HIGH-TECH QUALITY IMPROVEMENT:

Using Health Information Technology to Support Quality Improvement in Long-Term and Post-Acute Care Settings

Proceedings of the CAST Commission Meeting
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LeadingAge™
center for *aging services technologies*
CAST

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Using Health Information Technology to Support Quality Improvement in Long-Term and Post-Acute Care Settings

A program of LeadingAge

2519 Connecticut Ave., NW
Washington, DC 20008-1520
Phone 202-508-9438
Fax 202-783-2255
Website: LeadingAge.org/CAST

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

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EXECUTIVE SUMMARY

Quality improvement and health reform were the main topics for discussion when the Commissioners of the LeadingAge Center for Aging Services Technologies (CAST) gathered in Dallas, TX on Oct. 26, 2013 for their semi-annual meeting.

CAST Commissioner Kari Olson welcomed Commissioners to the meeting. Olson was standing in CAST Vice Chair Kathleen Martin, who was unable to attend. Olson is chief innovation and technology officer at Front Porch in Burbank, CA. She is also the president of the Front Porch Center for Innovation and Wellbeing.

The meeting book distributed before the gathering featured updates on CAST's work since the Commissioners' last meeting in March 2013. Summaries of those updates can be found in Appendix A of this report.

The meeting also featured:

- **A Skype-enabled conversation with CAST Chair Mark McClellan.** During a question-and-answer session, McClellan discussed the role of quality improvement in long-term services and supports; identified electronic measures that might facilitate quality improvement efforts; and explained what providers of long-term services and supports can expect in the near future from health care reform initiatives and the nation's ongoing budget debate.

- **An exploration of the future of electronic health records (EHR) in long-term and post-acute care (LTPAC) settings.** Representatives of the CIO Consortium, the Nurse Executive Council and LeadingAge Gold Partner Direct Supply outlined the distinctive features that LTPAC providers need in an EHR, including its ability to serve as a collaboration platform for "virtual" care teams; to enhance the relationship between health providers and LTPAC residents/clients; and to help LTPAC settings implement innovative care delivery strategies easily and quickly.

- **A case study illustrating how clinical decision support and health information exchange can improve quality in LTPAC settings.** Dr. Rodolfo Alvarez del Castillo, director of LTPAC Operations/Physician Advisor for Yeaman Consulting in Norman, OK, described how the Greater Norman Hospital Center is using a Challenge Grant from the Office of the National Coordinator for Health Information Technology to help five LTPAC settings use technology to reduce hospital admissions and readmissions.

- **A discussion about next steps for CAST.** The Commissioners discussed next steps for CAST. The discussion indicated that CAST should consider working on a toolkit that examines technology solutions for medication management.

LIST OF PARTICIPANTS

Commissioners

Casey Blumenthal
Vice President
MHA...An Association of Montana Health Care Providers
Helena, Montana

Thomas E. Brown, Jr., Dr.Ph., MBA
President and Chief Executive Officer
Lutheran Homes of South Carolina
Irmo, South Carolina

Patrick Clark
Information Technology Director for Continuing Care
St. Peters Health Partners, The Eddy
Albany, New York

Randy Eager
Industry Liaison Officer
Quality of Life Technology Center
Carnegie Mellon University
Pittsburgh, Pennsylvania

David Finkelstein
Chief Information Officer
Hebrew Home at Riverdale
Bronx, New York

W. Bryan Fuhr
Vice President, Business Development
Healthsense, Inc.
Mendota Heights, Minnesota

Joe Gerardi
Senior Vice President
Chief Information Officer
American Baptist Homes of the West
Pleasanton, California

Stephen Hopkins
Executive Director
LifeChoice Solutions
Saline, Michigan

Peter Kress
Vice President and Chief Information Officer
ACTS Retirement-Life Communities, Inc.
West Point, Pennsylvania

Gerry McCarthy
Vice President
HealthMEDX
Ozark, Missouri

Mark B. McClellan, MD, Ph.D.
CAST Chair
Director, Engelberg Center for Health Care Reform
Leonard D. Schaeffer Chair in Health Policy Studies
Brookings Institution
Washington, D.C.

Kari Olson
Chief Innovation and Technology Officer, Front Porch
President, Front Porch Center for Innovation and Wellbeing
Burbank, California

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

Tony Treglia
Vice President, People, Risk, and Information
Technology
Miami Jewish Health Systems
Miami, Florida

Jack York
Chief Executive Officer
It's Never 2 Late
Centennial, Colorado

Guests

Rodolfo Alvarez del Castillo, MD
Director of LTPAC Operations/
Physician Advisor
Yeaman and Associates
Norman, Oklahoma

Linda Brock
Global Director of Senior Living
Philips Healthcare
Framingham, Massachusetts

Marcia Conrad-Miller
Senior Director
Research and Development Competency Centers and
Global Technology Operations
Philips Home Monitoring
Framingham, Massachusetts

David Dring
(On behalf of Leo Asen)
Executive Director
Selfhelp Innovations
Flushing, New York

Irene Fleshner, RN, MHSA, FACHE
Principal
Reno, Davis and Associates, Inc.
Longboat Key, Florida

Carl Goodfriend
(On behalf of Rich Schutt)
Chief Information Officer
ProviNET Solution
Tinley Park, Illinois

Jay Gormley
(On behalf of Eli Feldman)
Vice President of Planning Research and Innovation
Metropolitan Jewish Health System
Brooklyn, New York

Randy Kirk
Executive Vice President and Chief Technology Officer
Direct Supply, Inc.
Milwaukee, Wisconsin

Sneha Patel
Chief Information Officer
Covenant Retirement Communities, Inc.
Skokie, Illinois

CAST/LeadingAge Staff

Majd Alwan, Ph.D.
LeadingAge Senior Vice President of Technology and
CAST Executive Director

Zohra Sirat
CAST Programs and Operations Administrator

Lauren Shaham
LeadingAge Vice President of Communications

Part 1

A Conversation with Mark McClellan About Electronic Quality Measures in Long-Term Services and Supports

Mark B. McClellan, MD, Ph.D.
CAST Chair
Director, Engelberg Center for Health Care Reform
Leonard D. Schaeffer Chair in Health Policy Studies
Brookings Institution, Washington, DC

Majd Alwan, Ph.D.
Senior Vice President of Technology
CAST Executive Director
LeadingAge
Washington, DC

Kari Olson
Chief Innovation and Technology Officer, Front Porch
President, Front Porch Center for Innovation
and Wellbeing
Burbank, California

CAST Commissioner Kari Olson and CAST Executive Director Majd Alwan engaged CAST Chair Mark McClellan in a far-reaching dialogue about electronic quality measures and health reform during the October 2013 meeting of the CAST Commissioners. Alwan asked McClellan six questions on topics ranging from quality improvement to October's 16-day government shutdown. At the end of this exchange, McClellan responded to additional questions from the floor during a session facilitated by Olson. The following is a summary of the question-and-answer session.

Quality Improvement in LTPAC Settings

Majd Alwan: *Can you offer some examples of quality improvement programs that engage long-term and post-acute care (LTPAC) providers? How is technology being used to support these programs?*

Mark McClellan: There are a growing number of examples of how health care providers are using technology to promote better quality care across the continuum of care. When these initiatives are directed at patients with multiple chronic conditions and frailty, long-term and post-acute care providers must be involved. Otherwise, quality improvement will not occur.

Some promising quality improvement initiatives are designed to ease care transitions through the exchange of timely, accurate, reliable data about the needs of patients with chronic health problems. One such program is called "Improving Massachusetts Post-Acute Care Transfers" – or IMPACT. IMPACT is funded by the Office of the National Coordinator for Health Information Technology (ONC) and is focusing its efforts on Worcester County in Massachusetts. Basically, the project is using an electronic Universal Transfer Form (UTF) that feeds critical patient data into the statewide health information exchange (HIE).

The IMPACT project recognizes that many LTPAC settings don't yet have electronic health records (EHR). So it's creating a system that exchanges information contained in the Continuity of Care Document (CCD) that all LTPAC settings use. Clinicians in a variety of settings can now access the CCD information on the statewide HIE and then use this information to prevent readmissions stemming from care coordination problems that often stand in the way of smooth transitions.

Other quality improvement initiatives aim to prevent hospital admissions altogether. LTPAC providers are key players in these initiatives because they are significantly better than other providers at helping residents and clients maintain their health and head off medical complications that often cause a hospital admission in the first place.

EHRs and other technologies that support medical decision making are keys to the success of these initiatives. Many of you are using EHRs to support better clinical decision making in LTPAC settings. You are also improving care by maintaining medication lists and tracking the status of residents and clients to provide early warnings of changing conditions. These things are happening and, hopefully, there is more progress to come.

Capturing and Exchanging Electronic Quality Measures

Majd Alwan: Do you think a set of well-defined, harmonized quality measures that span the continuum of care and facilitate care coordination will emerge from health reform?

Mark McClellan: We are seeing some progress in the area of quality measures, particularly in our ability to measure things that matter most to residents of long-term and post-acute care settings.

Unfortunately, many of the current measures used in LTPAC settings are better suited to the relatively healthy 65-70-year-old population. There has been a lag in the availability of quality measures addressing the issues affecting people with frailty and other serious chronic conditions. These, of course, are the people who are most likely to need the services and supports you provide.

I am hoping that we will begin seeing more wide-

spread use of measures that address issues that matter most to your residents and clients. These include improvement in functional status, quality of life, whether or not a resident has a care plan in place and, most importantly, whether the resident's preferred care plan is actually being followed.

The more that performance measures focus on what really matters to your residents and clients, the easier it will be to redirect the resources in our health care system into supporting your quality improvement efforts. I encourage you to look into more reliable ways of collecting information that relates to quality measures like functional status and the person's experience of care. The most promising approaches that I have seen use wireless technologies, smart phones and iPads to collect this kind of information from residents and clients as well as staff.

The Importance of Health Information Exchange

Majd Alwan: Implementing person-centered cross-continuum quality improvement initiatives will inevitably require providers to exchange health information and some quality measures electronically. How close are we to achieving that goal?

You cannot take an integrated approach to care delivery without reliable information exchange. But setting up these systems traditionally has required some additional funding from Medicare for the Quality Improvement Organizations (QIO) or from the Office of the National Coordinator for Health Information Technology (ONC). Funding for health information exchange is not yet a built-in, direct part of our health care system.

We need to make some progress on how well our

payment systems support and encourage information exchange. We need to ensure that it is in everyone's financial interest to support the exchange of key data as a way to prevent hospital readmissions and help improve care.

Accelerating Adoption of Electronic Quality Measures

Majd Alwan: How can we accelerate the adoption of electronic quality measures and implementation of quality initiatives like clinical decision support, telehealth, point-of-care technologies and health information exchange protocols?

Mark McClellan: We've made a lot of progress in adopting these kinds of systems. Now that we have enough capability on the technical side, we need to really focus on getting the payment reforms that are needed to make a sustainable business case for these systems.

Many long-term and post-acute care providers are investing in EHRs that let them work more closely with acute-care providers to exchange discharge information, medication information and the like. But under a fee-for-service payment system, you don't receive financial incentives for improving quality or reducing costs. Until these outcomes are rewarded, it will be very difficult to build a business case for EHR adoption.

How do we get to that point? Given the tight budget situation, I wouldn't wait for more fee-for-service add-ons coming from the federal government. The only way to sustain these quality improvement efforts is to implement payment reforms that reward providers when they improve quality and reduce overall costs. We need to move in the direction of implementing payments that are tied to functional status and outcomes, rather than payments that are not directly related to quality of care.

Future Directions for LTPAC Providers

Majd Alwan: Do you see new and/or more payment reforms in the pipeline to encourage closer partnerships and collaboration between acute and LTPAC care as a way to drive the adoption of quality improvement initiatives, related quality measures, and the technologies that support them? Where should providers and technology developers focus their efforts over the next year or two?

Mark McClellan: I know many of you are focusing your efforts on working with hospitals to help them reduce admissions and readmissions. This could be a very good bridge for getting hospitals to share more timely and effective information with you.

Right now, hospitals are primarily interested in sharing only a limited amount of information with LTPAC settings. But getting even this limited data flowing is a good first step. It provides a foundation for broader information exchange and for broader use of EHRs and registries to track residents and clients down the road.

One thing is clear. You must invest in an EHR system if you want to partner with health plans, ACOs and other providers. There will be enough opportunities coming along to make that investment worthwhile. And CAST has a variety of tools that can help you do that.

Ongoing Budget Debates

Majd Alwan: We have all witnessed the recent budget deadlock, the debt ceiling fight in Congress, and the government shutdown in October. What do you think is going to happen during the coming

budget negotiations? Are we going to see another government shutdown?

Mark McClellan: I certainly hope we won't see another government shutdown, but the budget battles will continue, due to a number of factors.

If you look at current projections, the bulk of the pressure on the federal budget over the next 10-20 years will come from health care costs. As health care costs go up, every other area where government spends money is getting squeezed.

Congress is supposed to come up with a workable budget proposal by mid-December. I don't think that is going to happen. I expect that we will see some pressure for incremental action in mid-January when federal spending will need to be reauthorized to prevent another shutdown, or in mid-February when we hit the debt limit again. But incremental action will only push these issues further down the road.

This is a very difficult budget problem to solve unless we address some bigger issues, including how to implement fundamental entitlement reform, put health care programs on a more stable financial fiscal path, and get some additional revenue into the federal budget.

This won't happen quickly. That's why it is so important to keep looking for better ways to deliver care.

Delivering care more efficiently is the best way to get to a sustainable solution and take some pressure off federal and state budgets. It is the only way to solve these long-term budget problems.

Coming Challenges for Home-based Care

Steve Hopkins: What advice can you give to

providers working in the home setting? How can we address the challenges associated with expected payment reductions? Can you suggest some creative ways to partner with other providers?

Mark McClellan: There is much more variation in home health care around the country today than there was 5 or 10 years ago. That variation has captured the attention of the Medicare Payment Advisory Commission (MedPAC), the independent agency that advises Congress on issues affecting Medicare.

MedPAC is pushing for some payment changes in home health care. I predict that payment squeezes for home health will be part of the budget legislation that will be proposed in January 2014.

The question is whether we can move in a better direction, toward a payment system that includes case-based, rather than fee-for-service, payments. These case-based payments would be better for home health providers. That's because the home is the most efficient and preferred setting for many types of patients.

The success of your partnerships will depend on whether acute-care providers in your market want to engage in new ways of coordinating care. Some ACOs are now selectively contracting with home health and other post-acute care providers to lower admission and readmission rates. These partnerships are more likely to succeed if you can show your acute-care partners that you can help them reduce admissions, improve functional outcomes, and lower overall costs for their patients.

Rural Providers and Payment Reform

Casey Blumenthal: *The success of payment reforms is usually contingent on patient volume. As a result, rural providers in states like Montana are often left out of initiatives like ACOs and bundled payments. Is that likely to change anytime soon?*

Mark McClellan: You are right. In many states with rural populations there hasn't been much of a movement away from fee-for-service payments. But we are starting to see some promising examples. In Oklahoma, for example, a regional health information exchange is supporting the adoption of EHRs among rural providers. QIOs in places like Minnesota are helping to promote information exchange in rural areas. Several states are promoting more coordinated care in areas where there is not enough volume to support a managed care plan. This is a big challenge but there are some steps that look like they might hold some promise for rural states, including Montana.

Moving from Widget Provider to Valued Partner

Peter Kress: *You have advised LTPAC settings to partner with other providers. But I worry that these partnerships only result in defining us as providers of "widgets" to a larger system. How can our sector own its own future a little bit more? Are there ways we can become primary go-to organizations for our partners, rather than providers of only small components of the care delivery system?*

Mark McClellan: As an LTPAC provider, you have the ability to distinguish yourself as being something other than a widget provider. Success won't come from just offering your partners a day in the nursing home or a home visit that meets Medicare minimum quality and cost measures. You will be a much more attractive partner if you can produce measurable outcomes like lower complications rates and lower overall costs.

The future is about more than widgets. It is about demonstrating what I think we all know is true: that the best opportunity to improve health and prevent costly complications is not in the hospital or the physician office. It is in the long-term and post-acute care settings that your residents and clients call home.

Part 2

ELECTRONIC HEALTH RECORD SOLUTIONS THAT LTPAC PROVIDERS NEED TODAY

Randy Kirk

*Executive Vice President
and Chief Technology Officer
Direct Supply, Inc.
Milwaukee, Wisconsin*

Irene Fleshner, RN, MHSA, FACHE

*Principal
Reno, Davis and Associates, Inc.
Longboat Key, Florida*

Peter Kress

*Vice President and Chief Information Officer
ACTS Retirement-Life Communities, Inc.
West Point, Pennsylvania*

A new whitepaper, entitled *Electronic Health Record (EHR) Solutions LTPAC Providers Need Today,* proposes a robust vision for the delivery and use of an integrated electronic system to support the long-term and post-acute care (LTPAC) care team while enhancing care delivery and interactions with residents and clients.

The whitepaper was released in June 2013 by:

- The CIO Consortium, which is an association of senior technologists from across a variety of LTPAC settings.

- The Nurse Executive Council, which provides a forum for nurse leaders

seeking to encourage innovation for ongoing improvements in care delivery and patient safety.

Direct Supply, a LeadingAge Gold Partner and provider of equipment, eCommerce and service solutions to the senior living industry, supported the development of the whitepaper.

The Changing World of LTPAC

Ten years ago, the primary role of chief information officers (CIO) in any LTPAC setting was to develop electronic systems to support the organization's billing process and to address issues related to the adoption of the Minimum Data Set (MDS). Eager to succeed, CIOs purchased tools from their technology vendors that helped them carry out these back-office tasks.

The tools were extremely successful, so it is not surprising that subsequent technology solutions continued to incorporate the same back-office design that had made their predecessors so successful. The problem is that these systems did not evolve to match the evolution of LTPAC settings. Specifically, LTPAC providers now need technology solutions that support care delivery as well as billing and compliance with government regulations.

With the advent of health care reform, more LTPAC organizations are looking for ways to distinguish themselves as significant partners with accountable care organizations and significant enablers of quality. This trend has put more pressure on LTPAC settings and their CIOs. We are starting to ask very different questions of technology vendors than we have been asking for the past 10 years. Unfortunately, our own care teams, and our vendor partners, don't always have the background and experience

to answer those questions and to develop the new solutions for today's person-centered care settings.

Our whitepaper identifies the current gaps between our current technology-related needs and our current technological capabilities. It envisions filling those gaps with fundamentally different solutions than we have traditionally used in the past. We hope the paper will spur providers and vendors to work together to develop and invest in new solutions that:

- Support the "virtual" care team that delivers care and services to LTPAC residents and clients in a variety of settings.

- Enhance the quality of our interactions with those residents and clients.

- Expand our internal processes so we can implement sustainable care delivery innovations quickly and easily.

Supporting the Virtual Care Team

The people who typically need long-term and post-acute care are more mobile than ever. Seniors live in multiple types of living environments and they move between many settings throughout their lives. To meet the needs of these mobile consumers, technology solutions must be designed to support the entire team of health care professionals who interact with the older person and his or her family in a variety of settings.

That team includes the on-site caregivers who provide services and supports within the walls of our bricks-and-mortar locations. But it also includes many other health care professionals, including:

- Admitting/attending physicians in other care settings.

- Consulting and institutional pharmacists.

- Lab or diagnostic services.

- Hospital discharge planners.

- Managed care case managers.

- The patient's primary care physician.

Members of this care team need systems that support secured and easy access to patient information, and provide effective tools for collaboration and real-time communication. Unfortunately, our current technology does not meet these requirements.

We desperately need solutions that allow each member of the virtual care team to deliver a set of quality interactions and care to our patients in a way that is highly coordinated. We need those solutions today because collaboration among providers in a variety of settings is the key component of efficient and effective delivery of quality care and successful transitions between care settings.

Interactions with Consumers

Our traditional health information technology systems were all about capturing information *after* care was provided. But today, we need technology that helps us deliver a great care experience. That technology should enhance the interaction between caregiver and the resident/client by providing decision support and by introducing coordination into the care delivery process.

These goals can be reached with a variety of solutions. Some solutions may support automatic data collection from ancillary devices like blood pres-

sure monitors that transmit readings directly to a caregiver or an EHR. Other solutions might facilitate self-documentation through the use of voice or gesture recognition.

No matter what specific solution we implement, that technology must be fully organized around our residents and clients and it must support consumer-caregiver interaction. Above all, technology should never come between consumers and caregivers.

A Platform with Extensibility

Technology can't just support back-office processes. It must be a key part of the care delivery system. Technology won't achieve that goal if it is static. Instead, it must have high extensibility; that is, its design must take future growth into consideration. It must be capable of facilitating new and innovative workflows quickly and easily.

How can technology facilitate innovative workflows? Our whitepaper does not envision a future scenario in which you brainstorm with your vendor about a new EHR capability that takes 18 months to implement. Instead, we see the need to deploy innovative workflows no more than a day after that brainstorming session.

A workflow-enabling technology platform could help us reach this optimistic goal. This versatile platform would have a variety of toolkits "under the hood" that could be easily tweaked to embed a new care delivery approach into the workflow simply by modifying a screen or building a new application. Such a system would allow LTPAC providers to easily deploy a variety of EHR capabilities. It would also allow new service delivery mechanisms to evolve much more quickly in the field of long-term services and supports.

Conclusion

After the CIO Consortium and the Nurse Executive Council released their whitepaper, the two organizations began working with Direct Supply to facilitate conversations with LTPAC providers and EHR vendors. As part of that effort, CAST invited representatives from the three organizations to present the whitepaper to the CAST Commissioners. The paper will also be presented to members of the CAST EHR Workgroup and to the EHR vendors participating in the recent update to the CAST EHR toolkit.

The CIO Consortium and the Nurse Executive Council believe that, working together, LTPAC providers and their technology vendors can turn the vision presented in our whitepaper from wishful thinking to practical reality. The whitepaper does not represent the end of the conversation, but merely the beginning.

We urge CAST Commissioners to read the whitepaper and to send us your comments. We hope to continue working with you to ensure that we have the tools we need today to serve the older adults who entrust their lives to us.

Part 3

IMPROVING TRANSITIONS OF CARE WITH CLINICAL DECISION SUPPORT AND HEALTH INFORMATION EXCHANGE

Rodolfo Alvarez del Castillo, M.D.
Director of Clinical Operations/ Physician Advisor
Yeaman and Associates
Norman, Oklahoma

In February of 2011, the Office of the National Coordinator for Health Information Technology (ONC) awarded 10 nationwide Challenge Grants to "encourage breakthrough innovations for health information exchange that can be leveraged widely to support nationwide health information exchange and interoperability."

The Norman Regional Health System (NRHS) in Norman, OK, is using one of those grants to develop an information technology (IT) infrastructure that allows nursing homes and hospitals in the region to share information that improves care transitions. NRHS is a multi-campus acute-care system serving south central Oklahoma.

Over the past two years, the project has achieved a 30-percent reduction in 30-day readmission rates among five long-term and post-acute care (LTPAC) settings that are NRHS partners. All five settings have also achieved a 40-percent reduction in 30-day returns to the emergency room (ER) after an acute-care discharge. The Greater Norman Hospital Council, which is overseeing grant activities, is now considering replicating the model in assisted living, home care and hospice settings.

How the IT Infrastructure Works

Daily documentation of activities of daily living (ADL) among nursing home residents is at the center of the ONC-funded project in Oklahoma. Caregivers at the five LTPAC settings participating in the Challenge Grant use the CareTracker documentation software from Cerner Extended Care to record information about each resident's ADLs. The CareTracker software analyzes that information to detect when a particular resident experiences a change in condition.

When the system identifies a resident who may be at risk for congestive heart failure, pneumonia or a urinary tract infection, five steps usually follow:

1. CareTracker sends an alert to the nursing home's management staff, including the nursing supervisor and the director of nursing (DON).

2. An appropriate staff member begins a Situation, Background, Assessment, Recommendation (SBAR) document that records details about the resident's change in condition in an easy-to-read, one-page form. Every nurse on every shift has access to this document and is encouraged to review it.

3. The SBAR is incorporated into the resident's medical record through Direct, a secure e-mail based data transfer method. Direct can be used to send the SBAR to the resident's physician to ensure that he or she has up-to-date information about the resident's condition if a care transition becomes necessary. It also accompanies the resident to the ER if a hospital admission is warranted.

4. The LTPAC setting also uses Direct to send a universal transfer form (UTF) to the acute-care setting after a care transition takes place. The UTF provides a more comprehensive account of the resident's condition. NRHS can also request these documents through the regional health information exchange (HIE).

5. A similar flow of information follows the patient back after being discharged from NRHS to an LTPAC setting.

The CareTracker alert system helps to hold staff at the LTPAC setting more accountable for addressing any changes in a resident's condition before a hospital admission becomes necessary. Alerts are sent to the nurse supervisor and the DON, who can follow up to make sure that appropriate interventions have been implemented.

In addition, the system also raises the vigilance of LTPAC staff. Certified Nursing Assistants (CNA) use the CareTracker system to notice and record changes in condition every time they work with a resident. Checking and recording ADLs, behaviors and activities has become part of the workflow on every shift.

Success at Cedar Creek

Health information exchange helped Cedar Creek, one of the LTPAC settings participating in the grant, to reduce unnecessary use of antipsychotic medications by 29 percent. Use of antipsychotic medications decreased from 45 percent in August 2012 to 16 percent in July 2013.

Using the CareTracker system, nurses and CNAs contribute data to a resident's file each time they interact with the resident. That data populates a report to the resident's physician that documents the resident's behavior, including evidence that a reduction in the dosage for an antipsychotic drug may be in order. The accuracy of the documentation has prompted physicians to take the reports seriously and to base their prescribing practices on the information they contain.

The success of Cedar Creek's campaign stems, in part, from a "mass communication" feature of the CareTracker software. This feature allows the DON to insert a message in any resident's profile. The message then appears on the screen every time CNAs or nurses work with that resident.

Cedar Creek's DON used this mass communication strategy to ensure that every CNA and nurse she supervises knew about changes in antipsychotic medication doses as well as the non-pharmacological approaches that she had implemented to help residents manage their behaviors. The DON used the same screen messages to alert staff members about particular residents who were at high risks for falls. The messages reminded CNAs and nurses to take appropriate steps to help the residents avoid falling. As a result, falls among Cedar Creek residents decreased by 33.2 percent—from 46 percent to 12.8 percent—between Dec. 2012 and July 2013.

Keys to Success

Over the course of the ONC Challenge Grant, NRHS and its LTPAC partners have learned a variety of lessons that could help other providers and health systems implement similar IT-enabled decision support technology. Those lessons include:

- **Keep your eyes on the goal.** In the first year of the grant, we carried out an exhaustive effort to implement technology in all five of the LTPAC

settings working with NRHS. This process involved installing equipment to facilitate information exchange, installing EHRs, connecting LTPAC settings to the statewide HIE, and providing those settings with access to Direct. We thought we were very successful until we realized that we had not met our goals to improve transitions of care because we had a collection of disparate systems that were not integrated. That's when we started asking hard questions about why patients were being readmitted and what we could do about that.

- **Pay attention to governance.** The key to our success was the creation of a multidisciplinary governance group for the project. This group included ER physicians from NRHS, the administrator and DON from each LTPAC setting, and case managers from both settings. Members of the group worked together to identify what data needed to be shared at the moment of transfer on both the SBAR and the UTF. The doctors told the DONs what kind of information they needed when a patient arrived at the ER. The DONs told the ER doctors what information they needed when that patient returned to the LTPAC setting. Before this group began its work, there was such a lack of communication between these two settings that ER doctors often didn't receive the patient information they needed to make good treatment decisions.

- **Be flexible.** We tried very hard to get ER doctors and nurses to open Direct accounts and to use them to review the SBAR and UTFs that we were sending them before and after a care transition. This never happened. Generally, these clinicians didn't want to use one more system—and remember one more user name and password—in addition to the hospital's EHR. Instead of fighting this trend, we convinced the hospital to open a Direct account for one staff person in the ER. This person was usually a clerk. When a resident's SBAR and UTF arrives in the ER, this clerk retrieves the documents from the Direct server, prints out both documents and slips them into the resident's chart. The doctor or nurse reviews these documents as part of the patient's hospital chart. This flexible approach helped embed health information exchange into the ER's workflow in a way that ensures it will continue to work over time.

Part 4

NEXT STEPS: MEDICATION MANAGEMENT?

CAST Executive Director Majd Alwan shared the positive feedback that CAST received from Commissioners after the recent release of two products:

- The update on the CAST Electronic Health Record (EHR) toolkit.

- The release of a white paper, case studies and selection matrix for remote patient monitoring and telehealth.

Discussions among CAST Commissioners suggested that medication management should be the topic of the next CAST toolkit. Commissioners agreed that medication management is a compelling topic, given the high rate of medication errors, and the important role that medication management and medication adherence play in care transitions.

Commissioners suggested that the forthcoming toolkit should:

- Address the full medications cycle, including prescribing, dispensing and taking medications.

- Make a distinction between medication management in the skilled nursing environment—which is generally a component of that setting's EHR—and medication management and adherence solutions that are more likely to be used in the home setting.

- Focus on multiple solutions. No one medication management solution will provide "the answer" for all residents/clients. Providers will choose different solutions depending on the end user, the care setting and the problem the provider wants to address. Many providers will need guidance on how to match a particular client profile with a particular solution.

Commissioners also suggested that, over the long-term, CAST could take the following steps to promote the implementation of medication management solutions in long-term and post-acute care settings:

- Explore the possibility of using personal health devices to launch wellness and prevention services around medication management and adherence services for residents in independent living settings. CAST could also explore ways to help providers process and manage data collected from the devices.

- Raise awareness among primary and acute-care providers about the role that innovative technology solutions can play in medication management and adherence. Eventually, the ability to assess and manage patient medication data should be integrated into the training and education of physicians and nurses.

Future Commission Discussion Areas

Commissioners also suggested the following topics for future Commission discussions:

- **Emerging technology:** Providers of aging services need to begin focusing on the technologies that are likely to emerge in the next 5-7 years. If CAST can identify these emerging technology solutions, it could spur LeadingAge and CAST members to begin meaningful discussions about how they can prepare their organizations to take full advantage of the coming innovations.

- **Long-distance caregivers:** A growing number of family members are tech-savvy and could use technology to help them manage their parents' care from afar. Commissioners should explore how families might use technology to remain engaged in their parents' care even when they live in a different location.

- **Idea Exchange:** CAST should consider hosting an Idea Exchange at the PEAK Leadership Summit in 2014. Past Idea Exchanges have been successful in connecting providers who are technology pioneers with providers interested in implementing technology. Commissioners suggested that providers that were featured in CAST's recently released telehealth case studies be invited to participate in the Idea Exchange.

Appendix A:

MAJOR CAST ACCOMPLISHMENTS FOR MAR. 2013 – OCT. 2013

- CAST updated its electronic health record (EHR) portfolio of tools, which includes a whitepaper that walks providers through the most important planning steps providers need to consider before selecting and implementing an EHR. The whitepaper also covers the most important features and functionalities to look for in an EHR. The whitepaper includes a selection matrix that compared 36 EHR products for long-term and post-acute care across over 200 functionalities and features. The portfolio also includes an easy-to-use online EHR 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 advanced EHR features like clinical decision support systems and health information exchange.

  http://www.leadingage.org/CAST_
  Completes_2013_Electronic_Health_Record_
  Portfolio_with_Updated_Online_Selection_
  Tool.aspx

- CAST released its telehealth and remote patient monitoring (RPM) portfolio of tools, which includes a whitepaper that explains the different types of telehealth technologies available, uses, 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 telehealth solution. The selection matrix is a resource containing 23 products from 16 vendors, compared across more than 200 different functionalities and features. The tools also include an easy-to-use online Telehealth and RPM 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 telehealth on care quality and outcomes.

  http://www.leadingage.org/New_Telehealth_
  Selection_Resources_Released_by_
  LeadingAge_CAST.aspx

- Published "WHAT MATTERS MOST: How Payment Reforms, Data and Education Will Transform Business Models for Long-Term and Post-Acute Care Providers" report of the Proceedings of the CAST Commission Meeting held on Mar. 17, 2013, in Washington, DC.

  http://www.leadingage.org/uploadedFiles/
  Content/About/CAST/Resources/What_
  Matters_.pdf

- Continued to advocate for Senate Bill S. 501, known as the Fostering Independence through Technology Act of 2011 (FITT), introduced by Sen. John Thune (SD) and Sen. Amy Klobuchar (MN). The bi-partisan FITT Act creates a pilot program under Medicare to provide incentives for home health agencies to use home monitoring and communications

technologies to improve access to care and help beneficiaries remain in their own homes.

- Continued to advocate for including long-term and post-acute care providers as active participants in health Information exchange activities and potentially other 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 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 members mentioned in main media outlets including newspapers, magazines, trade and industry publications, both in print and electronic media.

CAST RESEARCH UPDATE- OCT. 2013

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 on-going research initiatives:

- **EHR Initiative:** CAST updated its electronic health record (EHR) portfolio of tools, which includes a whitepaper that walks providers through the most important planning steps providers need to consider before selecting and implementing an EHR. The whitepaper also covers the most important features and functionalities to look for in an EHR. The whitepaper includes a selection matrix that compared 36 EHR products for long-term and post-acute care across over 200 functionalities and features. The portfolio also includes an easy-to-use online EHR 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 advanced EHR features like clinical decision support systems and health information exchange.

  http://www.leadingage.org/CAST_Completes_2013_Electronic_Health_Record_Portfolio_with_Updated_Online_Selection_Tool.aspx

- **Telehealth Initiative:** CAST released its telehealth and remote patient monitoring (RPM) portfolio of tools, which includes a whitepaper that explains the different types of telehealth technologies available, uses, 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 telehealth solution. The selection matrix is a resource containing 23 products from 16 vendors, compared across more than 200 different

functionalities and features. The tools also include an easy-to-use online Telehealth and RPM 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 telehealth on care quality and outcomes.

http://www.leadingage.org/New_Telehealth_Selection_Resources_Released_by_LeadingAge_CAST.aspx

- **Technology Adoption and Technology Spending Surveys:** Last year, CAST has developed two questionnaires: one on the adoption of technology and another on technology spending. The technology spending survey was developed in partnership with Ziegler, who administered the survey to the CFOs who participated in the CFO hotline. Results were published last year. Ziegler has incorporated our technology adoption survey questions into the research process they use to build the L-Z 100 Study. We have received responses and are in the process of analyzing the data to report the findings. We will be working with Ziegler on updating and administering the Technology Spending Survey to CFOs who participate in Ziegler CFO hotline for next year.

- **Stratis Health HIT PAC Project:** This project is funded by CMS and aims to study and encourage health information exchange between hospitals and their LTPAC partners, especially nursing homes, in two Minnesota communities. CAST is a partner with Stratis Health where Majd serves on the advisory group and is an expert consultant on the

project. The Stratis Health team is producing an HIE toolkit that compliments the Stratis EHR implementation tools, which served as a basis for the CAST EHR initiative and are currently being updated. The new HIE toolkit will be particularly useful to all LeadingAge members when it is completed.

LeadingAge Legislative Update

FY 2013 and Sequestration

The first third of 2013 was dominated by leftover business from 2012.

- Congress passed a continuing resolution for FY 2013, which continued funding for federal programs at the 2012 level, with a few exceptions (see below)

- Congress also allowed sequestration to go into effect, which reduced funding for domestic programs like HUD housing, Meals on Wheels and other discretionary programs by average of 5-6%.

FY 2014 Budget

Congress is currently attempting to address funding for FY 2014, but without great success:

- HUD: Both House and Senate Appropriations Committees passed housing budgets, but these budgets had significant differences affecting LeadingAge members. Both were expected to be debated and voted on in their respective Chambers, but both were pulled from the respective floors before votes were taken. LeadingAge supports the Senate bill because it allocates significantly more funds to HUD than

the House bill, and because it contains $20M in new funding that could be used for new housing and development.

- HHS: The Senate Appropriations Committee voted out a bill funding Labor and HHS in July but no appropriations legislation has moved in the House at all. The Senate bill either matched or increased funding from the FY 2013 Continuing Resolution.

- Since the House and Senate were not able to arrive at an actual budget for FY 2014, we are once again facing the need for a Continuing Resolution (CR) to keep the government operating. However, the path to the FY 2014 CR is very rocky. Legislation in the House defunds the Affordable Care Act (Obamacare) and keeps sequestration. This bill did not pass the Senate, leading to a government shut-down on Oct. 1.

- In addition, the federal debt limit must either be increased by mid-October or thereabouts, or the government will default on its bills. This was the scenario back in 2011 that resulted in sequestration and the Budget Control Act. It is not clear what will happen this year, but, once again, signs are ominous for an agreement between the parties/houses.

LTC Commission

The LTC Commission, created when the CLASS Act was repealed, began meeting in May 2013, and will close September 30. Robyn Stone, LeadingAge Senior VP for Research, testified at one of the open hearings on the nature of the population needing LTSS services now and in the future. LeadingAge has submitted a summary of the work of our LTC Financing Task Force.

The Commission issued its final report on September 18, 2013; it can be found on the commission's website (www.ltccommission.senate.gov). The final report was not unanimous; five of the commissioners issued their own alternate report, which is available at: http://www.medicareadvocacy.org/wp-content/uploads/2013/09/LTCCAlternativeReport.pdf.

We are analyzing the report now, but we can say that technology is included in the final recommendations, at page 34:

- "The Commission supports development by CMS and the Office of the National Coordinator for Health Information Technology (ONC) of an integrated HIT platform that would include LTSS (including incorporation of LTSS in Health Information Exchanges (HIEs), and recommends providing public resources necessary to support and accelerate the pace of this work.

  - The Commission supports efforts to incorporate LTSS care plans in Electronic Health Records (EHR) to enable providers to utilize a standardized care plan document as consumers with LTSS needs move among settings of acute care and LTSS

  - Family caregivers should be identified in the individual's EHR, especially when they are a part of the care plan. With the individual's permission, family caregivers should have access to such records as key members of care teams.

  - The Commission supports efforts to innovate, test, and develop viable

economic strategies for applying tele-health technologies to the LTSS system."

Other Issues

- S. 596: LeadingAge has actively supported the Fostering Independence through Technology Act for 2013 (FITT) and continues to seek out sponsors as well as find a member of the House of Representatives to introduce a companion bill. Right now, this bi-partisan bill has 8 sponsors. It would create pilot projects to encourage home health providers to use remote patient monitoring services, at a reduced cost to Medicare.

- S. 597/H.R. 1179: This bi-partisan legislation authorizes counting all over-night hospital stays toward the 3-day stay required for Medicare eligibility for SNF. Currently beneficiaries may be billed as "outpatients" (called observation) despite being in the hospital for many nights.

- Therapy Caps: Each year we deal with the expected imposition of financial caps on out-patient therapy resulting from legislation passed in 1997. The caps have never gone into effect because they would create a terrible financial burden for seniors and persons with chronic disabilities. This is the same legislation that mandated reductions in payments to physicians that have also not gone into effect (the so-called Sustainable Growth Rate formula (SGR)). Each year Congress passes legislation to avoid the cuts to physicians and imposition of the caps. This year it looks like there may be legislation to address SGR permanently, and we are gearing up to make sure that

therapy caps would also be addressed in some significant way.

- Medicare Post-Acute Care Reform: The Senate Finance and House Ways & Means Committees have requested comment on "options to reform" Medicare post-acute care (skilled nursing, home health, long-term care hospitals, IRFs). LeadingAge submitted extensive comments based on the work of our Public Policy Congress and our long-standing positions on Medicare and Medicaid payment, delivery system and reform. It is not clear what will happen with this request, it is far reaching and ambitious. http://www.leadingage.org/Recommendations_for_Post_Acute_Payment_Reform.aspx

- Tax Reform: The chairs of the Senate Finance Committee (Sen. Baucus, MT) and House Ways & Means Committee (Rep. Camp, MI) have been touring the country seeking out comments from businesses and others about reforming the Internal Revenue Code. Sen. Baucus and Hatch, the ranking member of Finance, have also asked their fellow Senators for suggestions for tax credits and deductions that they support. LeadingAge wrote each member of the Senate urging them to include low income housing tax credits and full charitable deductions in their response to the Committee. It is definitely not clear where this is going; the committee had to publicly promise that Senators' responses would be kept confidential for 50 years to encourage members of the Senate to identify their favored tax deductions.

  - Technology: For the first time in many years, the Senate Special Committee

on Aging has shown an interest in technology and aging services. In April the Committee held a "Technology Expo" for staff and members of Congress. LeadingAge and CAST had a large exhibit, as did other CAST members, including HealthMEDX and Phillips. Unfortunately there has not been much in the way of follow-up by the Committee, and it is not clear what their goal was. However, we hope to use their interest to support our technology positions when the opportunity arises.

CAST State Technology Update October 2013

State-level technology activities

In its continuing effort to track technology activities in the states, CAST held three conference calls over the past few months. The first was a presentation by Majd Alwan, CAST executive director, and Lauren Shaham, LeadingAge vice president of communications, on the Alma video, *High-Tech Aging: Improving Lives Today,* the second was an update on CAST's EHR and Telehealth Initiatives as a last minute substitute when the scheduled presenter had to cancel due to illness, and the third was a presentation on the three-state survey done by AgeTech West.

State Updates

AgeTech West's survey was in the field. The three west coast LeadingAge states involved were California, Oregon, and Washington. The goal is to encourage information exchange and share with

providers what their peers are doing. The results have been compiled and shared on the State Technology Policy Workgroup call held on August 28, 2013.

Arizona, Montana and Missouri Pass Telemedicine Bills - Nineteen states now require private insurers to cover a health service provided by telemedicine if they cover the same service when patients receive it in person. Arizona, Montana and Missouri made headlines recently for successfully enacting these telemedicine "parity laws." The South Carolina and Tennessee legislatures are encountering barriers in their efforts to pass similar laws.

Arizona now requires private health insurers to provide comparable coverage for services delivered by telemedicine and in person. But the Arizona requirement applies only in rural areas.

Under **Montana's** new law, telemedicine would be reimbursable for a long list of health care settings and licensed health care providers.

Missouri State Senate unanimously approved its own version of telemedicine parity legislation. In addition to requiring equal coverage for telemedicine and in-person services, the bill proposes that telemedicine visits not carry higher co-pays or deductibles than face-to-face doctor visits.

The **South Carolina** State Senate is now considering a bill that would require private health insurance plans to cover telemedicine. But an alliance of health care providers is delaying the bill.

Tennessee bill requiring equitable insurance policies has stalled in subcommittees.

Alaska, Rhode Island and Maryland Celebrate HIE Successes - Alaska and Rhode Island—our

largest and smallest states—joined Maryland in the headlines during April. All 3 states celebrated successes in their efforts to connect doctors and hospitals to health information exchanges (HIE).

ONC Challenge Grants' Early Successes: Increased Interest and Increased Efficiencies

The four grantees (Colorado, Massachusetts, Maryland and Oklahoma) have experienced some early successes in their efforts to use technology to improve care transitions. These successes include:

- More interest among LTPAC providers in electronic exchange of health information.

- Increased workflow efficiencies. These have been achieved by reusing clinical data captured electronically through OASIS, MDS or INTERACT forms.

- More complete data. This data reduces the burden on patients and families to report basic information to clinical staff.

- Improved, more accurate and timely medication reconciliation.

- Reduced errors and gaps in treatment associated with delays in results reporting.

- Avoidance of common problems like missed wound care treatments or therapy visits for frail and vulnerable patients.

State and State Affiliate Update:

Aging Services of Minnesota shared that Stratis Health has received an innovations grant from CMS. The grant allows Stratis to work with two communities; one community has a hospital with referral partners and the other has two hospitals with 6 SNF referrals. They are working very closely on interoperability issues with some emphasis on electronic interoperability and health information exchange. They will present at the LeadingAge Annual Meeting in Dallas. Majd was very helpful serving on the advisory committee. The project was supposed to end Sept. 29th, 2013 but it received a no-cost extension until March 31st, 2014.

It's Never 2 Late is seeing an interest in the use of its program to reduce medical restraints for people with dementia. It's Never Too Late has a dementia specific layout coming soon that's titled "Purpose Driven." Tacoma Lutheran of Washington State is doing a study around user engagement with dementia.

Pennsylvania - The E-Health authority held an all-day meeting with speakers and vendors that engaged consumers. Much like Minnesota's grant there's been a presentation on a grant program similar to that in PA. Additionally, two regional extension centers in PA are working with a grant from the ONC. The program is called the REACH program which includes IT assessments of facilities and a workplan of how IT can affect the workflow environment. LeadingAge PA will share this information with the group once finalized.

EHR & Standards Update

1. **Key Ongoing Standards Activities**

   a. S&I Framework activities continue under the Longitudinal Coordination of Care (LCC) committee with current focus on health care transitions and plan of care. HL7 has just finished balloting outputs of that work and Lantana is finalizing implementation guides. LCC work is summarized at http://wiki.siframework.org/Longitudinal+Coordination+of+Care+(LCC).

   b. HIT Standards and Policy committees are focusing on next generations of Meaningful Use with consideration for how certification should apply to providers ineligible for Meaningful Use incentives, harmonization and emphasis on quality measures, and standardization of advanced directives.

2. **Key Recent Reports**

   a. In June, the CIO Consortium published their paper on "EHR Solutions that LTPAC Providers Need Today" describing key gaps LTPAC HIT solution providers need to address in order to deliver tools that will enable LTPAC providers to navigate the changes and challenges they face. The paper is being discussed at the Commission meeting.

   b. In August, ASPE submitted a report to Congress, "Application of EHR Payment Incentives for Providers Not Receiving Other Incentive Payments." The full study can be found at: http://aspe.hhs.gov/daltcp/reports/2013/ehrpi.shtml.

   c. In August, The Office of the National Coordinator released a report based on the responses to their March request for information (RFI) "Advancing Interoperability and Health Information Exchange." The findings were reflected in the report, "Principles and Strategy for Accelerating Health Information Exchange," which can be found at: http://www.healthit.gov/sites/default/files/acceleratinghieprinciples_strategy.pdf.

   d. ONC has posted a website on policy making, regulation and strategy for LTPAC at: http://www.healthit.gov/policy-researchers-implementers/long-term-post-acute-care.

3. **Related Research Initiatives**

   a. The state challenge grants awarded in the LTPAC space to six state health information exchange (HIE) entities two years ago continue to generate interesting results around HIE participation and data exchange, e-interact, and other areas. Much of this work is fueling LCC and ONC activities.

   b. ONC is providing guidance for how ineligible providers can conform their certification efforts around key health information exchange building blocks. ASPE has a study underway to evaluate gaps/disconnects between LTPAC certification and meaningful use certification criteria.