GetCare Technical Specifications

AR-GetCare is based on an application service provider (ASP) model. The ASP model has two major components: 1) hosting and management of the Web-based information system and 2) professional services provided to the client related to its use of the system to meet intended needs.

AR-GetCare business rules are coded in the Java programming language, graphics are coded using an Apache Web server, and databases are programmed utilizing SQL. All coding and hosting is handled as part of the monthly hosting fee relieving the State of buying, managing, and supporting equipment and software. AR-GetCare technology enables users to input program information directly into the Website.

The contractor maintains collocated secure servers and redundant T3 lines to ensure availability and speed. AR-GetCare includes three-tier architecture, which means that database access requires penetration of three separate security layers.