



Medication Management Tools and Resources

Agenda

- Housekeeping/Introductions
- Health Resources and Services Administration (HRSA) Patient Safety and Clinical Pharmacy Services Collaborative (PSPC) – National and Local Views
- HomeMeds
- Resources/Next training
- Questions/Comments

Presenters

- Linda Kwon, Health Resources and Services Administration, Rockville, MD
- Kyle Peters, Siouxland Community Health Center, Sioux City, IA
- June Simmons, Partners in Care Foundation, San Fernando, CA
- Sandy Atkins, Partners in Care Foundation, San Fernando, CA



HRSA Patient Safety and Clinical Pharmacy Services Collaborative

Linda Kwon, MPH

HRSA Office of Pharmacy Affairs



Questions to run on – Presenters will answer....

- What is the Patient Safety and Clinical Pharmacy Services Collaborative (PSPC)?
- How to participate in PSPC 4.0?
- How has Siouxland Community Health Center been in action in improving health outcomes and patient safety?

What's the issue?

- More than **133 million** Americans live with chronic illnesses¹
- **91%** of all prescriptions filled for a chronic condition²
- **1.5 million** people are injured each year as a result of medication³
- Uncoordinated care costs an estimated **\$240Billion/year**⁴

1. CDC National Center for Chronic Disease Prevention and Health Promotion: Chronic Disease Prevention

<http://www.cdc.gov/nccdphp/overview.htm>

2. American Heart Association. Heart Disease and Stroke Statistics—2008 Update. Dallas, Texas: American Heart Association; 2008. <http://www.americanheart.org>

3. Institute of Medicine (IOM), To Err Is Human: Building a Safer Health System, Washington, DC: National Academy Press; 2000

4. Owens, MK "The Health Care imperative: Lowering Costs and Improving Outcomes", The Institute of Medicine, 2010

HRSA Patient Safety and Clinical Pharmacy Services Collaborative (PSPC)

WHAT: Quality Improvement Collaborative aimed at improving health outcomes and patient safety for high-risk patients
(Adapted Institute for Healthcare Improvement Breakthrough Series Collaborative Model)

Improve the delivery system where there are gaps by:

- Enhancing **care coordination** among the providers and partners involved
- Fostering **multidisciplinary, team based** care approach
- Strengthening **patient centered medical home**
- **Integrating** medication management and other services to minimize harm related to adverse drug events and maximize optimal health outcomes

HRSA PSPC (continued)

WHO: Community-based teams across the country

- Organizations include safety net providers and hospitals, public health departments, and HIV clinics
- Partners include colleges of pharmacy, primary care associations, and Quality Improvement Organizations,
- Multidisciplinary care teams delivering patient-centered services to improve medication safety and health outcomes

This is about saving patient lives!

PSPC Communities Ready to Enhance this work this year....



Community Partnerships

- Add strength to teams
- Help to leverage resources
- Provide man-power and skill sets
- Provides synergy

*“The whole is greater than the sum of its parts”
- Aristotle*

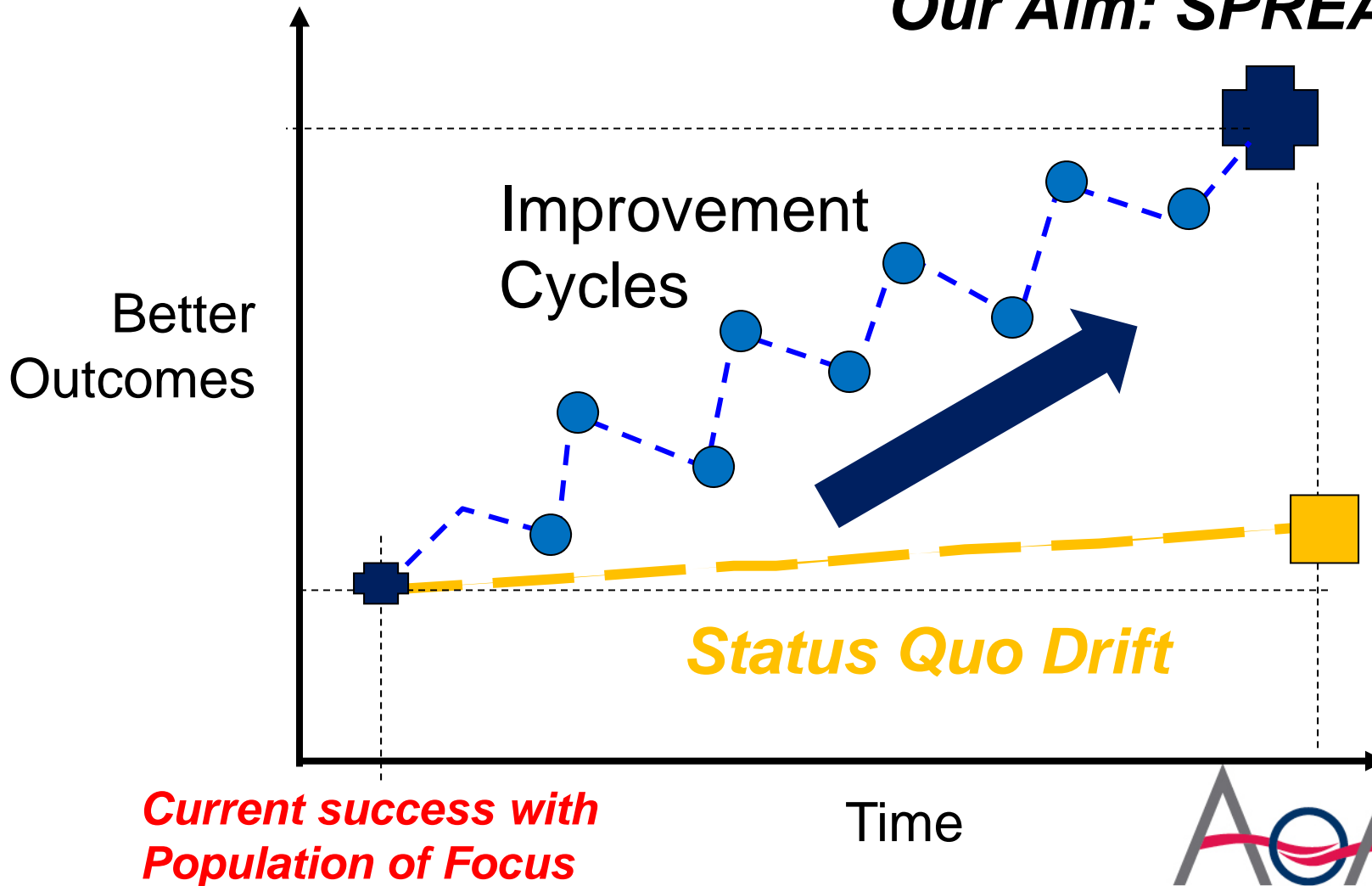
What do we want to achieve?

The transformational goal of the PSPC:

- Integrate the healthcare delivery system, across multiple healthcare partners, to create a service delivery system for high-risk patients that will produce breakthroughs in the following three areas:
 - 1) Improved patient health outcomes
 - 2) Improved patient safety
 - 3) Increase cost-effective clinical pharmacy services

Where do we want to go?

Our Aim: SPREAD



How will we get there?

- Committed team
 - Expanded care team
 - Community partnerships
 - Schools of Pharmacy
 - Hospitals
 - Quality Improvement Organizations
 - Leadership commitment
- Resource rich
 - Continuous peer-to-peer learning/sharing
 - Tools/resources
 - Team development and support (regionally and nationally)
 - Powerful change package
- Faculty expertise and national leadership/support

PSPC Model (Adapted from IHI Breakthrough Collaborative Series)

Enroll Teams



Prewrite



PDSA=Plan, Do, Study, Act
 LS= Learning Session
 AP=Action Period

- | Resources | |
|----------------------------|-------------------|
| ListServ | Tools/Guides |
| Conference Calls | Faculty Expertise |
| Healthcare Communities.org | |



Key Attributes of the PSPC

- Patient-Centered
- Interdisciplinary Care Team
- Cross-Organizational with Health Homes at the Center
- Systematically Addresses Medication Management, Safety and Risk -- Huge Issues for Ambulatory Care Patients
- All Teach, All Learn
- Align with national efforts – Partnership for Patients

*It Is Truly the
Next Generation of Collaboratives!*

Staying Focused...Our PSPC Aim

“Patient-centered, integrated care teams, armed with cost-effective clinical pharmacy services to improve the health outcomes and safety for high medication risk patient populations in alignment with national quality standards”

PSPC's vision:

By 2015 – 3,000 communities have an integrated delivery system that assure optimal health outcomes and patient safety

PSPC 4.0 Participation Process

1. Step 1 – Read PSPC Info Packet
2. Step 2 – Complete PSPC Participation Package (online)
 - Share contact information for team/partners
3. Step 3 – HRSA will review information and send a “welcome” email to the **team lead**

Website:

<http://www.hrsa.gov/patientsafety>

<http://www.healthcarecommunities.org>

Deadline to submit information: October 30, 2011*

**if you are considering partnering with a QIO, there is a rolling deadline*

HRSA is here to help!

Thank you from all of us at HRSA!

Contact information:

Email: patientsafety@hrsa.gov



Utilizing Partners as Members of an Integrated Care Team

Kyle Peters, Pharm.D., BC-ADM, CDE
Clinical Pharmacist Siouxland CHC
Clinical Assistant Professor UNMC COP
PSPC4.0 Faculty Co-Chair

Integrated Care Team

- Siouxland Community Health Center (SCHC) is located in Sioux City, Iowa
- 8 MDs, 1 Doctor of Osteopathy
- 6 Physician Assistants (PAs), 6 Advanced Registered Nurse Practitioners (ARNPs)
- 2 Clinical Pharmacists
- 2-3 Pharmacy Students from the University of Nebraska College of Pharmacy (CoP)
 - New students every 4 weeks

Integrated Care Team (continued)

- Patients on warfarin are referred to the clinical pharmacists for management
- Patients are see regularly by the clinical pharmacists for International Normalized Ratio (INR) management
 - They are referred back to their primary care provider for other diseases/conditions

Integrated Care Team (continued)

- Patients benefit from the integrated care team by:
 - More people looking at their medications and conditions to ensure improved safety and improved health outcomes
 - Members of the team working together to make the best treatment decision for the patient
 - Patient-centered care is necessary for success

Interventions

Outcomes:

- Making sure patients receive warfarin therapy for the correct duration of time based on the indication
 - Deep vein thrombosis (DVT) 3 months
 - Atrial fibrillation life-long
- Closer follow up if the patient is not within range
 - CHEST guidelines max 4 weeks between INR
 - If patient's INR was too high or low we could see them sooner due to less patients in schedule
 - More timely follow up with patients released from the hospital

Interventions (continued)

Safety:

- Stopped a lot of aspirin
 - Unnecessary, leads to increased bleeding risk
- Adjusted dose when antibiotics were used
- Modified dose based on other medications to prevent bleeding
 - Amiodarone
 - Fluconazole
 - Rifampin

Interventions (continued)

Access to medications

- Determined the most cost effective way to obtain warfarin
 - 1 tablet strength with alternate day dosing
 - 5 mg on M, W, F, 10 mg on T, Th, S, S
 - 30-day vs. 90-day supply
- If patient met criteria we changed them to Pradaxa (dabigatran)
 - Anticoagulant for patients with atrial fibrillation which does not require monitoring

Roles of Partners

- The PSPC model is centered on partnerships
- Partnerships allow:
 - More care providers to be involved in the work to reach more patients
 - Leverage of resources, requests and offers are made to decrease time to implement change
 - Partnerships allow us to spread to more communities to improve safety and outcomes to more patients!

SCHC-UNMC Partnership

- Siouland CHC and the University of Nebraska Medical Center (UNMC) College of Pharmacy
- Kyle Peters is a Clinical Assistant Professor
 - 2-3 students every month on rotation
- Students gain experience assisting in the management of patients with diabetes, on anticoagulation, and other primary care conditions

SCHC-UNMC Partnership (continued)

- SCHC Population of Focus (PoF):
 - Year 1: patients with diabetes who saw 2 of our Physician Assistants
 - Year 2: patients with diabetes whose A1C was greater than 9%
- Students would interview patients to determine why they were not at goal

SCHC-UNMC Partnership (continued)

- The students would discuss the patients with the clinical pharmacy team and provider to develop a treatment plan to get them to goal
- This freed up the clinical pharmacists and providers, and allowed the students to develop their clinical skills focusing on patient safety and improved health outcomes

SCHC-UNMC Partnership (continued)

- SCHC PoF:
 - Year 3: Patients on warfarin/Coumadin whose INR was not at goal.
- The students room the patient and ask them standard anticoagulation treatment questions

SCHC-UNMC Partnership (continued)

- Type the SOAP (Subjective-Objective-Assessment-Plan) note in the patient's electronic medical record (EMR)
- They do everything except perform the INR and provide the patient with the final treatment decision

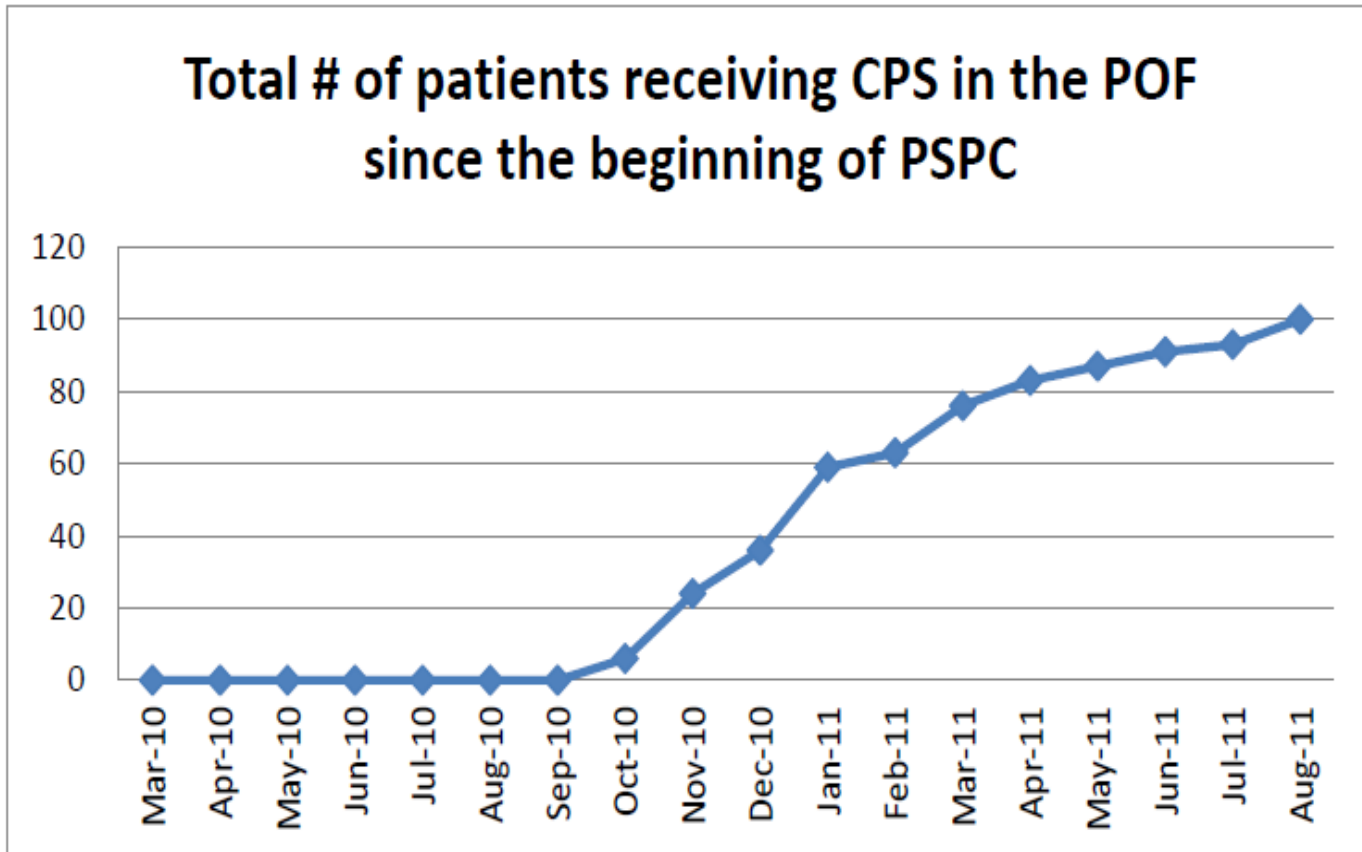
SCHC-UNMC Partnership (continued)

- Participating in the PSPC allows students to apply classroom knowledge to real patient situations
- Increased focus on preventing errors and educating patients to allow them to achieve their health outcome goals

PSPC-COP Partnership

- Without student involvement we would be:
 - Less efficient
 - Less likely to notice potential adverse drug events (pADEs)
 - Overworked
 - Find less joy in the work we do

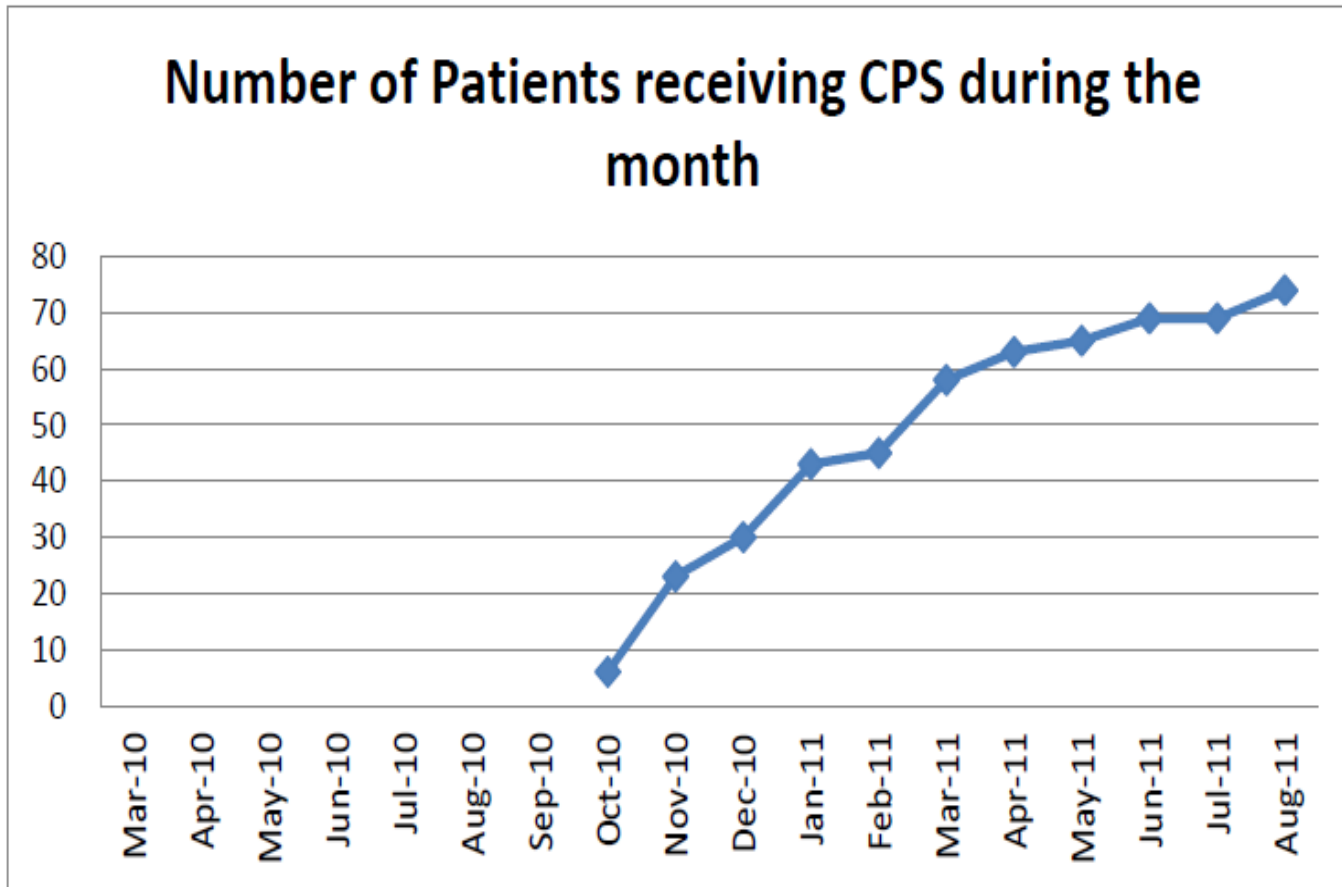
Siouxland Results



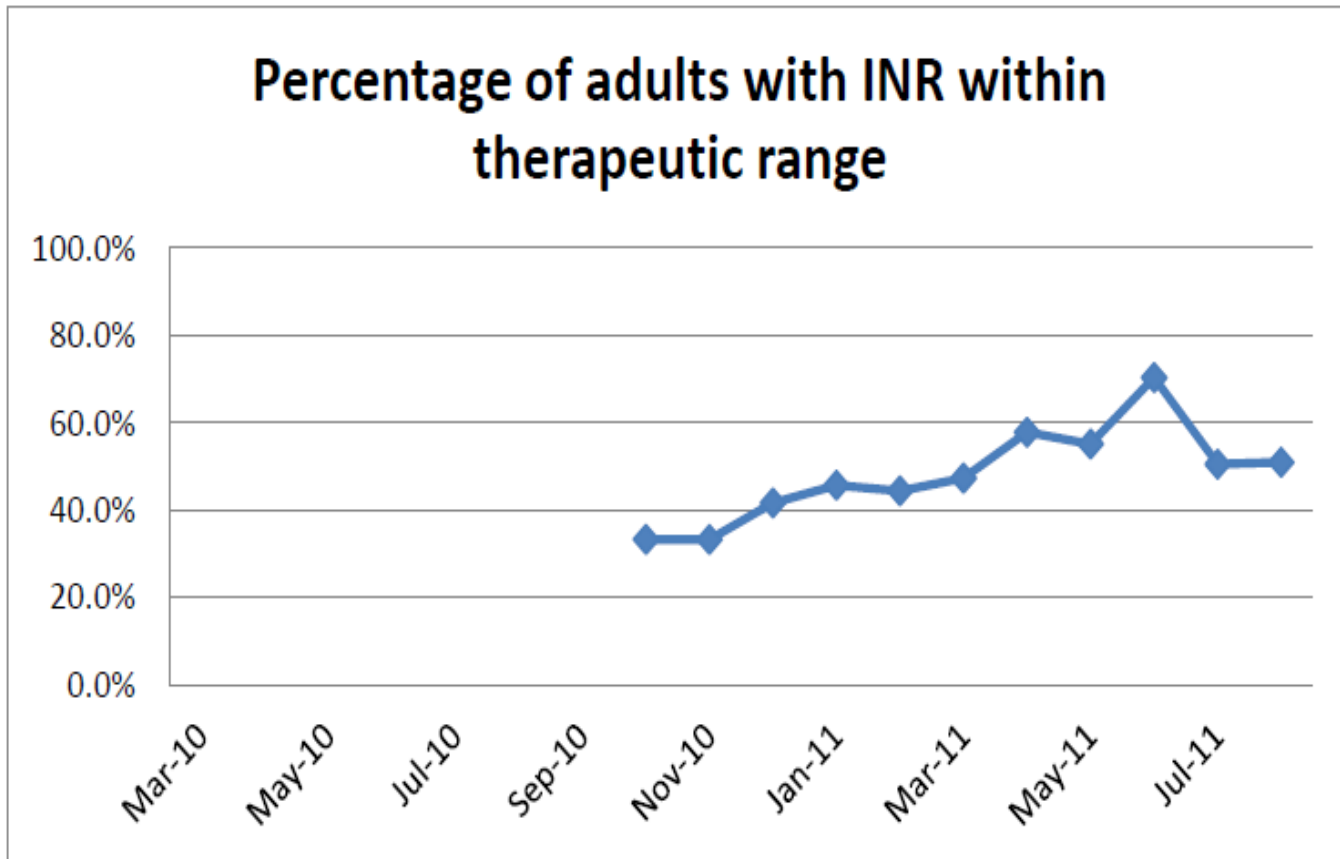
CPS=Clinical Pharmacy Services



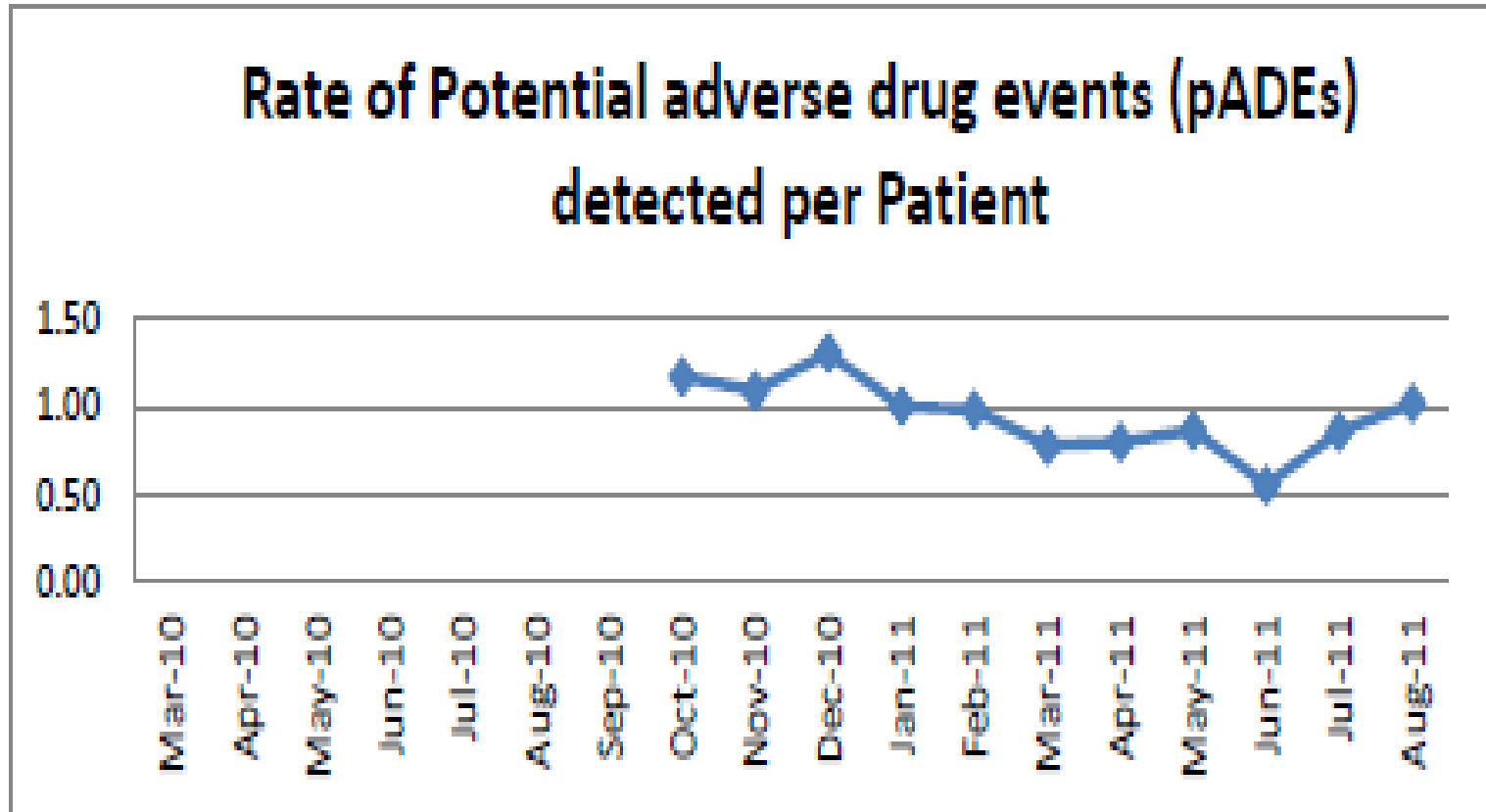
Siouxland Results (continued)



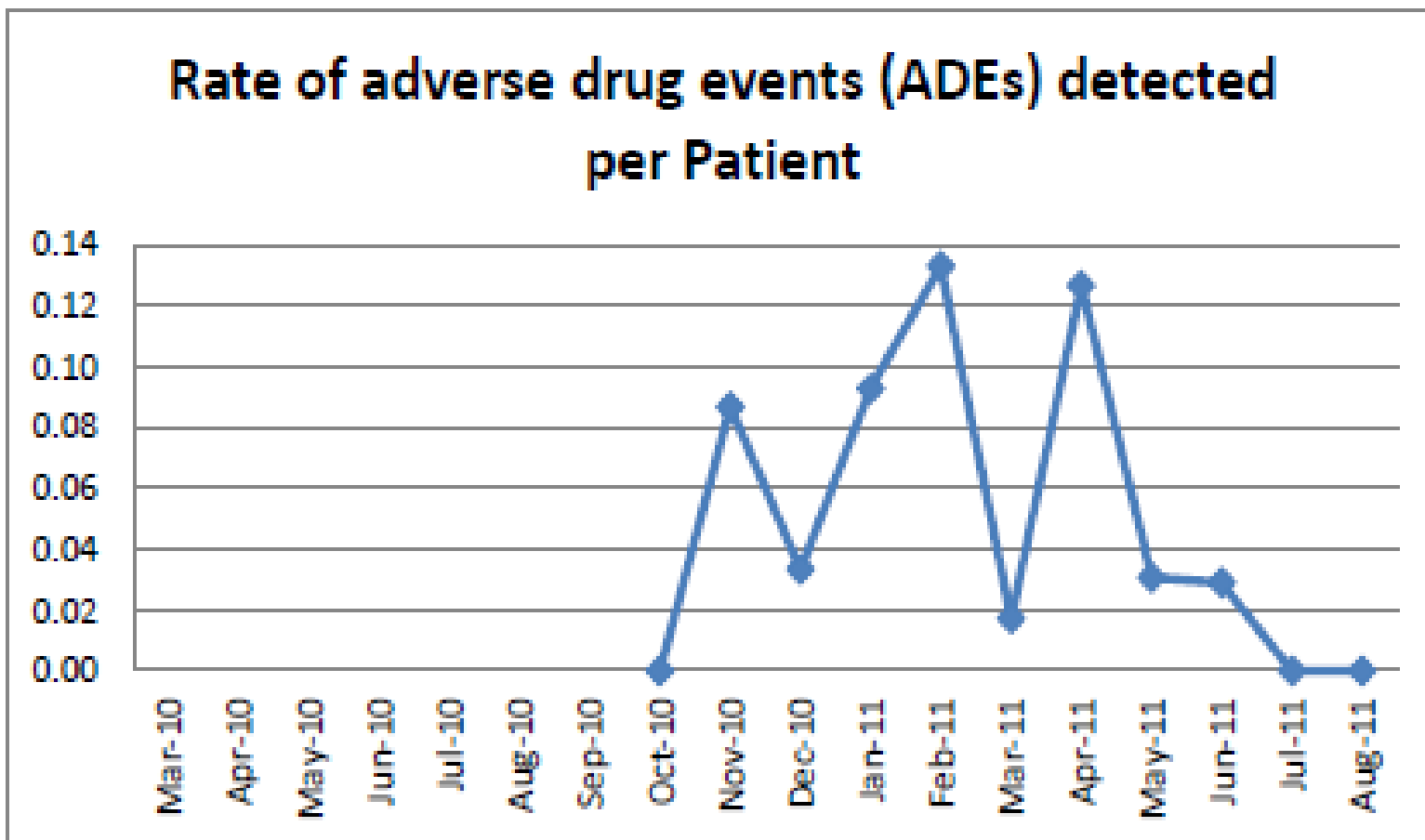
Siouxland Results (continued)



Siouxland Results (continued)



Siouxland Results (continued)



Summary

- Partnerships allow the integrated care team to work more efficiently
- The results obtained allow more patients to achieve their health outcome goals
- Safety is increased by having more eyes with different knowledge reviewing patient information
- The success seen in the first 3 years of the PSPC would not have been accomplished without partners!



HomeMedsSM Medication Management Improvement System: *A Partners in Care Aging Well Innovation*

W. June Simmons, CEO
Sandy Atkins, VP, Institute for Change
Partners in Care Foundation

Partners in Care Foundation: Who We Are

- Partners in Care is a transforming presence, an innovator and an advocate to shape the future of health care through new programs that promote optimal health and quality of life for all, focusing on home and community care



Partners in Care Foundation: Our Mission

- Our mission is to serve as a catalyst for shaping a new vision of health care by partnering with organizations, families and community leaders in the work of changing health care systems, changing communities and changing lives

The Problem

- Medication Errors are:
 - **Serious:** They cause approximately 7,000 deaths per year in the US
 - **Costly:** Annual cost of drug-related illness and death exceeds \$170 billion
 - **Common:** Up to 48% of community-dwelling elders have medication-related problems
 - **Preventable:** At least 25% of all harmful adverse drug events are preventable

Medications & Care Transitions

- Seniors are most at-risk when transitioning from hospital to home or other care setting
- 20% of hospitalized Medicare patients are readmitted within 30 days
- Close to 1 in 5 patients discharged from the hospital suffer an adverse event – 72% of which are related to medications*

*from Mary Andrawis presentation to Drug Safety Panel, May 10, 2011
(cite Forster et al. *Annals of Internal Medicine*. 2003; 128: 161-167. / *CMAJ* FEB 3, 2004; 170 (3))

The Solution -- HomeMedsSM

- HomeMedsSM was developed through funding from the John A. Hartford Foundation and the U.S. Administration on Aging
- HomeMedsSM is designed to enable community agencies to keep people at home and out of the hospital by addressing medication safety
- Practice change with workforces/settings that already go to the home – more cost effective use of existing effort

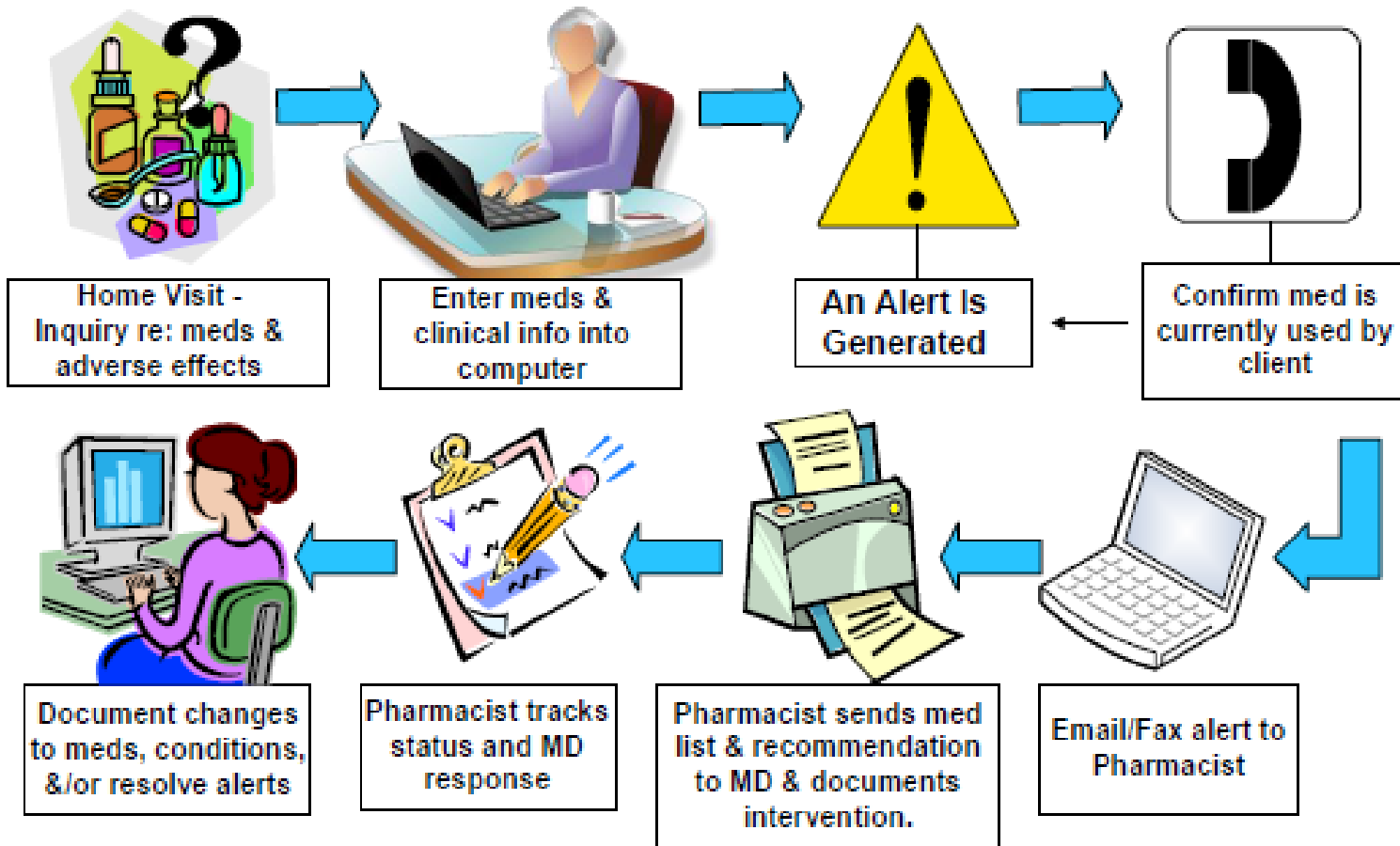
The Solution -- HomeMedsSM (continued)

- Core Components:
 - **In-home collection** of a comprehensive medication list with notes on how each drug is being taken, plus vital signs, falls, symptoms, and other indicators of adverse effects
 - **Use of evidence-based protocols** and processes to screen for risks and deploy consultant pharmacist services appropriately
 - **Computerized medication risk assessment** and alert process with comprehensive report system
 - **Consultant pharmacist** addresses problems with prescribers

Evidence-based Protocols

- Identified by expert panel – chosen for in-home intervention and positive response by prescribers (*minimize “alert overload”*)
 1. Unnecessary therapeutic duplication
 2. Use of psychotropic drugs in patients with a reported recent fall and/or confusion
 3. Use of non-steroidal anti-inflammatory drugs (NSAID) in patients at risk of peptic ulcer.
 4. Cardiovascular medication problems
 - High blood pressure (BP), low pulse, orthostasis and low systolic BP

HomeMedsSM Intervention Process



Home visit uncovers many “secrets”... that prescribers don’t know about

- Over-the-counter medications & supplements
- Medications prescribed by other doctors
- Adverse effects such as falls, dizziness, confusion
- Assessment information
 - Alcohol use, depression screen, etc.
- Incorrect self-dosing (3x/day vs. 3 pills w/lunch)
- Medications from other countries (Canada, Mexico)
- Meds “borrowed” from friends and family

Who's Implementing HomeMeds?

- Medicaid 1915(c) Waiver programs
 - Florida, Illinois, California
- Texas Area Agencies on Aging
 - Alamo/Bexar, Capital, ArkTex, Tarrant, Central, SE
- Minnesota – Carondelet Consortium
 - Assisted Living & Block Nurse Programs
- Wisconsin
 - Aging & Disability Resource Centers/Meals on Wheels
- Native American Tribal Community
- Connecticut – Fairfield U. Nursing School

Wisconsin Aging & Disability Resource Center/Meals on Wheels Example

- Clients screened: **138** (55% with one or more alerts)
- Avg. # meds per client: **11** (incl. 1.5 vitamin/mineral)
- Problems found: **171**
 - Possible Therapeutic Duplication: **94**
 - NSAID (Ibuprofen/Aspirin) and Age Risk for Gastrointestinal (GI) Bleed: **23**
 - NSAID plus blood thinner or corticosteroid: **33**
 - Fall and Psychotropic: **8**; Dizziness and Psychotropic: **9**
 - Elevated blood pressure: **4**
- Examples:
 - Patient >80 taking 3 medications that increase risk of GI Bleed
 - Patient who fell taking 5 meds that increase risk of falls
 - Patient taking 4 narcotic pain killers: hydromorphone, hydrocodone+acetaminophen, fentanyl, hydrocodone

Not just about numbers...

Mr. J. (Tarrant County AAA, TX) states *“I was taking 20 medications at one time. I never knew what they were for and why I was taking them; my wife would bring them with my cup of coffee, she didn’t even understand what they were for! After reviewing all my medications, we realized I was taking the same drug for the same symptoms. I currently am only taking 8 medications. You have saved us money on monthly refills and my life! We can not thank you enough!”*

HomeMedsSM Saves Money, Saves Lives

AltaMed: Major provider of FQHC and other health services and a member of the HRSA Patient Safety Clinical Pharmacy Services Collaborative (PSPC)



Estimated Savings at AltaMed Site: up to \$200,000

(HRSA, 2010, www.hrsa.gov/patientsafety)

HomeMedsSM Saves Money, Saves Lives (continued)

- Falls and other adverse effects improved through collaboration between pharmacists and members of the care team
- 46.7% of the older adults screened in 14 sites from 2007 to 2010 shown to have risk for medication-related injury – average of 2 to 3 potential problems per client.
- Estimated Savings from 7,000 Screenings: up to \$1.5 million. (HRSA, 2010, www.hrsa.gov/patientsafety)

HomeMedsSM Recognition

- HomeMeds is recognized by AoA as an evidence-based prevention program
 - Now under National Registry of Evidence-based Programs and Practices (NREPP) review
- Strong evidence rating on the US Agency for Healthcare Research and Quality (AHRQ) Innovation Exchange
(<http://www.innovations.ahrq.gov/content.aspx?id=2841>)



The Future for HomeMedsSM

Make HomeMeds a standard of care for home-based services, Medicare Advantage plans, etc.

- Connect aging services with healthcare delivery
- Resolve pharmacist reimbursement
- Enhance technology (and policy) for ease of use
 - Integrate into software for community services, EMRs, HIE, etc.
 - Standardize Rx barcodes for scanning

Partners in Care Foundation: Contact Information

HomeMeds Website: www.HomeMeds.org

HomeMeds Information Packet:

http://www.homemedes.org/landing_pages/14,3.html

Partners in Care Website: www.picf.org

June Simmons, CEO: jsimmons@picf.org

Sandy Atkins, VP: satkins@picf.org

Dennee Frey, PharmD: dfrey@picf.org

Phone: 818.837.3775

Resources: Medication Management

- <http://www.hrsa.gov/publichealth/clinical/patientsafety/index.html> (HRSA PSPC)
- <http://www.homemeds.org/> (Home Meds)
- <http://www.ahrq.gov/consumer/healthy.html> (Agency for Healthcare Research and Quality resources on Taking Medicines)
- <http://nihseniorhealth.gov/takingmedicines/toc.html> (National Institutes of Health SeniorHealth resources on Taking Medicines)

Resources: Care Transitions

- <http://www.cms.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?itemID=CMS1239313> (Community-based Care Transitions Program)
- http://www.aoa.gov/Aging_Statistics/Health_care_reform.aspx (AoA's Health Reform page – where archived webinars are stored)
- http://www.aoa.gov/AoARoot/AoA_Programs/HCLTC/ADRC_CareTransitions/Toolkit/index.aspx (AoA's The Aging Network and Care Transitions: Preparing your Organization Toolkit)
- http://www.aoa.gov/AoARoot/AoA_Programs/HCLTC/ADRC_CareTransitions/index.aspx (AoA's Aging and Disability Resource Centers Care Transitions page)
- <http://www.adrc-tae.org/tiki-index.php?page=CareTransitions> (AoA's Aging and Disability Resource Centers Technical Assistance Exchange care transitions page)
- <http://www.cfmc.org/integratingcare/> (Integrating Care for Populations and Communities Aim National Coordinating Center website)

Resources: **Affordable Care Act**

- http://www.aoa.gov/Aging_Statistics/Health_care_reform.aspx (AoA's Health Reform web page – where webinar recordings, transcripts and slides are stored)
- <http://www.healthcare.gov> (Department of Health and Human Services' health care reform web site)
- <http://www.thomas.gov/cgi-bin/bdquery/D?d111:1:./temp/~bdsYKv:./home/LegislativeData.php?n=BSS;c=111> | (Affordable Care Act text and related information)

Next Training

- *Care Transitions and Long-Term Care*
 - Watch your email in November for registration information