Information Technology
in Area Agencies on Aging

Report from the 2015 National AAA Survey

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MIAMI UNIVERSITY
SCRIPPS GERONTOLOGY CENTER

Introduction

Information technology (IT) has become increasingly important as Area Agencies on Aging (AAA) have expanded their portfolio of services to diversify funding sources and include integrated care and evidence-based health and wellness programs. The ability of AAAs to share data with hospitals, managed care organizations and accountable care organizations is critical to enhance partnership between AAAs and the

"So much is changing in aging right now—we need flexible, easy to use systems that help us not only streamline service delivery but understand our impact."

—Kathryn Lawler
Aging and Health Resources Manager
Atlanta Regional Commission

healthcare system in the future. This report summarizes the findings of a national survey of AAAs on their IT capacity and highlights case examples from the Aging Network.

Overview

AAAs are at the forefront of a complex service delivery system that provides access to home and community-based services for older adults. These services typically include information and referral, congregate and home-delivered meals, health and wellness programs, in-home care, transportation and caregiver support. While each AAA provides a core set of services under the Older Americans Act (OAA), they may also offer distinct services tailored to their community.

Recent changes in the health care system—targeted to improve outcomes, provide better care and lower costs through a coordinated system of care— have presented AAAs with new opportunities for partnerships with the health care system. Increasingly, AAAs have expanded their service portfolio to include integrated care, health promotion, Medicaid managed care and transitions across care settings.

While opportunities for health care and other partnerships are increasing for AAAs, the work that must be done to capitalize on these opportunities often requires agencies to retool their strategies for service delivery and to collect and report data and outcomes in a more robust way. Grant-based reimbursement that pays for staff expenses regardless of program volume and fee-for-service compensation independent of outcomes are increasingly being replaced by performance-based payment models.

To make the most of these new opportunities and not be overlooked in the changing marketplace, agencies must develop the infrastructure and business processes to support contracting with health plans and other health care entities. This change is not easy and requires a major culture shift for mission-driven organizations with a long history of government and foundation-funded work. Although the focus on providing high-quality services to older adults remains the same, the new landscape requires that agencies build business acumen, which may require retooling organizational and staff structure. These new partnerships often rely on IT to collect and share data to promote better outcomes, which also requires adopting sophisticated IT systems and improving health information security.

Recently enacted laws have put increased emphasis on the need to share health information to improve health outcomes. The Health Information Technology for Economic and Clinical Health (HITECH) Act was signed into law in 2009 to stimulate the adoption of electronic health records and supporting technology in the U.S. This law provided billions of dollars to hospitals, physician offices and clinics to promote and expand the adoption of health information technology. Unfortunately, none of this investment was targeted toward post-acute or long-term services and supports providers.

Additionally, the Patient Protection and Affordable Care Act of 2010 created several new initiatives that rely on information systems to report outcomes

and improve care. For example, the Centers for Medicare and Medicaid Services' (CMS) Community-based Care Transitions Program requires participants to track and report physician follow-up visits and other enhanced services. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) dramatically changes the way physicians are paid under Medicare, moving most to alternative payment models that will make them more accountable for their patients' health and responsible for reporting outcomes to Medicare in return for payment.

These new laws create opportunities and challenges for the Aging Network to continue to provide high-quality services in a rapidly changing health and long-term services and supports delivery system. Adequate and interoperable IT systems are critical elements to AAAs' ability to partner with health care payers and providers.

With a grant from the Administration for Community Living (ACL), the National Association of Area Agencies on Aging (n4a) partnered with Scripps Gerontology Center to conduct a survey to assess the capacity of AAAs to participate in programs that require IT interoperability and data sharing. The survey was conducted online and was available for approximately 16 weeks during the summer and fall of 2015. A total of 335 AAAs responded for a response rate of 55 percent.

There is a great deal of variation in the structure, services and range of funding sources among the AAAs that responded to the IT survey. Respondents had an average budget of over $11 million with a median budget of nearly $4 million (range: $12,000 to $400 million). Federal funding from the OAA is crucial: the average AAA receives about 40 percent of its budget from the OAA, but there is a wide range behind this average, with some agencies receiving almost all of their funding from OAA and others receiving as little as one percent from that source. However, nearly all AAAs (98 percent) draw on multiple sources of funding in addition to OAA dollars. It is not uncommon for each of these multiple funders to have their

own unique information-sharing requirements, especially around health issues. Regardless of budget and funding source, the need for interoperability was a theme among all agencies.

An important factor that could shape the adoption of IT systems is organizational size. To analyze the impact of agency size, AAAs were defined in the following manner: very small: 1 to 10 FTEs; small: 10.5 to 21 FTEs; medium: 21.5 to 36 FTEs; large: 36.5 to 79 FTEs; and very large: 79.5 to 408.

The most common governance structure of AAAs participating in the survey was independent nonprofit; these agencies account for slightly over 40 percent of all responding AAAs. The majority of other respondents are based in a division of county government or part of a Council of Governments (COG) or Regional Planning and Development Agency (RPDA). The majority of participating AAAs housed in independent nonprofits are large or very large (53%) while those in COGs or RPDAs tend to be very small or small (69%).

Technology Systems and Linkages

IT systems enable AAAs to link with important partners, streamline internal processes and effectively manage client services. The most common systems that AAAs have access to are: state systems for OAA programs, administrative systems to perform time-keeping and other human resources functions and systems that manage clients' services and programs, as shown in Figure 1.

AAAs may rely on IT systems in different ways and they are often required by their funding streams to use multiple systems. The average AAA has access to two state systems for OAA programs, two systems for administrative AAA systems and two systems to manage clients' services and programs. They also have access to two programs for state systems for

non-OAA programs, two national systems, one provider management system and another system to communicate with health plans and hospitals. Many of these systems are not able to communicate with one another and each may receive data differently, which can result in operational inefficiencies like entering duplicate data into multiple systems.

Figure 1: Technology Systems and Linkages
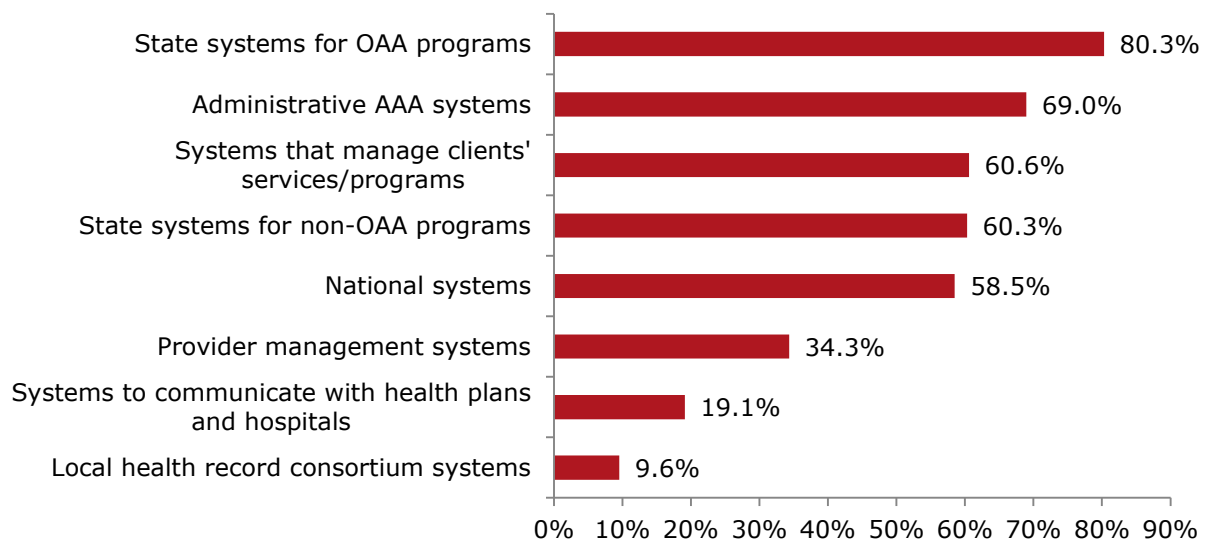
For AAAs partnering with multiple health care entities, these inefficiencies can be more pronounced. For example, a software program perceived to be a "good" system by a hospital may not meet the information-sharing requirements of a health plan due to regulations preventing the sharing of information with third-party entities. This is indicative of a larger issue: even if a health system does not require a AAA to use a specific system, most have unique requirements (i.e., certified by a third party, follows unique privacy protocols, etc.). Under some contractual agreements, health systems or health plans require AAAs to enter data about clients and/or the services they provide but provide little information in return to aid in service coordination.

Even greater IT challenges and inefficiencies can occur when the AAA does not have access to systems that would enable them to better serve their clients. The systems that the largest percentage of AAAs report *not* having access to are local health record consortium systems (57.9%), systems to communicate with health plans and hospitals (24.3%) and provider management systems (14.8%).

There are differences in the percentage of AAAs that have access to specific systems based on the size of the organization. For instance, nearly 90 percent of very large AAAs (88.9%) have access to state systems for non-OAA programs while fewer than 40 percent of small and very small AAAs access these systems (38.2% and 49.2%, respectively).

The type of AAAs that have access to state systems for non-OAA programs is influenced by their governance structure as well as their size: independent nonprofits and educational institutions are more likely to have access to these systems than are other types of AAAs. Three of four independent nonprofits (76.9%) and educational institutions (75.0%) have access to these state systems, compared to over half (60%) of city-based, COGs/RPDAs-based (56.3%) and county-based (53.5%) AAAs.

Case Example: Direction Home Akron Canton AAA

Direction Home, the Akron Canton AAA, provides an example of a AAA that purchased an IT system to improve data collection and reporting. Changes in payment models in Ohio (e.g., CMS Financial Alignment and Balanced Incentive Program demonstrations), recognition of increasing competition from other care management providers, such as health plans, and the need for readily accessible data, led Direction Home to purchase and customize the BI360 platform.

This system offers improved budget forecasting, more complex budgeting resources, customized data dashboards, as well as performance

management and tracking of labor hours. While it is not an electronic health record system, it can produce reports based on individual, team and unit performance, such as the timeliness of assessment completion, which allows targeted training and support if needed. BI360 is based on a data warehouse model that pulls data from the various systems ranging from the general ledger to clinical documentation systems.

As a AAA, Direction Home often is required to use platforms it does not own or have authority to modify, such as systems required by the state. BI360 allows the agency to import data from other systems, combine it with data from other systems and produce an aggregated data set that is user-friendly. Direction Home uses BI360 as a tool to ensure it has the clinical and administrative data necessary to improve quality and effectiveness across the organization.

Sharing Data with Partners

The majority of AAAs share data as part of a formal partnership. The most common partners AAAs share data with are their State Unit on Aging (SUA), other AAAs and Information and Referral providers (I&R), as shown in Figure 2.

Figure 2: AAA Partners in Linked Systems
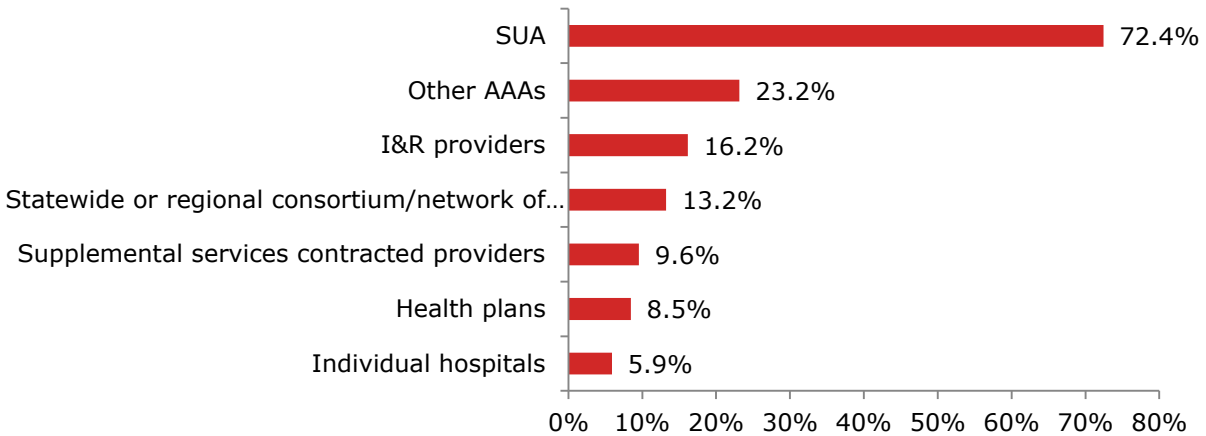
While there is little difference in the average number of partners based on the size of the organization, the types of agencies or organizations with which the AAA shares data varies by size. For example, only large and very large AAAs reported health plans and hospitals in their top five partners. There are significant differences, by AAA size, in partnerships with Health Information Exchange (HIE), health plans, health systems, individual hospitals and insurance companies. In all instances, very large AAAs were much more likely to have formed partnerships with these organizations than had other AAAs.

AAAs have a heightened need to share their data when they partner or contract with other specialized entities. Some of these partnerships include programs such as the Medicaid HCBS Waiver Program, Community-based Care Transitions Program (CCTP), Financial and Administrative Alignment Demonstrations for Dual Eligible Beneficiaries ("duals demos"), Accountable Care Organizations (ACOs) and patient-centered medical homes. Of those AAAs with special partnerships, the most common data sharing occurs among AAAs participating in Medicaid waiver programs. Only 20 percent reported sharing data among all other kinds of partnerships, as shown in Figure 3.

Figure 3: Sharing IT with Partners
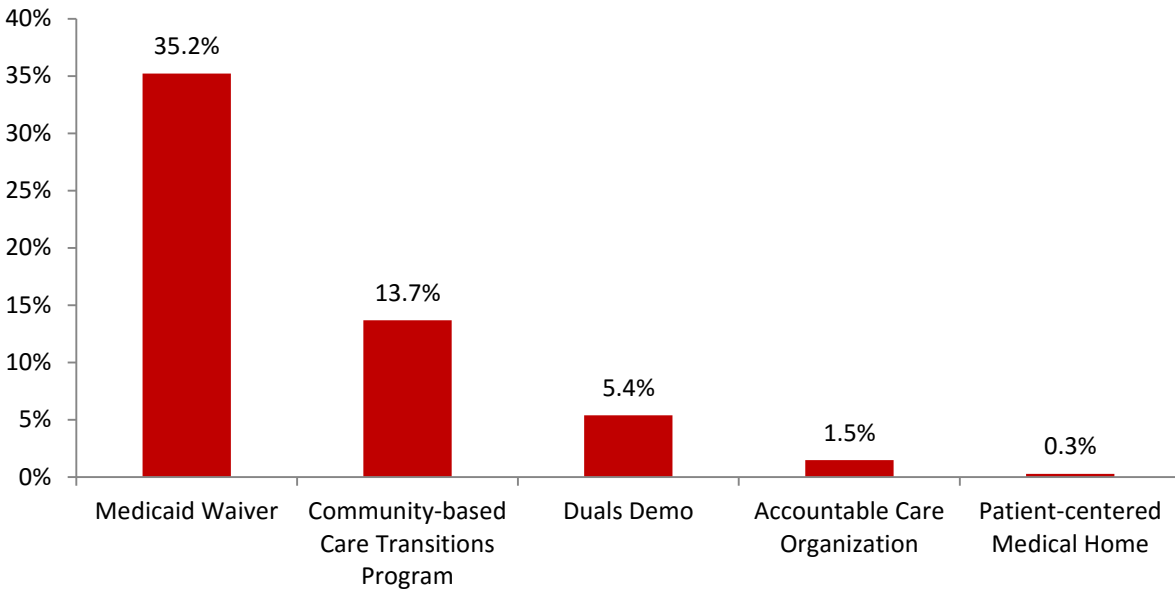
Case Example: Michigan

AAAs in Michigan and Resource Link of Michigan embarked on a unique partnership as Michigan deployed its Centers for Medicare and Medicaid Services (CMS) Financial Alignment demonstration ("duals demo") across four regions of the state.

To proactively prepare for payer contract negotiations, AAAs contracted with Resource Link, a Michigan-based health care consulting and IT company that supports organizations with Medicare and Medicaid enrollees through product development, for research and guidance in the development of pricing schedules. This work eased the development of AAA and health plan partnerships, and helped to meet the health plans' expectation that AAAs be prepared for contract negotiations.

After that initial step, AAAs in two of the Financial Alignment regions and Resource Link partnered to customize a web-based IT platform that allows AAAs to securely exchange and track Financial Alignment demonstration metrics including eligibility, authorization and claims data with Integrated

Care Organizations (ICOs). It also has a patient-driven care coordination module that allows agency partners to smoothly exchange information, such as assessments and service plans, based on the clients' preferences for whom should receive that information. A vendor management module allows AAAs the ability to manage multi-service vendor networks and bill health plans for network services ordered through a HIPAA-compliant electronic data interchange (EDI) portal.

Leveraging Networks

A small proportion of AAAs (13.2%) have taken an innovative approach to IT development and data-sharing through the formation of statewide or regional networks of community-based organizations. Such a "network" could be a group or coalition of community-based organizations that come together to pursue an opportunity with an integrated care entity. These networks are similar to the independent practice associations (IPA) developed by physicians in private practice. Doctors in IPAs continue to own and operate their own practices, yet the IPA serves as a contracting and management vehicle when working with health plans.

Network formation can help individual agencies overcome significant weaknesses, such as limited geographic reach, which is increasingly an elimination factor for agencies attempting to pursue new opportunities. A network can provide a critical mass of the types of services offered, expand the geographic reach of any single organization and offer economies of scale for common core business functions, including procurement of information systems and technology.

Some of the most common activities these networks engage in are training, technical support and reporting client outcomes, as shown in Figure 4. They can also serve as a central hub for the development of common requests for proposals for IT software packages and leverage points to retool products better tailored for aging services organizations.

Figure 4: Statewide or Regional Network Activities
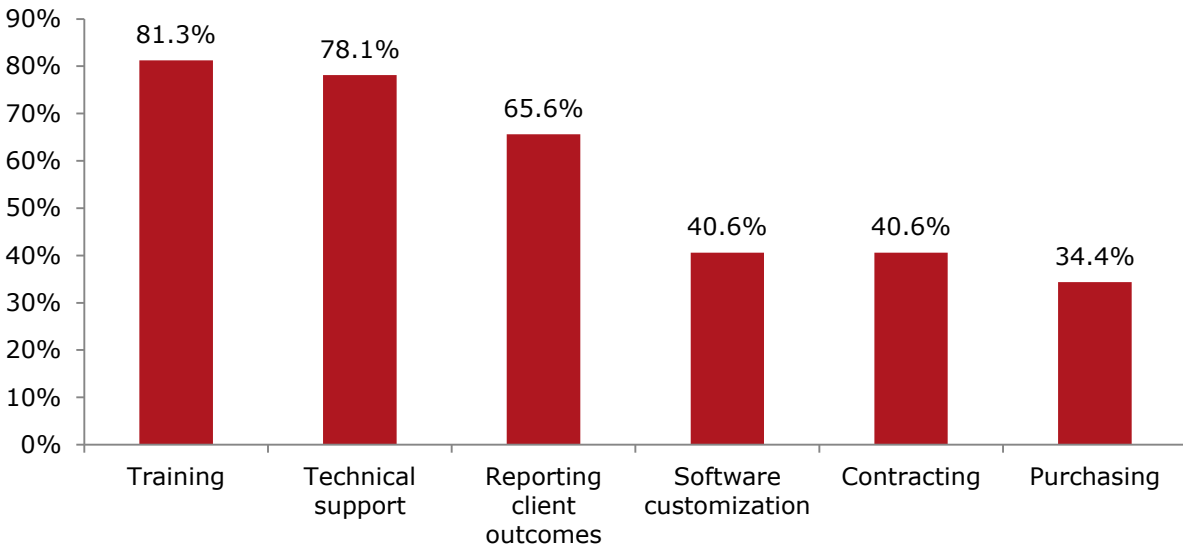
Survey responses indicated some regional differences related to whether a AAA reported being part of a network. AAAs in Regions I (Maine, New Hampshire, Vermont, Massachusetts and Connecticut), V (Ohio, Indiana, Illinois, Michigan, Wisconsin and Minnesota) and X (Idaho, Oregon, Washington and Hawaii) are more likely than other regions to contain AAAs that are part of a statewide or regional network. There are multiple factors that may contribute to these differences, but the primary factors appear to be the existence of integrated care opportunities and the governance structure of AAAs within a state.

Network features can be found in varying degrees under several different arrangements, from relatively informal collaborations to independently incorporated service organizations working on behalf of members. The more formal structures may range from a regional co-op governed by a charter to an unincorporated business association to a for-benefit limited liability corporation (LLC). When choosing an appropriate network structure, several factors are taken into consideration, including the desired level of organizational integration, especially around pricing and shared financial

risk. Given these considerations, it is often easier for independent nonprofit AAAs to both become part of a network and contract with health care payers, yet there are examples of AAAs from each of the other governance structures that have found success as well.

It is important to note that although there are clear benefits to network formation, there can be additional challenges with this approach, too. The major challenge may be for multiple organizations to come to an agreement on a single IT system. There are often varying levels of readiness, and despite being part of a network, each organization will still have programs/services independent of the network that are specific to their organization. The health care payer may also require that certain outcomes be reported, which may be beyond some network members' IT capabilities and/or ability to invest.

Case Example: Indiana

The 16 AAAs in Indiana are increasing their effectiveness through IT infrastructure, using a customized system "Population Health Logistics (PHL)" licensed by Preferred Population Health Management. This system tracks home and community-based services and facilitates transmission of information between AAAs, health care payers, health care systems and other community-based organizations. Launched in January 2015, the goal was for the software to streamline workflow and enhance the work of clinical and administrative staff.

Indiana embarked on the transition to PHL as the state prepared for the shift to Medicaid managed care. Currently, all AAAs in the state use the system to invoice, track quality and compliance standards and manage scope of work protocols set by their statewide contractual agreement with the managed care organization.

The system has several benefits: it improves tracking of clinical documentation, increases AAA capacity to analyze client outcomes, provides analysis of service needs on an individual and community basis, facilitates communication between AAAs and partners and functions as the billing system. It includes validated modules such as the Healthy Aging Brain Center which monitors changes in depression, dementia symptoms and caregiver stress. The system includes the validated PHQ-9 to monitor depression, the Anticholinergic Cognitive Burden Scale, Health Literacy Assessments and additional holistic assessment tools that can be implemented if selected. Clinical documentation, check boxes and drop downs are used when possible to decrease documentation time, improve data accuracy and generate quantitative reports.

The system allows community partners to access information only on their clients, thus maintaining appropriate privacy protocols. For instance, a nursing home can log-in to see the status of a shared client's Medicaid application without having to call the AAA or the Medicaid office. The system can also assist with analyzing resource gaps – information that can be used across the state to facilitate, advocate and enhance responsiveness to needs. Additional features are planned such as linking with the United Way 211 taxonomy codes and implementing options to assist with increasing AAA revenue.

## Type of Consumer Information Collected

AAAs collect a great deal of information about consumers of their services. On average, AAAs collect 17 types of data points about their consumers (range: 1-33). The most frequently collected information is caregiver contact information, consumer contact information and clinical/functional status, as shown in Figure 5.

When asked whether they entered the same consumer information into multiple systems, respondents report the need to enter this data an average

of two times (range: 1-7) due to funder requirements and lack of system interoperability. More than 60 percent of AAAs (67.3%) must enter collected data more than once. Duplication of effort and the inability to share information across systems seemed to be a major "pain point" across reporting agencies.

Examining the types of information that AAAs of different sizes collect revealed that many of the differences likely relate to their partnerships. For example, very large AAAs were more likely than very small AAAs to collect consumer information about health care expenditures (36.1% and 10.9%, respectively); health issues/diagnoses (83.3% and 40.0%, respectively); hospital readmissions (47.2% and 18.2%, respectively); hospital utilization (30.6% and 9.1%, respectively); information about physicians or health care providers (77.8% and 27.3% respectively); and prescription information (72.2% and 36.4%, respectively). As noted previously, larger AAAs are more likely to have partnership agreements with health plans and hospitals, which require data sharing.

Figure 5: Consumer Information AAAs Collect
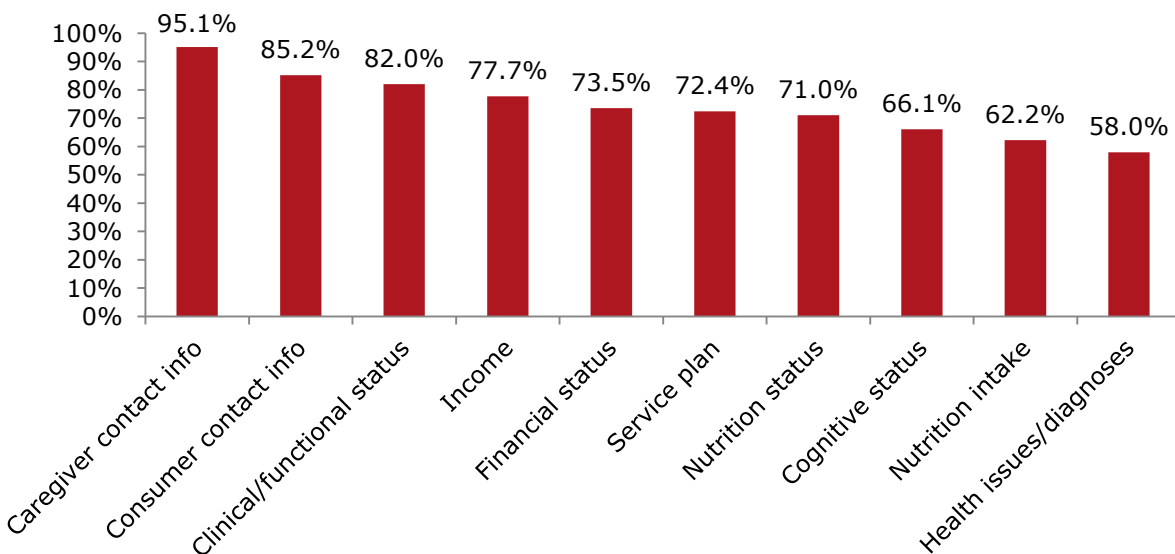
AAA leaders are keenly aware of the challenges they face aligning their IT capacity with their expanding operations and partnerships, especially in the

healthcare arena. In this survey, AAAs reported organizational goals they have set for their IT systems as shown in Table 1. These goals are primarily focused on simplifying the day-to-day operations of the agency (e.g., eliminating problems with duplicate data, reducing the amount of time required for data entry). Other goals focus on measuring the quality of the consumer experience: tracking consumer preferences to provide person-centered care, improving continuity of care and simplifying quality improvement.

Table 1: IT Goals for AAAs

Track consumer preferences to provide person-centered care	66.1%
Eliminate problems with duplicate data	64.3%
Simplify quality improvement	64.3%
Reduce time required for recording consumer info, notes and records	64.1%
Eliminate paper storage	62.1%
Improve record sharing	58.2%
Improve continuity of care	57.9%
Improve outcomes for consumers	57.8%
Consumer info entered only once	57.6%
Improve quality of care	57.6%
Improve work processes	52.9%
Reduce time required for consumer care	52.4%
Provide consumer portal	52.2%
Reduce incomplete records	52.2%
Consumers matched with services to meet their needs	51.8%
Consumers are matched to services that are revenue generating	50.8%
Simplify reporting	48.8%
Reduce care errors	46.2%
Secure new business	45.6%
Simplify billing	45.3%
Improve privacy and security	41.7%
Simplify record access	41.6%
Make records and consumer info legible	28.0%

| Chronologically order consumer records/info	22.9%
Assist external monitoring/auditing	22.8%

Barriers to Implementing IT Changes

AAAs were asked to report the extent to which certain challenges have affected their organization's ability to acquire and effectively deploy IT systems, as well as share data with partners.

The most commonly reported challenges are related to the financial cost of either implementing or maintaining IT, as shown in Figure 6, with 66.8 percent of AAAs reporting that the initial cost of implementing IT is enough to prevent the efforts of their agency to move forward with an IT initiative. In fact, several of the most commonly reported challenges that prevent IT efforts all relate to costs (initial cost, cost of upgrades and costs of data protection). The challenge of affording IT is greater for very small AAAs, 28 percent of whom reported that the initial high cost was great enough to stop efforts to adopt IT systems, compared to 8.6 percent of very large AAAs.

When looking at the challenges that were great enough to stop an agency's efforts, it is interesting to note that very small AAAs and medium-sized AAAs have the same constellation of challenges (i.e., initial high cost, costs of upgrading computers and systems to stay current and costs of data protection, security and cyber insurance). Further, the number one challenge that very large AAAs reported as being great enough to stop efforts was their need for a system that works with multiple outside systems. In addition, they reported that there are very few "off-the-shelf" systems that meet their needs or funding requirements.

Figure 6: Challenges Faced by AAAs in Using IT
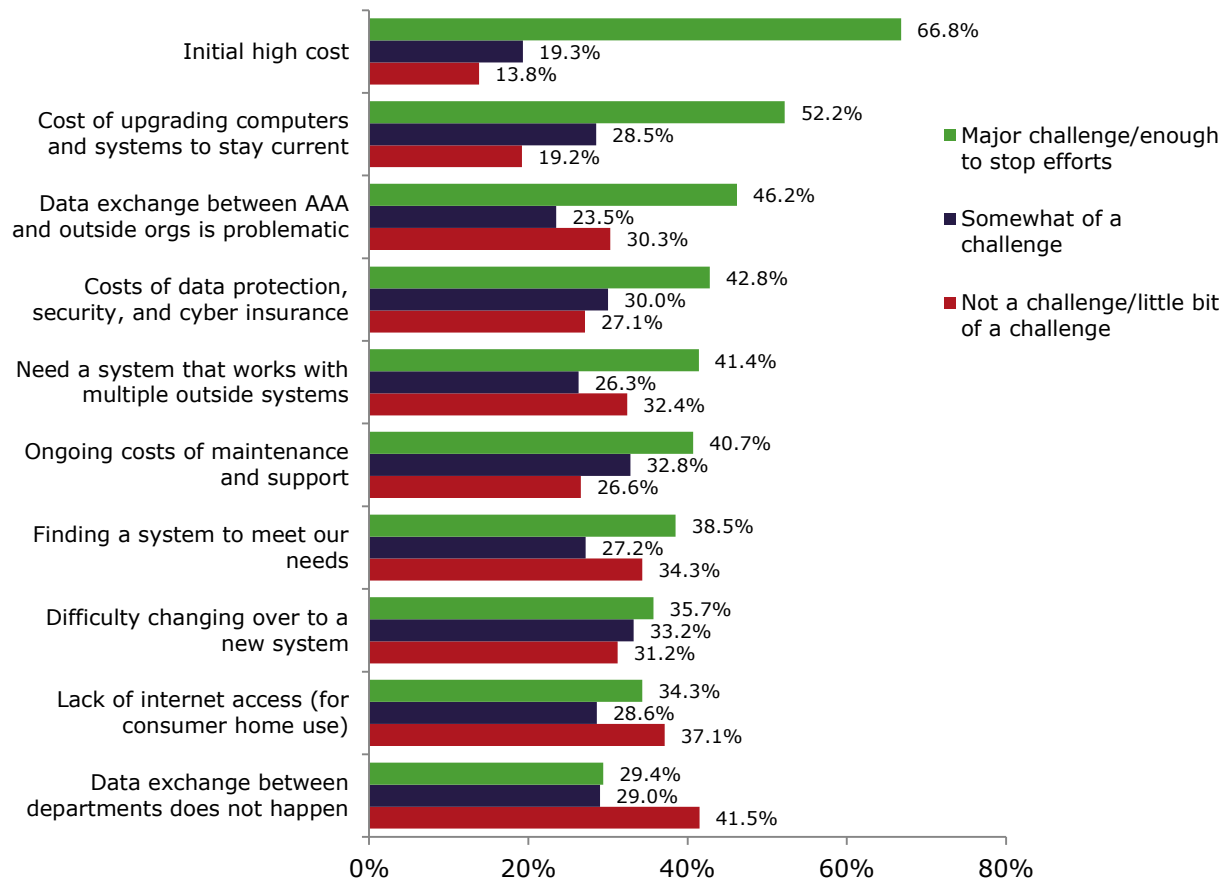
Nearly half (45.6%) of AAAs report that there are organizations with which they would like to share IT systems or data but do not or cannot. The most common reasons AAAs gave for not being able to share IT are the need for a new or upgraded system, incompatible data formats and concerns about their own data as shown in Figure 7.

Figure 7: Barriers to Sharing IT
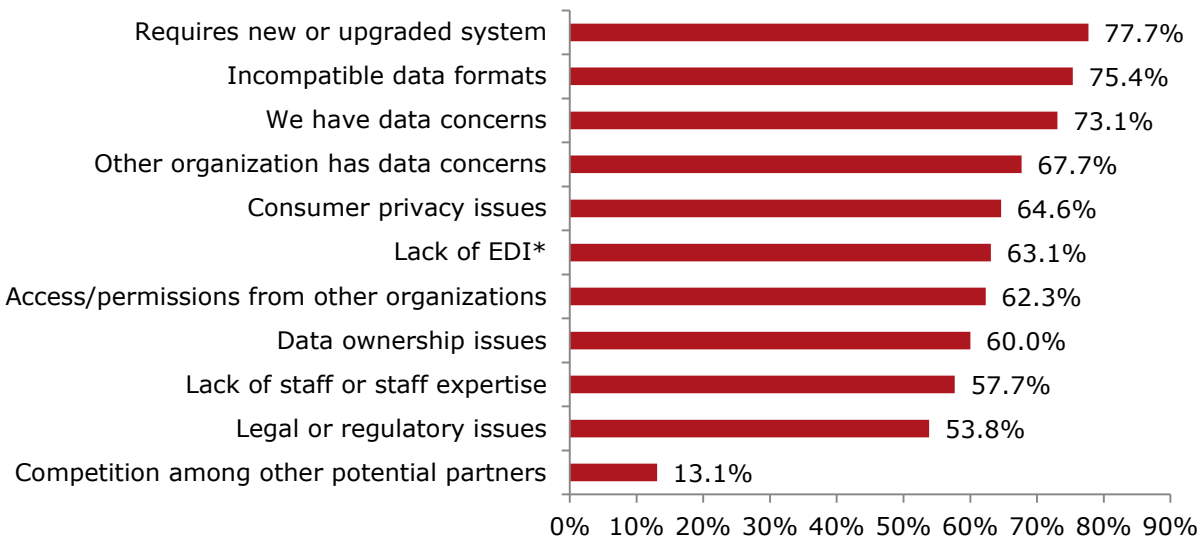
*Electronic Data Interchange

The need for new or upgraded IT systems is a major barrier for AAAs of all sizes and governance structures. Large and very large AAAs are more likely to express concern about data ownership. COG/RPDA AAAs, more so than AAAs with other governance structures, expressed significant concern about their own organization's data concerns and consumer privacy issues.

IT Training and Technical Assistance Needs

About two-thirds of AAAs indicated a need for training or technical assistance in at least one IT area, as shown in Table 2. Of the 68 percent of agencies reporting a need, more than half reported needing assistance to train staff to use IT systems and to understand ways to fund IT through contracts and grants.

Table 2: Training and Technical Assistance Needs

Training and Technical Assistance Needs	Percentage
Training staff to use IT systems	55.7%

Training and Technical Assistance Needs	Percentage
Understanding ways to fund IT through contracts and grants	52.6%
Safeguarding our data and cybersecurity	47.8%
Understanding the challenges faced by partner agencies or organizations	43.9%
Understanding health IT in relation to the health care industry	41.7%
Building IT staff capability	39.9%
Effective change implementation	38.6%
Understanding internal and cloud-based systems	36.0%
Learning the language of the IT field	32.5%
What to consider when choosing a vendor	31.6%
Locating systems, vendors, consultants and others	30.3%
Understanding financial return on investments in IT systems	29.4%
Decision-making and testing IT systems	28.1%
Developing specifications for IT systems	27.2%
Developing an IT department	14.9%

The one training and technical assistance need that differed significantly among AAAs was focused on identifying ways to fund IT through contracts and grants. Over 60 percent of independent, nonprofits (61.9%) and COGs/RPDAs (63.5%) listed this as training and technical assistance need, while fewer than one-third of each of the other types of agencies (AAAs that are part of county government, city government, educational institutions, and other settings) indicated this need.

Conclusion

AAAs exhibit a great deal of variability in their current IT capacity and their IT needs for the future. Many are quite knowledgeable and have extensive systems in place that gather and manage consumer information, share with outside partners and use their systems for reporting and other managerial

functions, while others consider themselves to have limited IT expertise and capability.

Some AAAs have made progress in overcoming these challenges, by pursing new pathways as the Michigan, Indiana and Ohio examples illustrate. Some states or regions are forming statewide or regional consortia to purchase, design/customize and implement new IT systems. Others have leveraged the IT investments they made in participating in the Community-based Care Transition Program to contract with additional health care partners. Many other AAAs have embarked on IT initiatives within their respective organizations and have achieved improvements in areas such as budget forecasting, budget management and performance tracking. These partnerships and investments will continue to grow in importance as the health care and long-term services and supports systems continue to evolve and become more aligned.

As AAAs increasingly work with health care systems and health plans, their IT capabilities will become a critical component of their ability to attract partners and perform the work that is needed. Of those AAAs that have implemented new systems, they report that the investment has increased their ability to track care outcomes, participate in clinical pathways, streamline billing, integrate with other partners and payers and begin interventions with data in hand—leading to improved efficiencies and opportunities for expanding their partnership and business lines.

To be able to take advantage of the efficiencies resulting from enhanced IT capacity, however, there are challenges that need to be addressed. The most common challenge is cost—upfront implementation costs, as well as the cost of upgrades and maintenance and the lack of interoperability among systems. Other challenges include finding the right system to meet AAA needs, addressing the overall difficulty of changing systems, and determining how best to exchange data with external partners.

However, even agencies that have not yet embarked on partnerships with the health care sector recognize the critical need for enhanced IT systems and data exchange. With more and more emphasis on demonstrating outcomes vs. outputs by both traditional and new funding sources, an effective information and data collection system is critical for success.

The ability of AAAs to keep pace with evolving technology is a key factor for AAAs today and will increasingly be in the future. AAAs realize that having a sophisticated IT system will directly impact their ability to respond to change and capitalize on new partnership and business opportunities. AAAs are engaged in developing, managing and maintaining IT and health IT systems in their organizations to a degree not seen before, although likely to be surpassed in the future.