"The nexus between health literacy and patient outcomes: Initiatives on the horizon at UAB, in Alabama and across the nation"

Presented by:

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Knowledge that will change your world

# **Objectives**

At the conclusion of the presentation the audience will be able to:

- Identify disparities associated with low health literacy nationwide
- Compare and contrast the economic impact of low health literacy in regions of the U.S.
- Discuss initiatives focused on health literacy at UAB
- Discuss initiatives on the horizon in Alabama
- Discuss initiatives ongoing in the nation



# **Health Literacy**

Health literacy goes beyond a narrow concept of health education and individual behavior-oriented communication, and addresses the environmental, political and social factors that determine health.

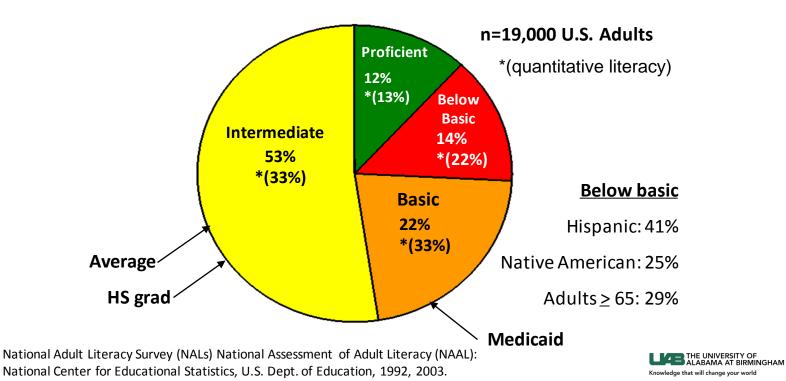
(WHO, 1998)

Defined..."the degree to which individuals **have the capacity** to **obtain**, **process, and understand** basic health information and services needed to make appropriate health decisions." (HHS,2000)

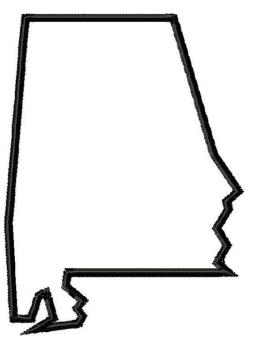


# **National Assessment of Adult Literacy**

Assessed functional skills in clinical, preventive, and navigational tasks



# **General literacy in Alabama**



510,000 of Alabama's Adults (9.5%) lack *basic* literacy skills-*they cannot read* 

25% lack a high school degree

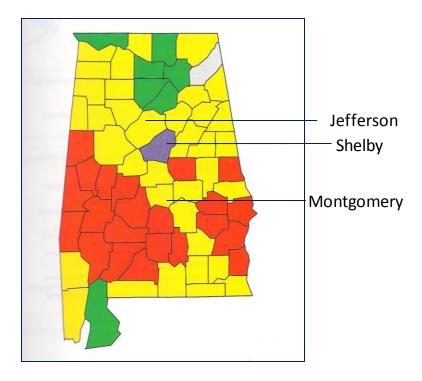
(American Community Survey; NALS 2003)

Up to 59% of adults in Alabama suffer from low health literacy

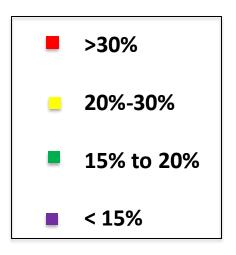
(Source: http://nces.ed.gov/naal/estimates/StateEstimates.aspx)



# Low literacy rates by county-Alabama



<u>% Adults with Level 1 Literacy Skills –reads</u> at or below the 5<sup>th</sup> grade reading level



(NALS, 1992; NAALs 2003)



# Disparities/At-risk populations associated with low health literacy

Those disproportionally affected by low HL are:

- > Poor
- Members of cultural and ethnic minorities
- Recent refugees and immigrants and Non-native speakers of English
- Southern and western region of the US
- Those with less than a HS degree or GED
- LARGEST GROUP: Those who are over the age of 65; (IOM, 2004; NCES 2003;1993)
- > 9 out of 10 American adults have difficulty with health information (Koh, HHS 2007)
- > By **2030 close to ¼ of all US Adults** will be 65 years or older (US Census)

### The FACE OF HEALTH LITERACY-Actual Patient Encounters #1



# **Health outcomes- Alabama**

- 48/50 for diabetes
- 49/50 cardiovascular deaths
- 49/50 for infant mortality
- 47/50 for avoidable hospital use and costs
- 45/50 for overall health outcomes

(2016 America's Health Rankings, United Health Foundation)



# In plain language- health literacy contributes to

- Misunderstanding-routine for patient discharge
- Poor health outcomes
- Mistakes-especially with medication *management-Approximately 28% of hospitalizations of older adults* is attributed to polypharmacy and adverse drug events (ADEs) yielding increased health care costs (\$\$\$\$)
- Excess hospitalizations and less than 30-day readmissions (\$\$\$\$)
- Unnecessary deaths

### The FACE of HEALTH LITERACY-Actual Patient Encounters #2



# **Demographics: Low health literacy in U.S.**

- The south has the greatest percentages of at literacy levels 1 and 2
- 9 states = 37-38% of population
- 18 states = 39-45%
- 14 states = 45-52%
- 7 states = 53-59% (Includes Alabama)
- Mississippi and Louisiana reported the largest number of residents ranked in the lowest literacy levels at 64% and 61%, respectively. (NALS, 1992)



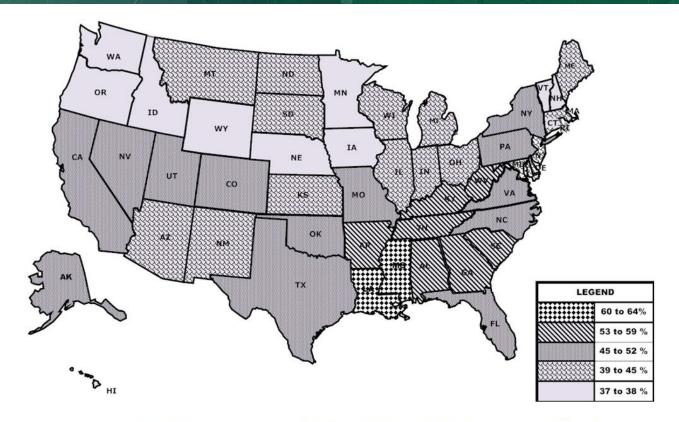


Figure 2. National Adult Literacy Survey Rankings by State 1992: Percentage of Population in each State Scoring at Literacy Levels 1 and 2 (Below Basic and Basic).

Note: From "National Adult Literacy Survey" (1992). Source: U.S. Department of Education. Public Domain Material.

# **Economic impact in the U. S.**

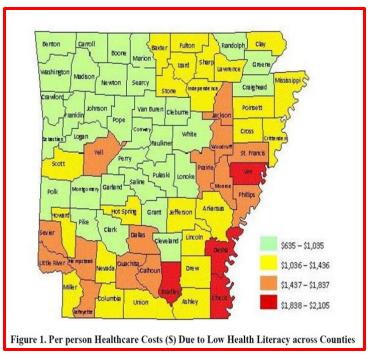
Limited health literacy adds between **\$106 billion** to **\$238 billion** of unnecessary costs per year to an already overburdened health care system nationwide

(Vernon, Trujillo, Rosenbaum, & DeBuono, 2007)



# **ARKANSAS** economic impact

# \$1.3 to \$3 billion each year in unnecessary health care costs





## **IOM Roundtable on Health Literacy**

### Vision of a Health Literate America (2004)

- Everyone should have the opportunity to use reliable, understandable information to make health choices;
- Health content would be basic curriculum for K-12;
- Accountability of all health literacy policies and practices;
- Public health alerts should be presented in plain language;
- Cultural factors integrated in all aspects of patient materials;
- Health care practitioners should communicate with each other using every-day language;
- Provide ample time for discussions between patients and health care providers
- Patients should feel comfortable to ask questions as part of healing process;
- Rights and responsibilities for health care instructions-plain language;
- Informed consent docs developed so all understand if they want to give or withhold consent based on information they need to fully understand.





Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™

SEARCH	۹	
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#### CDC A-Z INDEX ✓

### Health Literacy

Health Literacy
Health Literacy Basics
Find Training
Create a Health Literacy Plan
Collaborate
Guidelines, Laws, & Standards
Develop & Test Materials
Health Literacy Research
Evaluate Skills & Programs
Activities by State
Contact Us

### Health Literacy Activities By State



### Health Literacy Activities by State

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### K-12 Literacy and Numeracy State Data

- <u>National Assessment of Educational Progress (NAEP)</u> Reading, Math and Science scores for 4th, 8th and 12th graders ₫
- Program for International Student Assessment (PISA) Reading, Math and Science Literacy scores for 15 year olds 🗗



# Provider knowledge caring for low HL populations-Providers are not prepared-Research Examples

• U. S. Medical Schools

(Coleman& Appy, 2012)

• Nurses and other health professionals

(Jukkala, Deupree, Graham, 2009; Mackert et al, 2011)

- Rural Family doctors, family medicine residents, nurses, and other health professionals (Coleman & Fromer, 2015)
- Medical students Academic Family Medicine residents

(Coleman, Garvin, Peterson-Perry, Sachdeva & Kobus, 2017)



### **Online Health Literacy Course offered by the CDC**

- Training in health literacy, plain language, and culture and communication is essential for anyone working in health information and services. Whether you are new to these topics, need a refresher, or want to train your entire staff, the following courses are a good place to start.
- CDC <u>offers five online health literacy courses</u> for health professionals. Using Numbers and Explaining Risk Online Training is part of health literacy training available to the public.



### **Patient-Centered Label -Improve Understanding and Adherence\***

Micha	ael Wolf	04/29	)/71	Rx#:1234567 10/30/2008	Important	
Glybur	ide 5 mg	:		You have <b>11</b> refills 180 pills Discard after <b>10/30/2009</b>	Do not drink alcohol.	GLYBURIDE 5 mg
Take	for <u>Diabe</u> 2 pills at 2 pills at	breakfa	st	Provider: Ruth Parker, MD Emory Medical Center (414) 123-4567	Limit your time in the sun.	Take for Diabetes
Breakfast	Lunch	Dinner	Bedtime	Pharmacy: NoVA ScriptsCentral 11445 Sunset Blvd. Reston, VA (713) 123-4567		2 2 2
2		2		NDC # 1234567		

RCT in 11 FQHCs. 429 pts w DM and/or HTN. Average 5 meds Mean age 52, 28% W, 39% low literacy

	Standard Label	PC Label
Understanding	<b>59</b> %	74%
Adherence (3 months)	30%	<b>49</b> %

\*State Board of Pharmacy in CA passed legislation for this label



# Wisconsin will soon pilot test of new pharma labels

### Still Time to Vote for Your Favorite Label!

Over 800 people have already completed the Favorite Label survey and shared their opinions on what makes a good prescription label. We are well on our way to our goal of 1000 responses. Have you taken the survey yet?

If you haven't, please take a moment to take the (very short) survey. You can also choose to share a story about when you or someone else was confused by medication



labels. Keep reading for a look at some of the stories we've received so far.

Click HERE to begin.

Please share the link -- bit.ly/VoteMedLabel -with your friends and family.

### Here Are Some of the Stories: What's Yours?

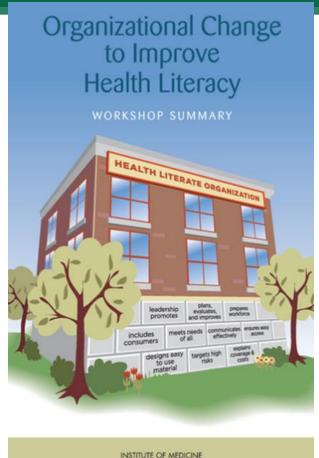
Here are a few stories from the Favorite Label Vote. These cases illustrate the impact of unclear prescription medication labels:



# The Re-Engineered Discharge Toolkit









OF THE NATIONAL ACADEMIES

### The 10 Attributes of a Health Literate Organization

- 1. Has leadership that makes health literacy integral to its mission, structure, and operations.
- 2. Integrates health literacy into planning, evaluation measures, patient safety, and quality improvement.
- 3. Prepares the workforce to be health literate and monitors progress.
- 4. Includes populations served in the design, implementation, and evaluation of health information and services.
- 5. Meets the needs of populations with a range of health literacy skills while avoiding stigmatization.
- 6. Uses health literacy strategies in interpersonal communications; confirms understanding at all points of contact.
- 7. Provides easy access to health information and services and navigation assistance.
- 8. Designs and distributes print, audiovisual, and social media content that is easy to understand and act on.
- 9. Addresses health literacy in high-risk situations, including care transitions and communications about medicines.
- 10. Communicates clearly what health plans cover and what individuals will have to pay for services.



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MEDICINE

ENGINEERING

### HEALTH AND MEDICINE DIVISION





### **Professional Organizations and Development Opportunities**

### International Health Literacy Association

### December 12, 2016

After years of preparation we have now launched the new International Health Literacy Association (IHLA). With many supporting colleagues across the world we held three unifying launching meetings in Europe, Geneva; North-America, Washington; and Asia, Haiphong in October and November 2016.







Empowering People Toward Better Health

International Conference on Communication in Healthcare Health Literacy Annual Research Conference October 8-11, 2017



{HARC} HEALTH LITERACY ANNUAL RESEARCH

IN PARTNERSHIP WITH





# Alabama Health Literacy Stakeholder Meeting February 2016



**Building Healthier Communities** 

### By Executive Order #18 by Alabama's Governor a Partnership was Named in April, 2016

#### Health Literacy Partnership of Alabama Leadership Team

- 1. Chair- Joy Deupree, UAB School of Nursing; a Robert Wood Johnson executive nurse fellow.
- 2. Vice Chair Nancy E. Dunlap, professor emeritus of medicine, the University of Alabama at Birmingham.
- 3. John Beard, president and chairman, Alacare Home Health and Hospice Services, Inc.
- 4. Peggy Benson, executive officer, Alabama Board of Nursing.
- 5. Cynthia Bisbee, executive director, The Wellness Coalition, Montgomery.
- 6. Rosemary Blackmon, executive vice president and chief operating officer, Alabama Hospital Association.
- 7. Jim Carnes, policy director, Alabama Arise.
- 8. Joann Clough<sub>64</sub> transitional care coordinator and registered nurse, UAB Hospital.
- 9. Michael Crouch, dean and professor, McWhorter School of Pharmacy, Samford University.
- 10. Chanda Crutcher, chief executive officer, American Senior Assistance Programs, Inc.
- 11. Conan Davis, assistant dean for community collaborations and public health, UAB School of Dentistry.
- 12. Robin DeMonia, senior vice president, Direct Communications.
- 13. C. Ann Gakumo, assistant professor, UAB School of Nursing; Robert Wood Johnson nurse faculty scholar.
- 14. Leah Garner, director of governmental affairs and advocacy, the Business Council of Alabama.
- 15. Anne Hails, associate state director of community outreach, AARP Alabama.
- 16. Paul Kennedy, president, Walker Area Community Foundation.
- 17. Karen Kennedy, associate dean, UAB School of Business.
- 18. Kathleen Ladner, co-leader, Alabama Health Action Coalition; adjunct associate professor at UAB School of Nursing.
- 19. Patricia Marincic, associate professor, College of Human Sciences, Auburn University.
- 20. Tom Miller, medical director, Alabama Department of Public Health.
- 21. Margaret Morton, president, advisory committee, Alabama Network of Family Resource Centers.
- 22. Nan Priest, executive vice president and chief strategy officer, St. Vincent's Health System.
- 23. Anne Schmidt, associate medical director, Blue Cross Blue Shield of Alabama.
- 24. Wesley Smith, chief executive officer, Alabama Quality Assurance Foundation.
- 25. Julia Sosa, director, Office of Minority Health, Alabama Department of Public Health.
- 26. John Stone, manager, community action, Children's of Alabama.
- 27. David Walters, Director for Adult Education, Alabama Community College System.
- 28. Cody Thompson, Director of Health Related Programs, Alabama Community College System.
- 29. Darlene Traffanstedt, member of the State Committee of Public Health; an internal medicine physician in Hoover.
- 30. April Weaver, Alabama House of Representatives.
- 31. Deborah Wesley, chief nursing officer, Children's of Alabama.
- 32. Jackie Wuska, president and chief executive officer, The United Way of West Alabama.

### How do we improve patient/family-centered care and communication?

### Early steps-

- Implementation of a quick assessment during intake for patients in clinics (anxiety levels are less than in hospital)
- Evaluate all patient education to ensure all are created using Culturally and Linguistically Standards (CLAS) and meet the NIH recommended level to be written at less than a <7<sup>th</sup> grade reading level; <u>use SIMPLY PUT to guide development for usability and understandability.</u>
- Professional Development for all employees that have contact with patients (CDC modules)

### **Advanced Work**

- Pilot a best practices for discharge teaching system (The Re-Engineered Discharge Project shows great promise with complete support from administration- pilot on one unit)
- Determine if your agency/system meets the minimum criteria for the "10 Attributes of a Health Literate Organization" and if not, implement a quality improvement plan to achieve that status.



## Notable Accomplishments in Alabama Since May 2016

- 50+ presentations to develop and explore partnership opportunities
- Alabama Hospital Association Train the Trainer Workshops (2 in summer 2016)
- Alabama Board of Nursing Module Offerings (4 modules) offered online (reached 85K nurses in Alabama).
- Pharmacy initiative for state during National Pharmacy Week (AU student project)
- Medicaid of Alabama-revised 3 letters that will go out to approximately 650,000 potential Medicaid customers
- Children's of Alabama-Developed fever management tool used in the ER-ACT project.
- Health Literacy Internship Mentorship and Facilitation: Leslie Pensa (MPH/MD student) will intern with Dr. Darlene Traffanstedt and Dr. John Waites outcomes found at:<u>https://www.youtube.com/watch?v=Y1nRsWw80ZM&feature=youtu.be</u>
- Cahaba Valley Dental Clinic- mentoring MPH students to revise all patient information sheets and patient education materials (Indigent Care Clinic)



### **Notable Accomplishments since 2016 continued**

- Collaborated with the Alabama Department of Rural Development to create the messaging for the Baby Box Project for Alabama
- Elsevier National webinar attended by ~250. Resulted in White Paper found at: <u>file:///C:/Users/deupreej/Documents/PRESENTATION%20MATERIAL/Communicati</u> <u>ng-Effectively-with-Diverse-Patient-Populations%20(1).pdf</u>



### **Research Activities – since May 2016**

- Advocated for BRFSS Questions to be added (analysis expected mid-2017)
- Alabama Hospital Association –collaborated with AlaHA for Quality Improvement project; analysis of 84 PEMs in 9 hospitals in AL and compared HCAHPS data for communication, and size of facility for analysis. Publication expected to be completed in September, 2017.
- Geriatric Scholars at UAB- Integrated a health literacy assessment into routine care at UAB Heart Clinic and Breast Clinic.
- DNP Project Mentor for Indigent Heart Failure Clinic and TKC for quality improvement
- Alabama Board of Nursing to launch a survey for nurses in AL
- Strategic Plan established by the Alabama Health Literacy Partnership



Vision: All Alabamians have the understanding they need to make informed health decisions and achieve their best possible health.

Mission: The mission of the Health Literacy Partnership of Alabama is to support patient-centered educational opportunities, guide outreach activities, and create partnerships to advance health literacy and improve health outcomes.

		Priority Areas	
	Community Engagement	Educational Opportunities	Sustainability
		Goals	
1. 2. <b>3.</b>	Identify critical needs Develop partnerships/engage stakeholders Establish venue to disseminate resources	<ol> <li>Establish professional development requirements</li> <li>Develop public awareness campaigns</li> <li>Explore opportunities K-12</li> </ol>	<ol> <li>Develop sustainability plan</li> <li>Establish a platform for the organization</li> <li>Explore opportunities for funding</li> </ol>
		Strategies and Objectives (Action Steps	(ئ
2.	<ul> <li>prioritize areas in need of improved health literacy efforts.</li> <li>1a) Conduct a statewide inventory of existing health literacy assets and activities such as Adult Basic Education (GED), ESL courses, library based and faith based efforts for literacy classes, community resource centers, etc.</li> <li>1b) In association with the ADPH identify critical clinical and demographic needs for beginning health literacy efforts such as infant mortality, CVD, and diabetes)</li> <li>1c) In association with the ADPH review analysis of the (4) Behavioral Risk Factor Surveillance System questions specific to HL previously added to ADPH data base for 2016 to determine next steps for action.</li> </ul>	<ol> <li>Encourage health related professional associations and licensure boards in AL to offer health literacy continuing education for new graduates and practicing healthcare providers.         <ol> <li>Seek partnerships to support health literacy education for all health related professionals.             <li>Advocate for health literacy requirements in continuing education for healthcare providers who have been working in the field but have not participated in health literacy, cultural competency, and language access training.</li> <li>Support efforts for institutions of academic learning to incorporate training for healthcare students to ensure health literacy, plain language, and culturally and linguistically appropriate services (CLAS) are included in curriculum.             <ol> <li>Convene a meeting of deans and leaders from institutions to establish a plan to promote inclusion of coursework on health</li> </ol> </li> </li></ol></li></ol>	<ol> <li>Establish a sustainability plan         <ol> <li>Create a governing board and infrastructure which includes members who are racially and ethnically diverse and/or bilingual.</li> <li>D) Create a detailed business plan and budget to present to potential funding agencies to demonstrate need for financial support.</li> <li>Develop metrics to assess organizational results from health literacy priority areas and goals of the strategic plan.</li> </ol> </li> <li>Explore possibilities for a non-profit partnership(s)         <ol> <li>Explore existing non-profit organizations that may want to serve as the platform for the HLPA.</li> <li>Explore opportunities to create a new non-profit organization.</li> <li>Participate in and help recruit cross-disciplinary coalitions to promote, advocate, and increase awareness for health literacy initiatives.</li> </ol> </li> </ol>

HE UNIVERSITY OF ALABAMA AT BIRMINGHAM 2a) Develop a comprehensive network for partnership opportunities in order to leverage HLPA work (see List of Partnerships) that supports efforts to improve the health literacy skills of providers and consumers. 2b) Support evaluation studies that examine health literacy factors that influence other issues including but not limited to patient safety, emergency preparedness, health care costs and social determinants.

 Develop and maintain a repository to serve as an information source for health literacy initiatives, activities, and resources and make them available to healthcare providers and consumers.

3a) Develop a website to make resources readily available to providers and consumers.

3b) Identify linkages to advance the sharing of health literacy resources.

3c) Identify existing nationwide health literacy resources for inclusion in the repository for providers and consumers.

 Develop partnerships with the business community to raise awareness of the disparities of health literacy in Alabama.
 4a) Identify champions in the business community that seek to support health literacy initiatives.

4b) Develop a white paper-A Business Case for a Statewide HL Initiative- using examples developed by other states such as Arkansas, Wisconsin.

4c) Develop pilot programs to establish ROI of health literacy improvement initiatives. literacy and CLAS in curricula of all health professions.

2b) Incorporate vignettes with diverse patients, including new readers, in course presentations and trainings for health professionals.

3. Establish Alabama Partners in Health Sciences Program (outreach to PreK-12)

3a) Use direct and developmentally appropriate health literacy curriculum to enhance understanding of health and health care.

3b) Incorporate health education into existing science, math, literacy, social studies, and computer instruction in grades K–12 by embedding health-related tasks, skills, and examples into lesson plans

3c) Using existing best practices from other states provide professional development opportunities for K-12 educators with a focus on age-appropriate health literacy education.

 Create /leverage public awareness campaigns addressing the challenges patients and families encounter when dealing with complex health care regimens.

4a) Leverage existing health literacy public awareness campaigns to bring awareness to health literacy issues in Alabama.4b) Vet campaigns with non-traditional focus groups (e.g. low literate patients). 3a) Establish funding for health literacy initiatives—both alone and integrated into existing programs.

3b) Access networks with community and faithbased organizations, social service agencies, and nontraditional partners—such as foster care services, poison control centers, and literacy service providers— to deliver health and safety information to different community programs and events.

3c) Support and participate in media sponsored events and projects.

3d) Develop a speakers bureau to expand outreach.

3e) Send quarterly newsletters and expand base of followers via social media efforts.

#### 4. Seek grant opportunities.

3a) Develop a template for all partners to use to seek funding for health literacy initiatives.
3b) Establish a Health Literacy Consortium for the purpose of targeted grant solicitation to include members from UA, UAB, UAH, AU, Samford, Troy, USA and others with interest.
3c) Explore funding available from NIH, PCORI, Private Foundations, NINR, the business community and others to address critical needs as determined by needs assessment.

 Host an annual event to maintain awareness and to raise funds for future projects <u>sponsored</u> by the HLPA.

4a) Plan annual event

4b) Follow examples of events from

organizations when they were getting started (example: Wisconsin, Minnesota, Florida, Arkansas)

4c) Include a training component at the annual event.



Using Literacy & Numeracy in Diabetic Education

Knowledge that will change your world

#### Organizations

#### Traffanstedt Internal Medicine

- · Primary care practice in Hoover, AL that provides quality healthcare to adults in the Birmingham area
- Preceptor: Darlene Traffanstedt. MD

#### Cahaba Medical Care

- FQHC & PCMH in Centreville. AL that provides comprehensive medical care to patients of all ages and backgrounds
- Preceptor: John Waits. MD

#### Public Health Context

#### Defining The Issue

- The average American reads at the 8<sup>th</sup> grade reading level
- · Proper diabetes management requires basic numeracy & literacy skills
- · Insulin-dependent diabetics must do basic math on a daily basis

#### The Tangible Impact

- · A community health problem was identified & investigated
- · Many admitted for the first time that they faced this barrier to health
- · People were educated & empowered about their health
- · Healthcare workers were given tools to improve community health

#### The Potential Impact

- · Decreased health disparities
- · Improved individual & community health
- · Community partnerships to improve care
- · Significant cost reduction

#### Leslie Pensa **MD/MPH Joint Program** May 29th - June 23rd, 2017

#### Description of the Experience

#### My Role

- Assess patient literacy & numeracy
- Teach basic diabetes pathophysiology, disease management skills, carbohydrate counting, & provide nutrition counseling

#### My Projects

- · Develop a system to streamline literacy & numeracy assessments & incorporate them into primary care visits
- · Promote understanding of individual deficits through the use of additional assessment tools
- Create universally user friendly blood glucose log
- Integrate patient literacy/numeracy information into the EMR

#### On-Site Discoveries

- At CMC, about 35% of the diabetic patients I worked with fell into either the limited or marginally literate categories
- Marginal literacy: averaged 10<sup>th</sup> grade education
- · Limited literacy: averaged between 8th 9th grade education
- · Many of these patients were noted as "non-compliant" in the EMR



- · The universal precaution approach is not feasible
- · You cannot predict a person's literacy/numeracy level based on short conversation or occupational status
- · Literacy level & grade level are not synonymous
- · Most patients are much less confident in their numeracy skills
- Educated patients can still struggle with understanding health



Knowledge that will change your world

#### Lessons Learned

#### Lesson 1: You have to gain the trust of the community in which you serve

· I had to get to know the patient population. before I could truly begin my assessment & intervention - without finding a connection to the patient & community, my efforts were futile

#### Lesson 2: You have to be willing to adapt

· It took several attempts to discover the best way to assess patient literacy/numeracy & how to best use that information to help the patients understand their diabetes & how to manage it

#### **Competencies Demonstrated**

Apply design & analytical methods to describe. implement, evaluate & interpret research addressing public health concerns

 I identified health risk through meetings with community leaders and stakeholders & through extensive literature review

#### Design public health programs, policies & interventions, including planning, implementation, & evaluation

- I carefully selected several literacy & numeracy assessments based on evidence based practice:
- Brief Health Literacy Screen (BHLS)
- Subjective Numeracy Scale (SNS)
- Prescription Label Quiz

#### Communicate public health issues, research, practice. & intervention strategies effectively

- · At the halfway point, I met with my mentors to discuss my findings
- Educational attainment does not equate with health maintenance ability
- · Universal precautions do not work for literacy
- Numeracy is overlooked as a necessary tool to health achievement

Special thanks to my preceptors. Dr. Darlene Traffanstedt. Traffanstedt Internal Medicine, and Dr. John Waits. Cahaba Medical Care. In addition, thank you to Dr. Joy Deupree, who served as my faculty mentor at the UAB School of Nursing, and Ms. Glenda Stanley, at the Alabama Area Health Education Center program for their coordination and support in making this internship possible.

- Calendar Interpretation Activity

### Assessments for Low Health Literacy at the Individual Level

 Recommend- the Brief Health Literacy Screening Tool (BRIEF) (UAB is pilot testing this in two clinics); 4 items; 2 minutes or less

• For a complete list of "tools" of the trade, visit the

Health Literacy Tool Shed



The Know Your Meds-Alabama Campaign –(2016) CMS funding Alabama Quality Assurance Foundation Prevention of medication-related harm from antipsychotics and antibiotics

25,000 high-risk Alabama Medicare beneficiaries

By September 30, 2018, the care of 25,000 Alabama High Risk Medication (HRM) Medicare Beneficiaries will improve as evidenced by:

40% Reduction in adverse drug events (ADEs) Reduced 30-day hospital readmissions and avoidable readmissions Reduce antipsychotic medications among nursing home residents Recruit 100 outpatient settings to fully embrace and implement core elements of the Center for Disease Control and Prevention (CDC) Antibiotic Stewardship (AS) Program





# Study of hospitals in the south June 2017-June 2018-early analysis

Health Literacy: Associations between patient education materials used for discharge, HCAHPS data, hospital size and CMS 30-day readmission penalties.

> Joy P. Deupree, PhD, RN at the UAB School of Nursing, Birmingham, Alabama; Dixie Peterson, DNP, RN at UAB School of Nursing, Birmingham, Alabama; Peng Li, PhD at the UAB School of Public Health; Rebecca S. Miltner, PhD, RN at the UAB School of Nursing, Birmingham, Alabama.



# **METHODS**

- Convenience sample; cross-section pilot study -collaboration with rural and non-rural hospitals (N = 9) located in the southern region of the U.S.
- Pearson correlation coefficients (r) -relationship between variables
- Wilcoxon test was used for the group comparisons
- Patient education materials (PEMs) used for DC teaching (n = 84)
- Public data –

HCAHPS questions (n=5) patient satisfaction scores for communication with physicians, nurses and staff

Size of hospital

2016 CMS penalties for less than 30 day hospital readmission.



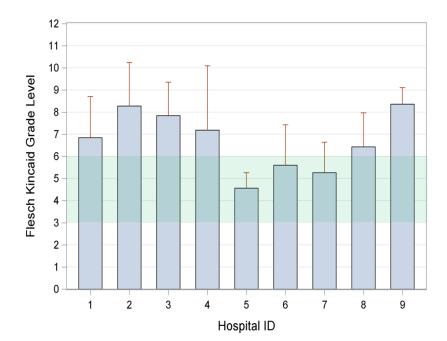
Self-reported hospital size, reflecting the number of inpatient beds, was stratified into three groups:

- 3 small (< 100)
- 4 medium (100-199)
- 2 large (> 200)



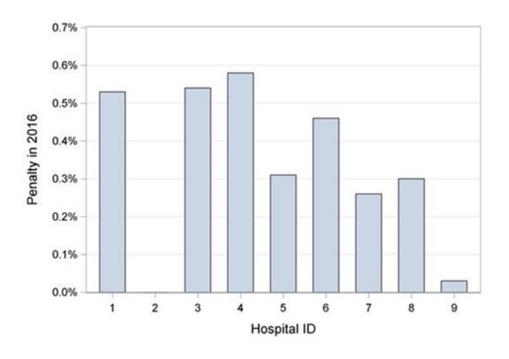
# PEMS- should be <6<sup>th</sup> grade reading level (NIH & AMA)

(5) hospitals average - meet a sixth-grade reading level



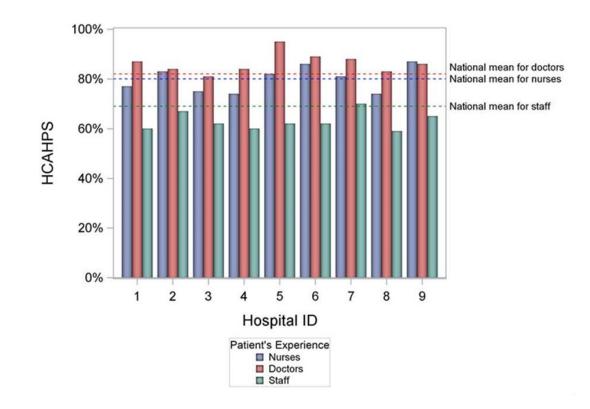


Regarding readmissions penalties, penalties are negatively correlated with HCAHPS for nurse (r=-0.62, p=0.0750) and staff (r=-0.63, p=0.0669) but not for doctors (r=-0.08, p=0.8444)





The patient satisfaction rates for communications are roughly equal or better than the national average for doctors but fall short for nurses and **staff comparisons.** 





 Hospital size was negatively correlated with patient satisfaction rates on communication with physicians (r = -0.77, p < 0.0001), nurses (r = -0.68, p < 0.0001), and staff (r = -0.35, p = 0.0010). The smaller the hospital, the higher the satisfaction rates with communication

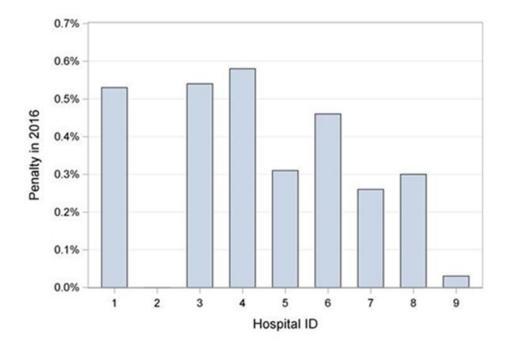
 The patient satisfaction rates on communications with physicians were 90.0 ± 4.6%, 85.0 ± 3.2%, and 83.5 ± 0.7% for small, medium, and large hospitals, respectively



# **Readmission penalties**

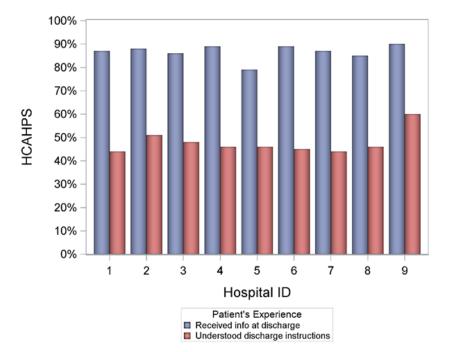
negatively correlated with HCAHPS for nurses (r=-0.62, p=0.0750) and staff (r=-0.63, p=0.0669) but not for doctors (r=-0.08, p=0.8444)

As patient satisfaction scores increase for nurses and staff; penalties decrease





Approximately 10-15% of patients report that did not receive information at discharge. For those who report receiving it, on average less than 50% understood the discharge information.





## Health Literacy Research at UAB for Numeracy Anne Gakumo, PhD, RN

#### Patient Preference and Adherence

### Dovepress

ORIGINAL RESEARCH

"Keep it simple": older African Americans' preferences for a health literacy intervention in HIV management

> This article was published in the following Dove Press journal: Patient Preference and Adherence 29 January 2015 Number of times this article has been viewed

Carrie Ann Gakumo<sup>1</sup> Comfort C Enah<sup>1</sup> David E Vance<sup>1,2</sup> Efe Sahinoglu<sup>3</sup> lim L Raper<sup>1,3,4</sup>

School of Nursing, Center for

Nursing Research, <sup>3</sup>School of Medicine, <sup>4</sup>1917 HIV/AIDS Outpatient

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8 Open Access Full Text Article

Purpose: Health literacy is lower in minorities and older adults, and has been associated with nonadherence to medications, treatment, and care in people living with human immundeficiency virus (HIV). Likewise, African Americans with HIV are more likely to be nonadherent to their HIV medications, less likely to keep their clinic appointments related to HIV treatment and care, and more likely to die during hospitalizations than their ethnic counterparts. The present study explored the preferences of older African Americans with HIV for a health literacy intervention to promote HIV management.

Patients and methods: In this qualitative study, 20 older adult African Americans living with HIV were recruited from an HIV/acquired immunodeficiency syndrome outpatient clinic in the centre and the UC bits methods rentire and the second second

A Qualitative Study on Health Numeracy and Patient–Provider Communication of Laboratory Numbers in Older African Americans with HIV

C. Ann Gakumo, PhD, RN\* Jim L. Raper, PhD, CRNP, JD, FAANP, FAAN, FIDSA Diana K. Cerice, BSN, RN Michael J. Stand-Gravois, BSN, RN Michael J. Mugavero, MD, MHSc



(CrossMark

### How to re-create easy-to-understand materials-Student Assignment in NUR 383 at UAB School of Nursing using CDC Tool "Simply Put"

### **Original Doc**

<u>Simply Put</u>



A guide for creating easy-to-understand materials



	actor:	Iment (Date and Time or Ti	Phone # for Docto me Frame):	tor or Clinic:Location;		
1	Green-Ge		Use preventive m	edicine sick or well, ev	en deu	
	Breathing is good     No cough or wheeze     Can work and play		Medicine Strength Route	How much to t	to take When to take II	
			* Rinse mouth after Inhaled madications 20 minutes before sports, use this medicine:			
2.1	Yellow-Caution		Take quick-relief medicine to	keep an asthma attack f	rom gelling bad	
÷	Cough Wheeze Tight Chest		Medicine (CIRCLE one) Albuterol MOI	How much to take 4 puffs with spacer	When to take it	
٠	<ul> <li>Wake up at night</li> </ul>		Xopenex MDI	4 puffs with spacer		
			* If not improved within 1-2 days	, notify M.D. If worsens n	olify M.D. Immediately	
3. Red – Stop – Danger			Get help from a doctor now! Take these medicines until you talk with your doctor.			
<ul> <li>Medicine is not helping</li> <li>Breathing hard and fast</li> </ul>			Medicine (CIRCLE one)	How much to take		
:	Nose opens wide Can't walk		Albuterol Xopenex	How much to take. MDI 4 puffs with spacer or unit dose nebulized MDI 4 puffs with spacer or unit dose nebulized Immediat		
:	Ribs show Can't talk well					
			If child is universived 20 min. after "Freshnent, repeat. If child remains in red zone after 2 <sup>-44</sup> treatment, or worsens during treatments, give 3 <sup>-44</sup> treatment and seek modical attention as soon as possible. If child spreyoue, roburn (o yeak wor zone treatment plan and robity M.D. of child having been in red zone			
				THMA TRIGGER		
					<u>×</u>	
	ger. 1 air/pollution:	Control Measure Stay indoors on these day	ys as much	*Colds: Av	ntrol Measure rold contact with ill person	ns; frequent
• Ho		Stay indoors on these day as possible. www.airnov Avoid exposure both insid	v.cov/index le. outside, and in car.	*Colds: Av ha * House Dust: All	rold contact with ill person nd-washing; annual flu vi ergy proof mattresses and	t pillow
· Ho	ot air/pollution:	Stay indoors on these day as possible. www.airnoy Avoid exposure both insic Call 1-800-784-8859 to o Clean bathrooms with 1:1 child is away; reduce hum work in areas with decay	A covindex le, outside, and in car. uit smoking now. O bleach solution when hidly in home; avoid yard no leaves and grass; keep	*Colds: Av * House Dust: All Col Cel hu two	rold contact with ill person nd-washing; annual flu w ergy proof mattresses an wors; avoid stuffed animai illing fan use; use a/o and amldity low in home; duat o (2) times weekly—remo	d pillow Is; avoid keep
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* Ho *Cig *Mol	arette smoke:	Stay Indoors on these day as possible. www.alroo Avoid exposure both insic Call 1-800-784-8859 to go Clean bettrooms with 1:1 child is away; reduce hum work in areas with decayi closets wait vented; avoid avoid house ptants and ar Clean house with child is	v.cov/index lia. outsido, and in carr. uit smoking now. O bleach sofution when islity in home, avoid yard ing leaves and grass; keep foring in basement areas; auatiums. away. avoid use of perfumes keep food containers; keep abits throubhout home	*Colds: Av ha *House Dust: All col cei hu tw fr *Animala with fur: Av *Pollens: Sti	rold contact with ill persor nd-washing; annual flu va ergy proof mattreases ani- vers; avoid stuffed anima: lling fan use; use a/c and whidily low in home; duat o (2) limes weekly—remo possible.	d pillow d pillow ls; avold keep and vacuum we carpets bunts are hower and unts are

Form # 835-Revised 1/2014

Flesch Reading Ease of 62.7, and a Flesch-Kincaid Grade Level of 5.2.

#### **Re-Created Asthma Action Plan** Know your common asthma triggers: Strong smells and perfumes Hot/Cold air and pollution Mold and mildew Animals with fur Cigarette smoke Roaches Pollen Dust What to do in each zone: Green Zone Use daily inhaler Can breathe easy · Rinse mouth after using inhalers · No coughing or wheezing · Use fast-acting inhaler 20 minutes before · Can work and play any sports or exercise Yellow Zone · Use fast-acting inhaler to keep breathing good Coughing · Call your doctor if breathing is not Wheezing better in 1-2 days Tightness in chest · Call 911 if breathing gets worse Unable to sleep after fast-acting inhaler use Red Zone Call 911 now! · Use fast-acting inhaler and get help · Inhaler not helping · If breathing gets better, go to · Breathing hard and fast the yellow zone and call the · Nose opens wide doctor Ribs show



# Walker County Bold Goals Coalition



### IMPROVING HEALTH OUTCOMES THROUGH COORDINATED CARE

As basic as it may seem, lack of communication and protocol among doctors, nurses, hospitals, pharmacies and rehab facilities is often where patient healthcare breaks down. While each individual or entity has the best of intentions, care is usually provided without the benefit of knowing a patient's history or what other treatment he or she may be currently receiving. But that's changing in Walker County.

On August 11th, the Leadership Team of the Walker County Health Action Partnership (anchored in part by the Bold Goals Coalition and

United Way of Central Alabama) voted to approve the new Coordinated Care Priority Group. Chaired by Joette Kelley Brown and Co-Chaired by Alicia Stewart, both of Ridgeview and Ridgewood Health Services, the group's overarching goal is to improve the health of Walker County residents by increasing the coordination of providers along the continuum of care. As the name implies, care coordination is a process through which teams of healthcare professionals work together to ensure that their patients' health needs are being met and that the right care is being delivered in the right place at the right time by the right person. This newly approved priority group has been meeting for several months to identify the causes of poor patient outcomes, build capacity and determine ways to work together to improve outcomes and reduce hospital readmissions. Priority Group members have been working with the Center for Medicare & Medicaid Services and the Alabama Quality Assurance Foundation to perform a root-cause analysis and develop actionable steps to get organized and address pressing issues.

The Coordinated Care Priority Group will be primarily focused on:

- advancing health literacy and medication safety
- improving the transition of care
- enhancing end-of-life care.

There are at least 19 organizations currently involved in the priority group, including health systems, home healthcare providers, hospice, skilled nursing facilities, outpatient rehabilitation providers and local pharmacies. As the local hospital, Brookwood Baptist-Walker will play a key role in the effectiveness of this new priority group. Using local data will be key to tracking and monitoring the impact of the group's efforts on patient health outcomes.

If you would like more information on how to join the Coordinated Care Priority Group, please contact Elyse Peters, Health Action Partnership Specialist, at



SOMEONE FROM THE GYNA COLLEGES CALLED. THEY SAID THE PABST BEER IS NORMAL.

> I DIDN T EVEN KNOW YOU LIKED BEER.

an4





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