Addressing Health Literacy and Health Communication in Population Health

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Disclosures

• **Previous Funding Support:** RWJ Clinic Scholars Program, UNC Department of Medicine, Vanderbilt Diabetes Center, Vanderbilt DRTC, Vanderbilt Center for Health Services Research, Pfizer Clear Health Communication Initiative, ADA (Novo Nordisk), K23/R03, AADE, National Academy of Medicine

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• **Disclosures:** EdLogics (Advisory Board), Boehringer Ingelheim

Outline

- Increasing demand for population and health system related research

- Definition of population health

- Addressing Health Literacy and Health Communication in Population Health

Health Challenges

- Over 50% of recommended care is not achieved.
  - Significant disparities in health outcomes
  - Overuse, underuse and misuse of health services
- Up to 50% of patients do not comply with care recommendations.
  - 20% of patients do not fill initial prescriptions
  - 50% of patients do not take prescriptions as recommended
  - Lifestyle changes can be more challenging
- Navigation of our complex health system is challenging:
  - Patients asked to perform more complex self-care
  - Clinic visit times and hospitalizations are shorter
  - Patients only recall 20% of what is told to them in the doctor's office.
  - Less than 50% of patients know their discharge medications or plan.
- Rapidly changing health care environment (ACA, ACOs, bundled payments, etc)
- Resources are limited with increased emphasis on patient-centeredness, population health, CER, quality, and cost-effectiveness
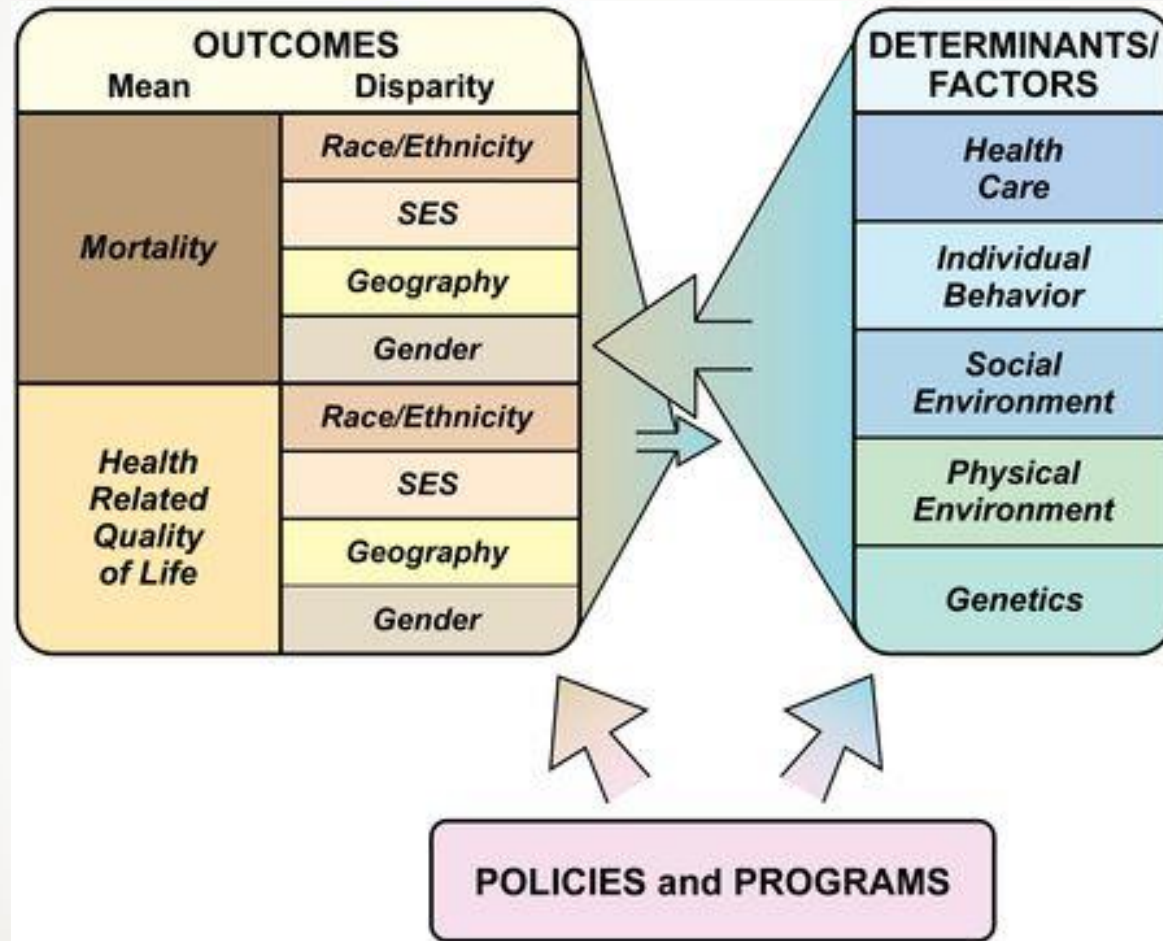
Why inadequate care?

Population Health Definition

- Population health is defined as the health outcomes of a group of individuals, including the distribution of such outcomes within the group.

- Population health is not just the overall health of a population but also includes the distribution of health, and the health of individuals.

- Distinct from public health which traditionally includes public health departments focused on preventing epidemics, containing environmental hazards, and encouraging healthy behaviors.
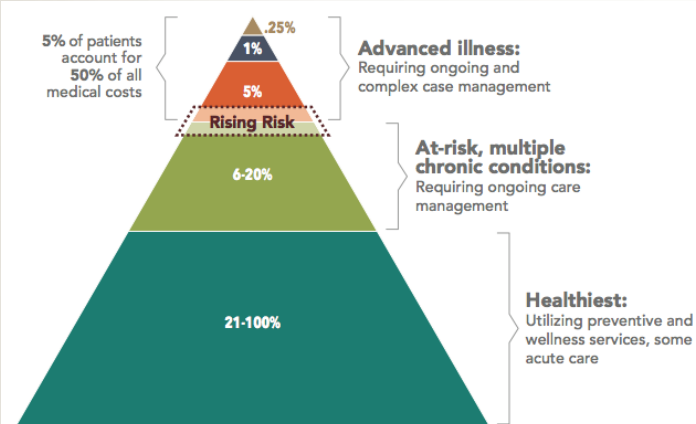
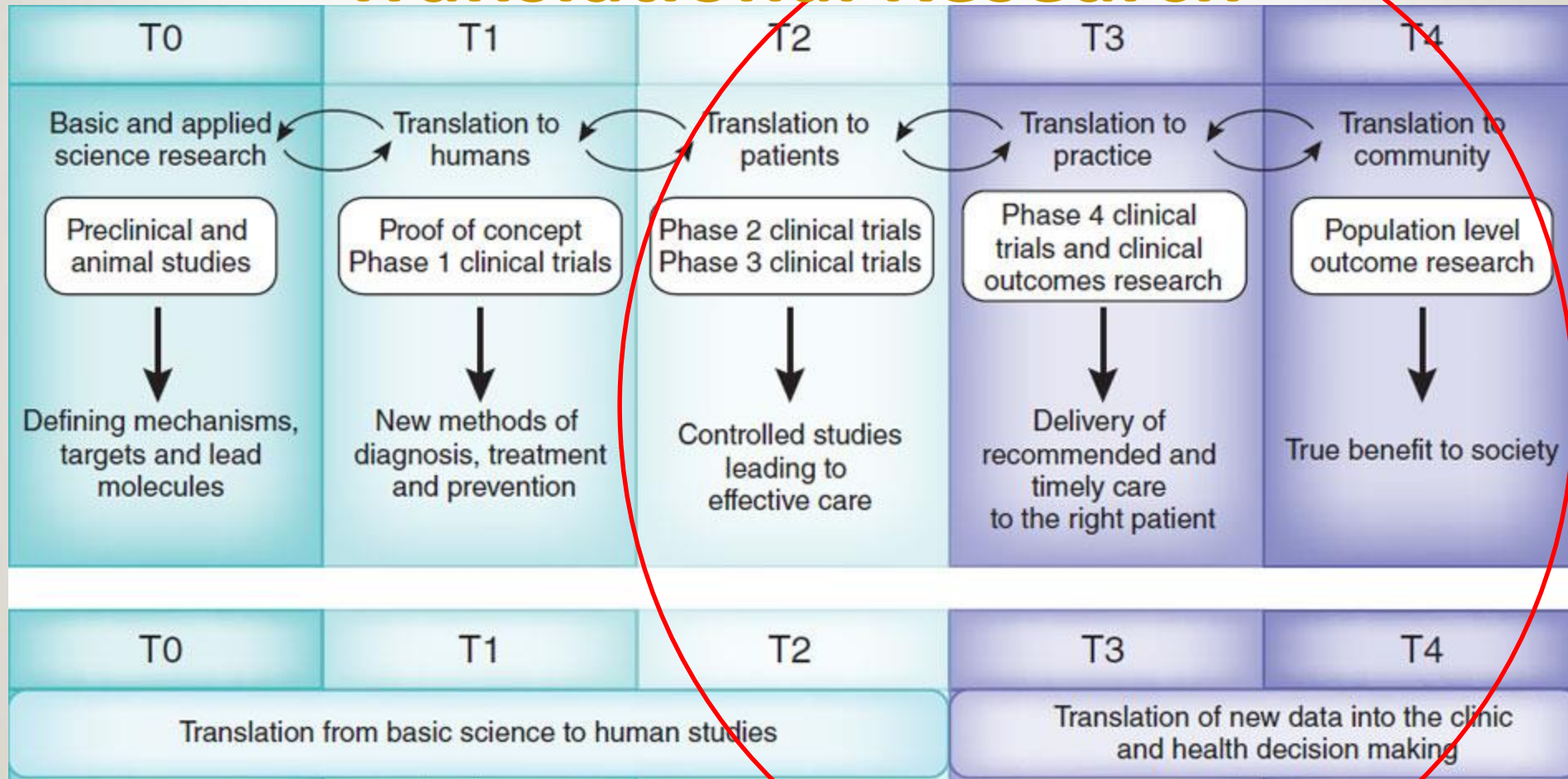http://www.improvingpopulationhealth.org/blog/what-is-population-health.html

Population Health Paradigm

Population Health Management

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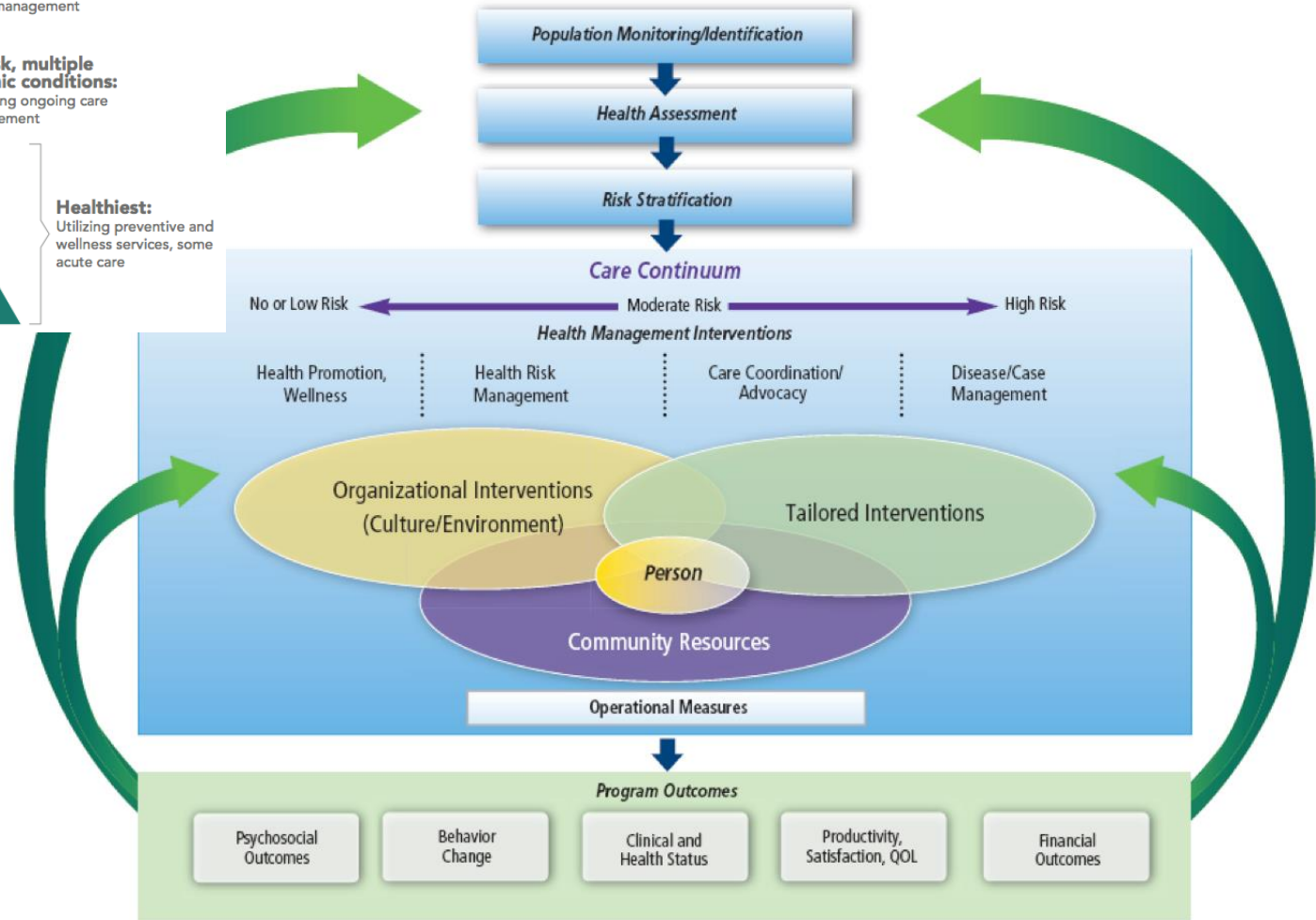
Increased emphasis on Translational Research

T0	T1	T2	T3	T4
Basic and applied science research	Translation to humans	Translation to patients	Translation to practice	Translation to community
Preclinical and animal studies	Proof of concept Phase 1 clinical trials	Phase 2 clinical trials Phase 3 clinical trials	Phase 4 clinical trials and clinical outcomes research	Population level outcome research
Defining mechanisms, targets and lead molecules	New methods of diagnosis, treatment and prevention	Controlled studies leading to effective care	Delivery of recommended and timely care to the right patient	True benefit to society

T0	T1	T2	T3	T4
Translation from basic science to human studies			Translation of new data into the clinic and health decision making	

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Addressing the Evidence Gaps
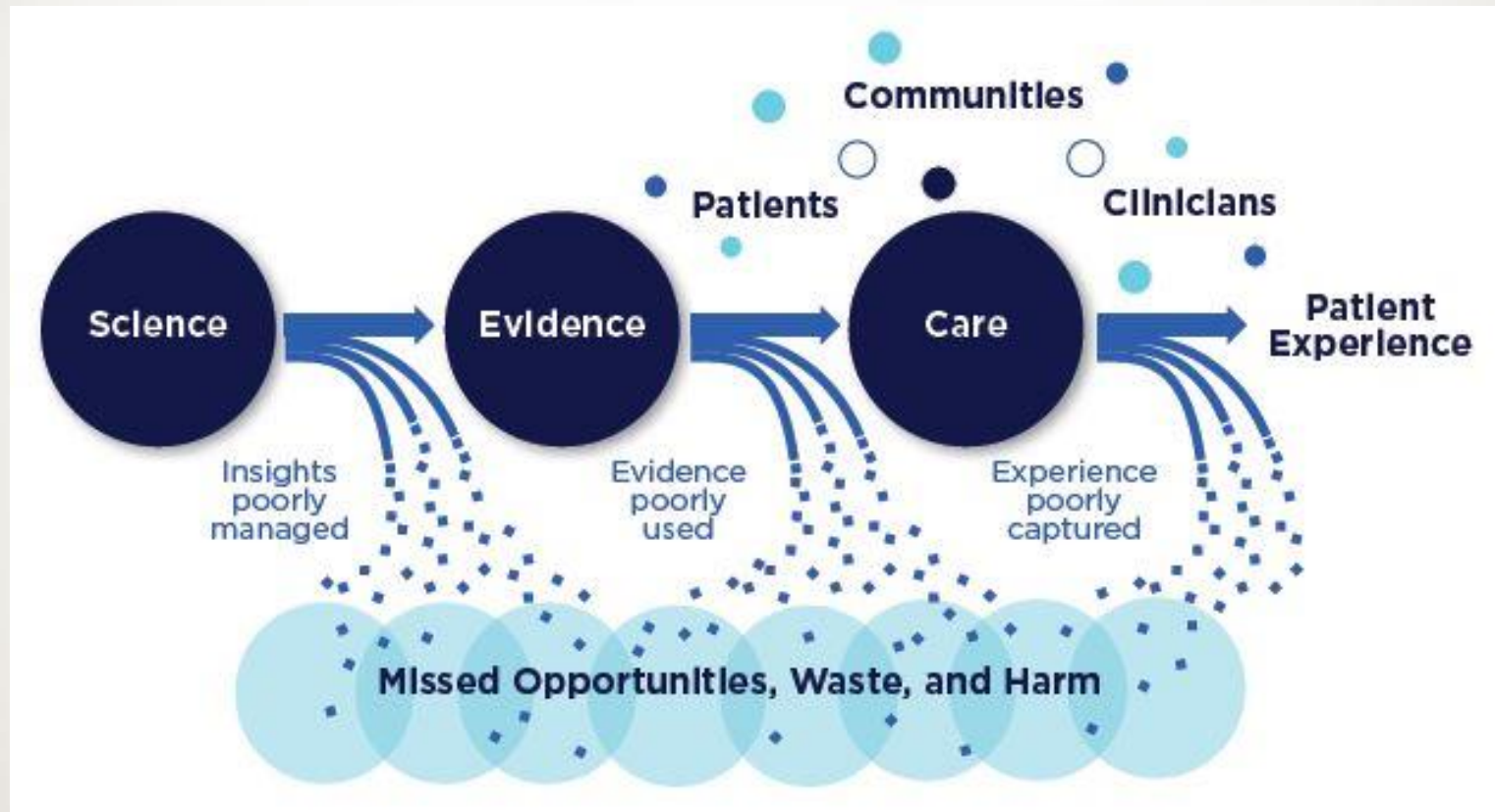
# Status of Population Health Research

- Observational data documenting the importance of social, behavioral, and health system factors as key determinants of health outcomes.

- Intervention studies, including RCTs, have demonstrated the value of behavioral interventions, system level interventions, and community interventions.

- Studies to date can be limited by residual confounding, short duration of follow-up, inadequate assessment of adverse events, lack of scalability, and other factors.

- Opportunities for more robust research – particularly related to the role of health communication/health literacy!

  - Health Affairs, 2014
  - Advancing the Science to Improve Population Health, August 2016, NAS

Concern about Literacy and Numeracy Skills
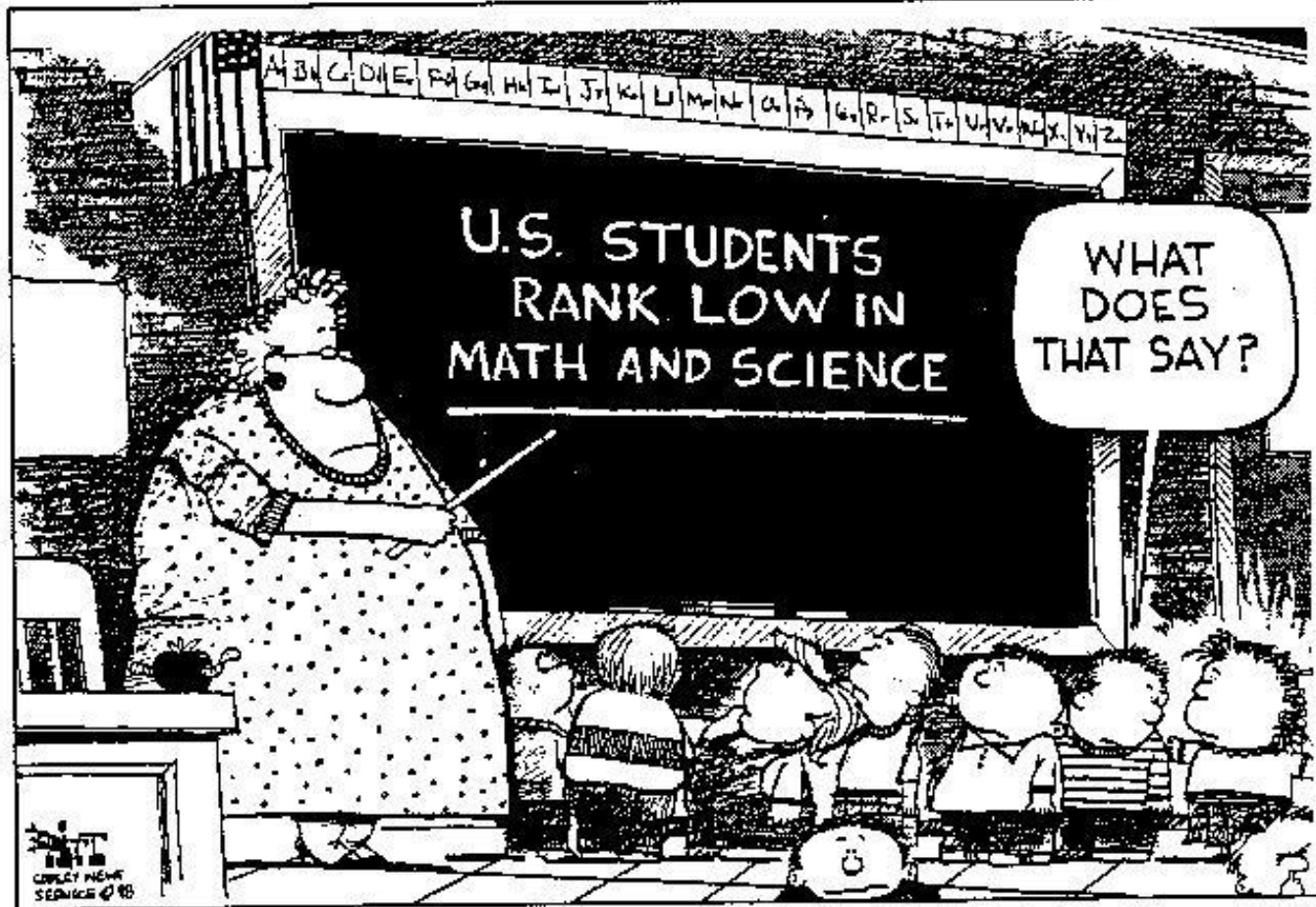
Literacy is a Complex Skill
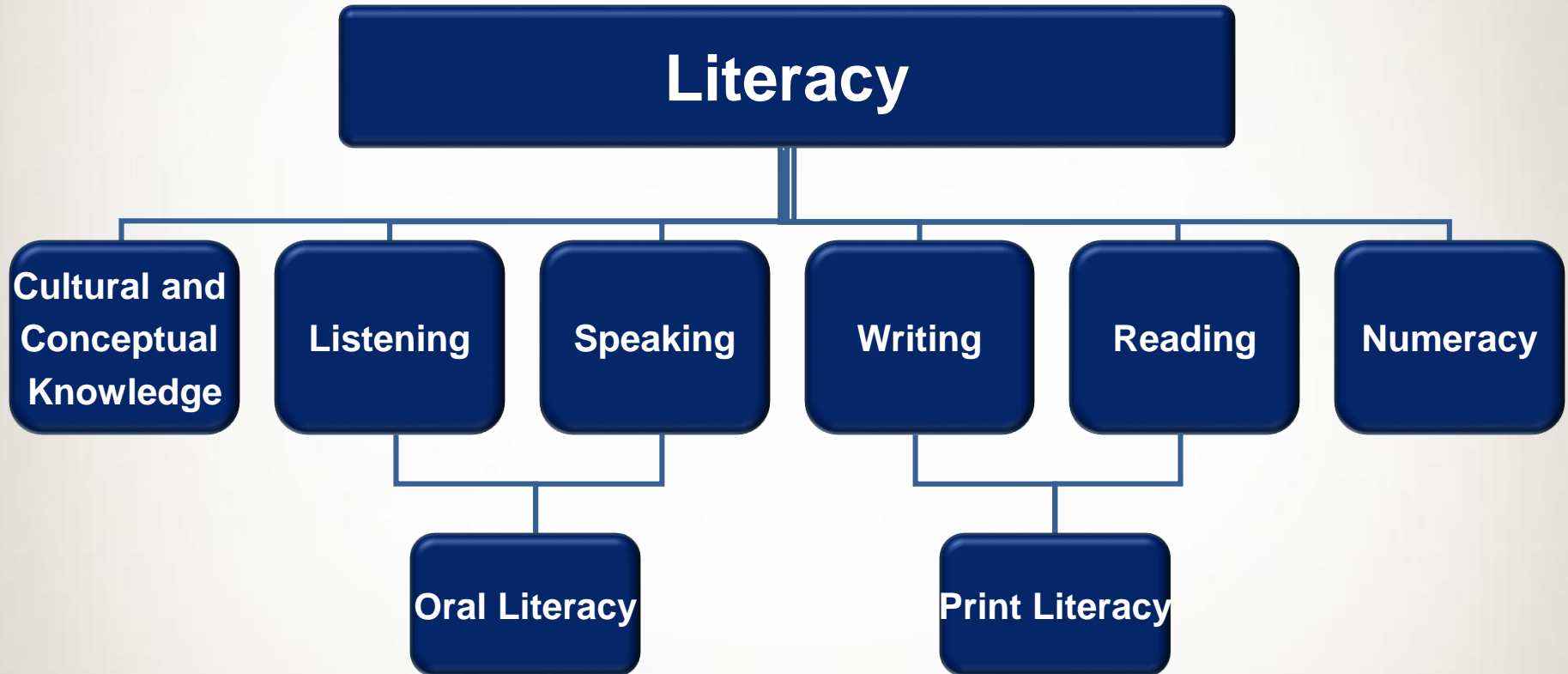
Health Literacy/Numeracy Linked to Poor Understanding

- Over 90% of patients struggle to understand food labels

- Over 2/3 of patients have poor estimation of portion sizes

- Subjects with lower Literacy/Numeracy had more difficult time understanding health information.

Rothman et al, AM J Prev Med, 2006
Huizinga et al, *Am J of Prev Med,* 2009

Health Numeracy Linked to Worse Diabetes Knowledge and Control

- Difficulties performing many literacy and numeracy related diabetes tasks:
  - Over 25% of patients could not interpret glucose meter
  - Over 40% could not calculate carbohydrate intake
  - Over 30% could not dose insulin correctly

- Self-care skills linked to underlying numeracy.

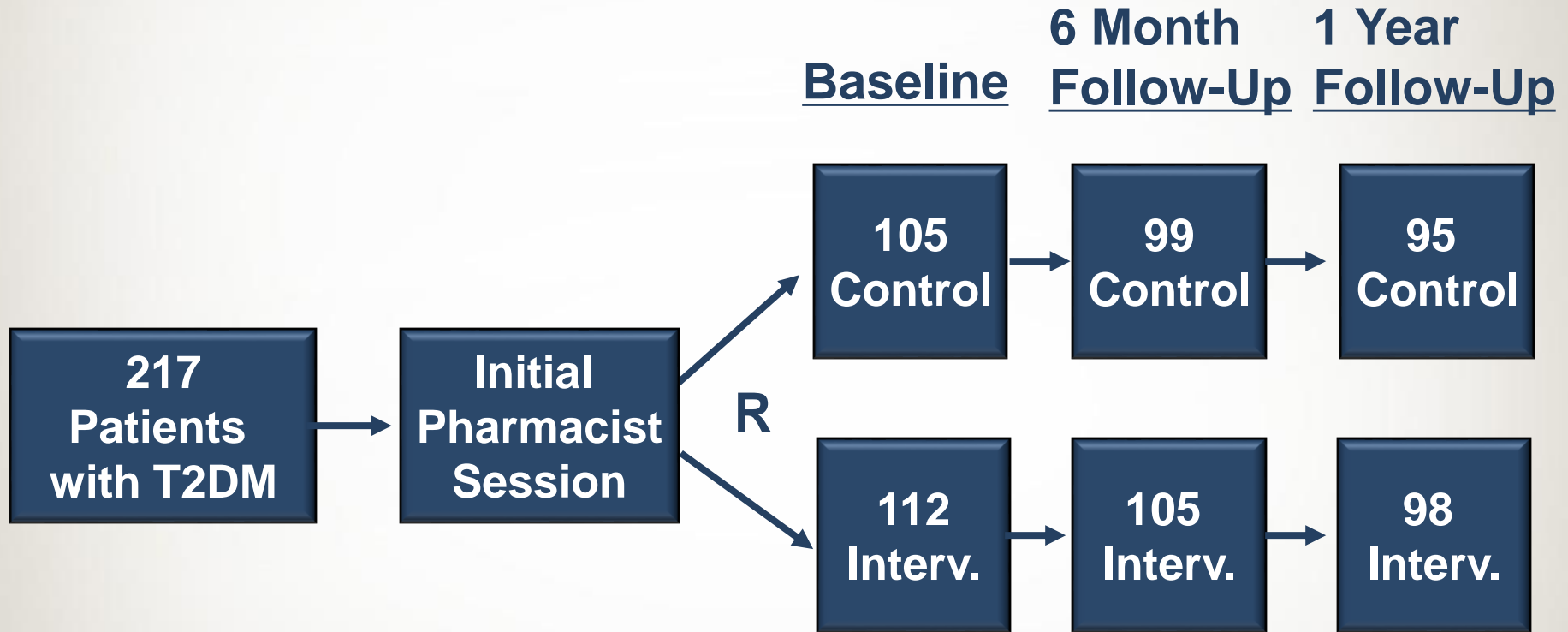- Diabetes numeracy skills associated with self-management, self-efficacy, and A1C.

Huizinga et al, BMC Health Services Res, 2008
Cavanaugh et al, Annals of Internal Medicine, 2008

Literacy Interventions
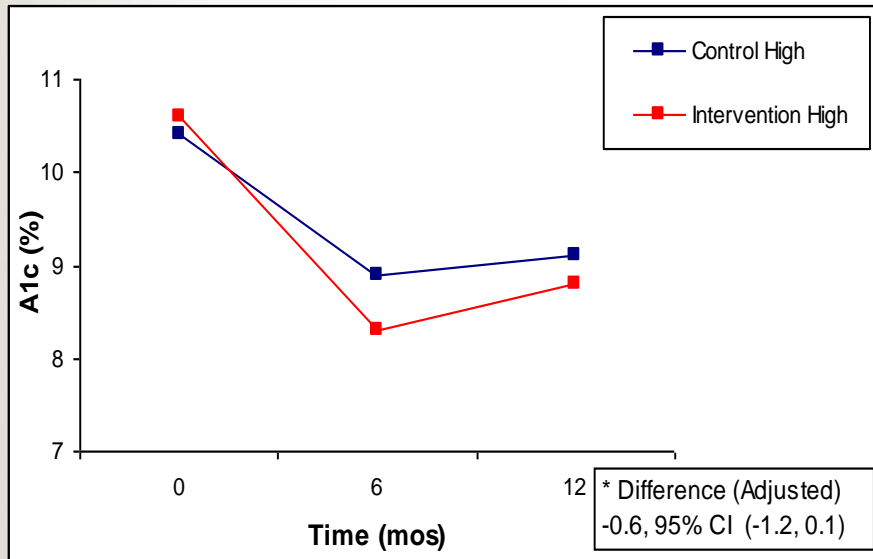
Initial Diabetes Intervention

Intervention

- Diabetes Education
- Evidence-based medication algorithms
- Database to track and manage patient outcomes
- Diabetes Care Coordinator

- Addressed literacy by using:
  - Individualized verbal education
  - Low literacy material
  - Teaching concepts in a simplified manner
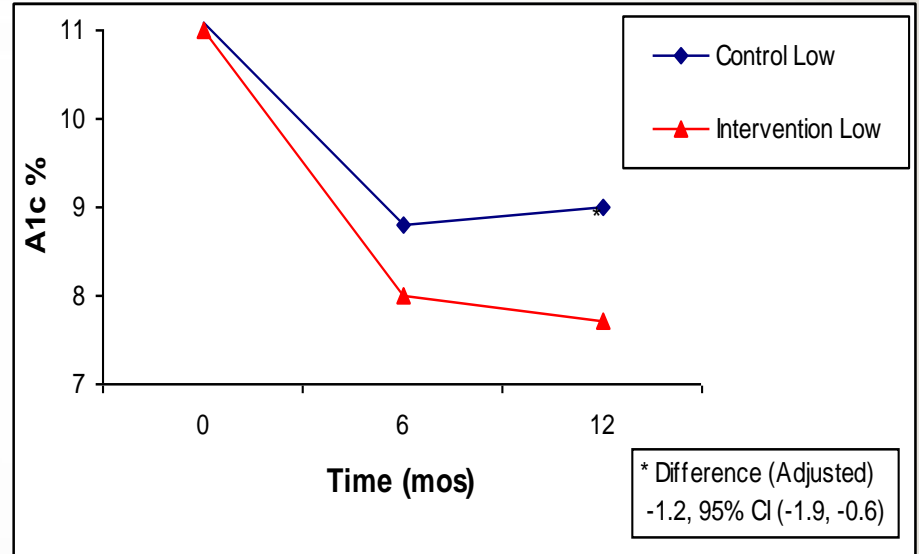 - "Teach back" techniques to confirm learning

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Significant Clinical Improvements at 12 months

Variable	Control (n=95)	Intervention (n=98)	Difference
A1C (%)	-1.2%	-2.1%	0.9% (0.8,1.0)
SBP (mmHg)	+2.3	-6.9	9.2 (2.3,16.1)
DBP (mmHg)	+1.2	-3.6	4.8 (1.1,8.6)
ASA (mmHg)	+6%	+47%	41% (25-55)
T. Chol. (mg/dL)	-12	-27	15 (-4, 35)

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Literacy was an Important Factor

High Literacy Patients   Low Literacy Patients

Diabetes and Numeracy RCT

DLNET Toolkit

Text at 5th grade reading level

Color coding

Pictures for key concepts

Step-by-step instructions

Simplified medication instructions

Practice skills worksheets

Wolff K et al. The Diab Educ 2009

Study Demonstrates Value of Addressing Health Literacy
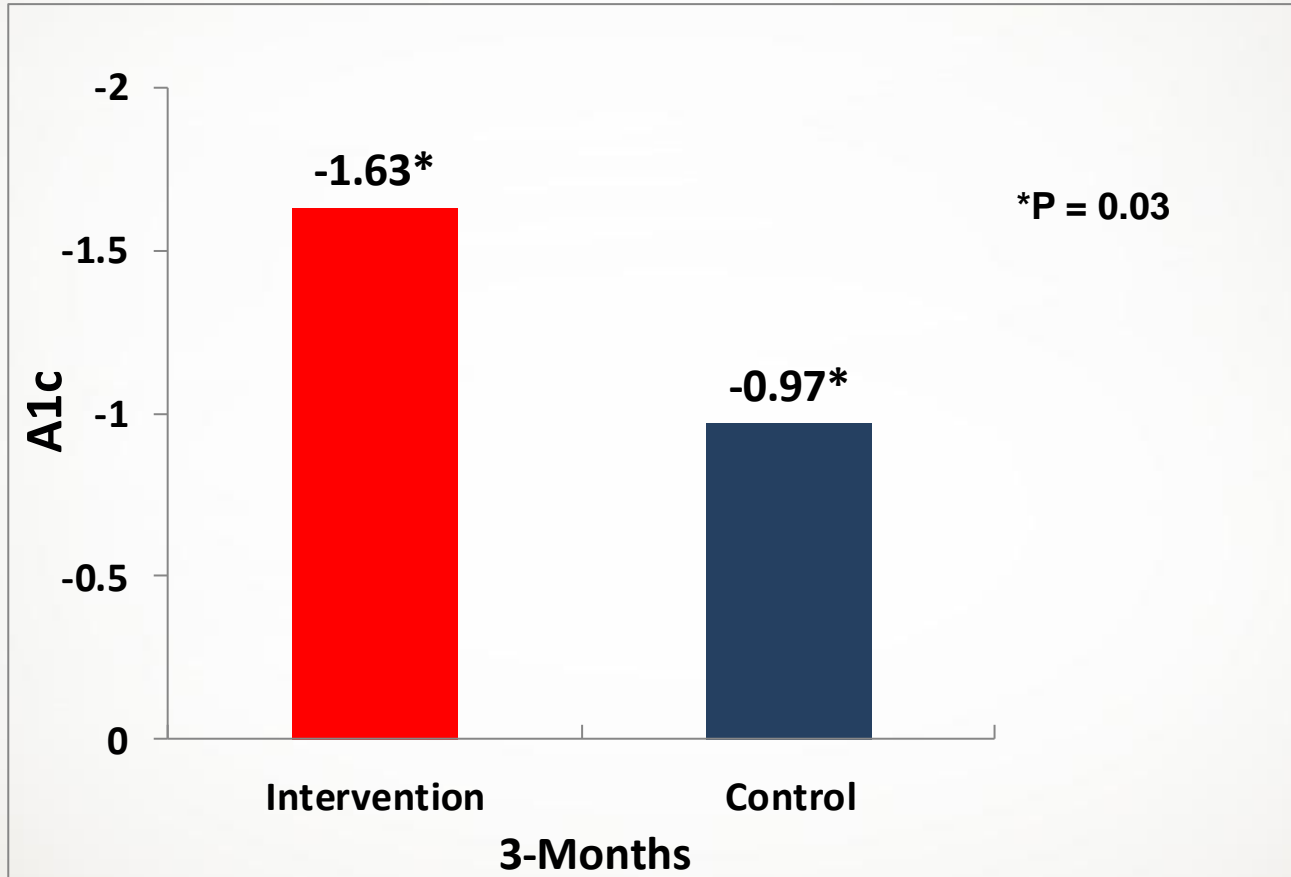
*Adjusting for age, gender, race, type of diabetes, income level, site of intervention and baseline DNT score and Hba1c levels

Cavanaugh KL et al. Diabetes Care 2009

Diabetes Nutrition Education Study (DINES)

Carb Counting vs Plate Method

Results Demonstrate Value of Simpler Diabetes Education
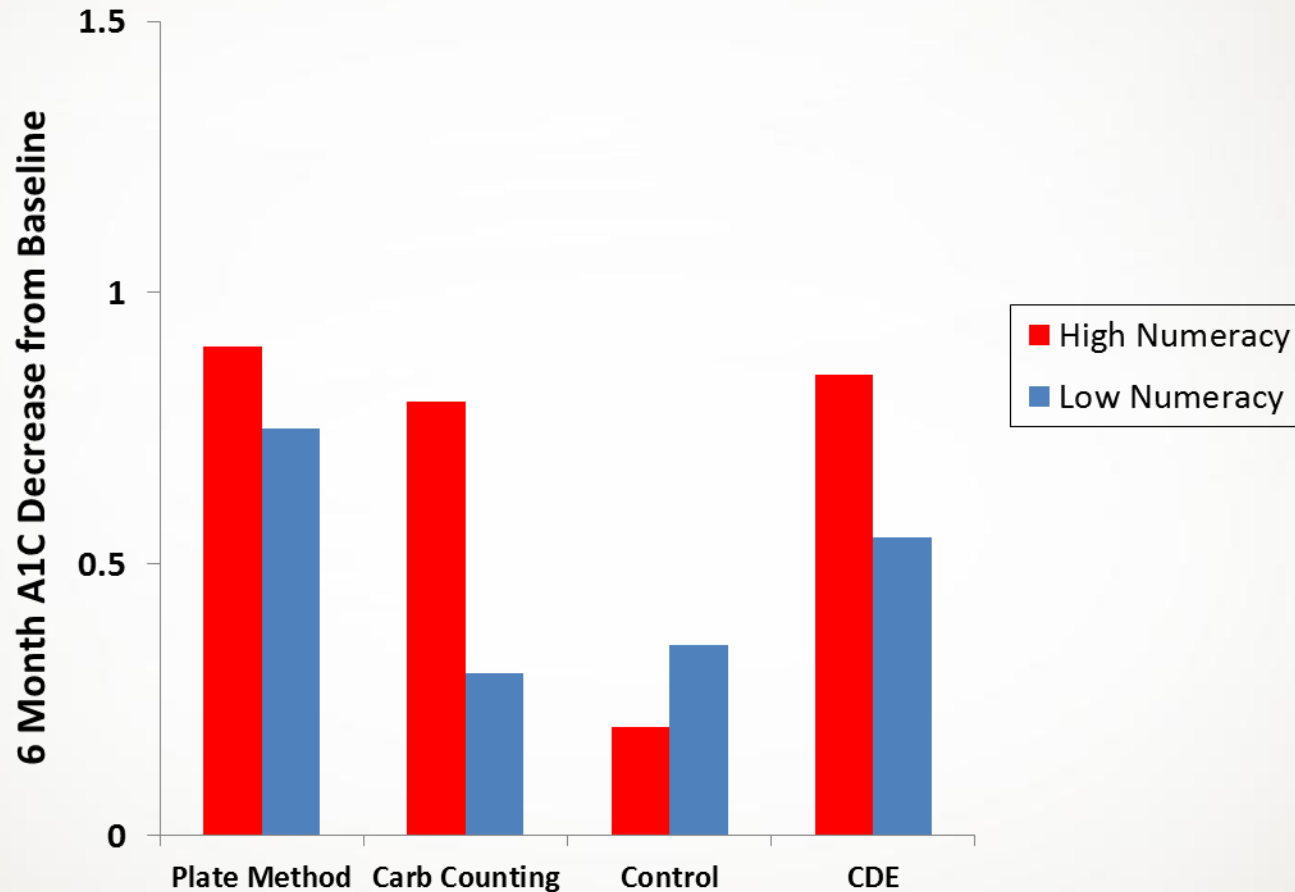
New Standards for Diabetes Education

National Standards for Diabetes Self-Management Education and Support

Linda Haas, PHC, RN, CDE (Chair)[1]
Melinda Maryniuk, MED, RD, CDE (Chair)[2]
Joni Beck, PHARMD, CDE, BC-ADM[3]
Carla E. Cox, PHD, RD, CDE, CSSD[4]
Paulina Duker, MPH, RN, BC-ADM, CDE[5]
Laura Edwards, RN, MPA[6]
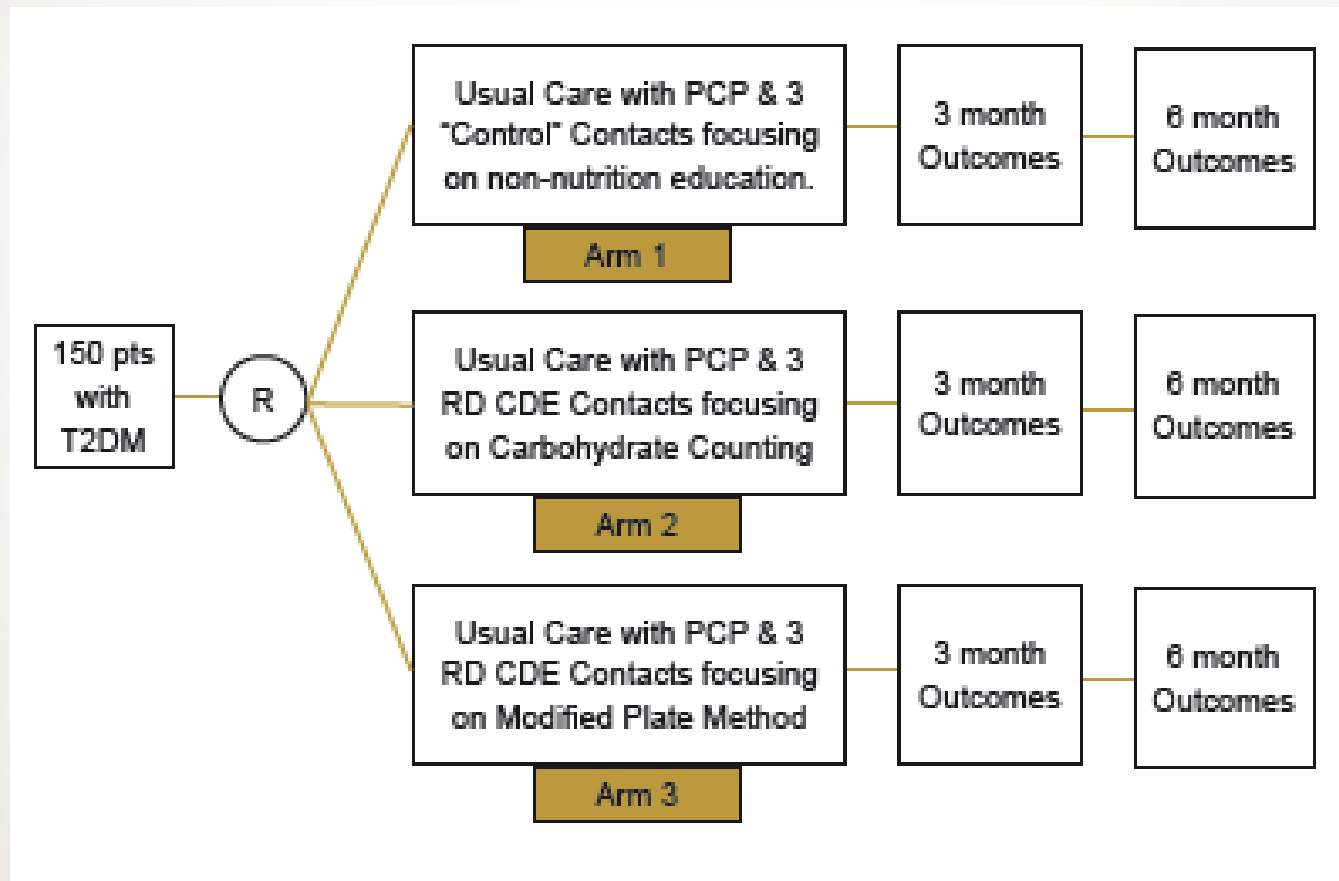Edwin B. Fisher, PHD[7]
Lenita Hanson, MD, CDE, FACE, FACP[8]
Daniel Kent, PHARMD, BS, CDE[9]
Leslie Kolb, RN, BSN, MBA[10]

Sue McLaughlin, BS, RD, CDE, CPT[11]
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Gretchen Youssef, MS, RD, CDE[18]
ON BEHALF OF THE 2012 STANDARDS REVISION TASK FORCE

nonaccredited and nonrecognized providers and programs.

Because of the dynamic nature of health care and diabetes-related research, the Standards are reviewed and revised approximately every 5 years by key stakeholders and experts within the diabetes education community. In the fall of 2011, a Task Force was jointly convened by the American Association of Diabetes

Diabetes Care, 2012

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PRIDE Study

- PaRtnering to Improve Diabetes Education
- Goal to address health communication issues to improve diabetes care in middle TN
- Collaboration between TN Dept. of Health, Vanderbilt, and Meharry
- 5 year NIDDK R18 study
- Cluster RCT with 10 Clinics and 400 diabetes patients
- Develop a sustainable model for improved diabetes care
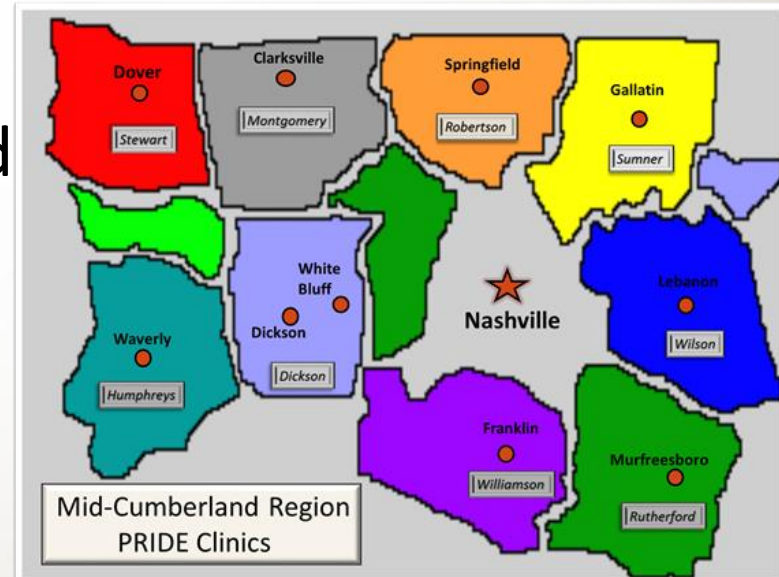
Pride Materials

	If Your Patient needs help with:	Consider these handouts:
1	**General Information For all Patients with Diabetes:**	• What is Diabetes • Low Blood Sugar
2	**Glucose Monitoring**	• Blood Sugar Checks • Blood Sugar Log Sheet - Simple • Blood Sugar Log Sheet - Advanced
3	**Nutrition Information**	• Nutrition for Diabetes • Using your Plate to Manage your Carbs • Counting your Carb grams • What Can I Eat for a Snack? • What Should I Eat When I Eat Out?
4	**Oral Diabetes Medication**	• Diabetes Pills • Taking Your Medicines
5	**Insulin and Byetta**	• Drawing and Self-Injecting Insulin (BD) • Mixing Insulin for Self-Injecting (BD) • How To use an Insulin Pen • Set Dose Insulin • Insulin for Set Dose Plus Correction • Long Lasting Insulin Dose Chart • How To Take Byetta • Taking Your Medicines
6	**Lifestyle Management and Behavior Change**	• Be Active • How Can Losing Weight Help Me? • Smoking and Diabetes
7	**Foot Care**	• Foot Care Do's and Don'ts (BD)
8	**Cardiovascular Risk Factors**	• Blood Pressure Control • Cholesterol • Taking Your Medicines
9	**Coping with Stress and Depression**	• Stress and Depression
10	**Oral Health**	• Problems With Your Teeth and Mouth
11	**Women's Health**	• How Diabetes Can Affect Women

PRIDE
PARTNERSHIP TO IMPROVE
DIABETES EDUCATION

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HIT approaches for Diabetes

- Web-based and mobile phone interventions to promote problem solving skills and self-care in adolescents with diabetes (NIDDK DP3 x 2)

- Use of electronic patient portal to address medication adherence (NIDDK R01)

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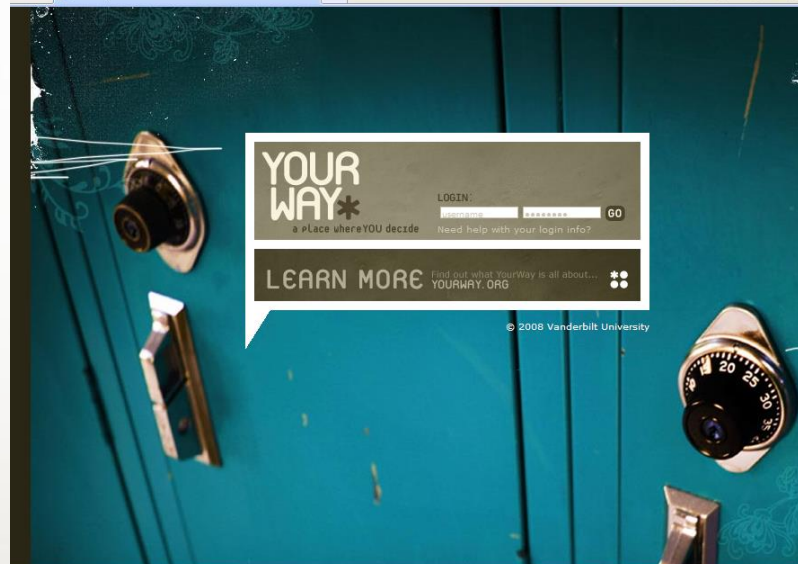
Greenlight Study

- NIH (NICHD) Funded R01
- Design: Cluster Randomized Trial of Literacy Sensitive Obesity Prevention intervention vs Active Control (Injury Prevention)
- Setting: 4 academic primary care resident clinics (Vanderbilt, NYU, UNC, and U Miami)
- Participants:
  - Over 400 pediatric residents at the 4 sites
  - 865 English and Spanish speaking families with children enrolled at 2 months of age and followed until 2 years of age
  - Children with weight/length z score >3% (WHO Criteria) without significant chronic health issues or FTT or history of prematurity (<35 weeks)

Sanders LM, ….Rothman, *Pediatrics*, 2014

Resident Training in Effective Health Communication

- Lectures, pre-clinic conference, role-playing
- Use effective health communication principles
    - Use plain language. Avoid jargon
    - Limit advice to 1-3 key concepts
    - Use "teach back" technique to confirm understanding
    - Address culture, language and family issues
    - Perform shared goal setting
- Perform in-room observations ("certifications")

Greenlight Toolkit Materials

- 1-2 Booklets per Well Child Visit
  - 1 CORE booklet focused on key behaviors
  - 1-3 SUPPLEMENTAL booklets *(Provider Chooses)*
  - Booklets are 2-6 pages and end with goal setting
- Designed to be used interactively during the visit
- Available in English and Spanish

Sample Materials: 15 months

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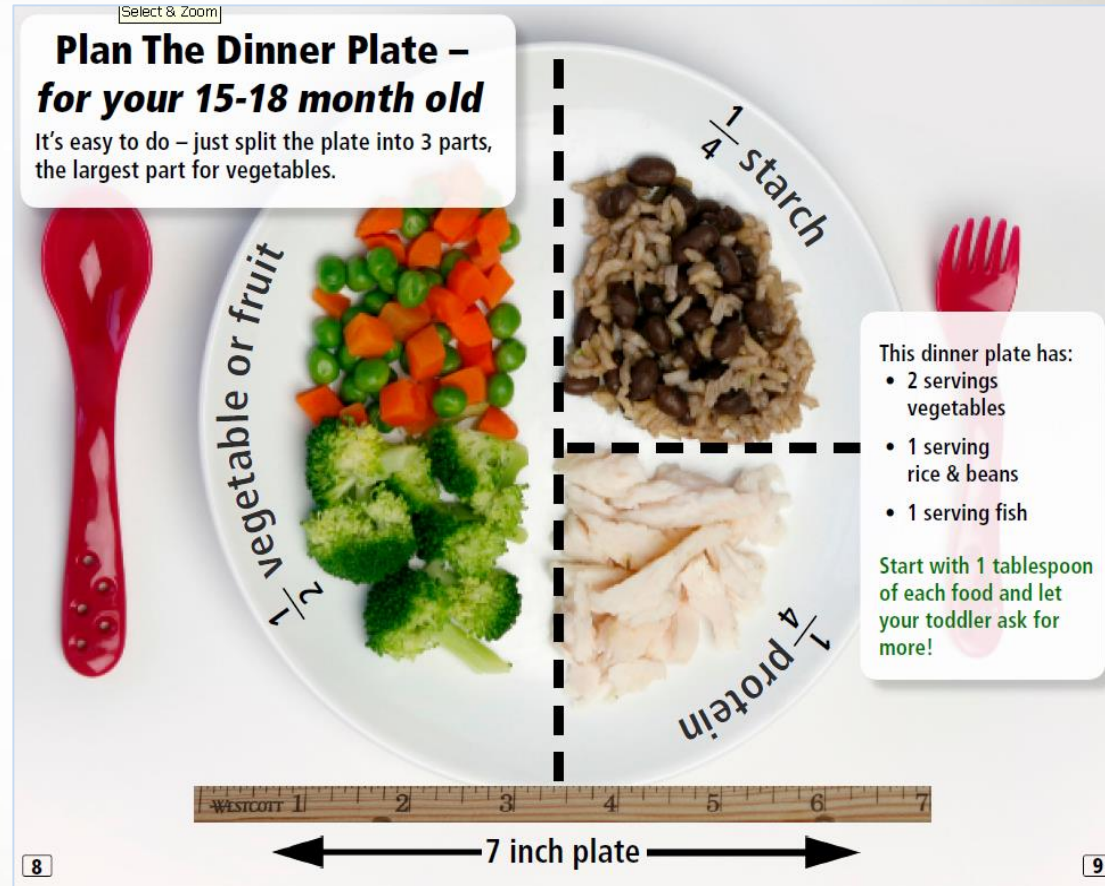
Goal Setting with the Toolkit

- **Last page of each CORE booklet**
  - Parent-centered
  - Do-able; "baby step"
  - Make goal with specific time frame
  - Can choose from examples or can WRITE ONE DOWN

I *Can* Keep My Baby Growing Healthy!

✓ Pick one of these ideas or write down 1 or 2 things you would like to do in the next few weeks.

☐ I will let my baby feed himself for part of the meal ____ times this week.

☐ Next week, when I leave the house, I will bring _____ as a healthy snack for my baby.

☐ Tomorrow, when I give _____ to my baby, I will start with 2 tablespoons and see if he wants more.

☐ I will <u>only</u> give my baby __ ounces of juice each day, ____ times next week.

☐ I will turn off the TV when my baby is in the room ____ afternoons next week.

☐ _____

_____

☐ _____

_____

Health Literate Organization

- "Health care organizations that make it easier for people to navigate, understand, and use information and services to take care of their health."

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Patient Interactions

Organizational leadership and policies

Patient And Family ⟷

Administrative Staff — Appointments, Insurance, billing, regulatory

Provider — Health care team (MD, NP, RN, RD, LPN, etc)

Support Services — Translators, patient navigators

Information — Educational materials, patient portal, medication lists, discharge instructions
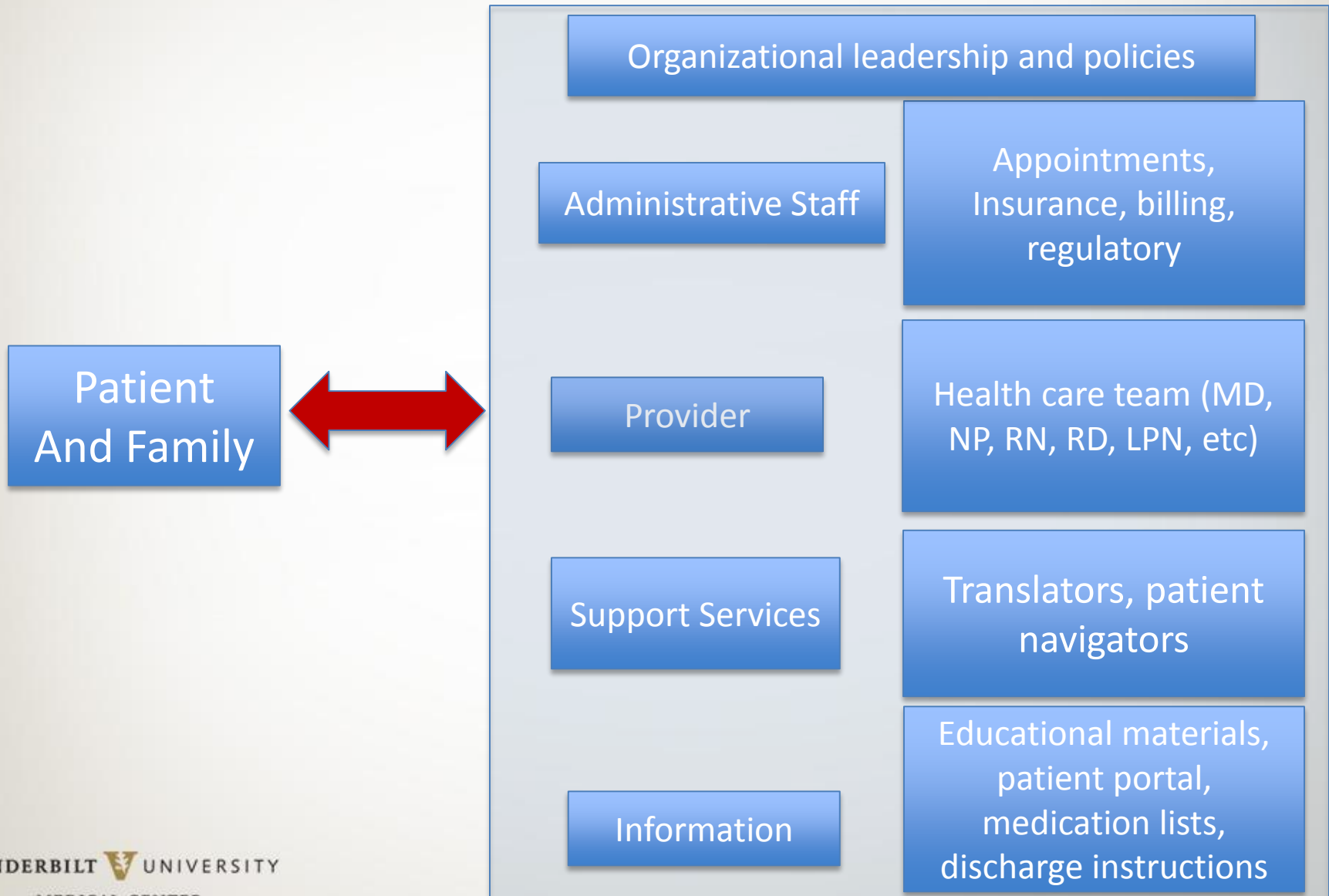
Principal Investigators:

Russell Rothman MD MPP, Vanderbilt University Medical Center

Trent Rosenbloom MD MPH, Vanderbilt University Medical Center

Paul Harris PhD, Vanderbilt University Medical Center

Tim Carey MD MPH, University of North Carolina at Chapel Hill

Jay Moskowitz MD, Health Sciences of South Carolina

PCORI Initiative

- Patient Centered Outcomes Research Institute (PCORI) has awarded:
  - 13 sites to build Clinical Data Research Networks (CDRN)
  - 20 sites to build Patient Powered Research Networks
- Goals
  - Each CDRN engages 1 million or more patients across 2 or more health systems
  - Build infrastructure to share data, build novel informatics tools, engage key stakeholders
  - Perform comparative effectiveness research and pragmatic clinical trials.

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PCORnet

Chicago Community Trust* (1 state)
*collaborating partners in MD, MA, NY
Children's Hospital of Philadelphia (22)
Harvard University Medical School (7)
Joan & Sanford I. Weill Medical College of Cornell University (3)
Kaiser Foundation Research Institute (10)
Louisiana Public Health Institute (1)
Oregon Community Health Information Network (13)
University of California, San Diego (all 50 states)
University of Kansas Medical Center (7)
University of Pittsburgh (7)
Vanderbilt University Medical Center (8)

Patient-Centered Outcomes Research Institute

Board of Governors Meeting, December 17, 2013   29

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Mid-South CDRN Clinical Reach

Vanderbilt Medical Center: hospitals, >100 clinics engaging 2 million patients. Meharry/Metro General Hospital: 100,000 patients
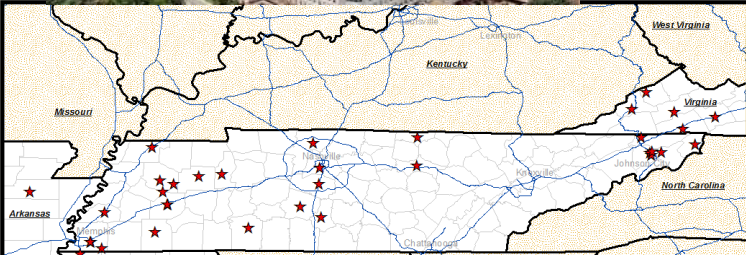
VHAN: 8 health systems, >30 hospitals, >300 clinics engaging >3 million patients
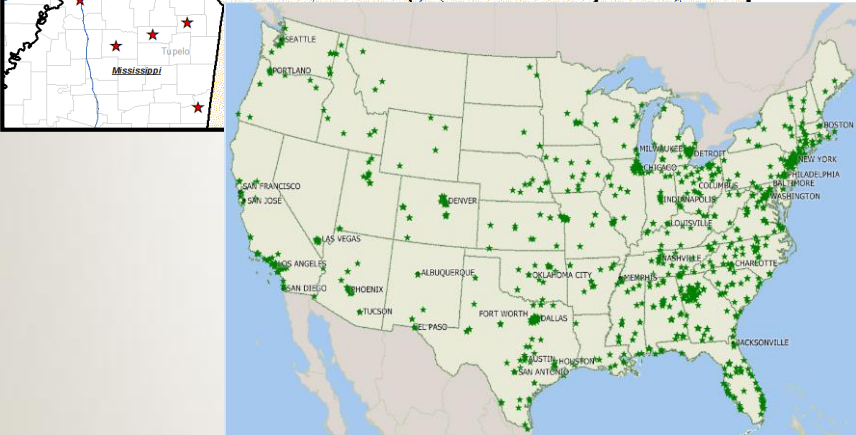
Greenway Health: 1600 clinics engaging 14 million patients

Carolinas Collaborative with > 6 million patients

Health Sciences South Carolina Supported Organizations

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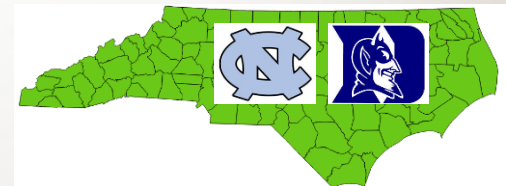
Pragmatic Research: Use Cases

1. De-identified data/HIPAA Limited data for prep to research or observational research

2. Fully-identified data for observational research

3. Contact patients for observational (survey) research

4. Pragmatic intervention studies at patient, clinic, or system level to answer practical clinical questions and improve patient care

Data Aggregation Across CDRN
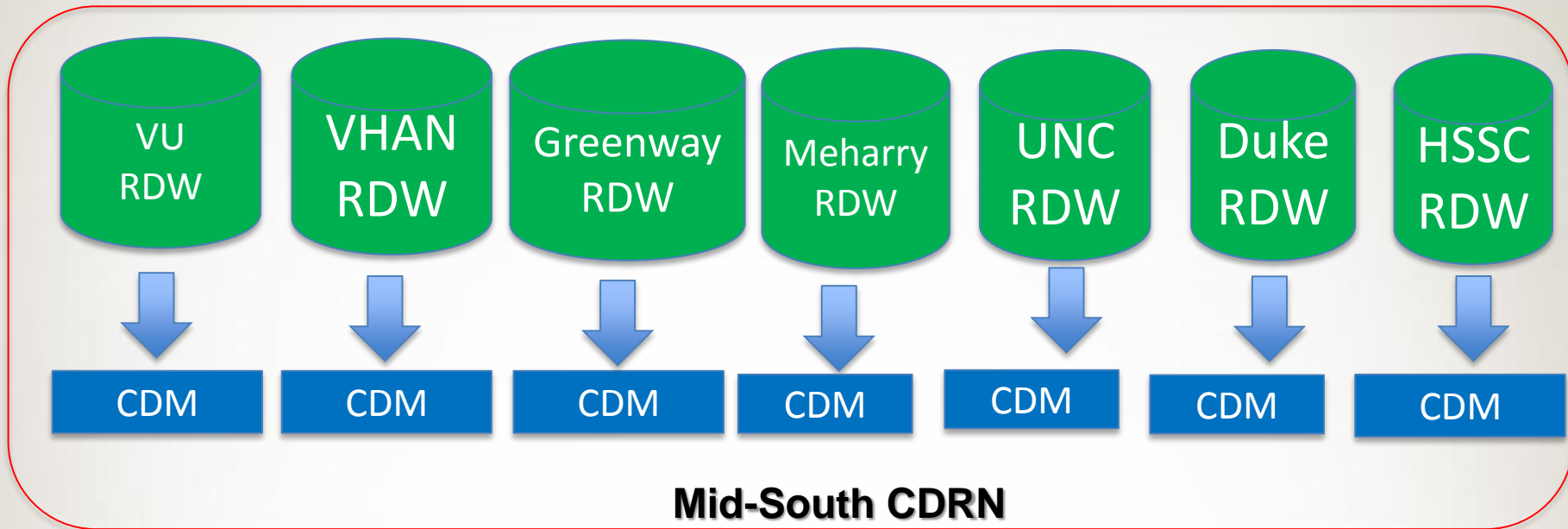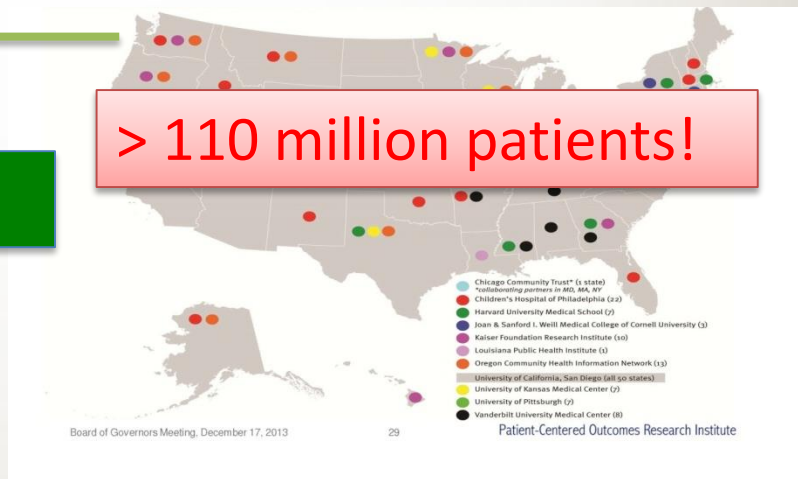
PCORI Common Data Model V 3.0

CONDITION v2.0

A condition represents a patient's diagnosed and self-reported health conditions and diseases. The patient's medical history and current state may both be represented.

DEATH v3.0

Reported mortality information for patients.

DEATH_CAUSE v3.0

The individual causes associated with a reported death.

DEMOGRAPHIC v1.0

Demographics record the direct attributes of individual patients.

DIAGNOSIS v1.0

Diagnosis codes indicate the results of diagnostic processes and medical coding within healthcare delivery.

DISPENSING v2.0

Outpatient pharmacy dispensing, such as prescriptions filled through a neighborhood pharmacy with a claim paid by an insurer. Outpatient dispensing is not commonly captured within healthcare systems.

ENROLLMENT v1.0

Enrollment is a concept that defines a period of time during which all medically-attended events are expected to be observed. This concept is often insurance-based, but other methods of defining enrollment are possible.

ENCOUNTER v1.0

Encounters are interactions between patients and providers within the context of healthcare delivery.

HARVEST v3.0

Attributes associated with the specific PCORnet datamart implementation

LAB_RESULT_CM v2.0

Laboratory result Common Measures (CM) use specific types of quantitative and qualitative measurements from blood and other body specimens. These standardized measures are defined in the same way across all PCORnet networks.

PCORNET_TRIAL v3.0

Patients who are enrolled in PCORnet clinical trials.

PRESCRIBING v3.0

Provider orders for medication dispensing and/or administration.

PRO_CM v2.0

Patient-Reported Outcome (PRO) Common Measures (CM) are standardized measures that are defined in the same way across all PCORnet networks. Each measure is recorded at the individual item level: an individual question/statement, paired with its standardized response options.

PROCEDURES v1.0

Procedure codes indicate the discreet medical interventions and diagnostic testing, such as surgical procedures, administered within healthcare delivery.

VITAL v1.0

Vital signs (such as height, weight, and blood pressure) directly measure an individual's current state of attributes.

Additional Linkage for "Complete" Data

TN State Health Data
- Includes statewide hospital/emergency dept discharge claims, and birth/death certificates. Years 2011-2013 will be available
- Agreements in place, data submission in process

Tenncare Data
- Includes health claims data derived from approx. 1,480,430 individuals covered under the states Medicate coverage
- Agreements in place, linkage/pipeline in process of being built

CMS Data (RESDAC, CMMI data)
- Reuse application development and plan in process
- CDRN-wide linkage plan in development

Vanderbilt Health Plan (Aetna)
- Includes health claims data derived from approx. 19,600 employees and dependents covered. Years 2011-2016 available
- Agreements in place, data linkages in process

Linkage to NC BC/BS Data and NC Medicaid Data
- Data Use Agreements complete;
- Linkage approved on a case by case basis

Linkage to SC Claims Data
- Data Use Agreement Complete
- Linkages available on a per project basis

Novel Informatics Tools

- Tools for quickly running queries and analyzing electronic health data
- Tools for identifying and contacting patients
  - Email, Text, Phone (> 300K emails at VUMC)
  - My Research at Vanderbilt (20K)
- New electronic consent process
- Expanded survey tools for collection of patient reported outcomes (via web/mobile platforms, automated phone, embedded video/audio, etc.)
- Integration of PROMIS measures into REDCAP
- Electronic payment processes for study participation
- Potential integration of patient survey data into the EHR for clinical use
- Expansion of clinical decision support tools

REDCap™

Weight Cohort Example

- Email blast to >10,000 Vanderbilt patients with over 30% response rate!

- Surveyed > 10,000 patients across multiple health systems/clinic sites in < 6 months

Overall Preliminary Survey Results
N=10,446

Survey Item	Mean (SD) or %
Gender (% female)	71.7%
Race	
White, Non-Hispanic	83.8%
Black, Non-Hispanic	10.5%
Hispanic	1.9%
Other, Non-Hispanic	3.7%
Income	
<$35,000	23.4%
$35,000-$74,999	51.9%
≥$75,000	24.5%

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Health Literacy
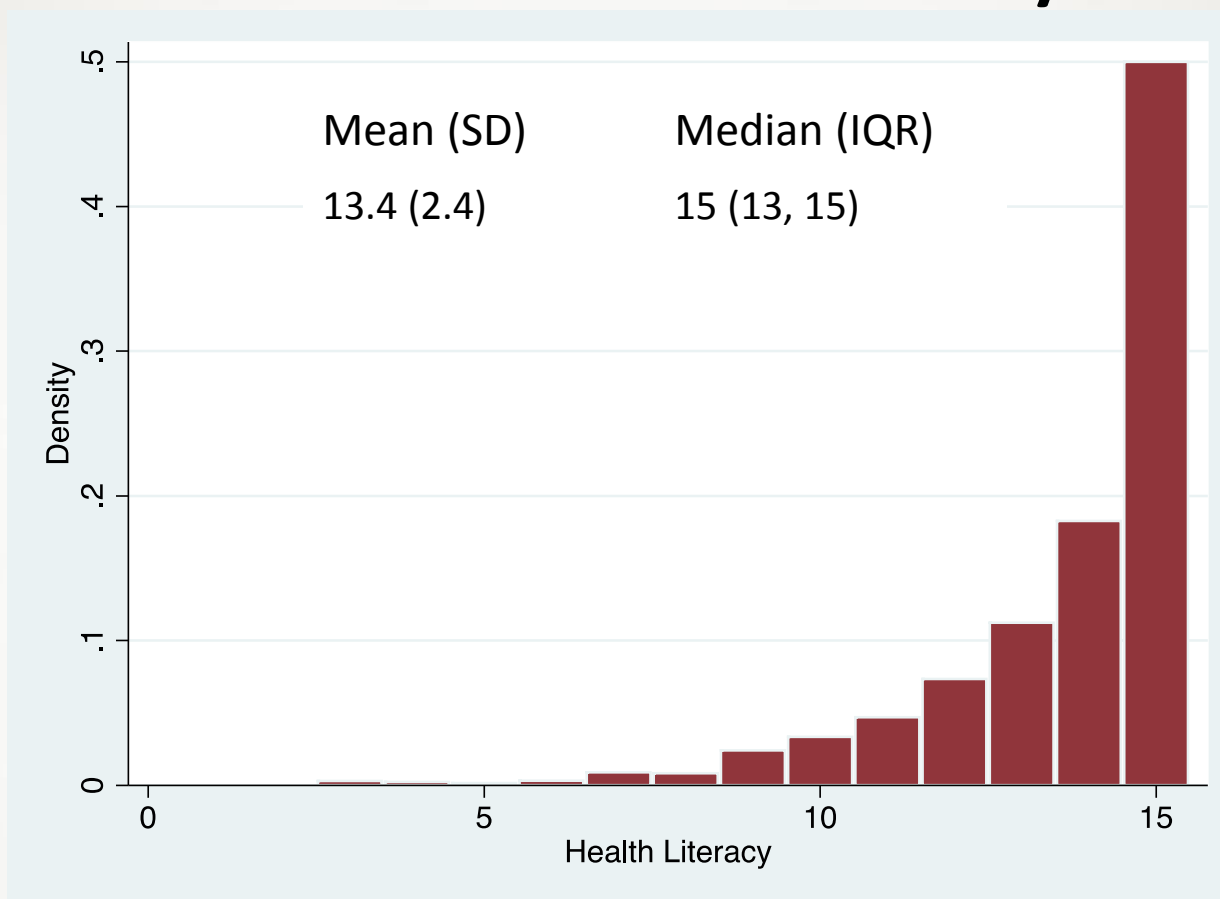
- How confident are you filling out medical forms by yourself?
- How often do you have someone help you read medical materials?
- How often do you have problems learning about your medical condition because of difficulty understanding written information?

Response Options 1 (All of the time) to 5 (None of the Time)

Numeracy

Mean (SD): 14.7 (3.4)

Median (IQR): 16 (13-17)
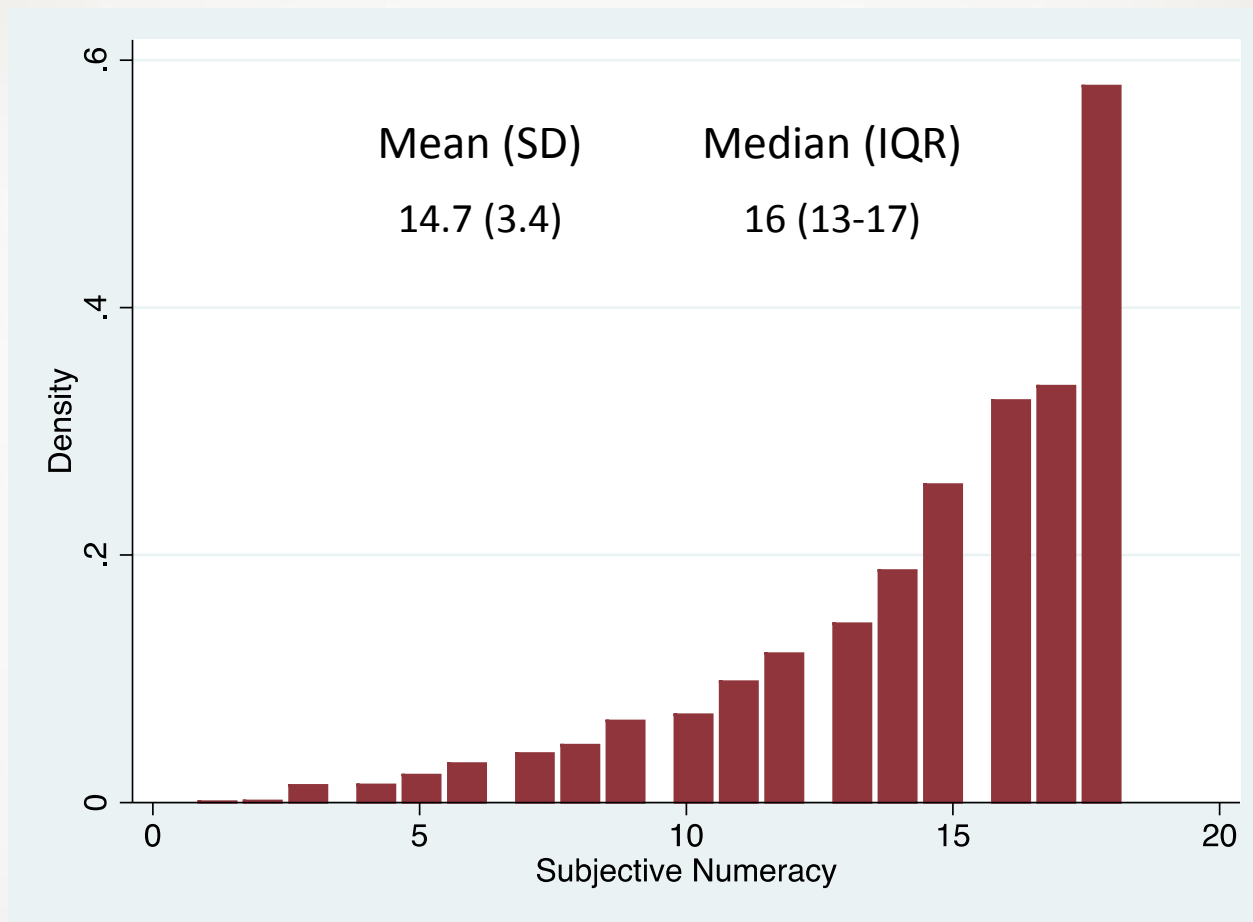
- How often do you find numerical information to be useful?
- How good are you at working with fractions?
- How good are you at figuring out how much a shirt will cost if it is 25% off?

Response Options: 1(Never/Not at all good) to (Very often/Extremely good)

Mobile Data Collection

Rate your stress

Stressed   Calm/relaxed

50

Slide or click to make rating
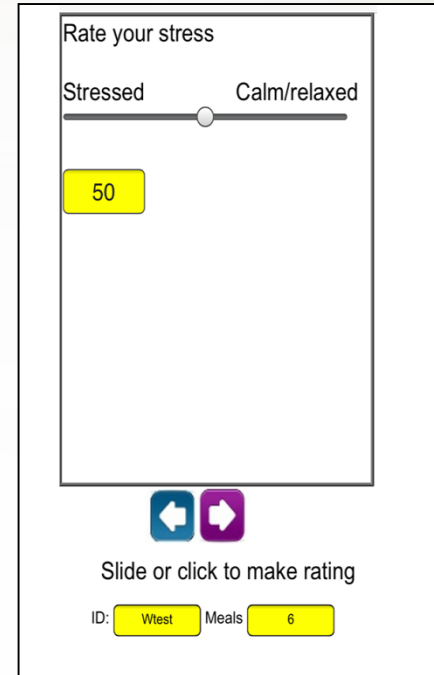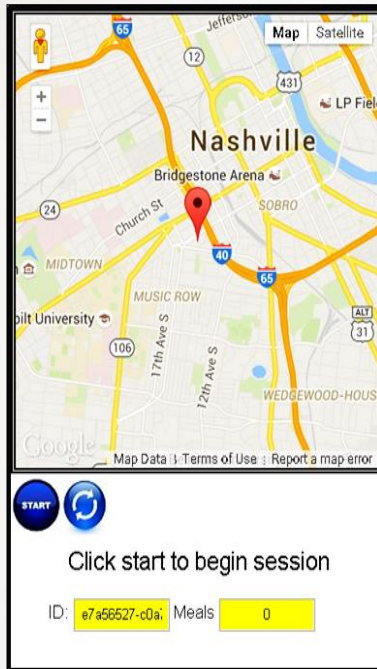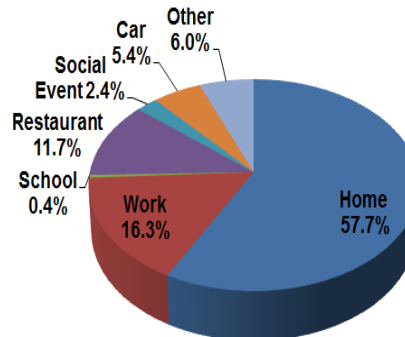
- 396 enrolled participants
- 11,189 meals
- Mean of 28.3 (17.6) meals/person

Meal Location

Other 6.0%
Car 5.4%
Social Event 2.4%
Restaurant 11.7%
School 0.4%
Work 16.3%
Home 57.7%

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Identifying Eligible CHD Patients

- Case 1: 2 outpatient visits billed for MI or CHD
  - N=27,194

- Case 2: 1 or more revascularization procedure codes
  - N=3,637 additional

- 26,343 of 30,831 pts (85.4%) had encounter in last 2 yrs

	CHD Disease Positive	CHD Disease Negative	TOTALS
CHD algorithm detected	192	3	195
CHD algorithm NOT detected	11	264	275
TOTALS	203	267	470

Positive Predictive Value	192/195	98.5%
Negative Predictive Value	264/275	96.0%
Sensitivity (true positives)	192/203	**94.6%**
Specificity (true negatives)	264/267	**98.9%**

Available in Phenotype Knowledge Base:

Roumie CL, Shirey-Rice J, Kripalani S. MidSouth CDRN – Coronary Heart Disease algorithm. PheKB (a knowledgebase for discovering phenotypes from electronic health records). Available at: https://phekb.org/phenotype/midsouth-cdrn-coronary-heart-disease-algorithm

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CHD "Personome"

Emotional Support
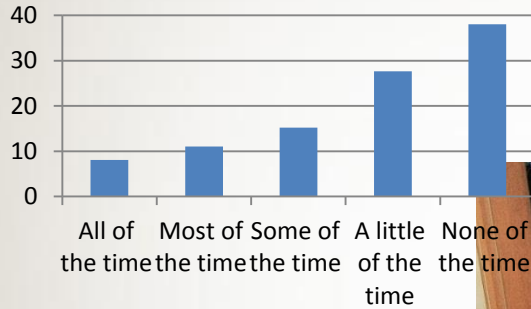
70% married
12% divorced
12% widowed
21% live alone

26% missed their meds at least once in the last week

9% not high school graduate

35% make ≤ $35k

Self-rated health

Fatigue

Difficult to Pay Bills

17% disabled

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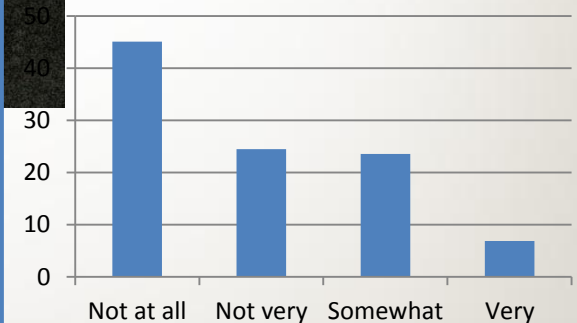
Study flow diagram
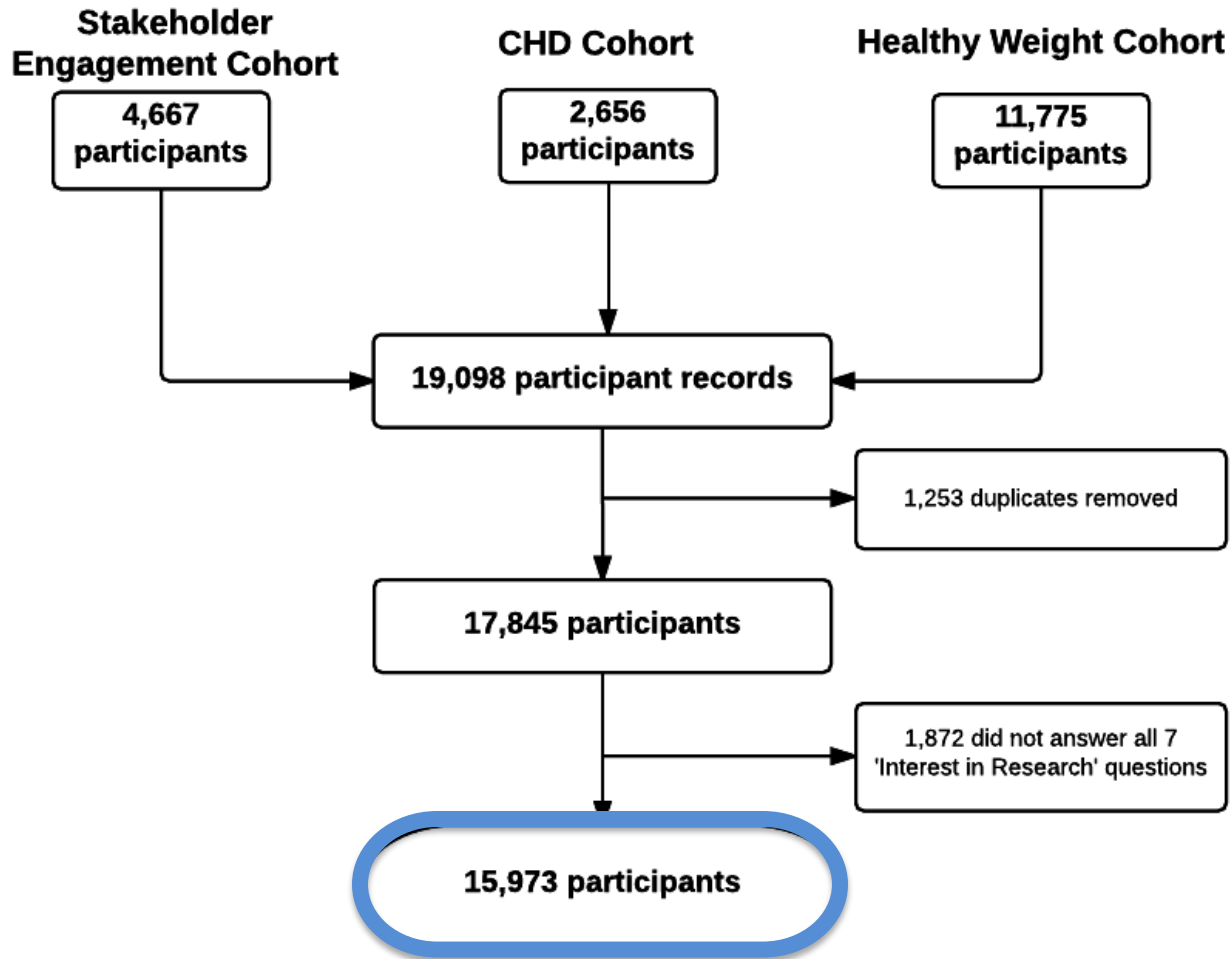
Measures

- We assessed health literacy using the Brief Health Literacy Screen (BHLS) and numeracy using the Subjective Numeracy Scale (SNS-3)

	Health literacy (BHLS) N=15,718	Numeracy (SNS-3) N=15,692
Minimum	3.0	3.0
Maximum	15.0	18.0
Mean ± SD	13.6 ± 2.2	14.3 ± 3.7

Summary of responses

What Type of Projects Would You Consider Taking Part In?	Very Interested
Completing survey 2 or more times	53.3%
Giving a blood sample	37.2%
Taking part in a study that involves talking by phone or is over the internet	40.0%
Taking part in a study where you have to take medication	14.5%
Taking part in a study that involves meeting at a local community center or school	15.7%
Taking part in a study that involves you and other people in your family	16.5%
Taking part in a study where you would stay in the hospital for 1 or more days	12.1%

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Results

- Responses to all 7 questions were summed to create a "willingness to participate in research" index
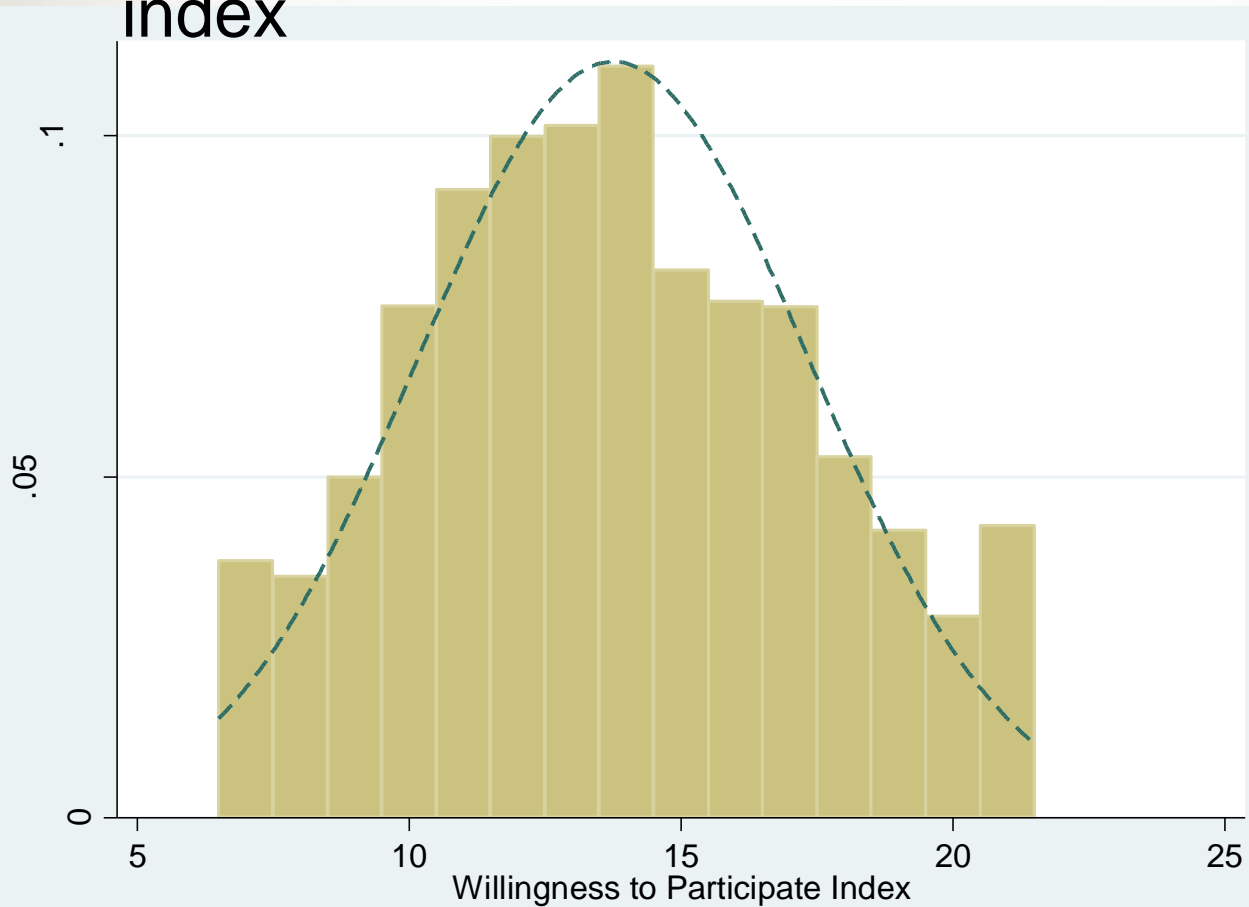
Index summary (n=15,973)	
Range	**Mean (SD)**
7 to 21	13.7 (3.6)

Health literacy, numeracy and willingness to participate in research
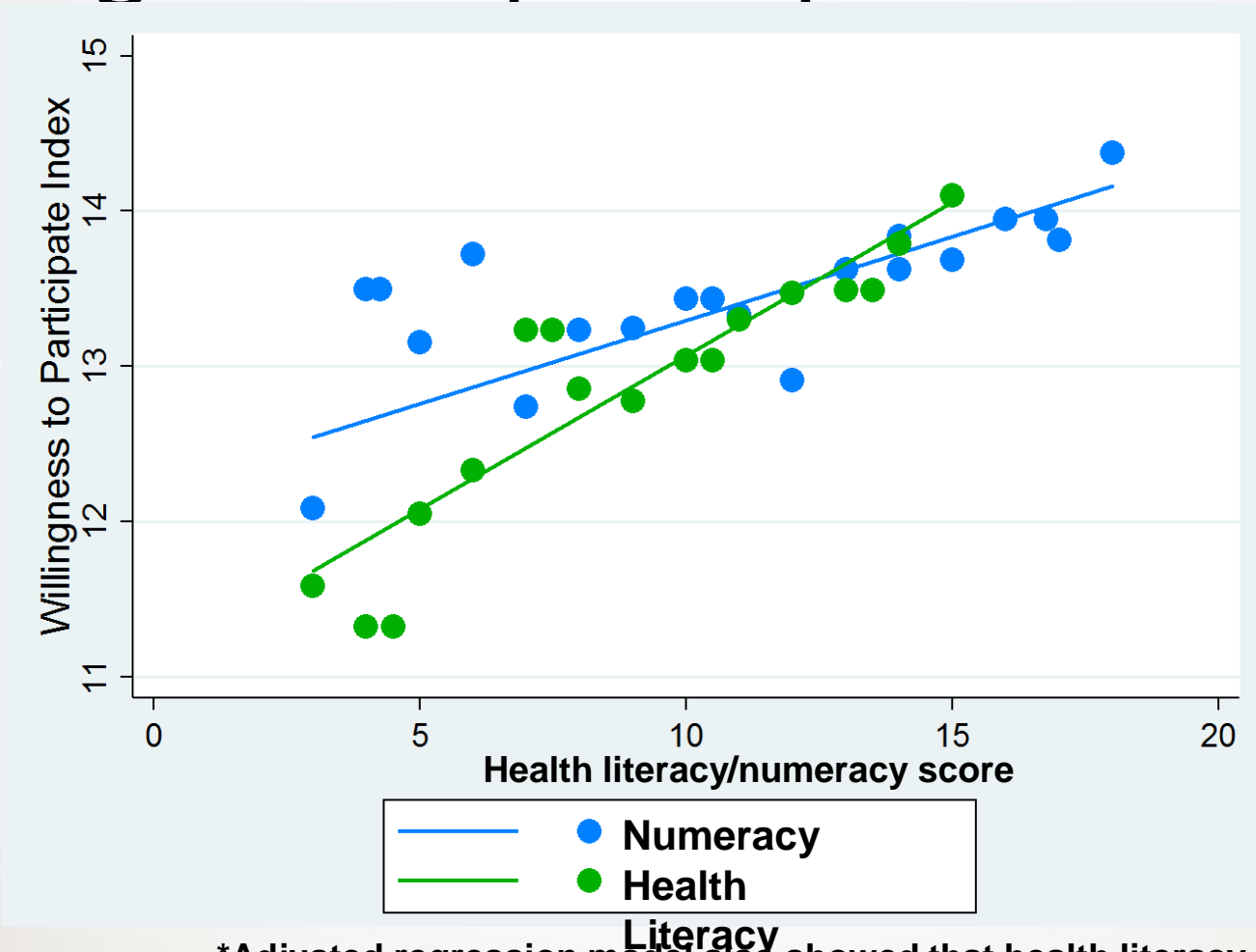
*Adjusted regression model also showed that health literacy and numeracy were independently associated with willingness to participate in research.
**Model adjusted for age, race, gender, previously research participation, income, education, marital status, and employment status.

Stakeholder Engagement

- **Governance:**

•Co-Investigator – 1 member

•Stakeholders at Oversight Committee – 2 members

•Stakeholder Advisory Council– 4 members (3 VU, 1 Carolinas)

- **Stakeholder input:**

•Surveys

– 480 Providers - (30% racial/ethnic minorities, 16% Community Health Centers)

– >5,000 consumers – completed

•Provider Interviews

– 59 (44.1% Physician)

•Community Engagement studios – 58 stakeholders

- **Proposal Review:**

•Stakeholder Engagement Review Process

THE TENNESSEAN
PART OF THE USA TODAY NETWORK

Why patients need a louder voice in medical research

Neely Williams   8:04 a.m. CDT August 7, 2016

If we are from a community that is underrepresented in the clinical research process, we are expected to simply make do.

Our country's clinical research system is inadequate, and here's why: It's not loud enough. Voices are missing. Fewer than 10 percent of Americans participate in clinical trials, which drive the vast majority of decision-making for clinicians, health systems, and payers — decisions like what treatment to recommend, which procedures to cover, and the process and duration for follow-up.

What's more, the strict inclusion criteria of most clinical trials make the majority of that 10 percent an alarmingly homogeneous, one-note group. So where does that leave the rest of us, the 90

← → C ⓘ pcornet.org/frontdoor/

pcornet ® | The National Patient-Centered Clinical Research Network

🔍

About PCORnet   **Partner Networks**   **Research**   **Newsroom**

Front Door

We invite PCORnet researchers and other investigators, patient groups, healthcare organizations, clinicians and clinician groups, government, industry scientists, and sponsors to collaborate on important patient-centered studies through the Front Door. Through the PCORnet Front Door you can submit three different types of requests: 1) Data Network Requests, 2) Requests for Network Collaboration, and 3) (COMING SOON) Requests for PCORnet Study Designation. For an overview of the Front Door processes click here. See also our Frequently Asked Questions (FAQs) section below. For general questions or to submit a request for information or consultation, contact us at frontdoor@pcornet.org

Data Network Request

Request for Network Collaboration

Request for PCORnet Study Designation

Coming Soon

SUBMIT
Data Network Request

- Requests from investigators who

SUBMIT
Request for Network Collaboration

- PCORnet's study designation may be desirable to reflect the PCORnet brand and its association with high-quality, efficient, and timely people-

Health Care Reform

"First we're going to run some tests to help pay off the machine."

Changing Market and Regulatory Environment

Delivery System Changes

- ❑ Care Coordination
- ❑ Provider Feedback & Accountability
- ❑ Measurement around Quality & Efficiency
- ❑ Fragmented event driven care

Future

Value-driven, Coordinated Care

2016...

CMS CPC+

CMS Quality Payment Program (APMs and MIPS)

Hospital-Acquired Conditions Penalties

HITECH/ Meaningful Use Penalties

TennCare Bundles

Optional Commercial Bundles

2015

Insurance Exchanges open

Individual coverage Requirement

Disproportionate Care reductions

2014

2013

CMS Bundled Payment Pilot

CMS PQRS

DRG Readmissions Penalties

2012

Value-Based Purchasing Incentives

HITECH/Meaningful Use Incentives

...2011

CMS Community Care Transition Program

Volume-driven, Fragmented Care

Payment System Changes

- ❑ Fee-for-Service
- ❑ Episode or Comprehensive Care Payment
- ❑ Clinical Integration

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Medicare Access and CHIP Reauthorization Act of 2015

Replaces the 1997 SGR formula, which capped Medicare physician per beneficiary spending growth at GDP growth rate

- Overwhelming bipartisan support.

- Provides new tools in implementing the payment reforms.

- Applies to expanded group of clinicians

- Creates clear timetable and benchmarks.

On 3/26, the House passed H.R. 2 by 392-37 vote.

On 4/14, the Senate passed the House bill by a vote of 92-8, and the President signed the bill.

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Volume to **Value**

Track 1:
Value-based payments

	2016	**2018**
Track 1: Value-based payments	**85%** of all Medicare payments	**90%** of all Medicare payments
Track 2: Alternative payment models*	**30%** of all Medicare payments	**50%** of all Medicare payments

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Source: Premier

MACRA reform timeline
(Medicare Access and CHIP Reauthorization Act of 2015)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026

Permanent repeal of SGR

Updates in physician payments

0.5% (7/2015-2019)   **0% (2020-2025)**

Source: Premier
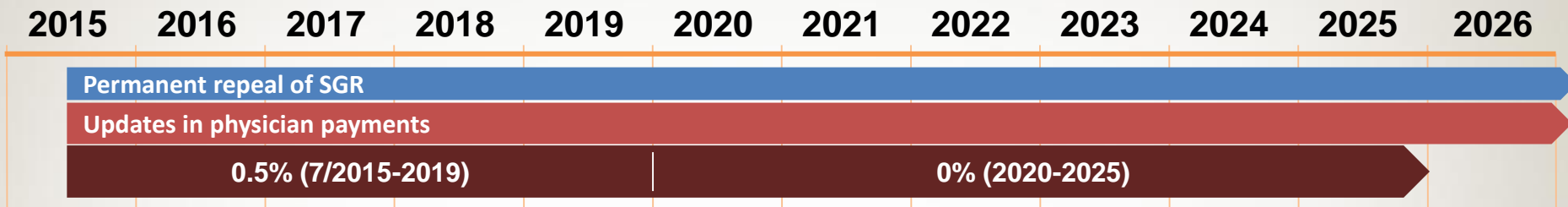
ACOs

- ~ 30 million patients now enrolled (CMS and Commercial)
- Initial evaluations of CMS ACOs suggest modest reduction in initial costs (~1%) with significant improvements in quality metrics
- New CMS ACO models emphasize:
  - Integrated care for assigned Medicare beneficiaries
  - Shared savings or losses dependent on:
    - Costs from baseline assessment
    - Quality metrics

JAMA, 2016
CMS, 2016

Medicare Shared Savings Program ACO and Pioneer ACO Assigned Beneficiary Population by ACO by County

(counties with more than 1 percent of an ACO's assigned beneficiaries)

Alaska

Hawaii

Puerto Rico and U.S. Virgin Islands

No Assigned Ben
1 ACO
2 ACOs
3 ACOs
4 to 5 ACOs
6 or more ACOs
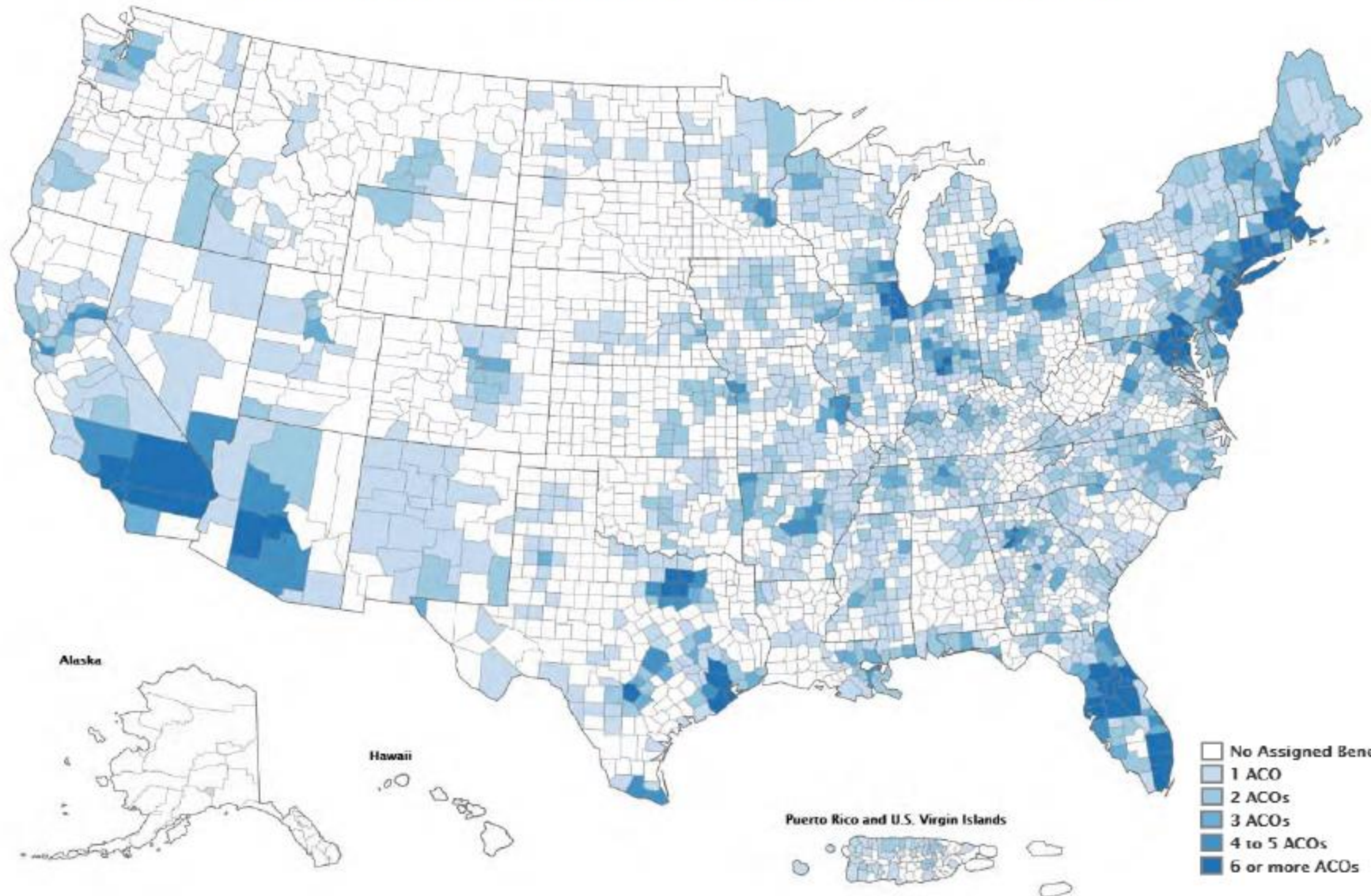
MIPS Scoring

Summary of MIPS Performance Categories		
Performance Category	**Maximum Possible Points per Performance Category**	**Percentage of Overall MIPS Score (Performance Year 1 - 2017)**
Quality: Clinicians choose six measures to report to CMS that best reflect their practice. One of these measures must be an outcome measure or a high-value measure and one must be a crosscutting measure. Clinicians also can choose to report a specialty measure set.	80 to 90 points depending on group size	50 percent
Advancing Care Information: Clinicians will report key measures of patient engagement and information exchange. Clinicians are rewarded for their performance on measures that matter most to them.	100 points	25 percent
Clinical Practice Improvement Activities: Clinicians can choose the activities best suited for their practice; the rule proposes over 90 activities from which to choose. Clinicians participating in medical homes earn "full credit" in this category, and those participating in Advanced APMs will earn at least half credit.	60 points	15 percent
Cost: CMS will calculate these measures based on claims and availability of sufficient volume. Clinicians do not need to report anything.	Average score of all cost measures that can be attributed	10 percent

CMS Transforming Clinical Practice Initiative (TCPI)

- Assist practices with the transition from fee-for-service payments to value-based payments by providing personalized resources and financial assistance.

TCPI's Five Phases of Transformation

PHASE I
Detailed Transformation Planning

- Developing Shared Vision of Transformed Practice

- Creating Plan to Achieve Vision including Targeted Metrics

PHASE II
Reporting and Using Data To Generate Improvements

- Monitoring Metrics

- Training Staff on QI

- Initiating Population Management & Care Coordination

PHASE III
Progressing Towards Success in Value-Based System

- Improving Metrics

- Incorporating QI Activities into Day-to-Day Operations

- Enhancing Access to Care

- Implementing Multiple Care Coordination, Population Management, and Team-Based Care Strategies

PHASE IV
Sustaining Progress Over Time

- Meeting Metric Targets for One Year

- Decreasing Utilization and Unnecessary Testing

- Consistently Delivering Evidence-Based, Patient-Focused, Coordinated Care

PHASE V
Preparing to Thrive in Value-Based System

- Sharing Financial Data within Practice To Optimize Success in APMs

- Graduating to APM Prepared to Thrive Long-Term

MIDSOUTH PRACTICE TRANSFORMATION NETWORK

Improving Quality of Care for Patients and Families throughout Tennessee, Mississippi, and Arkansas

- CMS contract for up to $28 million over four years to help more than 4,000 clinicians transform their clinical practices to improve quality of care and hold down costs.

- Partnership between Vanderbilt, the Vanderbilt Health Affiliated Network (VHAN), including its major partner, Baptist Memorial Health Care, and the Safety Net Consortium of Middle Tennessee (SNCMT).

- Part of CMS' Transforming Clinical Practices Initiative (TCPI) to reach 140,000 clinicians nationally.

MIDSOUTH PTN
PRACTICE TRANSFORMATION NETWORK

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Mid-South PTN
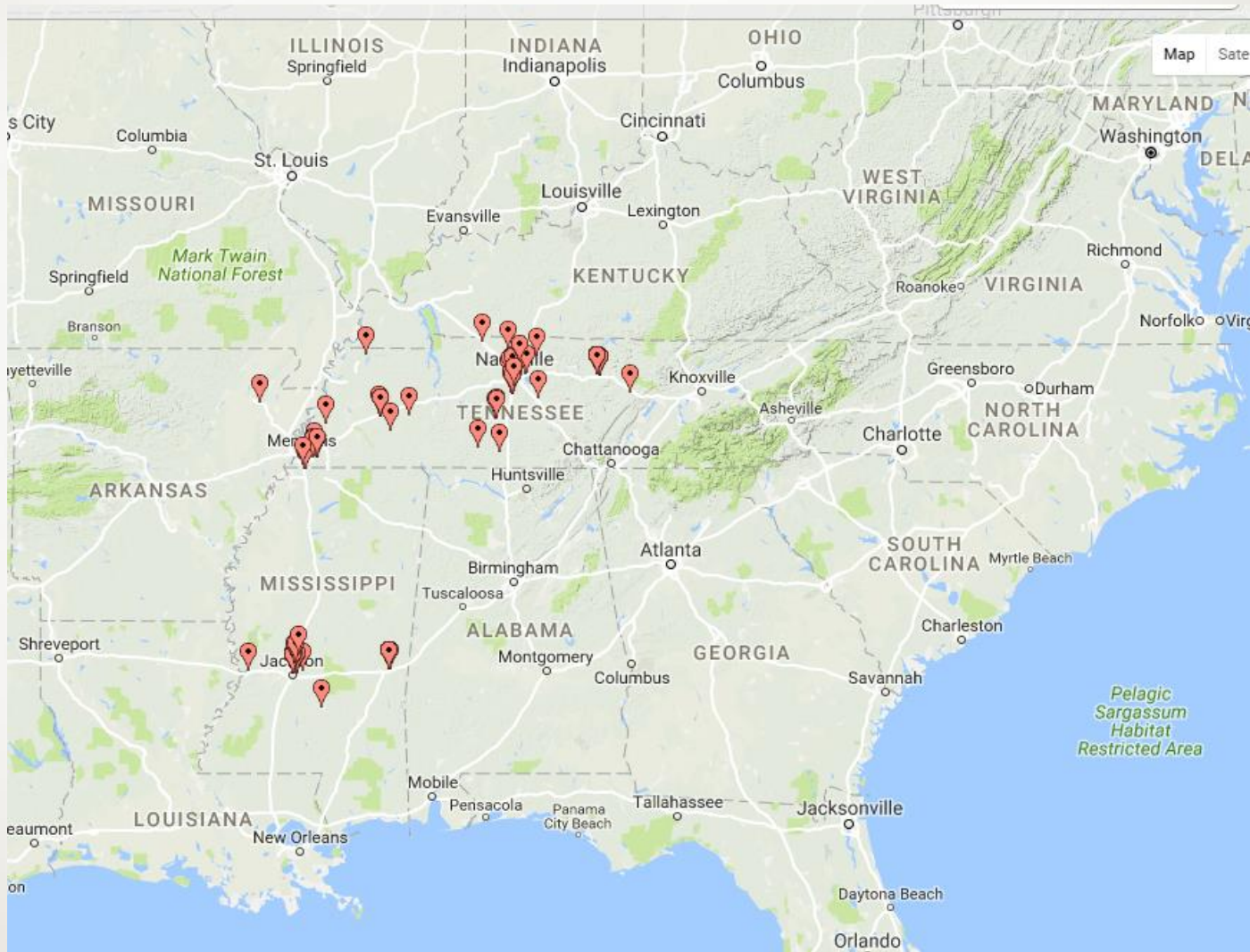
Training in Transformation

- Understanding of value-based health care system
- Quality measurement and evaluation
- PDSA cycles for rapid quality improvement
- Care coordination and disease management
- Improved access/scheduling/referral patterns
- Optimizing technology in clinical care
- Patient-centered care
- Collaborative care models (ex. Psychiatry)
- Engagement of local resources and community

Summary

- Population health is a growing field aimed at improving care for individuals and populations

- Heath Literacy/numeracy and health communication are important components to addressing population health

- Significant opportunities to advance the science of health literacy/health communication in population health

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Questions