Understanding Market Drivers *And* Preparing for the Next Wave of Reforms

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REPORT

LeadingAge™ CAST
center for aging services technologies

UNDERSTANDING MARKET DRIVERS

AND

PREPARING FOR THE NEXT WAVE OF REFORMS

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LeadingAge Center for Aging Services Technologies:

The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

For more information, please visit LeadingAge.org/CAST

Table of Contents

Executive Summary

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As health care and technology evolve, so do the policy and planning that enable us to deliver better care to the individuals we serve. At the fall 2015 CAST Commission Meeting, we looked to the future, discussing anticipated reforms, market drivers, and research that provides insights about members' needs and informs our future work.

- **Next Wave of Policy Reforms for Long-Term Services and Supports (LTSS)**: CAST Chair Mark McClellan shared his perspective on the effect of several pieces of regulation and legislation—those related to reforming assessment requirements for long-term care facilities, U.S. Food and Drug Administration (FDA) reforms and innovation, interoperability, telehealth in chronic care, and broadband access for rural nursing homes. He discussed how the IMPACT Act and upcoming health and payment reform might affect long-term and post-acute care (LTPAC) providers.
- **Surveys**: In a joint research project with CAST partner PointClickCare, CAST surveyed LTPAC providers to learn what is driving the future of LTPAC. Respondents identified three top driving factors to be payment reform, rising acuity, and aging in place. Most are concentrating their technology on billing/financial management (89 percent), customer relationship management (CRM)/marketing (78 percent), and medication management (77 percent). The top area for improvement—for 84 percent of respondents—is investing in technology, yet most are not focusing on data analytics and have challenges with resources when it comes to information technology (IT).
- **Strategic Planning**: By examining usage data of its Strategic Planning and Strategic IT Planning Interactive Tool, CAST created a snapshot of how providers are approaching strategic planning in preparation for the future. Results are mixed. A little over half (52 percent) of users recently updated their strategic plan, and 70 percent have started selecting applications that enable their strategic goals. But the majority did not undertake deep strategic planning. Only 47 percent of those who updated their strategic plan have engaged in IT strategic planning, and most have not designed their network to support future needs, pointing to opportunities and gaps.
- We also learned that the CAST Functional Assessment and Activity Monitoring portfolio is highly valuable; 70 percent found the white paper extremely useful, while 50 percent said the same of the case study and online selection tool.
- **Future CAST Tools**: Finally, we discussed ideas for the next CAST tool, which will focus on Care Planning and Coordination, and what could be done to encourage more members to access, use, and act on the recommendations of the different CAST tools.

We are excited to lead the field on these issues.

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Part 1
Introductions, Exciting Initiatives, and Challenges

CAST Commissioners started their meeting in Boston with introductions and sharing the technology initiatives they're most excited about, and their challenges.

Exciting projects ranged from electronic health records (EHR), passive monitoring, organization-wide customer relationship management (CRM), WiFi, and document management implementations to performing security audits and building smart homes. Exciting development initiatives include interoperable EHRs, interoperability solutions, disease management, care planning, communication, and coordination platforms.

Challenges, on the other hand, centered on payment, limitations in resources, lack of integration, and scaling. For more details, please see Appendix 2.

Part 2
Next Wave of Reforms for LTSS

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CAST Co-Chair Kathy Martin and CAST Executive Director Majd Alwan facilitated a far-reaching discussion between CAST Commissioners and CAST Chair Mark McClellan. The following is a summary of the question-and-answer session.

Centers for Medicare & Medicaid Services' (CMS) Proposed Long-Term Care (LTC) Requirements Rule

Question: *CMS has recently proposed a massive* ***Reform to the Requirements for LTC Facilities****. The changes include a few provisions pertinent to health information technology (IT), including a number of important assessment data to be exchanged at transitions of care, which are preferred (but not required) to be exchanged electronically, as well as the assessment of the physical facility including health information technology resources, such as systems for electronically managing patient medical records and electronically sharing information with other organizations, when available.*

There is a lot of ambiguity in the proposed rule, which makes it open to subjective and inconsistent interpretations by surveyors. Also, we feel that CMS has underestimated the burden and cost of implementing that rule, and that this burden will particularly disadvantage smaller, unaffiliated, and rural providers, especially those without an electronic health record (EHR) or resources to implement an EHR; while we support the intent behind these goals, we feel they should be phased in over a period of time. We are submitting comments, including comments on the Health IT aspects.

What can you tell us about the expectations, your thoughts about the timeline, and your advice for long-term and post-acute care (LTPAC) and long-term services and supports (LTSS) providers regarding this rule, especially with regards to EHRs and Health Information Exchange?

Answer: It's a 700-page rule, and the areas we're focusing on, IT, are just one part of it. It will change by the final rule, but only because of input from organizations like this one. For the big picture, CMS's heart is in the right place, but with something like IT, it's hard to get to where you want by laying out detailed requirements.

We're still a long way from the vision of integrated technology, the ability for needed data to flow and be interoperable and people to get the information support they need. It's still a CMS effort to get there. It's best to focus on characteristics of IT as a strategic end, not a means. Some of the requirements may be burdensome. Reinforce that you want to get to CMS's overall goal, which is more interoperable, effective data for patients. For example, consider what information needs to be shared. Some information may be essential for certain situations but is probably not relevant for every case. One challenge with requiring capabilities is it shifts focus away from supporting goals of better care.

CMS is trying to better align a whole set of reporting requirements—for example, Physician Quality Reporting System (PQRS), reporting measures, etc.—realizing that sometimes there is too much reporting. Now the agency has an overarching goal of consolidating these into more meaningful measures and requirements that tie into results. In commenting, provide specific examples of ways requirements could be modified and move away from those that don't fit into busy provider and LTSS organizations.

21st Century Cures

Question: ***The 21st Century Cures*** *is another massive piece of proposed legislation that passed the House and is being considered by the Senate. The bill includes three sections relevant to CAST and LeadingAge members: the first is Interoperability and addressing the information blocking, the second is related to U.S. Food and Drug Administration (FDA) reforms and accelerating innovation, including approval of medical device and information systems, the third addresses proposed action by government bodies to facilitate the broad adoption and use of telehealth in chronic care! We have submitted comments to the Senate Energy & Commerce Committee regarding Chronic Care Management.* ***What can you tell us about this bill, and what is the likelihood of it passing, and what is likely to remain or be thrown out?***

Answer: The bill itself is more up in the air than people thought it might be when it passed the House by a very strong bipartisan vote. It was intended in the House to be about accelerating discovery, development, and use of new treatments and included technologies that are part of the overall CAST effort—IT, digital medicine, assistive technologies, telemedicine, and the like.

The House bill had requirements and significant funding for FDA and especially the National Institutes of Health (NIH) to accelerate the process of innovation. The House Energy & Commerce Committee, though advocate Congressman Fred Upton of Michigan, included the Strategic Petroleum Reserve, a nice way to find $9 billion in offsets for the legislation. The Senate Committee on Health, Education, Labor & Pensions (HELP) does not have that jurisdiction.

With the recent budget agreement that has gone to President for signature, there is not a clear pathway to provide funding needed to implement major goals of the legislation. But the ideas are not going to go away, even if the bill doesn't pass this year.

There is a strong sense in Congress that more needs to be done to promote interoperability. Some states are going to say they'll require it, but in practice, it will be difficult to say what that means. There are gaps between incentives and reasons why data are not moving as much as they should that you just can't legislate.

We need to do more in policy to promote changes in payment and regulation to facilitate data flow rather than just require it. That was a challenge in meaningful use as well. Meaningful use systems are required to exchange data with other systems, but in actual use it's still difficult to get systems to talk to each other because of business models.

A lot of work at Brookings is now underway around changing that. How can you make meaningful use incentives about demonstrated data sharing rather than check-the-box capabilities? Hopefully that will make it into later versions of this legislation.

A big priority in the legislation is trying to streamline the FDA review process, especially for devices, software,

and other things related to telehealth. FDA has gotten the bipartisan message about that. Next year, FDA will have a new strategic vision out with high-priority streamlined approaches to get new devices, especially those not risky to patients, to market quickly and to shift device regulation into a post-market evidence/surveillance approach.

This approach makes sense because of the life cycle of these products, which evolve quickly. If FDA has more confidence about these devices when they get to market—if a good surveillance system means they hear about any problems quickly—then they feel they don't need to impose as many regulatory requirements. This approach will promote more use of electronic information and interoperability.

Even if this legislation doesn't pass, these ideas will get incorporated somewhere—in the next FDA reform legislation in 2017 or other healthcare legislation down the road.

Rural Healthcare Connectivity Act

Question: *Senate Bill S.1916, the* ***Rural Health Care Connectivity Act of 2015*** *recently introduced by Senator John Thune of South Dakota, is a short and sweet bill that aims to include Skilled Nursing Facilities as a type of health care provider under section 254(h) of the Communications Act of 1934 to allow nursing homes to tap into the Universal Service Fund for broadband access. We had advocated to ensure that our providers are considered in the national broadband plan and support this common-sense bill.* ***What, if any, reactions have you heard about this bill and what is its likelihood of passage, whether standalone or rolled into a larger bill?***

Answer: Standalone, not too likely. Congress just passed the budget bill, the last piece of legislation that has to get passed and signed before the next election. We're heading into campaign season, and it's not looking like a lot of things are moving.

This legislation may also have a bit of a score associated with it. Even though this fund already exists and has available resources in it so no appropriation is needed, it still may get scored as legislation that has a cost and may need an offset to it.

The goal is exactly right. Really fast broadband is not widely available. Rural communities and most providers have what was considered fast access five years ago—cable lines, etc. Five years from now, hopefully we'll be doing remote monitoring, visualization of the patient and their circumstances, remote ultrasounds, and high-resolution images. Those are big datasets that are not feasible with what's thought of as fast access in rural areas. There are relatively few rural hospitals or nursing facilities that have fast broadband access.

This is an important issue for CAST to keep highlighting. The Federal Communications Commission (FCC) may have administrative flexibility to interpret this rule, as it is connecting healthcare providers in an era with more team-based and integrated approaches to care. That may be another avenue with this bill.

Would it be lost if rolled into a large bill? It could be, but I don't see a lot of large legislation happening until 2017.

IMPACT Act Implementation

Question: *The IMPACT Act passed earlier this year will harmonize assessment and quality measures across care settings and set the stage for site-neutral payments.* ***Can you give us an update on your read on progress with respect to the IMPACT Act planning and implementation, challenges and/ or expectations? Any information on the preparations for proposed rule timeline?***

Answer: CMS has provided a timeline for full implementation of the law and is trying to stick to it.

It's not too soon for leaders in the field to start thinking about how this law will affect you. It's not just the movement toward the new measures of performance related to functional assessments and other capabilities, but a piece of the broader CMS strategy around payment reform.

CMS and the U.S. Department of Health & Human Services (HHS) have gotten more and more explicit about a movement to new payment models, with 30 percent of new payments that Medicare makes by 2016, 50 percent by 2018. They don't mean the typical fee for service or per diem with a quality adjuster, they mean payment models with accountability for overall results and costs for patients.
An example is an ACO program that might have some traditional payments plus a second track for overall results or spending at the person level or models far beyond that—true episode or bundled payment models. These provisions of the IMPACT Act can be fundamental to the success of those kinds of reforms.

Much of the Medicare and Medicaid costs are tied to people who need LTSS, and you'll move to more person-level reimbursements related to performance for those patients—these measures will be the heart of that effort. It seems like a really good idea if you want to improve the welfare of vulnerable patients to have ongoing, reliable tracking of impact. These kinds of measures and pressures toward more payment reform to the person level will be coming within the next few years.

Related Resources:

- *Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT) ACT*, article by LeadingAge.
- *Hospice Provisions in the IMPACT Act*, article by LeadingAge.
- For a summary of the IMPACT Act with timeline, please see slides 34-37 of this presentation by CMS.

Next Wave of Reform

Question: ***In your opinion, what is the next wave of health and payment reform, particularly for LTPAC providers? Any new or exciting demonstration from Center for Medicare & Medicaid Innovation (CMMI) after the Next Generation Accountable Care Organizations (ACOs)?***

Answer: CMS is supporting a new public-private collaboration, called Health Care Payment Learning and Action Network. I am co-chairing it with Mark Smith, the former head of California HealthCare Foundation, trying to take steps to improve practical implementation of payment reform and demonstrate these steps are working more effectively.

Early activities are characterizing where we are with payment reform. We are identifying efforts taking place somewhere in the system—state Medicaid plans, integrated Medicare Advantage Plans being used for dual-

eligible populations, or Medicare pilot programs through CMMI—ways to encourage fast and more-effective adoption of payment reforms.

CMS is focusing on these approaches:

1. **Whole person payment reforms with accountability**. These are ACOs, conference of medical homes, component of payment types of patient's overall costs. Details soon to come about a Next Generation ACO model. Earlier this year, actuaries certified that experience from the ACO pilot model showed significant reduction in costs and outcome improvements. The program is now a permanent part of the overall Medicare program.
2. **Episode or bundled payment models**. These are like joint replacement bundles. They are built on a Diagnosis Related Group (DRG) chassis; they will include accountability for costs and a very aggressive schedule for implementing it. LTSS providers will be impacted. There will be changing accountability and financial incentives for hospitals and other organizations taking on the bundle. Expect to see more of these kinds of reforms.
3. **ACO programs**. CMS has had mixed results for its ACO programs.
    a. **The Pioneer ACO Model** showed significant savings—1 or 2 percent per year, plus significant improvements in quality. However, you do lose money if you don't meet our overall benchmark savings for patients. A number of organizations dropped out. It only works for a subset of providers. Here are some reasons:
        - **Things Providers Did or Didn't Do.** Some are more successful in moving into new delivery models.
        - **Technical Details of the CMS Setup.** It is easier to see in the pilot voluntary program if you're doing worse beforehand. They didn't want to mandate these pilots. The choice is to benchmark an organization where it's been or where everyone should be. In the voluntary pilots, the organizations use their own history as the benchmark.
        - **Successful Integrated Systems Led by Hospitals.** These are moving farther away from fee-for-service payments faster. Pioneer ACOs, ones doing payment reforms with commercial plans, tend to be larger, so they can handle actuarial risk better.

        Note: The joint bundle is mandatory; it is a regional benchmark. The design issue has been a challenge for some organizations.

    b. **Medicare Shared Savings Program**. It now has over 400 ACOs and is still getting bigger. Some are seeing savings of 1 percent a year, but about two-thirds haven't gotten significant savings. We are still learning what works.
        - **Physician-Led Groups**. A lot of early successes are physician-led groups without hospitals. They have taken steps to avoid hospitalization. For example, McAllen, Texas, written about in *The New Yorker*, had some of highest rates of health care and chronic disease, huge use of post-acute home health care—everything wrong with U.S. health care. Then 10 doctors and nurse practitioners formed an ACO and identified the highest-risk diabetic patients. They focused on managing patients better with low-tech approaches, referred patients to hospitals and skilled nursing providers that were more efficient and better at preventing readmissions, and made $1.5 million in shared savings per doctor in the first year.

          Their example shows that practical steps can have payoffs to build on over time. After the first round of savings, however, it gets harder. For continued success, you need partnerships

with post-acute care providers. You also need to rely on caregivers spending more time with the patients, the kinds of approaches CAST has been highlighting.

More than half of the ACOs in Medicare now are physician led. Soon they will need more sophisticated strategies to move patients out of the hospital.

- **Hospital-Led ACOs**. These are not so successful yet, because they have shared savings. If you prevent a hospitalization, you get some money back, but you lose the revenue from the hospitalization. Those have focused almost entirely on bundles and readmission issues, trying to find less-costly partners to work with in the LTSS world to prevent readmission. There are huge opportunities to bypass hospitals and work directly with physician groups in more integrated systems.

Open Q & A from the CAST Commissioners and Guests

Question: ***Are there unexpected recent developments in health care legislation?***

Answer: Changes in payment in Medicare are starting to take hold. So much is changing in the way care is delivered that it doesn't work with fee-for-service payments. We're not going back. It's interesting to see how much HHS has emphasized payment reform. Secretary Burwell plans to leave office with all payment reforms on track.

There is still bipartisan support for it. The physician payment reform law tells CMS to get physicians into alternative payment models. It gives CMS a remarkable degree of authority to implement these reforms and will build in penalties for the physicians over the long term. It's still a long way to ideal person-centered approaches to care, but we're at the end of the beginning.

Question: ***Is there anything moving to get at identifying what patient is on what bundle?***

Answer: The number one goal of the Health Care Payment Learning and Action Network is getting more alignment and coordination across these programs. Alignment on quality measures and benchmark efforts, as well as data sharing with providers. Trying to get more clarity about what information is critical to share and how it can be done more consistently and at lower cost is important.

Question: ***One thing CAST has suggested in comments to the Office of the National Coordinator for Health Information Technology (ONC) is to use a summary that gives the person or facility receiving a patient a background, brief assessment, and a set of recommendations that helps the recipient focus on the current issue and context, instead of a laundry list of data that providers may or may not have every transition.***

Answer: Many early successes in care coordination focus on getting to the few critical elements. In some cases, some critical information can go a long way. We should encourage customization. Can we move forward on payment reforms, plus look at what information is most critical for those organizations to share? Has ONC focused on standards in the area? What are practical barriers for these new delivery approaches? And then help those be adopted voluntarily.

Discussion: ONC recently listed all standards and requirements. CAST is comparing those standards, and a percentage of EHRs are implementing those standards. The more practical use cases, the better we can see what the obstacles are.

Part 3
PointClickCare-CAST Partnership

The Commission discussed with Dave Wessinger, Co-Founder and Chief Technology Officer of PointClickCare, its partnership with CAST. The conversation covered importance and aims, the Joint Project, survey results, interpretations, and next steps.

The Joint Project

The Joint Project between PointClickCare and CAST was to learn about opportunities and challenges in the long-term and post-acute care (LTPAC) market. Both partners wanted to understand what is driving the future of LTPAC. They sought to learn from those who may not be at the forefront of technology and set these goals:

- Acquire a view of the current state of the LTPAC industry from the providers' perspective.
- Understand how technology is being used to enable providers in their operations.
- Identify which areas providers are focusing on in order to remain competitive and be prepared for the future.

They pursued a focused survey on these areas:

- New regulations.
- Alternative payment models.
- Increasing growth of senior population.

About the Survey

A total of 2,630 listserv members from three care settings—continuing care retirement communities (CCRC), nursing homes, and assisted living—received the electronic survey. Distribution was even across all three.

- There was an average of 20 questions per survey.
- Response rate average was 12 percent across all three listservs.

The survey did not collect the respondents' title, role, or position. These would be helpful to understand the data better.

Results

Results are as follows:

What is Driving the Future of LTPAC?

These are the top three factors:

- Payment Reform
- Rising Acuity
- Aging in Place

They are common across all three care settings. On the nursing home side, rising acuity wasn't an issue due to shorter length of stays, and staffing was a concern. Payment reform is driving the other factors (the lowest cost setting is the patient's home).

What factors will impact the future of your organization?

To be a risk-bearing entity and be a player, data analytics, population health, risk indicators and factors, and how to prepare for caring for who's in your building are critical. Our membership is not focusing on data analytics; this is surprising and a concern.

How Tech Enabled Are We?

Does your organization leverage technology or use manual/paper processes?

Billing/financial management is the most strongly adopted technological solution (89 percent of respondents).

There is a focus on customer relationship management (CRM)/Marketing (78 percent). As you look at referral sources, CRM can help you understand who your partners are. How are we leveraging Salesforce and similar automation tools?

Medication management seems to be the tip of the spear (77 percent), especially in Assisted Living. Wanting a medication management system comes from the desire to deliver better care and is on the rise.

Expanding Services

In which of the following areas does your organization plan to operate in the future?

Every segment is interested to move across all areas listed—or may be doing already. Program of All-inclusive Care for the Elderly (PACE) is growing about 12 percent a year. CCRCs are the perfect service solution to support PACE programs, and 71 percent plan to pursue them, more than any other area. However, if you don't have an actuary on staff, data, predictive analytics, and a good partner, beware.

Preparing for the Future

To remain competitive and differentiate your community, where do you think you can improve?

The top area for improvement—for 84 percent of respondents—is investing in technology. Ideally, doing so will help you care for people, not do documenting and administration. Sensors and capabilities can help. On the flip side, we need to be careful that we don't isolate seniors and remove too much of the social interaction of care.

Is your community actively participating in an ACO?

Most are not. Only 18 percent of CCRCs, 13 percent of nursing facilities, and 4 percent of assisted living facilities are. You expect to see the inverse. Clearly, participation in ACOs is not as extensive as it should be.

Additional Thoughts

- **Effective condition-based management of chronic diseases**. This is evolving into population health. For example, some people have a protocol for managing diabetics and have been asked to manage across a population and geography for seniors. In an acute-care space, many providers deliver content. There is not much evidence-based clinical content available in long-term care. There are academic partners to develop that capability, like John Hopkins. This is a critical component for all sectors.

- **Be a specialist or a generalist**. It's important to choose one.
- **Ability to bear risk**. You'd need to understand risk and data–you'll be at their mercy if you can't. For people who stay too long, it's clear you'll need to connect, communicate, and make data available to these folks, even if you're not bearing risk. You need to get involved there. Sharing is caring, but if you don't have the data, you can't share.
- **Measures**. Quality measures are important and evolving. Important ones to think about include the rehospitalization rate, length of stay, and 5-Star rating. Ratings are done on a bell curve, which makes life tough for a lot of providers; you must be able to demonstrate your quality.
- **Capital**. It is now much harder to get than in the past, which is also a huge challenge for the industry.

The Challenge

To remain competitive and differentiate your community, where do you think you can improve?

Investing in technology is a highlight to many of these organizations (84 percent for CCRCs, 60 percent for nursing facilities, and 67 percent for assisted living). Yet budget and lack of IT resources prevent them from pursuing it, more so than any other factor.

Putting the Pieces in Place

These elements are important:

- **Progressive board**: Having an aggressive board is going to be critical. You need to have board members willing to devote budget to IT. Health care is at bottom of the barrel for planning for technology, and your past years' IT budget is usually not where it needs to be. You need a mix of people on the board who think strategically and understand how important an IT plan is to the broader picture.
- **Understanding industry drivers**: You need to be progressive and involved.
- **Focus on outcomes**: If you can't measure it, you can't share it and create the kind of partnerships you want for future success.
- **Leverage strategic partnerships**: Stay attuned to where people are going, who's progressive, lessons learned, what does and doesn't work with technology. You should take that from anyone who has it.
- **Engage with patients and families**: Acute care provides an opportunity to connect with families, when a health crisis happens and people realize "I really do need to take care of my dad" or "I need to take care of my health." That moment when they recognize they need care can be a great catalyst. You need to capture that moment, get them in virtual communities and the like.
- **Build a plan**: Start with the end in mind. Build a three- to five-year plan. Paint with broad strokes. What do we want to look like? Where are we today? Be honest, then build a plan to get you where you want to go.

Part 4
Strategic Planning and Strategic IT Planning Interactive Tool: Results and Implications

How to Take Strategic Goals and Identify Enabling Technology

Here, we walk through strategic IT planning, assessments, gap analysis, creating a strategic IT plan, then updating IT infrastructure and implementing applications.

Accessing the Tool

The Strategic Planning and Strategic IT Planning Interactive Tool guides providers in a Q&A format, to direct people to the right section of the white paper.

Find the tool on the CAST website. Visit www.LeadingAge.org/CAST, then choose Strategic IT Planning Tools from the left side.

To register or log in, use My.LeadingAge.org.

About the Tool

The tool is very interactive and easy to use. It leads you through the questions and collects data in the background. Here's a snapshot of how many people have used it from April to October of 2015:

- 1,488 unique users visited the tool's link.
- 31 unique registered to get to the tool.
- 82 unique login using my.LeadingAge.org.
- 118 used the Online Interactive Tool.
- 103 Completed the Online Interactive Tool (15 abandoned without responding).

Results

Strategic Planning

A little over half (52 percent) of survey tool respondents recently updated their strategic plan. More than 75 percent of those did not engage a multi-stakeholder Strategic Planning Team—and things go downhill from there. The majority did not say that vision-based strategic planning is the most appropriate approach for them (61 percent), have not conducted an environmental scan (80 percent), or identified key issues and questions based on the environmental scan (72 percent).

They are doing okay in reviewing their organization's values, mission, and community vision (57 percent have). These results indicate that the people who are doing a strategic plan are doing a shallow one, not going deep enough. The majority are not developing specific strategic goal statements or agreeing on key strategies or

developing an action plan. None have finalized a written strategic plan or built in procedures to monitor or modify their strategies.

Strategic IT Planning

Of those who have engaged in strategic planning, only 47 percent have engaged in IT strategic planning—but again, from that part onward, there are a lot of "no" answers. Most have not conducted a recent technology assessment, reviewed application usage and detailed needs, conducted a gap analysis or drafted an initial list of IT initiatives.

If they've done strategic IT planning, they control the budget well; 53 percent have performed initial budgeting and resource planning for the specific projects and initiatives.

Updating IT Infrastructure

Most have updated their IT infrastructure to support all the technology applications that enable their strategic goals (57 percent). The vast majority have considered hosting applications locally instead of in the cloud (73 percent), and the majority have thought about the support aspect—58 percent have considered options to support IT infrastructure and applications in-house versus outsourcing it.

Planning for Future Needs

But when it comes to designing their network to support future needs, they fail miserably; 79 percent have not done so. They think about the specific applications, so they are good at the operational level of selecting technologies to support their business needs, but their approach is not strategic enough.

When it comes to interconnectivity/interoperability and information exchange, close to 60 percent have thought about their needs, and 70 percent have actually started selecting applications that enable their strategic goals. EHR is one of the leading applications that have been adopted by CAST members.

The vast majority have created a multi-stakeholder project team (63 percent). But none have specific SMART goals for projects.

The vast majority (88 percent) are not redesigning their workflows to take advantage of the technology application or identifying must-have and desired functionalities.

Question: Are these results representative of the market? Probably not! Many people abandon the survey after a few questions.

In addition, the vast majority have not created an implementation plan, system integration, data migration, and change management plans or considered training and support needs.

The good news is that for those who didn't update their strategic plan, technology/IT strategic plan, infrastructure or specific technology applications, the vast majority of them believe they need to do so (82 percent).

Conclusions

In conclusion, about half of providers updated their strategic plan in the past two to three years, but more than 50 percent of them do not have an updated IT strategic plan, which provides an opportunity for those in that space. Strategic planning is shallow; most people do not go beyond vision and mission.

They are usually good at budgeting and cost control but do not undertake the details of strategic planning that would be helpful: Describe future states, define specific strategic goals, identify key strategies, write a plan, and incorporate a review mechanism.

Of those who incorporated strategic IT planning, most know their infrastructure needs updating. The majority pay attention to IT infrastructure and consider various applications, business continuity, IT support, and interoperability. Most have assembled multi-stakeholder teams and started implementing technology.

However, the vast majority don't design their network to support all current and future needs. They don't have SMART goals for their operational IT projects, redesign workflows, identify must-have features, or consider all training and support needs.

Part 5
CAST Technology Selection Tools and Next Proposed Tool:

Feedback and Next Steps

Scott Code of CAST/LeadingAge led a discussion on feedback gathered around the CAST Technology Selection Tools, as well as proposed topics for the next tool.

For this tool, CAST invited 40-50 vendors to participate, and 15 vendors responded with product information. CAST asked vendors to fill out a product matrix this year that addressed 320 elements. This process would take months for you to do on your own. All answers are consolidated into an online tool. To use the tool, you answer a few questions, and the tool selects the best products for you based on your responses.

Like previous CAST technology selection tools, the Functional Assessment and Activity Monitoring portfolio contains four elements: White paper, case studies, product matrix, and online selection tool. It's most effective to read the white paper first, to understand the questions and the selection process you're facing.

Online Survey/Feedback Results

The Functional Assessment and Activity Monitoring portfolio is considered useful; the portfolio filled a significant need for hands-on tools to help providers implement technology initiatives (100 percent agreed). Below are statistics on individual elements:

- **White paper** – 70 percent found it extremely useful; 30 percent said it was okay.
- **Case studies** – 50 percent found it extremely useful; 40 percent said it was okay, and 10 percent said it was not useful at all.
- **Online selection tool** – 50 percent found it extremely useful; 40 percent said it was okay, and 10 percent have not used it. Of those who used the online selection tool, 30 percent said it was super easy to use, and 70 percent said they had not used it.

All Portfolios

The research also measured unique views of all CAST portfolios:

- Electronic Health Records, the first one launched – 6,212 people have viewed the page since it went live in 2012.
- Strategic IT Planning – 1,488 unique views.
- Telehealth and RPM – 1,107.
- Medication Management – 325.
- Functional Assessment and Activity Monitoring – 166.

The next tool, for 2016, should focus on care coordination technologies.

Part 6
Generative Discussions about Future Planning

Two breakout groups met to discuss strategic planning and strategic IT planning, as well as the next CAST Technology Selection Tool for providers. Reports follow.

Discussion Groups

Option 1- Strategic Planning & Strategic IT Planning:

- What is missing? What else should we do?
- How can we get Boards and Executives of members to access and use these tools?
- How can we get members to act on the recommendations?
- How can Commissioners help?
- Next Steps

The following ideas could encourage more strategic planning and strategic IT planning, so that organizations reap the high-level return on investment this planning can bring.

1. Target boards, CEOs, and executive teams to get them to use these tools.
2. Incorporate these tools into the education track for CEOs of multisite organizations (CEMO) and into board education—conferences, webinars, and other resources.
3. Educate LeadingAge Corporate partners who often get involved in strategic planning, board retreat, and similar efforts about the CAST tools and resources, to ensure that they use them, contribute to enhance them, and raise awareness of members about them.
4. Incorporate a technology champion into the board. Idea: Some Commissioners suggested becoming advisory board members or technology champions on member boards. Interested Commissioners can email Majd and CAST would do the matchmaking and connect them to organizations. CAST could write an article in CAST newsletter soliciting interest from CAST membership and offer this matchmaking service.
5. Track trends. We are doing this in partnership with Zeigler. Discussants talked about how we can create a complete ecosystem by deepening our partnership with the Zeigler fund by documenting case studies of the pilots being conducted there, sharing them with LeadingAge members, and trying to get an early startup fund. That way, we would have a complete ecosystem, from conceptual design through startup funding and growth funding to sharing pilot and actual data from experimentation with LeadingAge members.

Option 2- Next CAST Technology Selection Tool for Providers:

- Do you agree that Care Planning and Coordination Tools seems the right focus?
- Do you have any suggestions for other priority tools?
- Are these tools missing anything?
- Is the update frequency appropriate?

- How can we get more members to access and use these tools?
- How can we get members to act on the recommendations?
- How can Commissioners help?
- Next Steps

Most of the discussion in the beginning was on care coordination technologies and how we can define them. The discussants agreed that a Care Planning and Coordination Tool seems the right focus. While the group participants didn't all agree on a definition, majority felt that this would be the initial focus of this initiative's workgroup in 2016.

Other feedback indicated that we have a lot of great content and comprehensive tools, but are not packaging presenting that content in small bites that makes the information easily manageable. The white papers are comprehensive but seem a little academic. The matrix data could be overwhelming sometimes. The group discussed ways to pare down the online selection tools make them easier to use.

Ideas to get more members to access and use these tools included:

1. Crowdsourcing and having members rate the systems listed; the rating has its potential downsides, including verification or the rater, potential sabotage from other vendors, etc.
2. Educating LeadingAge Corporate partners, who often get involved in technology planning, selection, and implementation, about the CAST tools and resources, to ensure that they use them, contribute to enhance them, and raise awareness of members about them.
3. Targeting technology professionals among LeadingAge Members about the existing CAST tools.

Appendices

Appendix 1: Agenda and Outcomes

CAST Commission Meeting
Saturday Oct. 31, 2015
2:30-6:30 PM
The Westin Boston Waterfront
425 Summer St, Boston, MA 02210
Phone: (617) 532-4600
Meeting Room: Grand Ballroom C

Outcomes of the CAST Commission Meeting:

1. Introductions and meaningful networking with other CAST Commissioners and Guests where attendees will share not only who they are, but also their most exciting technology initiative and their biggest challenge.
2. Hear the most important accomplishments and brief update on CAST work.
3. Commission will discuss with Dave Wessinger, Co-Founder and Chief Technology Officer, PointClickCare, on their Partnership with CAST: Importance and Aims, The Joint Project, Survey Results and Next Steps.
4. Commissioners will discuss the results of Strategic Planning and Strategic IT Planning Interactive Tool and discuss the implications.
5. Commissioners will discuss the feedback on the CAST Technology Selection Tools and the Next Proposed Tool.
6. Commissioners will break-out into two small workgroups and engage in a Generative Discussion to develop guidance for CAST on the next set of technology planning and selection tools, steps to increase access to, and utilization of, the tools, as well as the execution of the recommendations they provide, and how Commissioners can help with those efforts.
7. Commissioners will engage in a conversation with Mark McClellan, M.D., PhD, CAST Chair one the Next Wave of Reforms for LTSS including CMS' proposed LTC Requirements Rule, 21st Century Cures, Rural Healthcare Connectivity Act, IMPACT Act Implementation, and others.
8. Commission will receive written updates on progress in the areas of Research, Federal Policy, State Policy, and Health IT Standards. Note: written updates will be provided in meeting book.

Agenda:

2:30-2:35 PM Welcome to Boston Meeting Overview, Objectives and Desired Outcomes
Kathy Martin

2:35-3:35 PM Introductions- and a round of rapid fire

Name, Title, Affiliation
Most Exciting Aging Services Technologies Initiative
Biggest Challenges
(2 minutes per Commissioner/ Guest)

3:35-3:40 PM Highlighted Accomplishments and Important CAST Updates
Majd Alwan

3:40-4:20 PM CAST Partnership with PointClickCare: Importance and Aims, The Joint Project, Survey Results and Next Steps
Dave Wessinger

4:20-4:30 PM BREAK

4:30-4:50 PM Strategic Planning and Strategic IT Planning: What Does the Interactive Tool Tell Us
Majd Alwan

4:50-5:05 PM CAST Technology Selection Tools: Feedback & Next Proposed Tool
Scott Code

5:05-5:40 PM *Working Session:*

Group/Option 1- *Strategic Planning & Strategic IT Planning:*

- What is missing? What else should we do?
- How can we get Boards and Executives of members to access and use these tools?
- How can we get members to act on the recommendations?
- How can Commissioners help?
- Next Steps

Group/Option 2- *Next CAST Technology Selection Tool for Providers:*

- Do you agree that Care Planning and Coordination Tools seems the right focus?
- Do you have any suggestions for other priority tools?
- Are these tools missing anything?
- Is the update frequency appropriate?
- How can we get more members to access and use these tools?
- How can we get members to act on the recommendations?
- How can Commissioners help?
- Next Steps

Self-Select & Self-Moderate

5:40-5:55 PM Report out
All
Moderated by Kathy Martin

5:55-6:27 PM Conversation with Mark McClellan on the Next Wave of Reforms for LTSS

a. Read on CMS' LTC Requirements Rule
b. 21st Century Cures
c. Rural Healthcare Connectivity Act
d. IMPACT Act Implementation Progress
e. The Next Wave of Reforms
f. Next steps

Mark McClellan, MD, PhD
Moderated by Kathy Martin

6:27 PM Closing Remarks and Next Steps
Kathy Martin

6:30 PM Adjourn

Dinner at Commonwealth Ballroom A

Next Commission Meetings:

PEAK Leadership Summit
2:30-6:30 p.m. Sunday March 13, 2016, Washington, DC

Appendix 2 - Introductions, Exciting Initiatives, and Challenges

What aging-services technology initiative are you most excited about? And what challenge do you face? CAST Commissioners answered those questions at the beginning of their Fall meeting. Here are their responses:

Majd Alwan, *Senior Vice President of Technology and Executive Director of the LeadingAge Center for Aging Services Technologies (CAST)*

Exciting Initiative: The new Functional Assessment and Activity Monitoring Technology Selection Tool that compares 17 products from 15 vendors across 320 functionalities. New leader of LeadingAge as Katie Sloan becomes CEO. A potential new CAST tool for care coordination. The Strategic IT Planning Tool.

Challenge: Curbing my enthusiasm and ambition. Getting providers to access and apply these tools more.

Scott Code, *Aging Services Technologies Manager, LeadingAge*

Exciting Initiative: Recently launched a new initiative around functional assessment and activity monitoring technologies.

Challenge: Keeping up with Majd.

Suman Halthore – *CAST & Housing Administrator, LeadingAge*

Exciting Initiative: Jack of some trades, keeping everything running smoothly and meeting everyone.

Raj Agarwal, *Chief Executive Officer and President, Medocity*

Exciting Initiative: Just launched Medocity Silver and excited to approach seniors who want to age in place. Catering to needs based on their conditions. Bringing the clinical and technology aspect to seniors with a concierge option.

Challenge: How Centers for Medicare & Medicaid Services (CMS) is moving. What are the reimbursement issues?

David Baker, *Vice President and Chief Technology Officer, The Asbury Group*

Exciting Initiative: Designing smart homes, putting in technologies and universal design components to help people age in place.

Challenge: Working with architects and engineers to communicate that long-term care is more than cable TV and telephone.

Casey Blumenthal, *Vice President, Montana Hospital Association*

Challenge: Post-acute care and long-term care settings are still 20 years behind in this market. How to get them on board with no additional human or financial resources, no large systems, and little buying power. Where facilities are more automated, want to connect the dots and share information statewide.

Jeff Bolivar, *Director of Information Services, Lutheran Homes of South Carolina*

Exciting Initiative: Collective of continuing care retirement communities (CCRCs) across hospital and hospice and non-skilled home health or home care.

Challenge: Just beginning to implement and make the best use of electronic health record (EHR) software.

Alan Bugos, *Head of Technology and Innovation, Philips Healthcare – Home Monitoring*

Exciting Initiative: Transforming business to embrace the home and build out telehealth solutions, remote monitoring, and connected care. Leveraging sensors that are collecting data from seniors who want to age in place. Building the "Internet of Aging Wellness Things."

Challenge: Data—what to do with it, how to integrate it. How to move quickly.

Marcia Conrad-Miller, *Senior Director of Business Transformation Philips Healthcare – Home Monitoring*

Exciting Initiative: Two solutions in the marketplace: CareSage, which yields data analytics and predictive analytics that show future risks to patients, and HealthSuite digital platform, a web-based big data platform to integrate information from healthy living to urgent care.

John DiMaggio, *Chief Executive Officer, BlueOrange Compliance*

Exciting Initiative: Providing private security solutions to healthcare and long-term care, Health Insurance Portability and Accountability Act (HIPPA) and high-tech assessments.

Challenge: Education—what is required in the fast-track, high-risk area of security and privacy?

Fred Erlich, *Chief Executive Officer, Living Resources*

Exciting Initiative: Built a smart house for people with developmental disabilities and would like to do more. Exploring smart home technology and how to energize people in upstate New York to invent new things. Partnering with The State University of New York at Albany.

Challenge: To figure out what people want, beyond saving money, and how to help them remain independent as they live longer. Marrying technology with needs for new inventions.

Eli Feldman, *CEO Emeritus, Metropolitan Jewish Health System (MJHS)*

Exciting Initiative: A new device whereby people can use symbols to communicate, giving healthcare professionals a picture of what's happening with the person, beyond language barriers.

David Finkelstein, *Chief Information Officer, RiverSpring Health*

Exciting Initiative: Undertaking an enterprise-wide document management initiative to eliminate paper. Getting an audit of the organization's finance, information technology (IT), HIPAA, and security compliance processes to make sure we're good stewards of information. Building a CCRC on campus.

Challenge: New York is privatizing Medicaid, eliminating the one-payer system. Now Medicaid patients are going to many managed care companies.

Joe Gerardi, *Senior Vice President of Information Technology and Chief Information Officer, American Baptist Homes of the West*

Exciting Initiative: Affiliating with the be.group in California, which operates affordable housing communities.

Challenge: Sifting through millennial ideas to find something that makes sense for senior communities.

Carl Goodfriend, *Chief Information Officer, ProviNET Solutions*

Exciting Initiative: Happy to be part of selection tools, solving challenges with strategic plans/tools, or care coordination tools.

Challenge: Eliminating information silos and integrating products.

Cathy Guttman, *Senior Director Business Opportunities and Strategy Innovation, Medocity*

Exciting Initiative: Patient-centric disease management platforms for seniors designed to educate and support seniors whether they are part of CCRCs or independent living or living in virtual communities outside.

Challenge: Trying to help large senior living providers move away from the traditional view of senior living that we've had for years. Building out better virtual communities that speak to the baby boomers, managing chronic diseases, and enabling aging in place.

Rich Hoherz, *Chief Information Officer, Westminster-Canterbury on the Chesapeake Bay*

Exciting Initiative: Doing a study of bringing computers to beside of dementia patients—engaging with music and other content.

Challenge: Trying to get data to communicate across multiple systems so there is no need to re-enter data.

Stephen Hopkins, *Chief Operating Officer, Evangelical Homes of Michigan*

Exciting Initiative: Working on a project with passive monitoring technology, a pilot with an Australian company to discern what and when to do things rather than doing things on schedule, which saves money.

Challenge: Scaling to care for large groups and learning how best to use available tools. Embracing innovation in business models, not just picking tools.

Gail Hunt, *President and CEO, National Alliance for Caregiving*

Exciting Initiative: Catalyzing Technology to Support Family Caregiving examines how tech developers can give and receive input with family caregivers to better merge products.

Challenge: How do we get family caregivers to contact tech developers to produce better products and have a place to market them?

Asif Khan, *Founder and Chief Executive Officer, Caremerge*

Exciting Initiative: Fast growth for this young company providing a communication and care coordination network for post-acute care.

Challenge: There is a lot of technology; in which direction do I go?

Peter Kress, *Chief Information Officer, ACTS Retirement-Life Communities, Inc.*

Exciting Initiative: Implementing a new system that manages every employee and resident request in Salesforce. Pre-approval on a project for a fully connected community—WiFi, Internet in apartments, digital signs in all hallways, a new resident portal app, and more.

Challenge: How to get it done with a small team implementing multiple projects. How to leverage partners well and accelerate activity.

Dennis Jakubowicz, *Senior Vice President of Market Development, MatrixCare*

Exciting Initiative: A pilot with Los Angeles Jewish Home enables outside providers to access data without having to log into their system, pushing out the data to pharmacies, therapists, physicians, and other providers to create a care community.

Challenge: Information from innovative technology doesn't tie in.

Darren Johnson, *Director of Client Services, HealthMEDX*

Exciting Initiative: Engaging with partners on activities in interoperability and technologies. Focusing efforts on having customer success in quality of care, streamlining operations, and controlling costs.

Challenge: Interoperability; not just the technology but also the decision factors related to expansion of Medicaid.

Jerry Kolosky, *Senior Healthcare Advisor, Office of the CTO, Panasonic Corporation of North America*

Exciting Initiative: Specific technologies related to the intersection between decision making and provision of care.

Challenge: Stakeholder alignment and data being propagated across the ecosystem and individual engagement; what is the optimal user experience? How can we deploy systems to generate revenue for the organizations?

John Mabry, *Chief Technology Officer and Senior Vice President, Align / Avalon Health Care*

Exciting Initiative: A discharge planning tool that engages patients starting the day they're admitted, understands the gaps in their care, then prepares a discharge plan based on data that rolls into a call system to maximize the patient's success at home.

Ricardo Meirelles, *Market Intelligence Manager, PointClickCare*

Exciting Initiative: Working with Majd and LeadingAge CAST on successful market research that will be presented at the meeting.

Stuart Kaplan, *Chief Executive Officer, Selfhelp Community Services*

Exciting Initiative: Using sensor technology and working with virtual senior centers to engage those who are not able to leave their homes.

Challenge: Getting technologies at scale. Demonstrating the value and financial benefit to the healthcare system.

Sneha Patel, *Chief Information Officer, Covenant Retirement Communities*

Exciting Initiative: A security initiative using a virtual security partnership rather than in-house, replacing the old CRM system and rolling out a new portal and second-generation WiFi.

Challenge: Integrating all systems and making the most of limited resources, dollars and people.

Debi Sampsel, *Chief Officer of Innovation and Entrepreneurship, University of Cincinnati*

Exciting Initiative: Just finalized a legal agreement to bring innovation from multi-disciplinary teams (medical, nursing, engineering, computer science) working at the smart house as part of students' coursework to the market.

Challenge: How to share intellectual property and licensing resulting from inventions with CCRC, get funding for it, and use it for senior care there. Want to create a new platform for people who are going blind in the senior population.

Jon Sanford, *Director, Center for Assisted Technology and Environmental Assets / Georgia Institute of Technology*

Exciting Initiative: A grant-funded research program that focuses on people who have had long-term disabilities and now are aging into additional disability. The research involves biomedical engineering and robotics, design of products and software applications, and basic research. This year, researchers developed a robotic bed to help people who are bedridden.

Challenge: External partnerships with service providers to create real-world solutions and speed up the time to market.

Joe Velderman, *Director of Consulting Services, ProviNET Solutions*

Exciting Initiative: Figuring out how to deliver more in-field or desk-side support services.

Dave Wessinger, *Co-Founder and Chief Technology Officer, PointClickCare*

Exciting Initiative: Helping partners leverage more of technology to deliver better outcomes. Delivering technology to market at a reasonable price point and ensuring technologies are right-sized for the marketplace.

Appendix 3: Major CAST Accomplishments for Oct. 2014 – Mar. 2015

- CAST published "Strategic Planning and Strategic IT Planning for Long-Term and Post-Acute Care (LTPAC) Providers: A "How To" Workbook," the first component of CAST's Strategic IT Planning initiative. This component of the initiative provides an overview and detailed explanations of strategic planning, strategic and operational IT planning, and IT infrastructure. It will be accompanied by online interactive educational modules that capture the process and point to other tools and resources. Lastly, the initiative will also include a set of provider case studies.
- CAST released its first-ever Medication Management portfolio of tools to help providers better understand, plan for, select and implement medication management technologies. The portfolio includes a white paper, a selection matrix comparing 15 products across 305 functionalities and features, an easy-to-use online selection tool, and a collection of three provider case studies.
- CAST published the CAST Commission Proceedings entitled "Collaborating on Change: How Payer, Health Care and Academic Partnerships Can Advance the Missions of Aging Services Organizations.
- CAST partnered with Ziegler on the second survey of Technology Adoption among the largest 150 members of LeadingAge.
- CAST leadership continues to be recognized by think tanks and policymaking bodies as a key resource to help and inform technology policy. For example, CAST Executive Director was recently invited to participate in a workshop on Aging by the President's Council of Advisors on Science and Technology (PCAST).
- Continued to advocate for including long-term and post-acute care providers as active participants in health Information exchange activities and potentially other American Recovery and Reinvestment Act (ARRA) funded activities, including state-designated Health Information Exchanges entities and Beacon Communities.
- Continued to provide guidance and successfully influence LeadingAge state-affiliates and members in different states to become actively engaged in state Health Information Technology for Economic and Clinical Health (HITECH) Act initiatives.
- Continued to support LeadingAge state-affiliates on technology education, technology surveys aimed at gauging technology adoption, and other technology-related activities, including technology policy and advocacy efforts.
- Kept CAST and its supporters, associates, and LeadingAge members mentioned in main media outlets including newspapers, magazines, trade and industry publications, both in print and electronic media.

Appendix 4: CAST Research Update - March 2015

CAST continues its efforts to encourage and actively engage in outcome-oriented evaluation of aging-services technologies as an essential element to more informed decision-making and wider adoption. Here is an overview of the new opportunities and ongoing research initiatives:

- CAST released "Strategic Planning and Strategic IT Planning for Long-Term and Post-Acute Care (LTPAC) Providers: A "How To" Workbook," the first component of CAST's Strategic IT Planning initiative. This component of the initiative provides an overview and detailed explanations of strategic planning, strategic and operational IT planning, and IT infrastructure. It will be accompanied by online interactive educational modules that capture the process and point to other tools and resources. Lastly, the initiative will also include a set of provider case studies.
- CAST partnered with Ziegler on the second survey of Technology Adoption among the largest 150 members of LeadingAge. The report revealed that:
    - Three-quarters (74.7 percent) of the largest 150 not-for-profit senior living communities have adopted electronic medical records and/or electronic health records (EMR/EHR). A similar percentage (76.6 percent) of senior living communities have adopted electronic point of care or point of service documentation systems, according to the report.
    - The majority of LeadingAge Ziegler 150 (LZ 150) organizations reported implementing some type of safety technology, including user-activated emergency response systems (75.2 percent) and access control/wander management systems (73.1 percent). A smaller percentage of LZ 150 organizations had implemented automatic fall detectors (33 percent).
    - In the area of health and wellness technologies, more than half (57.8 percent) of LZ 150 organizations reported having physical exercise and rehabilitation technologies.
    - LZ 150 organizations have the greatest opportunity for enhanced technological capacity in three areas where adoption is lowest:
        - Teleheath/remote patient monitoring (4 percent).
        - Telecare/telemonitoring/behavioral monitoring (7.6 percent).
        - Medication monitoring technologies (21.2 percent).
- **Medication Management Initiative:** CAST released its medication management portfolio of tools, which includes a white paper that explains the different types of medication management technologies available, applicability to different phases of medication management, settings, benefits, and potential revenue streams and business models that support these technologies. It also provides the most important planning steps an organization needs to take to prepare for selecting and implementing a medication management solution. The selection matrix is a resource containing 15 products from 14 vendors, compared across more than 305 different functionalities and features. The tools also include an easy-to-use online Medication Management Technology Selection Tool that helps providers hone in on only products that meet their business lines and must-have features. Finally, the portfolio has a companion set of case studies focusing on the impact of using medication management technologies on care quality and outcomes.

Appendix 5: LeadingAge Legislative Update - January 23, 2015

Executive Summary

Congressional outlook: The 114th Congress convened January 6, 2015.

Because Republicans won a majority in the Senate, the leadership of the full Senate and of its committees has shifted to Republicans. In addition, Republicans have gained more seats on key committees in both the House and the Senate because of their expanded majorities.

In the next three months, Congress will work on two issues of paramount importance to LeadingAge and its members:

- **2016 budget**: According to the Congressional Budget Act, the President is supposed to submit his budget proposal for the next fiscal year to Congress on the first Monday in February, which will be February 2 this year, and we expect the budget to be issued on time. From there, Congress is supposed to develop a budget plan and then spending bills and potentially budget reconciliation legislation. Appropriations Committees are expected to develop their bills during the spring and hold hearings before the summer.

  Last year we had a reprieve from across-the-board spending cuts, aka sequestration, in the non-defense discretionary spending category that includes senior housing and home- and community-based services programs under the Older Americans Act. Sequestration will return for fiscal 2016, however, unless Congress finds a way to pass spending bills in line with the caps contained in the Budget Control Act of 2011.

  The cap on non-defense discretionary spending for 2016 does not allow for an overall spending increase in this budget category. This means that programs like senior housing and community-based services will compete with other budget priorities like education, the environment, transportation, etc. for 2016 funding. Increases will be difficult to achieve, and we probably will have to defend aging services programs against spending cuts.

  Sequestration continues for Medicare reimbursement to health care providers. We will urge Congress not to extend this sequestration beyond 2024 and not to make Medicare cuts a piggybank for spending in other areas of the budget.

- **Medicare sustainable growth rate**: Aside from budget issues affecting Medicare, Congress once again will confront the flawed physician payment formula. The present, temporary "doc fix" will expire March 31. Before then, Congress will have to either enact another temporary fix or, preferably, enact a permanent correction to the physician payment formula.

  We have a direct stake in the issue because some areas of post-acute care reimbursement are tied to the physician payment formula. In addition, we will continue to push for Congress to include therapy cap reform or elimination in the doc fix legislation and to address the problem of observation days.

Senior housing

Before adjourning in December, the 113th Congress passed a "cromnibus" fiscal 2015 spending measure. This bill gave Section 202 housing $420 million for 2015, a $35 million increase over fiscal 2014. The $420 million total includes $70 million for service coordinators.

The housing with services demonstration project was technically zeroed out, but the bill allows $16 million above the $420 million given to Section 202 for "elderly housing."

Medicare

In the new Congress, we will continue working on the following outstanding issues for long-term services and supports:

- **Observation days**: A new bill will have to be introduced to require all time a Medicare beneficiary spends in the hospital to be counted toward the three-day stay requirement. We will continue working for this legislation, or alternatively to resolve the issue under potential legislation relating to Medicare coverage of short hospital stays.
- **Therapy caps**: The exceptions process is set through March 31, 2015. Congress will have to deal with the flawed physician payment system before then. We will be working to make sure reform or removal of therapy caps is part of the "doc fix."
- **Post-acute payment reform**: The 113th Congress passed the IMPACT Act, Public Law 113-185, which requires the development of standardized patient assessment data and quality measures reporting across the spectrum of long-term services and supports. We will now be working with the Department of Health and Human Services and the Centers for Medicare & Medicaid Services on implementation.
- **Adult day services**: We anticipate reintroduction of legislation to authorize adult day services providers to be certified to provide Medicare-covered home health services. We will continue working for effective Medicare coverage of these cost-effective services.
- **Technology in home health**: The Fostering Independence Through Technology (FITT) Act, to provide incentives for home health agencies to use technology to remotely monitor the Medicare beneficiaries they serve, will need to be reintroduced. It will continue to have our strong support.

Medicaid

We may see renewed interest in Medicaid per capita caps and other spending cut proposals as Congress develops a budget for fiscal 2016. We will continue to oppose any Medicaid policy changes that would reduce federal Medicaid funding to the states.

Long-term services and supports financing

We continue advocating, both directly and in coalition with other stakeholders, to develop a more effective financing structure for the services LeadingAge members provide. Our Financing Task Force report, *Pathways to Coverage*, is the foundation of our advocacy work.

Older Americans Act [home- and community-based services]

One of the very first bills filed in this Congress will reauthorize the Older Americans Act. Older Americans Act programs have operated for several years without official authorization; we have been working with numerous other stakeholder organizations to get reauthorization legislation passed by Congress. The bill that has been introduced, S. 192, is bi-partisan, introduced by Sens. Alexander (R-TN), Murray (D-WA), Burr (R-NC), and Sanders (I-VT), and similar to legislation that was introduced last Congress. The holdup last year was a dispute over the funding formula for states, but that dispute has apparently been resolved and reflected in new language in the current bill. The HELP Committee is "marking up" the bill on Jan. 28, and we are hopeful that it will proceed fairly smoothly through the Senate. We are waiting for a House version.

Home- and community-based services programs: 2015 funding

The cromnibus spending bill for 2015 provided funding at 2014 levels for these programs, some of which are under the Older Americans Act:

- Community Services Block grants - $674,000,000.
- National Family Caregiver Program (Title IIIE) - $145,586 (pays for adult day services, in-home).
- Congregate meals - $438,191,000.
- Home delivered meals - $$216,397,000.
- HCBS grants to the States (Title III B) - $347,724,000 (pays for adult day services, in-home).
- Lifespan respite program - $2,360,000.
- Aging and Disability Resource Centers - $6,119,000.
- Low Income Home Energy Assistance (LIHEAP) - $3.390 billion for home energy assistance for low-income households.
- Community Services Employment Program for Older Americans -$434,371,000.

The cromnibus bill provided $4 million in new funding for an Elder Justice Act initiative to encourage states to prevent and respond to elder abuse.

Long-term care for aging veterans and those wounded in Iraq and Afghanistan received $7.04 billion under the cromnibus. The funding includes both institutional and home-based care. The agreement provides $90 million for grants for the construction of state extended care facilities.

Taxes

There could be renewed interest in major tax reform legislation this year, possibly based on groundwork done in the last Congress. If Congress does not pass a tax overhaul this year, the issue's chances for congressional action will diminish as election year politics will likely complicate the legislative process in 2016.

We will monitor the work on this legislation closely to make sure that current tax benefits for charitable contributions and tax-exempt organizations are preserved.

We also continue to work on extensions of expiring tax breaks including the IRA tax-free rollover and the minimum 9 percent credit rate for the low-income housing tax credit.

Appendix 6: CAST State Technology Update March 2015

State-level technology activities

In our continuing effort to track technology activities in the states, CAST held two conference calls prior to preparing this update. One included a presentation by Scott Code and Majd Alwan on CAST updates and future CAST initiatives. The most recent conference call included a presentation titled "Reducing The Use of Psychotropic Drugs and Improving Quality Of Life Through Entertaining Technology-Driven Activities" presented by Jack York, It's Never 2 Late and Josh Hansen, WesternHome Communities.

State updates

New York: New York Governor Andrew Cuomo signed into law a bill requiring private insurers to cover telehealth and telemedicine coverage starting January 1st, 2016. New York joins 21 other states in the country in providing "parity" between what is reimbursable by Medicare and what must be reimbursed by all other insurers. The new law defines the scope of eligible distant site providers to include not just physicians, physician assistants, and hospitals, but also dentists, home care and hospice agencies, nurses, midwives, podiatrists, optometrists, ophthalmic dispensers, psychologists, social workers, and speech language pathologists and audiologists. The law also expands the definition of telehealth to include telephone and remote patient monitoring.

Appendix 7: Standards & Interoperability Report

LTPAC HIT Summit and roadmap

The annual LTPAC HIT Summit is scheduled to convene in Baltimore June 21-23. The collaborative continues to develop a new roadmap publication that will focus on the connected worker, connected person (patient), connected provider, health intelligence and quality, and evolving business imperative. There is a growing sense that the discussion is moving from creating the building blocks of interoperability to interoperating.

Meaningful use and regulatory HIT

At its recent annual summit, the Office of the National Coordinator (ONC) described the current state of its efforts as embodied in several documents that had been recently released. "A 10-Year Vision to Achieve an Interoperable Health IT Infrastructure," published in June, 2014, provides a useful overview of priorities and strategies to advance the impact of Health IT. "The HHS Health IT Strategic Plan" has just exited from its comment period. "The Shared Nationwide Interoperability Roadmap" and "2015 Interoperability Standards Advisory" were released at the end of January in draft and are now in comment. These four reports provide a meaningful framework against which organizations can enhance their own Health IT and Health information Exchange plans. The Standards advisory will become an annual publication and will become the basic reference for standards. While significant ongoing standards work is necessary, this body of work supports the idea that interoperability efforts can move from early adopters and incentive driven activities to more widespread application. The IMPACT Act provides additional timelines for developing common assessment and outcome measurement across hospital and post-acute care provider types.

Real opportunities for interoperability

Recent interoperability efforts and opportunities engaging LTPAC providers have been driven largely by ad hoc, research/grant based, or meaningful use incentives. With recent HHS announcements regarding accelerated targets for moving Medicare reimbursement from volume to value based (50 percent target by 2018, 30 percent by 2016), we expect that LTPAC providers will increasingly participate in new kinds of partnerships requiring greater information exchange. In general, we are seeing LTPAC health information technology (HIT) vendors supporting interoperability with physicians, labs, pharmacies, payers, medical device, and simple health information exchange (via CCD or Continuity of Care Document and Direct HISP, or Health Information Service Provider).

CAST has historically provided leadership in coordinating the Interoperability showcase at the LTPAC HIT Summit each year. With the shift from concept, pilots, and research toward production interoperation, CAST is exploring joint efforts with the CIO Consortium and the LTPAC HIT Collaborative to develop, publish and showcase production interoperability case studies, implementation guides, and operating practices.

Appendix 8: Commissioners' and Guests' Bios

Alan Sadowsky, PhD, *Senior Vice President MorseLife Health System, (West Palm Beach, FL)*
Alan D. Sadowsky joined the campus staff in October 2000 and serves as Senior VP of MorseLife, including Palm Beach PACE, Home Care (Medicare and Private) Care Management, Day Care and a host of programs designed to help seniors age at home while avoiding institutional care. Dr. Sadowsky received his Bachelor of Arts at the University of Pennsylvania and his Master's and Doctorate at the University of California, Los Angeles (UCLA). He served as the President of the Area Agency on Aging of Palm Beach and the Treasure Coast from 2016-2012. Alan has lived in Palm Beach County since 1985 and was previously the Executive Director of St. Mary's Rehabilitation Center (1985-1997), a multi-disciplinary outpatient rehabilitation center campus located in the Intracoastal Health Systems complex.

Candace LaRochelle, **JD, MHA,** *Manager of Business Operations, eHealth Data Solutions (Beachwood, OH)*
Candace LaRochelle provides oversight for accounts receivable, sales and marketing at eHealth Data Solutions, a leading innovator in data analytics in the long term care profession. Her responsibilities include regulatory oversight, and she has extensive knowledge of HIPAA and HITECH regulations, with a primary focus on the role of the business associate. Ms. LaRochelle has a background in both commercial litigation and commercial underwriting. She earned a Bachelor of Science in Business Administration from Winston-Salem State University, Master's in Health Administration from Pfeiffer University at Charlotte, and a Juris Doctorate from University of Dayton School of Law. Ms. LaRochelle is from the upstate area of South Carolina and now resides in Cleveland, OH, with her husband and daughter.

Carl Goodfriend, *CIO, ProviNET Solutions (Tinley Park, IL)*
Carl Goodfriend has 35 years of experience in long-term care operations, including 25+ years in technology and Information Systems. He serves a dual role as CIO for ProviNET Solutions and Providence Life Services. In this dual role, Mr. Goodfriend continues to advance technology adoption and Information Systems use. He participates in a variety of software and technology advisory boards and is active in national and state associations including LeadingAge Illinois, Centers for Aging Services and Technology (CAST), and LeadingAge. In his role with ProviNET, he has developed a technology collaborative in the long-term care provider network that allows companies to share ideas and work together to create an integrated system for the next generation of healthcare. As part of this collaborative effort, Mr. Goodfriend has developed a network of providers, software vendors, technology companies, and consultants who collaborate, share ideas, and actively participate in the advancement of technology for long-term care. Mr. Goodfriend utilizes his experience by providing strategic planning and providing technology solutions for providers throughout the country and oversees a team of dedicated technology professionals who share the same vision.

Casey Blumenthal, DNP, MHSA, RN, CAE, *Vice President, MHA...An Association of Montana Health Care Providers (Helena, MT)*
Casey Blumenthal, DNP, MHSA, RN, CAE is a Vice President with MHA...An Association of Montana Health Care Providers. Originally hired in 2002 to provide services to MHA's Extended Care members, her role now encompasses the entire membership as she offers a clinical perspective to advocacy, regulatory, and practice issues, along with oversight of MHA's Education programs. Prior to coming to MHA, she was the director of Flathead County Home Health Agency for 12 years and was President of the Montana Association of Home Health Agencies. A licensed RN in Montana since 1979, Ms. Blumenthal has served in a variety of clinical nursing positions, including OB, ICU, ER, Med-Surg, and supervisory positions. Ms. Blumenthal obtained her Bachelor of Science in Nursing from University of Portland (Oregon), and Masters in Health Services Administration at St. Joseph's College of Maine. In 2008, she became a Certified Association Executive, and

she recently completed her Doctor of Nursing Practice, Executive Leadership degree from American Sentinel University in Colorado. Ms. Blumenthal is the co-lead for the Montana Action Coalition with the Robert Wood Johnson Foundation/AARP Future of Nursing Campaign for Action and is the state executive for Montana's LeadingAge affiliate.

Charlie Hillman, *Founder/CTO, GrandCare Systems (West Bend, WI)*
Charlie Hillman has spent most of his career as an entrepreneur involved in disruptive technologies, including computer cartography in the '70s, computer aided design in the '80s, and internet in the '90s. His latest effort, GrandCare Systems, is designed to allow the aged to live longer in their own home with greater security and less social isolation. The system, using a combination of smarthome technologies, ADL monitoring, internet communications, and telehealth features, is intended to support the full continuum of care by involving both professional and familial caregivers. Mr. Hillman is a professional engineer with a Bachelor of Science from MIT and a Masters in Engineering from the University of Wisconsin-Milwaukee. He is a commissioner of CAST (Center for Aging Services Technologies) and a frequent speaker at national and international conferences. In his spare time, he is involved in local economic development, heads up the local school board, and enjoys spending time with his four grandchildren.

Chip Burns, *President, The Asbury Group-Integrated Technologies, LLC (Asbury-IT) (Germantown, MD)*
With over 40 years of experience in the Information Technology (IT) field, Chip Burns is responsible for the strategic planning and leadership of technology initiatives and programs for The Asbury Group-Integrated Technologies and the Asbury Communities system. Mr. Burns manages a highly skilled team of over 50 professionals that offer technology solutions to senior-living organizations. Mr. Burns serves as a commissioner for the Center for Aging Technologies (CAST) and is a founder of the CAST HackFest program. In the area of Healthcare Information Exchange (HIE), Mr. Burns has worked with state agencies such as CRISP (MD) and Keystone (PA), as well as Shady Grove Adventist Hospital in Maryland to facilitate integration and interoperability. He is a regular guest speaker at several senior living conferences, including the American Association of Homes and Services for the Aging (LeadingAge), LeadingAge Maryland and LeadingAge Pennsylvania. Mr. Burns has a Bachelor of Science degree in Information Systems Management from the University of Maryland University College.

Craig Lehmann, PhD, *Dean, School of Health Technology and Management, State University of New York at Stony Brook (Stony Brook, NY)*
Craig Lehmann, PhD, CC (NRCC), FACB is the Dean of The School of Health Technology and Management, Professor of Clinical Laboratory Sciences and Director for the Center of Public Health Education at Stony Brook University, Medicine. He is a registered clinical chemist with the National Registry of Clinical Chemistry and a Fellow in the National Academy of Clinical Biochemistry. In addition to his more than 75 journal articles, he has edited and co-edited five clinical laboratory science textbooks and 14 book chapters. He is the editor and author of "Saunders Manual of Clinical Laboratory Science" published by W.B. Saunders. He has made more than 130 presentations nationally and internationally on a variety of health care topics. He served on the editorial board for American Association for Clinical Chemistry "Strategies" (1993-2003) and has served on the editorial board of Clinical Laboratory Sciences since 1987. Some of the more distinguished honors that have been bestowed upon him over the years have been the "President's Award for Excellence in Teaching" from Stony Brook University as well as the State University of New York "Chancellor's Award for Excellence in Teaching." In 2007, he received the American Association for Clinical Chemistry's Award for Outstanding Contributions in Education. Sample presentations include "E-Participation: Empowering People through Information Communication Technologies (ICTs)," United Nations, International Telecommunications Union Headquarters, Geneva, Switzerland, July 24-25, 2013.

David Finkelstein, *Chief Information Officer, Hebrew Home at Riverdale (Bronx, NY)*
David Finkelstein is the Chief Information Officer at Hebrew Home at Riverdale, an internationally recognized nonprofit geriatric service organization offering a full continuum of care ranging from modern apartments for independent seniors to the most intense level of nursing care. The Home serves more than 10,000 older adults in the greater New York area. As CIO, he is responsible for the oversight of all enterprise-wide IT and Telecommunications functions. Mr. Finkelstein is a seasoned IT professional with close to 30 years of healthcare IT experience, primarily in long-term care. He brings a unique combination of experience in IT strategic planning, IT infrastructure, desktop and application support, and project management and vendor selection, strategic outsourcing, and team building. Mr. FInkelstein most recently served as CIO for CareOne Management, LLC, a privately held post-acute care provider serving nine states, 9,000 beds of SNF/ALF services, 30,000 beds for pharmacy, homecare, and hospice services. Prior to Care One, Mr. Finkelstein spent over 15 years as CIO for Village Care and is one of the co-founders of the 6N Systems, Inc., a leading long-term care information system. He has a BBA in Computer Information Systems from Hofstra University. Mr. Finkelstein often presents at industry conferences and is an active board member and Technology Co-Chair for CCITI-NY as well as a member of the Healthcare Information Management Systems Society (HIMSS), where he served as long-term care special interest group chairperson.

David Gehm, *President and CEO, Wellspring Lutheran Services, (Frankenmuth, MI)*
David M. Gehm has served as the President and Chief Executive Officer of Lutheran Homes of Michigan since January, 1994. In this role, Mr. Gehm is responsible for administrative and executive leadership for the organization, which is governed by a not-for-profit Board of Directors. Lutheran Homes of Michigan serves thousands of seniors and caregivers each year through various programs, including home health and hospice, housing, skilled nursing and rehab, assisted living, and memory loss programs. Mr. Gehm graduated from Wayne State University, Detroit, Michigan in 1984 with a Bachelor of Science degree in Pharmacy. While continuing his pharmacy licensure, Mr. Gehm is also a licensed nursing home administrator. Mr. Gehm has served as a member of the Board of Directors of the American Association of Homes and Services for the Aging, Washington, DC, including two terms as its Treasurer. In addition, he has led various committees and currently serves as the Vice Chair of the Center for Aging Services Technologies, also in Washington, DC. He is past Chair of the Board of Directors of the Michigan Association of Homes and Services for the Aging, Lansing, MI.

Debi Sampsel, *Chief Officer of Innovation and Entrepreneurship, University of Cincinnati (Cincinnati, OH)*
Debi Sampsel, DNP, MSN, BA, RN**,** is the Chief Officer of Innovation and Entrepreneurship at the University of Cincinnati, College of Nursing (UC CON) in Ohio and director of research and innovation at Daniel Drake Center Post-Acute Services in Cincinnati. Dr. Sampsel is a researcher, simulation coordinator, and co-chair of the nursing research committee at the Dayton Veterans Affair Medical Center. Dr. Sampsel is a visionary leader, researcher, educator, and clinician in a variety of clinical settings, including geriatrics. Many of her activities are multidisciplinary and collaborative, involving patients, healthcare professionals, and students. In her role at the UC CON, she oversees the development of new innovative teaching initiatives that incorporate technologies and groundbreaking approaches in education, research, and clinical practice and does consulting work for the University's Research Institute. Over Dr. Sampsel's career, she has been involved in a variety of initiatives including the integration and utilization of telehealth and telemedicine technologies, robotic systems, simulators, sensor tracking systems, creative learning environmental space design, and computer programming. Before coming to UC, Dr. Sampsel designed the Living Laboratory Smart Technology House at Wright State University. At UC, she has used this same knowledge and experience to establish the Interprofessional Innovation Collaboratory Smart House, located on a Continuum Care Retirement center property that is home to over 835 older adults. Her latest workforce readiness bridging environment is the creation of a newly renovated Interprofessional Telehealth and Clinical Translation Innovation Center. Dr.

Sampsel holds a doctorate in nursing practice from Union University in Jackson, TN, a Master of Science from the Medical College of Ohio, and a Bachelor of Arts in Anthropology and Associate Degree in Nursing from the University of Toledo. These diverse academic credentials have provided a unique opportunity for developing technologies and systems to enable better health care for older adults. Several opportunities of note include a 2013 U.S. Patent for a home remote telehealth system, an extension of her pioneering "Home Stabilization" program in 1988, designing an in-the-home and community-based case management computer system, and integrating robotic systems for patient monitoring, engagement, and student education. She has received numerous accolades and accomplishments for her pioneering work such as a being named an honorary commander of the Wright Patterson Air Force Base 188th Medical Center, chair of the Midwest Nurse Researchers' Society's Gerontology Research section, a member of the LeadingAge Center for Aging Services Technology Commission, a member of Sigma Theta Tau International Nursing Honor Society, a member of the Junior League of Cincinnati, and a board member on the Senior Independence Home Care and Hospice Corporation in Columbus, OH. In addition, she has written scholarly articles that have been published in peer-reviewed journals and text books. She has been highlighted in "Developing Successful Health Care Education Simulation Centers" by Pamela Jefferies.

Dusanka Delovska-Trajkova, *CIO at Westminster Ingleside (Washington, DC)*
Dusanka Delovska-Trajekova has more than 25 years' experience in computer science and automation in variety of environments, corporate, government, educational, and nonprofit in Macedonia and U.S.A. Macedonian by birth, Ms. Delovska-Trajekova spent her formative years in Prague then returned to her native country for university. Dusanka attended Saints Cyril and Methodius University in Macedonia and graduated with an electrical engineering degree back in the time when computer science and automation were described as part of the electrical engineering programs. While in Macedonia, she worked in a chemical factory and the Department of Defense. Dusanka came to the United States in 2000 after the war in Kosovo. Once in the States, she worked for the Council on Foundations. She returned to Macedonia in 2006 to accept a position as counselor to the President of Saints Cyril, working to consolidate the IT system between 23 schools. After that, Dusanka returned to America and was working at the Pew Research Center when she heard about a position at a startup in Rockville, Maryland. She had always worked for established organizations, and the idea of building something from the ground up was exciting. As IT Director, Dusanka was instrumental in helping to build Ingleside at King Farm into the successful community it is today. She was promoted to Chief Information Officer at Westminster Ingleside, where she brings her vision and energy to developing technologies that will be a part of the business and life strategies for the organization, all Westminster Ingleside communities, the Foundation, Service Corporation, home and community-based services, their staff and residents. Her focus is to help each community adapt to new organizational innovations and to develop and execute new business strategies.

Eli S. Feldman, *CEO Emeritus of Metropolitan Jewish Health System (MJHS) (Brooklyn, NY)*
Eli S. Feldman became CEO Emeritus of Metropolitan Jewish Health System (MJHS) and its participating agencies and programs in January 2015, having been its President and CEO for more than 36 years. The system includes a range of Continuing Care Programs and health insurance products. These include a 420-bed nursing and rehabilitation facility; post-acute home care; a licensed home care agency; advanced illness programs, including a palliative care program, hospice program for children and adults, an Institute for Innovation in Palliative Care, and a Center for Jewish End of Life Care; a special needs Medicare Advantage plan (Elderplan) with special coordinated community care services for at-risk individuals; a FIDA SNP (fully integrated dual advantage special need plan); a Medicaid managed long-term care plan (HomeFirst SM); an Institutional Special Needs plan; senior housing; and a center for the development of assistive technology. MJHS is a recognized leader in the field of integrated care for frail, at-risk and chronically impaired individuals. Its participating

agencies and programs have more than a century of health care experience, and serve more than 50,000 individuals and their families in the Greater Metropolitan New York area and 27 counties upstate. Mr. Feldman graduated cum laude, with a Bachelor of Science in Business Administration from C. W. Post College of Long Island University. He also holds a Master's of Business Administration in hospital administration from Wagner College.

Frances A. Walls-Ayalasomayajula, MPH, MSMIS, PMP, *Healthcare Global Senior Manager, HP (Palo Alto, CA)*
Frances Ayalasomayajula is an executive healthcare technology strategist. With over 20 years in health and life sciences, Frances's experience spans both the U.S. and overseas markets, including Latin America, Europe, and Asia Pacific, leading megaprojects in clinical research, public health administration, and digital health solution adoption. Currently the Global Healthcare Solutions Senior Manager for HP Company, Print and Personal Systems, Ms. Ayalasomayajula devises strategies and product innovations designed to aid in advancing discovery, diagnosis, treatment and adherence for improved clinical outcomes, better population health, and increased patient engagement. Prior to HP, Ms. Ayalasomayajula worked for World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Bristol Myers Squibb, and United Healthcare Group. She holds Master's degrees in public health and information systems and is certified in project and clinical trial management.

Gail Gibson Hunt, *President and CEO, National Alliance for Caregiving (Bethesda, MD)*
Gail Hunt is President and Chief Executive Officer of the National Alliance for Caregiving, a nonprofit coalition dedicated to conducting research and developing national programs for family caregivers and the professionals who serve them. Prior to heading NAC, Ms. Hunt was President of her own aging services consulting firm for 14 years. She conducted corporate eldercare research for the National Institute on Aging and the Social Security Administration, developed training for caregivers with AARP and the American Occupational Therapy Association, and designed a corporate eldercare program for EAPs with the Employee Assistance Professional Association. Prior to having her own firm, she was Senior Manager in charge of human services for the Washington, DC, office of KPMG Peat Marwick. Ms. Hunt attended Vassar College and graduated from Columbia University. As a national expert in family caregiving and long-term care, Ms. Hunt served on the Policy Committee for the 2005 White House Conference on Aging, as well as on the CMS Advisory Panel on Medicare Education. She is chair of the National Center on Senior Transportation. Ms. Hunt is also a commissioner for the Center for Aging Services Technology (CAST) and on the Board of the Long-Term Quality Alliance. Ms. Hunt is a member of the Multiple Chronic Conditions Workforce Technical Expert Workgroup. She co-chairs the NQF MAP Person and Family-Centered Care task force. Additionally, Ms. Hunt is on the Governing Board of the Patient-Centered Outcomes Research Institute (PCORI).

Hakan Aykan, *Senior Social Science Analyst, Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health and Human Services (HHS) (Washington, DC)*
During his federal service of more than 13 years at ASPE, Hakan Aykan has conducted research, program evaluations, and policy analyses on a variety of issues pertaining to health and long-term care services for the elderly and individuals of all ages with disabilities—including his service as the lead ASPE analyst in examining the role that technologies can play in the lives of and care for older adults and individuals with disabilities. Prior to joining ASPE, Mr. Aykan worked as a social scientist in the private sector and in the academia. He holds a PhD in Public Administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University, as well as a Master's degree in Economic and Social Demography and a Bachelor's degree in Public Administration. Mr. Aykan is very passionate about the issues of aging, individuals with disability, and other vulnerable populations, and is an advocate for technology. Mr. Aykan has worked on the Aging Services Technologies Study: Report to Congress, which ASPE funded, in his Project Officer capacity.

Howard Wactlar, *Vice Provost for Research Computing and Alumni Research Professor of Computer Science, Carnegie Mellon University (Pittsburgh, PA)*
Howard D. Wactlar is Vice Provost for Research Computing and Alumni Research Professor of Computer Science at Carnegie Mellon University. He also serves as scientific director of the recently established NSF-funded Quality of Life Technology Engineering Research Center. He received his advanced degrees in physics from the University of Maryland and the Massachusetts Institute of Technology. He was primary architect and remains project director of the CareMedia and Digital Human Memory Machine projects, both seminal contributions to the machine understanding of aspects of human behavior. He founded the Informedia Digital Video Library, one of the first U.S. Digital Library Initiative research systems, aimed at automated understanding of video with applications in education, entertainment, and national security. He was a co-founder of the U.S. Department of Defense-funded national Software Engineering Institute (SEI), a Federally Funded Research and Development Center dedicated to improving the process of software development and promulgating software engineering technology to government and industry.

Jack York, *CEO, It's Never 2 Late (Centennial, CO)*
Jack York is co-founder of It's Never 2 Late (iN2L), a company dedicated to helping older adults realize the full benefits of adaptive technology. Originally, Mr. York did not envision iN2L as a business; the impetus for what became the company was a philanthropic idea—to donate computers to assisted living communities and nursing homes in southern California. With a 15 year background in the Silicon Valley, he saw a vast potential in fostering these connections, but also he saw that conventional technology was too difficult for virtually all of the residents to use in a meaningful way. As a result, in 1999, Mr. York retired as vice president of strategic sales for Vishay Intertechnology and started what has become a successful gerontechnology company. As of 2015, the company has a customer base of over 1,500 communities spread out across all 50 states. He is a sought-after national and international speaker on technology as a means to create personalized experiences that engage and connect residents to their loved ones and the world at large, specifically individuals with dementia. iN2L's work has been recognized by the *Wall Street Journal*, NPR, and dozens of senior living publications.

Jeffery Kaye, *Director, Oregon Center for Aging and Technology (ORCATECH) and Director, Layton Aging and Alzheimer's Disease Center (Portland, OR)*
Jeffrey Kaye is the Director of the Oregon Center for Aging and Technology (ORCATECH), an NIA-supported Roybal Center, and Director of the Layton Aging and Alzheimer's Disease Center, an NIA-supported Alzheimer's Research Center, both based in Portland, Oregon. He is Professor of Neurology and Biomedical Engineering at Oregon Health and Science University (OHSU). He also directs the Geriatric Neurology program at the Portland Veteran's Affairs Medical Center. Dr. Kaye's research has focused over the past two decades on the question of why some individuals remain protected from frailty and dementia at advanced ages while others succumb at much younger ages. This work has relied on a number of biomarker techniques ranging across several fields of inquiry, including neuroimaging, genetics, and continuous activity monitoring. A centerpiece of his studies has been the ongoing Oregon Brain Aging Study, established in 1989. He currently leads a longitudinal NIH study, "Intelligent Systems for Detection of Aging Changes (ISAAC)" using ubiquitous, unobtrusive technologies for automated assessment of seniors in their homes to detect changes signaling imminent decline of function. Dr. Kaye has received the Charles Dolan Hatfield Research Award for his work. He is listed in Best Doctors in America. He serves on many national and international panels and review boards in the field of geriatrics, neurology, and technology, including as a commissioner for the Center for Aging Services and Technology (CAST), chair of the Professional Interest Area Working Group on Technology for the national Alzheimer's Association and on the Advisory Council of the International Society to Advance Alzheimer's Research and Treatment (ISTAART). He is an author on over 200 scientific publications and holds several major grant awards from federal agencies, national foundations, and industrial sponsors.

Jeremy J. Nobel, MD, MPH, *Dept. of Health Policy and Management, Harvard School of Public Health (Boston, MA)*
Jeremy Nobel is on the adjunct faculty of the Harvard School of Public Health, where he does research on emerging information technologies and health care delivery processes. An important aspect of Dr. Nobel's work includes active engagement with the payer and purchaser world, including advisory liaisons with large self-insured employers, insurers, foundations, government, and health care business coalitions. He has done extensive work in the effective application of emerging information technologies in Senior Care scenarios, including programs to manage environmental risks, improve health and wellness, and reduce the burden of social isolation in seniors at home and in assisted living situations. Dr. Nobel is Board Certified in Internal Medicine and Preventive Medicine with Master's degrees in both Epidemiology and Health Policy from the Harvard School of Public Health. He is on the board of directors for the Care Continuum Alliance (formerly DMAA) and is Senior Medical Advisor for the New York Business Group on Health (NYBGH).

Jim Osborn, *Executive Director and a co-founder of the Quality of Life Technology Center (Pittsburgh, PA)*
Jim Osborn is the Executive Director and a co-founder of the Quality of Life Technology Center, a collaboration of Carnegie Mellon and the University of Pittsburgh funded by the National Science Foundation as one of its Engineering Research Centers since 2006. He is also the Coordinator of University Life Science Initiatives for Carnegie Mellon. From 2001 to 2006, he was Executive Director of the Carnegie Mellon's Medical Robotics Technology Center, as well as MERITS of Pittsburgh, a program to stimulate collaborations between clinical and technological researchers. Previously, he founded a regional economic development group, the Pittsburgh Robotics Initiative. From 1985 through 1999, he held research and management positions in Carnegie Mellon's Robotics Institute and led several multimillion-dollar robotics research and development projects sponsored by the U.S. Department of Energy, the National Aeronautics and Space Administration, and industry, including the first robot to explore an active volcano and robots for investigation of the Chernobyl and Three Mile Island nuclear accidents. He has served as a board member of several professional society robotics divisions and chaired two technical conferences. He holds a Bachelor's degree in Electrical and Biomedical Engineering and a Master's degree in Civil and Biomedical Engineering, both from Carnegie Mellon University.

Joe Gerardi, *Senior Vice President and Chief Information Officer, American Baptist Homes of the West (Pleasanton, CA)*
Joe Gerardi is the IT Vice President/CIO of American Baptist Homes of the West (ABHOW), a nonprofit that operates 10 CCRCs and over 32 affordable housing communities in four western states. Mr. Gerardi and his extended IT team of 19 plan, install, and support all IT activities for the company, including classic business applications and resident health and safety applications and operate a network with over 1,000 nodes. In his nine years at ABHOW, Mr. Gerardi has overseen the deployment of a new HRMS system, a new clinical system, a new time and attendance system, a brain fitness program, and resident wireless and has developed standards for Nurse Call, telephone systems, and premise wiring. Prior to joining ABHOW, Mr. Gerardi had a 26-year career with Hewlett-Packard, where he did everything IT from repairing customer computers to managing global networks to owning strategy and support for the company's 110,000 PCs. Mr. Gerardi has a Bachelor of Arts in Management from the University of Maryland and has completed graduate work at the University of Phoenix. He was born in Brooklyn, NY, and now lives in Dublin, California, with his lovely wife, daughter, and assorted pets.

John Rydzewski, *General Manager, Direct Supply Inc. (Milwaukee, WI)*
A dynamic, growth-oriented thought leader, John Rydzewski has spent the past 12 years serving the Senior Living industry, with a passionate focus on innovation and technology to help drive Senior Living forward. He is committed to building and integrating technology and seeks to create partnerships that foster innovation. As General Manager, he has led the Technology Solutions business by providing outrageous customer service,

delivering innovative solutions and streamlining operations. Mr. Rydzewski enjoys working with the world-class team at Direct Supply every day. He has a strong track record of delivering high-growth results and has robust experience in launching new offerings, new businesses, new technology, and new process improvements. Mr. Rydzewski has had full profit and loss responsibility within the large matrix organization of Direct Supply, overseeing Sales, Product Management, Project Management, Operations, Customer Service, Strategic Marketing and Supply Chain teams and strategies to drive long-term growth. He has experience leading the organization through short- and long-term strategic planning. Mr. Rydzewski serves as a member of Direct Supply's Executive Working Group. In his current role, Mr. Rydzewski is responsible for helping Direct Supply bring new technologies into the Senior Living space. He focuses on resident monitoring systems, wireless technology, the Internet of Things, telehealth, wearables and other new, cutting-edge technologies. Mr. Rydzewski has previously led the creation and implementation of Operations & Supply Chain strategies where he implemented new systems, services and technologies inside Direct Supply and in the Senior Living industry. As a leader in change and innovation, Mr. Rydzewski's expertise can be found in several areas, including technology, supply chain, operations and business development. Mr. Rydzewski is a graduate of the University of Wisconsin-Madison and has been with Direct Supply since 2002.

Jon Sanford, M. Arch, *Director of the Center for Assistive Technology and Environmental Access and Associate Professor of Industrial Design at Georgia Tech (Atlanta, GA)*
Jon Sanford, M. Arch, is the Director of the Center for Assistive Technology and Environmental Access and an Associate Professor of Industrial Design at Georgia Tech. He is also a Research Architect at the Rehab R&D Center at the Atlanta Veterans Affairs Medical Center. Mr. Sanford is one of the few architecturally trained researchers engaged in design and usability of products, technologies, and environments for older adults and people with disabilities, and he is the lead PI on the Rehabilitation Engineering Research Center on Technologies for Successful Aging with Disability (RERC TechSAge), which is a five-year grant from the National Institute on Disability and Rehabilitation Research (NIDRR) in the Department of Education. He is internationally recognized for his expertise in universal design and home modifications and the development of several environmental assessment instruments to help clinicians and designers meet the needs of older adults for aging in place. His current work focuses on use of integrating digital technologies into physical products and use of remote interactive technologies to provide home modifications to improve health of older adults and facilitate aging in place. He has over 300 presentations and publications and recently authored the book *Design for the Ages: Universal Design as a Rehabilitation Strategy* from Springer Publishing.

Kari Olson, *Chief Information Officer, Front Porch (Burbank, CA)*
Kari Olson, Chief Information Officer, leads all of the business and resident technology initiatives for Front Porch and its partners. Prior to joining Front Porch, Ms. Olson led major technology initiatives in the health care and social services sectors and worked as a technology consultant to a variety of national clients. In addition, Ms. Olson served as the product manager for AMS International Data Systems. Ms. Olson is actively involved in the Center for Aging Services Technologies, where she serves as a commissioner, steering committee member, and task group chair for Boomer Technology Needs Research. She is also a member of the Dakim scientific advisory board. Ms. Olson holds a Bachelor of Arts in economics from University of California, Los Angeles and has completed graduate course work in education at California State University, Los Angeles.

Rear Admiral Kathy Martin, *CEO, Vinson Hall Retirement Community (McLean, VA)*
Kathy Martin became the CEO of Vinson Hall LLC in McLean, VA, and the executive director, Navy Marine Coast Guard Residence Foundation in September 2005, upon retiring from active duty in the United States Navy. In her tenure at Vinson Hall, she has overseen the construction of a multimillion dollar expansion that included a parking garage, 75-unit independent living residence with underground parking, and a community

building with a state-of-the-art rehabilitation center. She has partnered with industry to pilot several technologies, including a wearable fall detection system and robotic pet therapy. Additionally, partnerships with University researchers have explored fall prevention strategies and various aspects of senior health. Rear Admiral Martin was commissioned an Ensign in May 1973 after graduating from Boston University. After serving at several Navy health care facilities, in 1992 she earned a Master of Science Degree in both nursing administration and as a family health nurse specialist. She assumed her first command in 1993 as commanding officer of Naval Medical Clinic, Port Hueneme, CA. Subsequently, she served as commanding officer, Naval Hospital, Charleston, SC, from July 1995 to June 1998. She was promoted to the rank of Rear Admiral and assigned as the Medical Inspector General from August 1998 to October 1999. From November 1999 to October 2002, she served as commander, National Naval Medical Center, Bethesda, MD. She served as deputy surgeon general of the Navy/vice chief, Bureau of Medicine and Surgery from October 2002 until her retirement in September 2005. She also held the position as the 19th director of the Navy Nurse Corps from August 1998 to August 2001. Her military decorations include the Distinguished Service Medal (two awards), Legion of Merit (three awards), the Defense Meritorious Service Medal, Meritorious Service Medal, and the Navy Commendation Medal. Rear Admiral Martin also proudly wears the anchors of an honorary Master Chief Petty officer.

Larry Hickman, *Senior VP of Administrative Services & CIO, Bethesda Health Group (St. Louis, MO)*
Larry Hickman is an innovative and motivational executive with a strong record of success building high-performing technology groups that enable business efficiency and growth. Mr. Hickman brings 19 years of experience in Strategic Visionary Thinking and Leadership, Team Building, Process Assessment and Improvement, Change and Project Management, and Budgeting and Cost Control. Mr. Hickman has been the Chief Information Officer with Bethesda since 2008 and is responsible for setting the strategic direction and providing technology-enabled solutions that provide better health outcomes. Mr. Hickman's role has expanded over his tenure to include Facilities and Construction Management, Project Management, Grounds, Purchasing, Housekeeping, Laundry, Security, and Property Renovations. Prior to joining Bethesda, Mr. Hickman was a Technology Risk Consultant with Arthur Andersen as he guided Fortune 500 companies to drive efficiency through the use of technology, led Centene's Information Technology group as the company grew 600 percent in five years, and solidified a worldwide project management office for Reinsurance Group of America.

Linda Spokane, *Director, Analytics & Technical Services, LeadingAge New York (Albany, NY)*
Linda Spokane, as Director of Analytics and Technical Services at NYAHSA, oversees the EQUIP for Quality software product, a web-based MDS analytics tool used by over 350 nursing homes around the country to monitor and improve outcomes, manage risk, and assist with care planning. In addition, Ms. Spokane is on NYAHSA's executive team and has recently become involved with helping the association set its technology agenda. Before becoming Director, Ms. Spokane worked as a project manager/analyst for several EQUIP research projects that focused on using health information technology to improve the quality of life for dementia residents. She has extensive experience researching and identifying potential risk factors that lead to negative outcomes in long-term care settings—such as falls, pain, incontinence, and pressure ulcers—and incorporating this information into quality improvement software used by direct care staff to improve resident care. Ms. Spokane has a Master's degree in Health Policy and Management from the University at Albany's School of Public Health and has worked in the health care field for over 10 years.

Mark McClellan, MD, PhD, *Director of the Engelberg Center for Health Care Reform and Leonard D. Mark Schaeffer Chair in Health Policy Studies, The Brookings Institution, CAST Chair (Washington, DC)*
Mark B. McClellan is director of the Health Care Innovation and Value Initiative and senior fellow at the Brookings Institution. His work at Brookings focuses on promoting quality and value in patient centered

health care. A doctor and economist by training, Dr. McClellan also has a highly distinguished record in public service and in academic research. He is a former administrator of the Centers for Medicare & Medicaid Services (CMS) and former commissioner of the U.S. Food and Drug Administration (FDA), where he developed and implemented major reforms in health policy. These include the Medicare prescription drug benefit, the FDA's Critical Path Initiative, and public-private initiatives to develop better information on the quality and cost of care. Dr. McClellan chairs the FDA's Reagan-Udall Foundation, is co-chair of the Quality Alliance Steering Committee, sits on the National Quality Forum's Board of Directors, is a member of the Institute of Medicine, and is a research associate at the National Bureau of Economic Research. He previously served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House. He was also an associate professor of economics and medicine at Stanford University. Dr. McClellan holds an MD and an MPA from Harvard University and a PhD in economics from MIT.

Mary Senesac, *Director of Health Systems, HealthMEDX (Ozark, MO)*
Mary Senesac is the Director of Health Systems for HealthMEDX. Ms. Senesac's experience in health care spans more than 25 years. Her early health care career began as a Medical Technologist working in academic health systems and national laboratories as a clinician, lab director, and sales leadership. Prior to joining HealthMEDX, Ms. Senesac held leadership roles with McKesson IT. Ms. Senesac's work with complex health systems deploying electronic medical records and driving connectivity to ambulatory settings including physician electronic medical records and health information exchanges bring a unique perspective to the long-term post-acute care continuum. As a trusted advisor, Ms. Senesacs experience and work with her clients help to formulate strategic plans. Ms. Senesac is passionate for continued improvement in health care technology and driving customer success. Ms. Senesac holds a Bachelor of Science in Health Care Administration.

Patrick Clark, *IT Director for Continuing Care, St. Peters Health Partners, The Eddy (Albany, NY)*
Patrick Clark is the Director of Information Technology/Continuing Care for St. Peters Health Partners Eddy system. The Eddy is a comprehensive continuum of healthcare, supportive housing and community services that reaches 22 counties and serves more than 40,000 people yearly in the capital region of New York State. Eddy services help maximize independence, quality of life, and dignity of individuals and help prevent the premature institutionalization of chronically ill, frail, or disabled seniors. Mr. Clark's responsibilities encompass the entire Eddy system, Housing, Long Term Care, Acute and Sub-Acute Rehabilitation, PACE, and Home Care (VNA). Prior to his tenure at St. Peters Health Partners, Mr. Clark served as the Director of Information Services for Bassett Healthcare in Cooperstown New York. Mr. Clark is a member of HIMSS and a past board member of the Health Information Exchange of New York (HIXNY), the capital region's Regional Healthcare Information Organization (RHIO). Mr. Clark is also a LEAN Facilitator for St. Peters Health Partners and applies the principles of the Toyota Production System (TPS) to solving issues facing St. Peters Health Partners affiliates.

Peter Kress, *Vice President and Chief Information Officer, ACTS Retirement-Life Communities (Ambler, PA)*
Peter Kress has led Information Technology-enabled change initiatives at ACTS Retirement-Life Communities, Inc. for 19 years, the last 15 as Vice President and Chief Information Officer. Peter serves on the commission of the Center for Aging Services Technologies (CAST) and leads their standards and Electronic Health Record/ Personal Health Record efforts, including participation on the Long Term and Post-Acute Care (LTPAC) Health IT Collaborative and co-planning the Collaborative's annual summit. He also serves on the Florida Health Information Exchange Coordinating Committee. Mr. Kress previously served as chair of the advisory board of the Coalition for Leadership in Aging Services. He has a master's degree in Gerontology from the University of Southern California and has completed graduate work in religious studies. Mr. Kressis passionate about exploring the future of the intersection between aging services, consumerism, health care, demographics,

and technology. Prior to working for ACTS, Mr. Kress led an independent information technology consulting business for 12 years. He has been invited to present at regional, national, and international aging services and IT conferences. Mr.Kress lives in Ambler, PA.

Rich Schutt, *Chief Executive Officer, Providence Life Services (Tinley Park, IL)*
Rich Schutt has been with the organization over 30 years. He has the responsibility for overseeing operations, finance, marketing, development, and administrative divisions of Providence Life Services. Mr. Schutt was the past chair of the American Association of Homes & Services for the Aging (LeadingAge) Board of Directors and has served on his local church and school boards. He is also the past chair of the State LeadingAge affiliate in Illinois, which is known as LeadingAge Illinois. He is president of Providence Management, which owns a Technology Company and Development Company. In addition, Mr. Schutt is the past chair of an alliance of long-term care agencies in Chicago known as Symbria, formerly Health Resources Alliance. Mr. Schutt has a Masters in Health Administration from Governors State University, where he has taught courses in Nursing Home Administration and Concepts of Long-Term Care. During his tenure as Chair of LeadingAge, the Center for Aging Services Technology (CAST) was established. Mr. Schutt and Providence Life Services have continued to participate in the leadership of the CAST Commission.

Rustan Williams, *Vice President, Information Services/Technology Systems, Evangelical Lutheran Good Samaritan Society (Sioux Falls, SD)*
Rustan Williams is the Vice President for Information Services/Technology Systems and Chief Information Officer for The Evangelical Lutheran Good Samaritan Society, whose corporate headquarters is in Sioux Falls, SD. Mr. Williams coordinates all software, technology, and related services for the 22,350 employees in 23 states where the Society provides services as the largest not-for-profit long-term care provider in the United States. He has served the Society in this capacity for 13 years. Mr. Williams has been essential in the development of the Society technology that is focused on providing the greatest amount of functionality at the lowest possible cost. Mr. Williams and the Society have been pioneers in the use of thin clients and network centric computing, and this work has been referenced in several publications. Mr. Williams received his Master's degree in Business and Administration from Colorado Technical University and his Bachelor of Business Administration and Associate's of Art degree in Computer Science from Southeast Missouri State University. He has received numerous certificates for management and technology specialized training, including being a certified nursing assistant. Previous to joining the Society, Mr. Williams was a Divisional Chief Information Officer for the Adventist Healthcare System, a major acute care provider in the Midwest and Southeast.

Sneha Patel, *Chief Information Officer, Covenant Retirement Communities, Inc. (Skokie, IL)*
Sneha Patel joined Covenant Retirement Communities (CRC) as Chief Information Officer in 2001. CRC is a church affiliated, not-for-profit leader in the long term care industry. CRC's 3,200 employees operate 14 retirement communities across eight states and serve more than 5000 residents. The IT needs for all CRC locations are centrally managed by CRC's Information Services department. Prior to joining CRC, Ms. Patel worked for 15 years as a consultant in various roles at EDS, Platinum, and Computer Associates (CA). In her last position before joining CRC, she worked as Project Director for the consulting practice of Computer Associates. When CRC hired CA in 1999 to set up and staff an IT Help Desk, Ms. Patel became CA's onsite senior consultant and functioned as CRC's Help Desk project manager. She is a graduate of University of Illinois at Chicago, with a degree in Operational Research and Statistics.

Stephen Hopkins, *COO, COO LifeChoices, Inc. Evangelical Homes of Michigan (Detroit, MI)*
Stephen Hopkins is vice president and executive director of LifeChoices®/LifeChoice Solutions®, wholly owned subsidiaries of Evangelical Homes of Michigan, in Detroit. Evangelical Homes of Michigan's

LifeChoices®/LifeChoice Solutions® offer products, programs, and the newest in technologies to older adults who wish to remain in the their homes and actively engaged in their community. Mr. Hopkins joined Evangelical Homes of Michigan as its corporate director of wellness and physical health in 2007, after owning and operating several fitness and personal training businesses both in Michigan and in Florida. He also has extensive experience in lifestyle coaching and leadership development and mentoring. Mr. Hopkins currently sits on two nonprofit boards and has had management responsibility of teams as large as 600 with gross revenues of $50M+ and as small as two-person startups. Leading innovation discernment and execution as well as talent acquisition, placement, and coaching individuals through transformation are common threads throughout his career. Mr. Hopkins holds a bachelor's degree in exercise physiology from Eastern Michigan University. He currently oversees four home-based subsidiaries for Evangelical Homes of Michigan and is responsible for all wellness and fitness programming for the organization as a whole.

Steve Safier, *CEO, President, Panasonic Corporation of North America Health & Wellness Solutions Inc. (Newark, NJ)*
Steve Safier is President of Panasonic Corporation of North America Health & Wellness Solutions. In this capacity, Dr. Safier is responsible for developing and leading the new business that the company is cultivating in the health and wellness marketplace to develop and sell Panasonic products and solutions in the B2B and B2C sectors. Prior to taking on this assignment, Dr. Safier was Chief Transformation and Human Resources Officer for Panasonic Corporation of North America, where he was accountable for stewarding the development of organizational and employee capability to deliver innovative technology solutions, deepen customer relationships, and steadily expand market share, revenues and profitability in the hyper competitive consumer and business-to-business electronics industry. Before coming to Panasonic, Dr. Safier was the Senior Vice President and Chief Operating Officer for the Subway Franchisee Advertising Trust, where he supported the Board of Directors and CEO and was accountable for all operations functions. He also spent 20 years as a consultant for Hay Group, where he led client relationship management teams and provided consulting solutions for clients in the financial services, health care, telecom and consumer electronics sectors. Dr. Safier has a Bachelor of Arts in Psychology from Touro College, and a Masters in Psychology and a PhD in Clinical Psychology from the University of Connecticut.

Stuart C. Kaplan, *CEO, Selfhelp Community Services, Inc. (New York, NY)*
A forward-thinking executive with extensive experience in health care administration, Stuart C. Kaplan provides strategic, analytical, and operational stewardship for social service, health care, long-term care, and managed care organizations. Under his leadership, Selfhelp Community Services, Inc., a leading provider of health and human services, home care, and affordable housing for aging New Yorkers, has strengthened its financial position, improved program efficiency, and preserved its compassionate delivery of care. Selfhelp is also the largest provider of comprehensive services to Holocaust survivors in North America. As a transformative leader, Mr. Kaplan led Selfhelp in the formation of a care management joint venture with FEGS Health and Human Services to serve chronically ill populations. Mr. Kaplan's commitment to the wider New York community is evidenced by his committee and board participation in many service organizations. Mr. Kaplan serves on the Board of Directors of LeadingAge New York, where he is President of the statewide Housing Cabinet. Mr. Kaplan is also active in the national LeadingAge association in the areas of aging services technology and housing with services. Locally, Mr. Kaplan serves on policy and program development committees at UJA-Federation of New York and served as Co-chair of UJA's Communal Service Division Campaign. Mr. Kaplan served as an officer of the Board of the Elizabeth Seton Pediatric Center in New York City. Prior to Selfhelp, Mr. Kaplan was executive vice president at St. Mary's Healthcare System for Children, serving children with special health care needs and terminal illnesses. He has written and presented on the subject of gerontechnology and subacute care for adults and children. Mr. Kaplan is a licensed Nursing Home Administrator in New York State and holds a Master's degree in Business Administration from Bernard M. Baruch College. He is a past President of Bernard M. Baruch College/Mount Sinai School of Medicine Health Care Administration Alumni Association.

Stuart Myer, *Vice President, Applications Design and Development, Visiting Nurse Service of NY (New York, NY)*
Stuart Myer is the vice president for applications design and development for the Visiting Nurse Service of NY. He is responsible for the development of IT strategic plans to meet the provider and managed care plan business lines' operational, financial, and clinical objectives. Mr. Myer has spearheaded efforts to incorporate interoperability into his organization's IT strategy to drive efficiencies, foster care coordination, and improve clinical outcomes. Mr. Myer holds a MPA from New York University.