

 *Coalition for Care*  
IHA's Hospital Engagement Network

 **Indiana Hospital Association**  
**INDIANA PATIENT  
SAFETY CENTER**

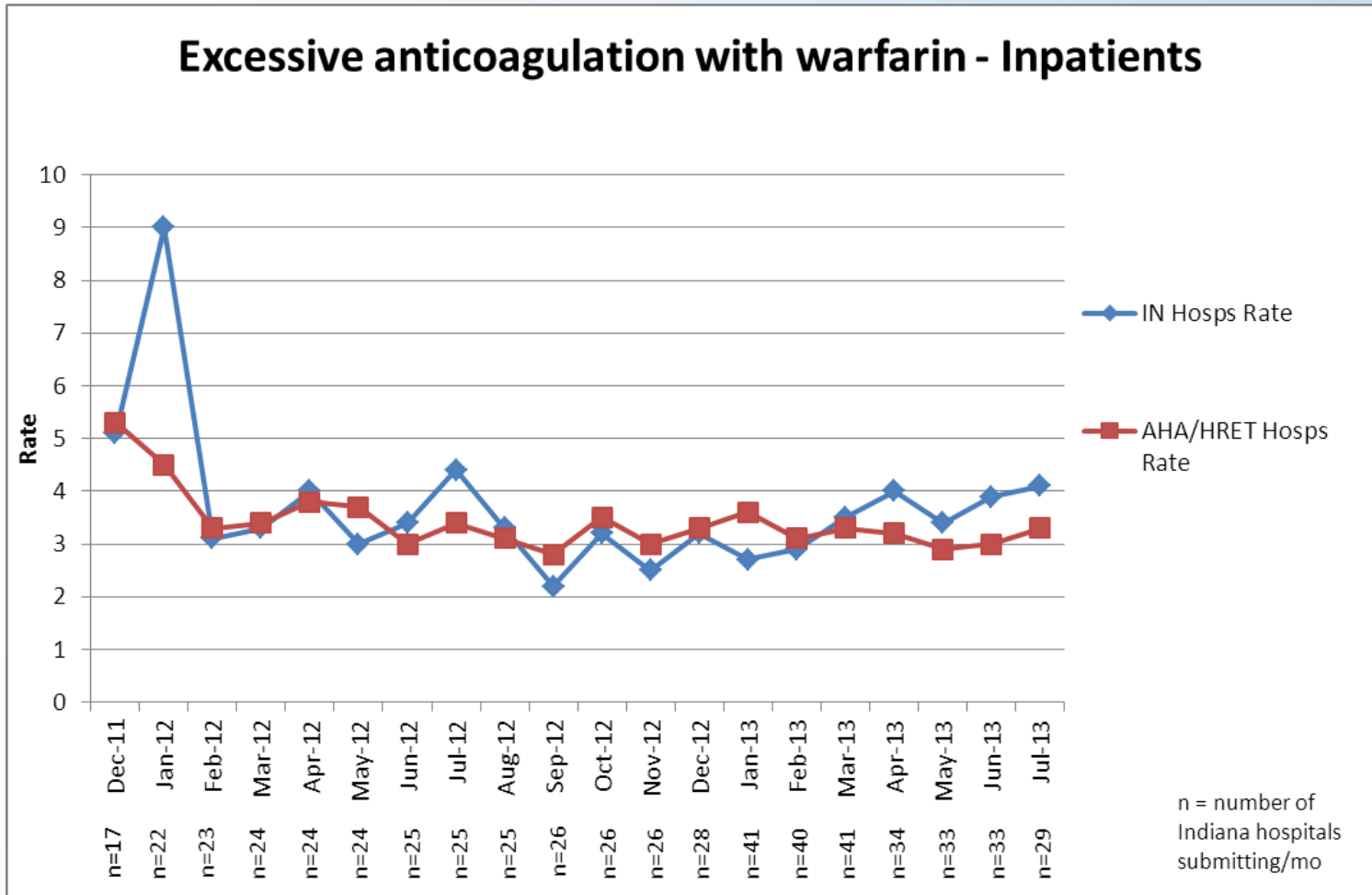
*IHA's Anticoagulant  
ADE Webinar Series:  
Medication Reconciliation  
and  
Health Literacy*

October 29, 2013

 **Indiana Hospital Association**

# Webinar Agenda

- Overview & Introductions – *Betsy Lee*
- Pharmacist's Role in Anticoagulation – Drs. John Hertig & Katelyn Brown
  - Identify key factors to consider when performing medication reconciliation for a patient on anticoagulation (i.e. drug interactions, social history, etc.)
  - Identify common barriers to medication reconciliation
  - Define health literacy and identify strategies to improve health literacy for those patients on anticoagulation therapy
- Wrap-up – *Betsy Lee*



The analyses upon which this publication is based were performed under Contract Number No. HHSM-500-2012-00017C, entitled, "Hospital Engagement Contractor for Partnership for Patients Initiative." This publication's contents are solely the responsibility of the authors and do not necessarily represent the official views of The Centers for Medicare & Medicaid Services.

# Evaluation

- Webinar funded by CMS through the *Partnership for Patients*
- CMS reviews results and wants 80% of participants to evaluate educational sessions
- Please complete the simple three question evaluation by Nov. 8, 2013:  
<https://www.surveymonkey.com/s/ADEWebinarSession3>



## Center for Medication Safety Advancement

### CE Information for the IHA Anticoagulation Bootcamp CE offerings

#### Anticoagulation Boot Camp – Medication Reconciliation with Anticoagulation

**Audience** – This activity is designed for pharmacists.

**Learning Objectives:**

1. Identify key factors to consider when performing medication reconciliation for a patient on anticoagulation (ie drug interactions, social history, etc)
2. Identify common barriers to medication reconciliation
3. Define healthy literacy and identify strategies to improve health literacy for those patients on anticoagulation therapy



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Release Date: **10/29/2013** Expiration Date: **10/29/2013**

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Zach Weber, PharmD, BCPS, BCACP, CDE – Purdue University – has nothing to disclose

**Any CPE questions should be directed to Dawn Sinclair at (765)494-5457 or [sinclaird@purdue.edu](mailto:sinclaird@purdue.edu)**



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# Post Webinar Evaluation

[https://purdue.qualtrics.com/SE/?SID=SV\\_9EK5YP9S2gdKEU1](https://purdue.qualtrics.com/SE/?SID=SV_9EK5YP9S2gdKEU1)

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# Anticoagulation ADE Boot camp: Medication Reconciliation and Health Literacy

**John B. Hertig, PharmD, MS**  
**Associate Director**  
**Assistant Clinical Professor**  
**Purdue University College of Pharmacy**  
**Center for Medication Safety Advancement**

# Learning Objectives

- Identify key factors to consider when performing medication reconciliation for a patient on anticoagulation (i.e. drug interactions, social history, etc.)
- Identify common barriers to medication reconciliation
- Define health literacy and identify strategies to improve health literacy for those patients on anticoagulation therapy



# Medication History Review

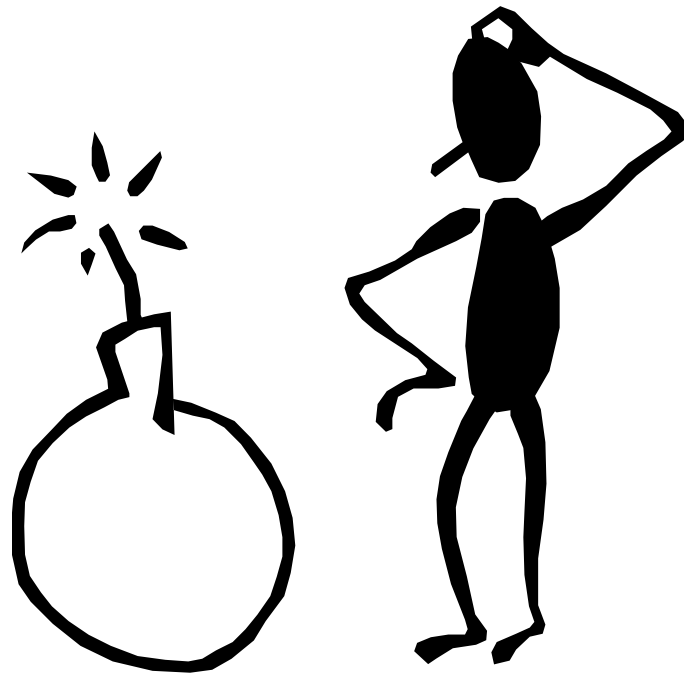
- A structured, critical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimizing the impact of medicines, minimizing the number of medication-related problems and reducing waste



# Medication Reconciliation

- A process of identifying the most accurate list of all medications a patient is taking—including name, dosage, frequency, and route—and using this list to provide correct medications for patients anywhere within the health care system
  - Cognitive or clinical use of the medication history or review

# Why All this Talk about Medication Reconciliation?



# Medication Reconciliation as a Patient Safety Issue

- Studies quantify discrepancies during key transition points such as hospital admission, intra-hospital transfer, and discharge
- Differences between the medications patients' took prior to admission and their admission orders ranged from 30 percent to 70 percent in literature reviews

# Impact of Medication Discrepancies

- More than 50% of admitted patients have at least one discrepancy
  - Medication history vs. pre-admission regimen
  - 27%-59% of these have potential to harm
- Discrepancies are the most common drug-related problems at time of discharge
- Root cause of at least half of all preventable adverse drug events within 30 days after discharge

# National Patient Safety Goals

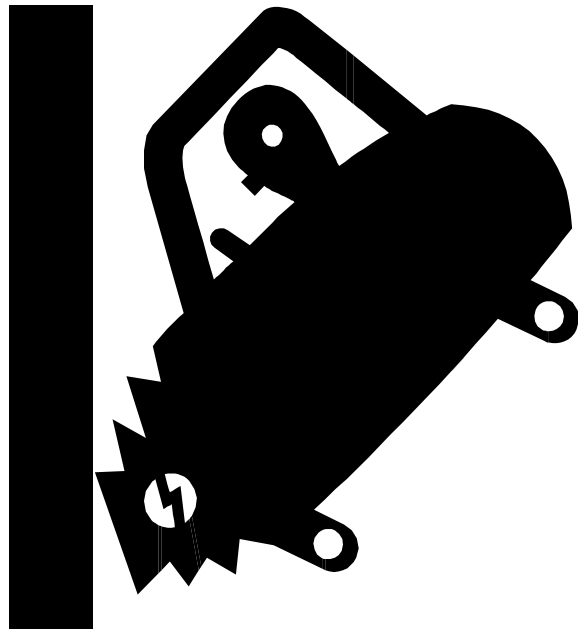
- NPSG.03.05.01
  - Take extra care with patients who take medicines to thin their blood
- NPSG.03.06.01
  - Record and pass along correct information about a patient’s medicines
  - Find out what medicines the patient is taking
  - Compare those medicines to new medicines given to the patient
  - Make sure the patient knows which medicines to take when they are at home
  - Tell the patient it is important to bring their up-to-date list of medicines every time they visit a doctor



# Foundational Principles

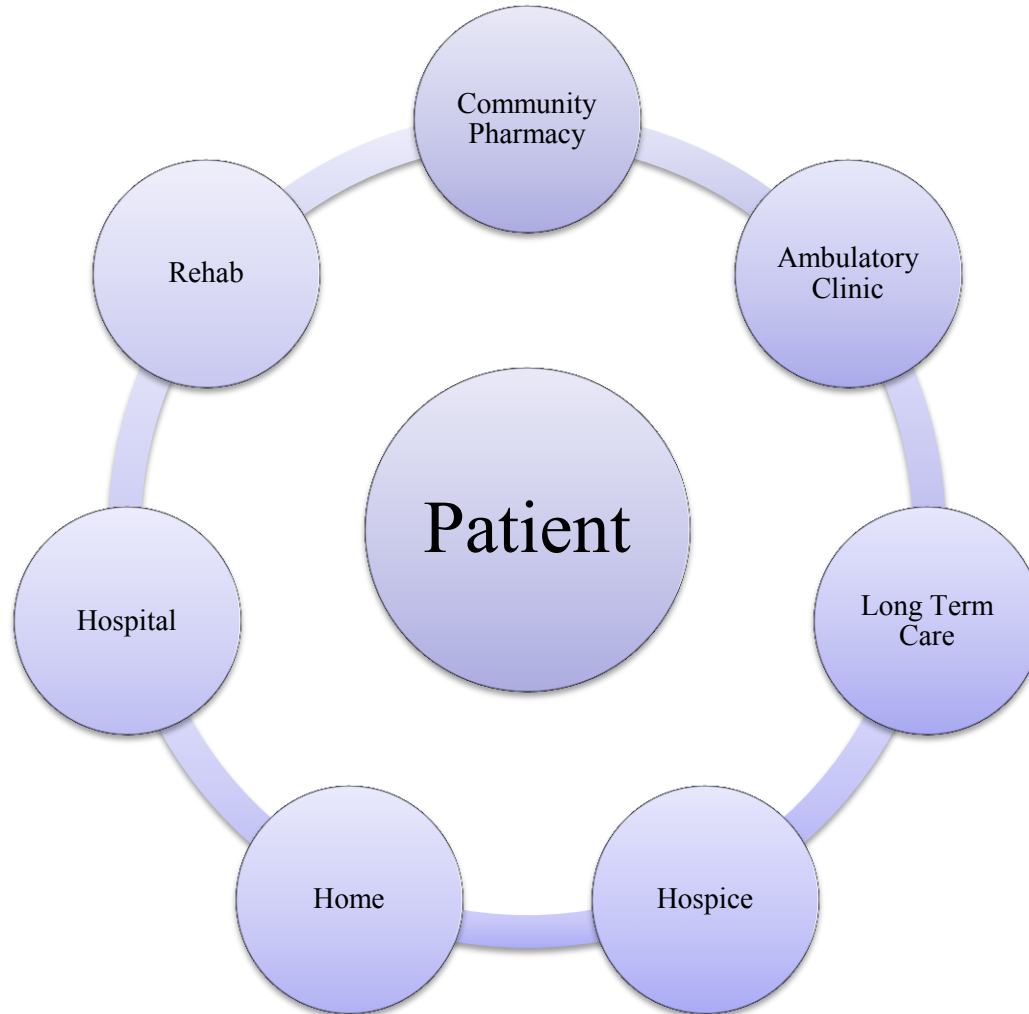
- Care coordination is important for everyone
- Certain populations are higher risk
- Targeted care coordination may be needed:
  - Clinician-level
  - Group/team
  - Practice
  - Organizational-level
- Patient/family involvement is essential

# Barriers to Effective Medication Reconciliation





# Opportunities to Fail



# Assessment Question

- Medication reconciliation is the responsibility of only one profession or discipline.
  - True
  - False

# Barriers and Disconnects



System



Clinician



Patient



# System



# Clinicians

- Misunderstanding about the nature of the next care location
- Communication breakdowns
- External factors not considered
  - Access
  - Cost
  - Preferences
- Very little accountability

# Patient

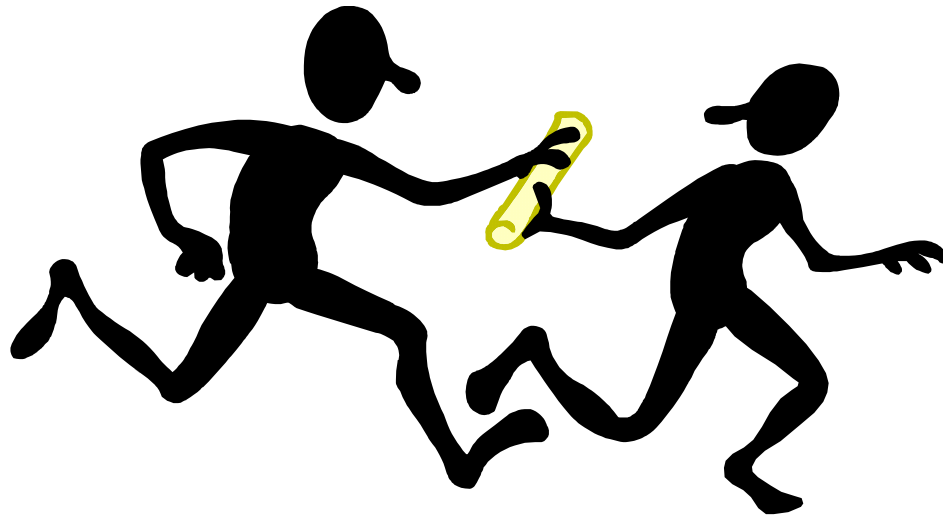
- Passive role in care
- May be the only common linkage between providers
  - Poor historians
  - Limited “assumed” responsibility
- Not given tools and resources to navigate complexity

# Medication Reconciliation: Challenges

- Information from multiple, often inaccurate, sources:
  - Patient/caregiver
  - Primary care physician
  - Medical records
  - Discharge summaries
  - Community pharmacies
- Many disciplines involved
  - Accountability
  - Expectations?
  - Misalignment



# Principles of Effective Medication Handoffs





# Best Practices in Medication Reconciliation

- Many disciplines should be involved (avoid silos!)
  - Physicians
  - Nurses
  - Pharmacists
- Process must be clearly defined
- Responsibilities for each component of the process assigned
  - Expectations
  - Accountability



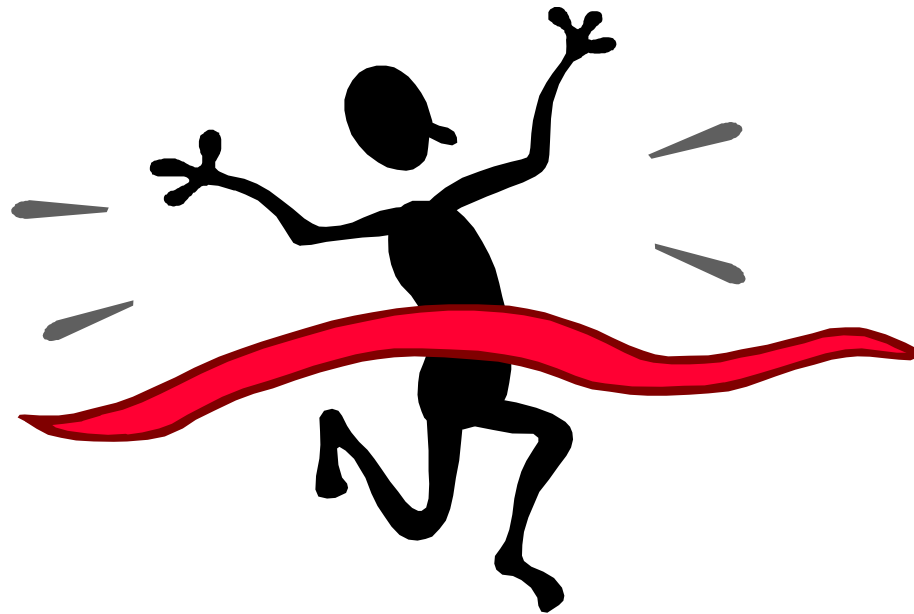
# Best Practices in Medication Reconciliation

- No single universal process will meet needs of all patients entering a hospital
  - Limited number of different processes will likely need to be developed based on patient population and point of entry into hospital
- Successful implementation will require significant training, education, and support from clinical leaders
  - Willingness to engage in continuous improvement and monitoring for compliance are likely success factors

# Additional Care Transitions Strategies

Intervention	Impact
Transition Communication	Discrepancy recognition Decrease ADEs
Patient Education	Side effect awareness Greater medication understanding Decrease ADEs
Follow-up Telephone Call	Discrepancy recognition Increase patient adherence Decrease ADEs
Post-discharge Clinics/ Improved Monitoring	Optimize therapy Decrease ADEs

# Summary



# Summary Points

- Failure to reconcile medications during transitions of care accounts for many preventable adverse events
- To design a robust medication reconciliation process, one must define steps involved and decide who should be responsible for each step
- A reliable medication reconciliation system requires a multi-disciplinary approach
  - Physicians
  - Nurses
  - Pharmacists





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# Anticoagulation ADE Boot Camp: Health Literacy

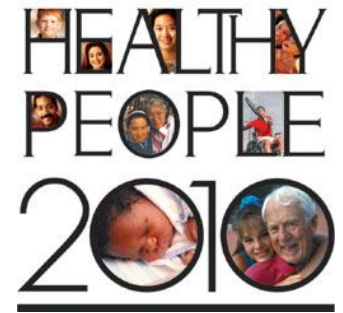
**Katelyn Brown, PharmD**  
**Post-Doctoral Fellow in Medication Safety**  
**Purdue University CMSA/ Eli Lilly and Company/ FDA**

# Learning Objectives

- Define health literacy
- Identify strategies to improve health literacy

# Definition: Health Literacy

- “The degree to which individuals have the capacity to obtain, communicate, process, understand, and act upon health information and services needed to make appropriate health decisions”
  - Affordable Care Act of 2010

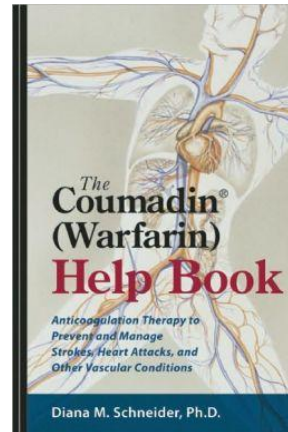




# Literacy vs. Health Literacy

- More than simply the ability to read
- Health literacy requires a complex group of skills

- Reading
- Listening
- Analytical
- Decision-making



Patient Consent			
<i>Patient's details</i>			
Name		Blood group	
Insurance		Group	
<b>Medical history</b>			
Special medical issues	DOB		
Last tetanus shot (Td) DD/MM/YY			
Medication allergies			
History of Asthma Y ___ N ___ History of seizures or other forms of unconsciousness Y ___ N ___ History of heart problems Y ___ N ___ If yes, nature of problem _____			
I _____ do agree to take the following medical procedure _____			
being fully aware of the risks involved. I take full responsibility of my decision and the consequences of the same.			
Doctor		date	
Signed		date	sampleforms.org

# Health Literacy Gap



Individual Skills  
and abilities

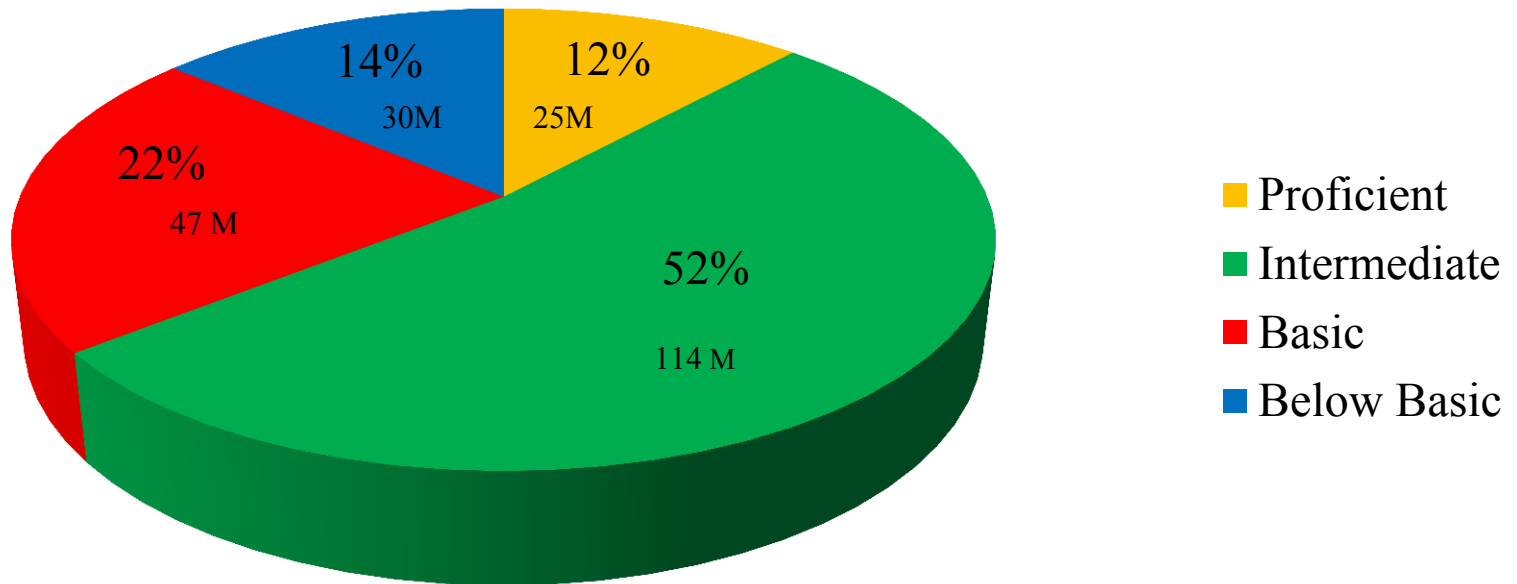
Complexity and  
demands of Health  
and Healthcare system

# Health Literacy in the United States

- **National Assessment of Adult Literacy (NAAL)**
  - Four performance levels
    - **Below Basic**: perform the most simple and concrete literacy skills
    - **Basic**: perform simple and everyday literacy activities
    - **Intermediate**: perform moderately challenging literacy activities
    - **Proficient**: perform more complex and challenging literacy activities

# 2003 NAAL

## US Adult's Health Literacy Levels



Approximately **88%** of Americans do NOT have proficient health literacy skills

# What does this mean?

Nearly 9 out 10 adults lack the skills to

1. Manage their own health
2. Navigate the health care system



# NAAL: Patient Characteristics

- Education level
- Race/ethnicity
- Age
- Primary language spoken
- Language of origin
- Financial status



# Patient Examples

Look back at some of your patient interactions, have there been instances when you suspected a patient might have low health literacy?



# Health Literacy: Anticoagulation Research

- 88% of reading material is at the 9<sup>th</sup> grade education level or higher
- Poor health literacy has the strongest relationship with an elevated INR
  - Produced a 3-4 fold increase in bleeding risk
- 81% of patients on warfarin had no knowledge about its benefits for the treatment of their medical condition
- Between 45% and 70% of older patients on warfarin therapy had insufficient knowledge about the potential risks associated with their treatment



# Health Literacy: Anticoagulation Research

- Outpatient Warfarin Clinic
  - Describe your indication for warfarin
    - 43% answered inaccurately
  - Describe a stroke
    - 40% described a stroke inaccurately
    - Only 33% described the signs/symptoms of a stroke

# Bottom Line

Health Literacy is a **stronger predictor** of health status than

- Age
- Income
- Employer status
- Education level
- Race/ethnicity



# Why is Health Literacy Important?

- Lower utilization of preventative services
- Greater risk of preventable adverse events
- More emergency room visits and hospitalizations
- Higher risk of death
- Higher costs

# Call to Improve Health Literacy

- AMA Foundation 2003
  - “Health Literacy: Help Your Patients Understand”
- Institute of Medicine 2004
  - “Health Literacy: A Prescription to End Confusion”
- The Joint Commission 2007
  - “Improving Health Literacy to Protect Patient Safety”
- Healthy People 2010 & 2020
  - Objectives

# HCP Role in Health Literacy



**N**ever assume a patient has adequate health literacy

**E**ffectively communicate to patients

**E**nvironment needs to be patient-centered

**D**esign system processes that address health literacy issues

# Never assume a patient has adequate health literacy

- Multiple factors affect health literacy
  - Education level
  - Social factors
  - Cultural factors
- Utilize tools
  - Prevalence calculator
  - Observations
  - Screening Questions

Prevalence Calculator

Please input the appropriate number that is the percentage of your practice for each category in the place provided.

About what percentage of the patients in your practice would you say are:

Over 65 years of age	<input type="text"/>	%
Enrolled in Medicaid or other public assistance program	<input type="text"/>	%
White	<input type="text"/>	%
Black (African-American)	<input type="text"/>	%
Hispanic	<input type="text"/>	%
Mainly speak a language other than English	<input type="text"/>	%

The percentage of your patients that might have limited health literacy is at least:  %

<http://www.pfizerhealthliteracy.com/physicians-providers/PrevalenceCalculator.aspx>. Accessed September 24, 2013.

# Effectively communicate to patients

- Use plain language and analogies
- Use open-ended questions
- Focus the take away message
- Check for understanding using “teach back” method
- Pictures and demonstrations are most helpful for low literacy
- Design educational material at the appropriate reading level

# Environment needs to be patient-centered

- Create a warm, welcoming environment
- Engage patients in the dialogue
- Welcome questions
- Address their concerns
- Listen more and speak less
- Encourage them to have someone come with them





# Design system processes that address health literacy issues

- Form a team
- Perform a self-assessment
- Develop an action plan
- Measure outcomes
- Continuous improvement



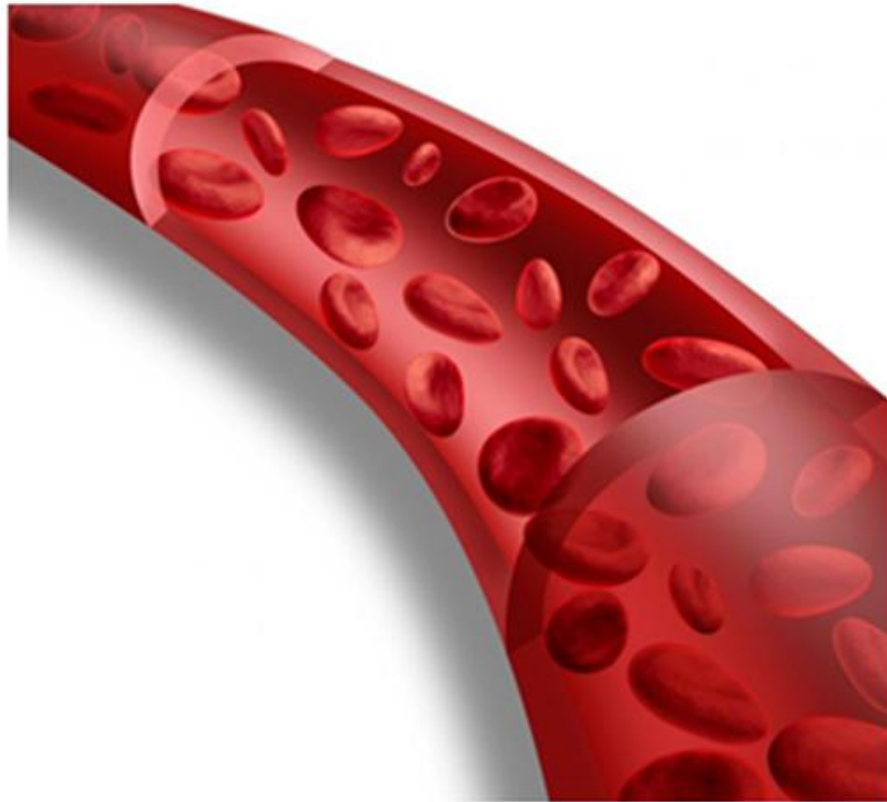
# Take Home Question

- What (if anything) will you change in your practice now that you are aware of the issues of health literacy?

# Putting It all Together

- 9 out of 10 adults have low health literacy
- Health literacy is a strong predictor of health status
- Patients receiving warfarin have many risk factors for having low health literacy
- NEED: Never make assumptions, Effectively communicate, Environment needs to be patient centered and Design processes that address health literacy

# Anticoagulation Boot Camp Toolkit



Improving Safety through Anticoagulation Therapy Management



# Thank you

- Thank you for your participation in this program.





Center for Medication Safety Advancement

# Anticoagulation ADE Boot camp: Medication Reconciliation and Health Literacy

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