

Systems Issues and Health Literacy: Assessing Problems and Generating Solutions

Darren Dewalt, MD, MPH &
Robb Malone, PharmD, CDE
University of North Carolina-Chapel Hill
Department of Medicine

Low Health Literacy: Patient Outcomes, Self-Care, and Safety

- We have previously discussed the impact of low health literacy on:
 - Outcomes
 - Behaviors
 - Knowledge
- Low health literacy has also been recognized as risk factor for medical errors
 - Communication problems are the most common cause of medical errors
- The health care system recognizes this, but has not adopted techniques to address the problem

Fernald D, et al. Ann Fam Med. 2004; 2: 327-332
Health Literacy and Patient Safety. AMA Foundation. 2007

The System and the Patient

The Health Care System is Becoming More Complex

- The elderly population is growing
- The minority population is growing
- The number of Americans with limited English proficiency is growing
- The number of medications prescribed has increased
- Hospital stays are shorter
- More self-management occurs in the home



The Truth About Systems

“Every system is perfectly designed to get the results it gets”

“The definition of insanity is continuing to do the same thing over and over again and expecting a different result”

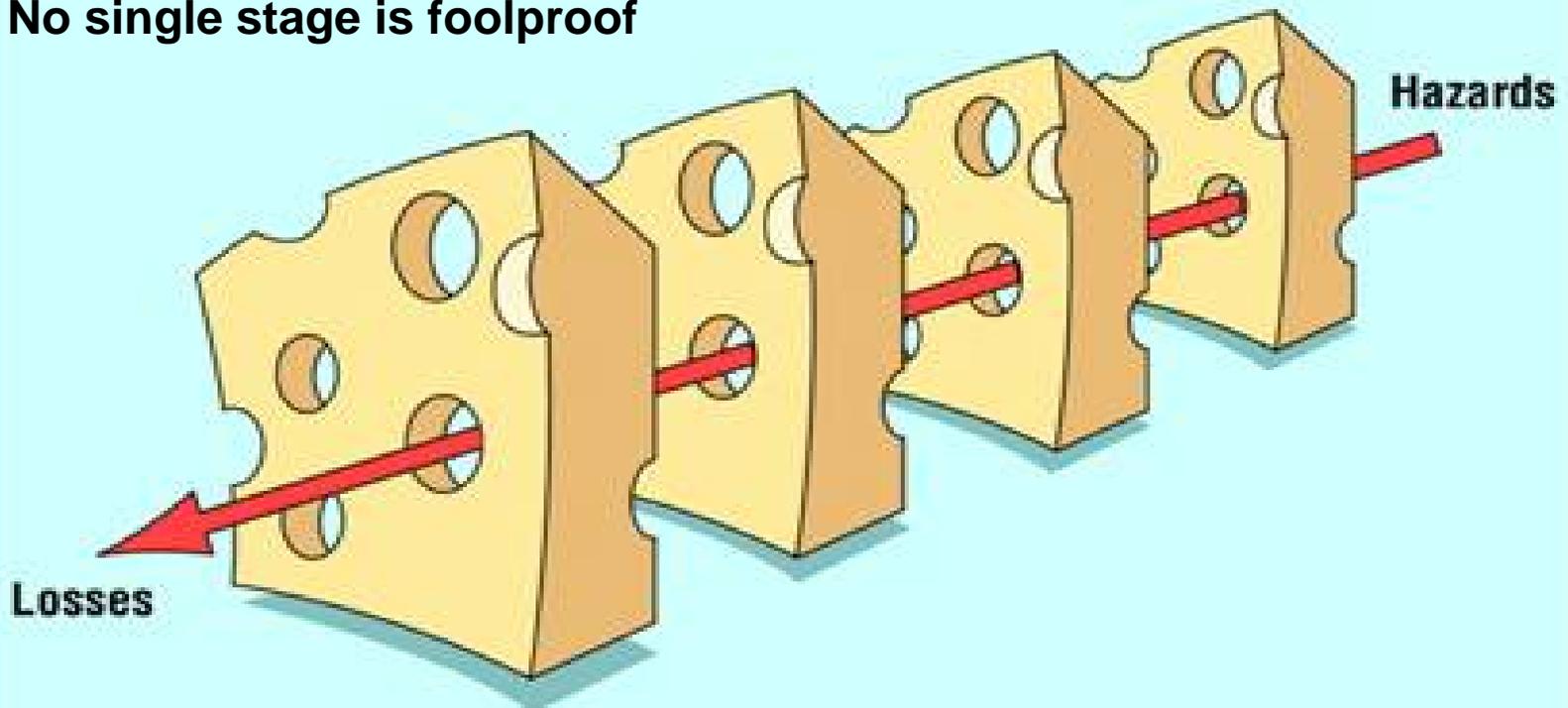
–Benjamin Franklin

We Have a Problem and Must Alter Systems of Care

- The complexity of the care system exacerbates literacy vulnerabilities
- All aspects of our system can raise barriers
 - Appointments and referrals
 - Getting tests done
 - Paying for medicine or treatment
 - Understanding bills and insurance

The Health Care System and the Swiss Cheese Model

Health care is complex
No single stage is foolproof



Reason J. BMJ. 2000;320:768-770

A Better System Must be a Reliable System

- Reliable processes, procedures, and strategies are required to attain and maintain improvement
- Key features of a high-reliability organization are:
 - Acknowledgement of the high-risk, error prone nature of the organization
 - A blame-free and shame-free environment where individuals can report problems and errors
 - An expectation of collaboration across ranks
 - A willingness of the organization to direct resources

Begin the Improvement Process: Gain Insight Through Knowledge

Assess your Practice

- Know your patients
- Know your providers and staff
- Know your processes
- Know your patterns
- Use tools to help
 - ‘The Green Book’, Dartmouth
 - [The Physician Practice Safety Assessment](#)
 - The Health Literacy Environment Review

Health Literacy and Patient Safety. AMA Foundation. 2007
Assessing Your Practice. Godfrey et al. 10/2003.
Literacy Alberta, ‘The Literacy Audit Kit’ Devins et al.
The Health Literacy Environment of Hospitals and Health Centers. Rudd and Anderson.





How do Patients Experience Your Practice: Evaluate the Environment

- How will you be greeted by the front desk staff?
- What paperwork will you have to complete?
- What procedure will they ask you to follow?
- Will assistance be offered?
- Will you receive handouts or consent forms?
- Did you receive enough education to understand your own care?
- Will you get the same message from provider to provider, staff to staff, etc.?

Assessing Your Practice. Godfrey et al. 10/2003.

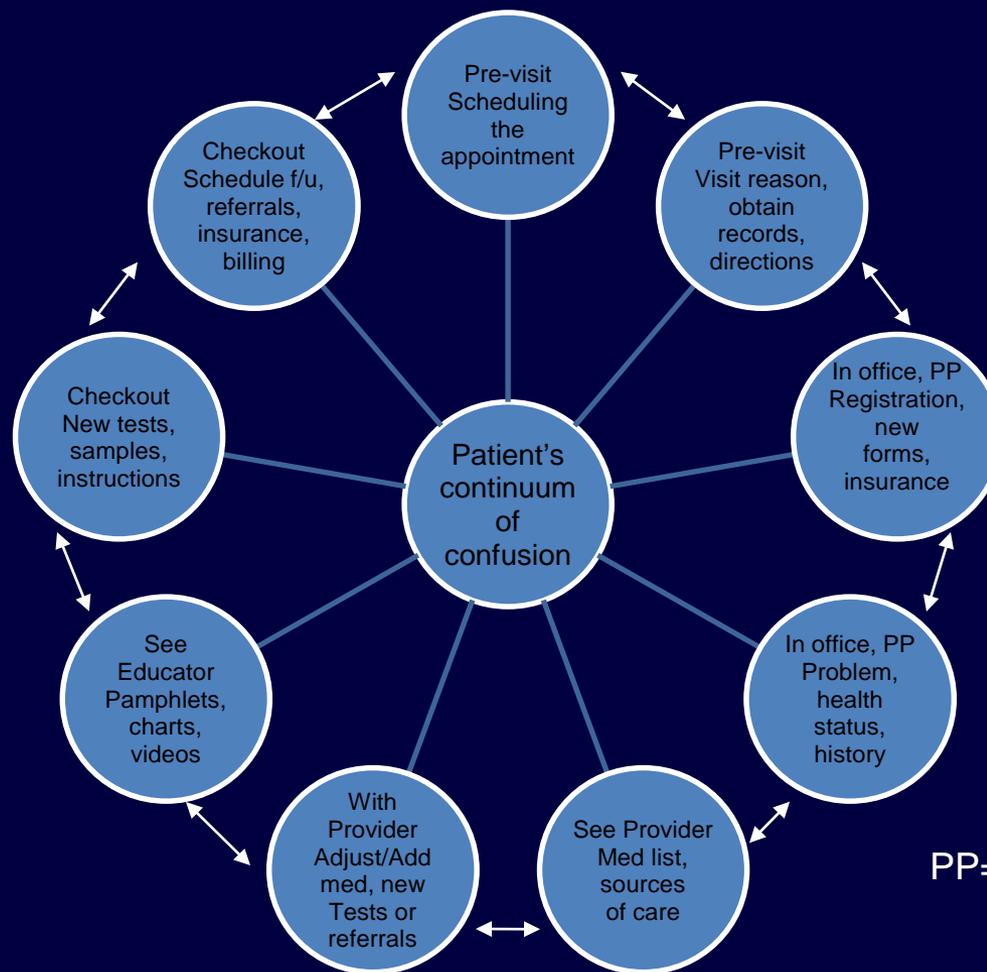
How do Patients Experience Your Practice: The Walk Through

- Perform a walk-through
 - Determine a start and stop point
 - May be on the phone
 - Consider a 'real' visit
 - Document your findings
 - Share what you learn

Date: _____		Staff Members: _____		
Walk Through Begins When: _____		Ends When: _____		
Positives	Negatives	Surprises	Frustrating/Confusing	Gratifying

Assessing Your Practice. Godfrey et al. 10/2003.

The Continuum of Confusion: “Now go home and safely manage your care”



PP=Prior to seeing physician

Health Literacy and Patient Safety. AMA Foundation. 2007

Now That You Have Data, Look for Opportunities

- Are the right services being provided?
- Are there new services that patients could benefit from?
- Are the right people doing the right things?
- Do we need to develop new roles?
- Are there any processes that can be eliminated?

Assessing Your Practice. Godfrey et al. 10/2003.

Implement Change: The Keys for Transformation

- To transform a practice you need to:
 - Assess the current state of the environment
 - Increase awareness of the problem
 - Build a sense of accountability for change
 - Train staff
 - Take action with new skill sets once they are developed
 - Assess progress of your actions



Full Transformation Requires Improved Communication: Universal Precautions for Low-literacy

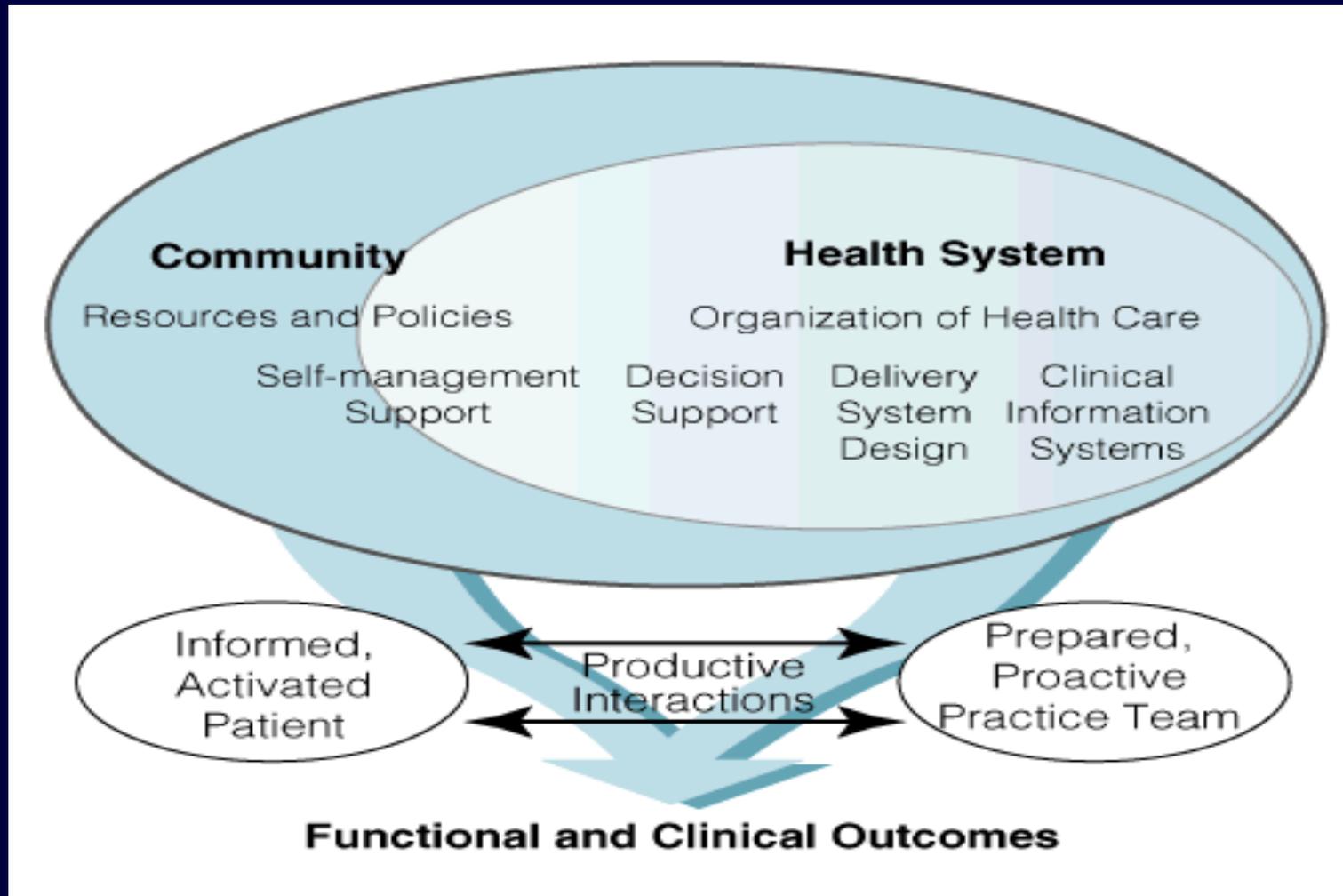
- Interpersonal communication
- Communication aids
- System-wide communication strategies
 - Train your staff alter hiring practices
 - Simplify paperwork demands on the patient
 - Ensure medication review & reconciliation
 - Schedule adequate time for education

Planned Care

Effective Chronic Illness Care

- Effective interventions usually fall into five areas:
 - The use of evidence-based planned care
 - Reorganization of systems and provider roles
 - Improved patient self-management support
 - Increased access to expertise
 - Greater availability of clinical information
- The challenge is to organize these into an integrated system of care

The Chronic Care Model



Wagner EH. *Effective Clinical Practice*. 1998;1(1):2-4.]

Planned Care Components

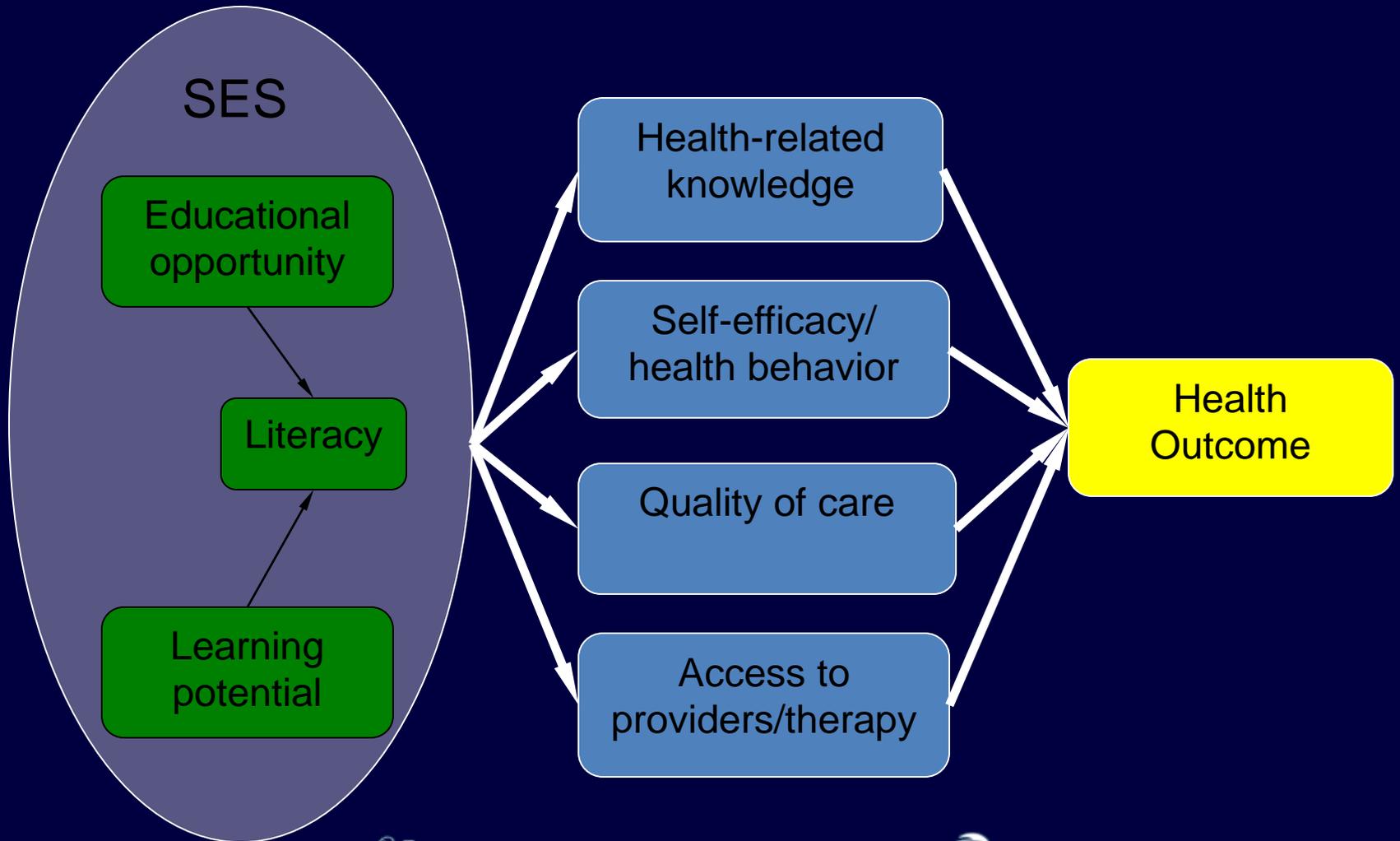
- Multidisciplinary teams
- Defined follow-up procedures
- Treatment algorithms based on best available evidence
- Information systems for tracking patients
- Patient education for self-care

New Designs for Planned Care

- Many planned care programs focus on the management of chronic illnesses
- The principles and knowledge gained from these planned care models may be used as a template for many types of patients
- An appropriately designed planned care system may improve self-care, particularly for low literacy patients

[Institute for Healthcare Improvement](#), accessed 4.17.08

Why Would Planned Care Work for a Patient with Low Health Literacy?



Planned Care: A UNC Example

Diabetes Planned Care

- Patient registry
- Prompting
- Treatment and monitoring algorithms
- Patient education
- Care coordination

Educational Strategies

- Patient centered learning
- Focus on behaviors rather than knowledge
- Repetition/reinforcement
- Survival skills
- Teach-back method

Care Coordination

- Call at-risk patients at least once a month
- Review self-care skills
- Help to navigate health care system
- Address barriers of medication access, transportation, and communication



The RCT

One Time Management Session

Planned Care

compared to

Usual Care

112 patients

106 patients



Outcome Measures

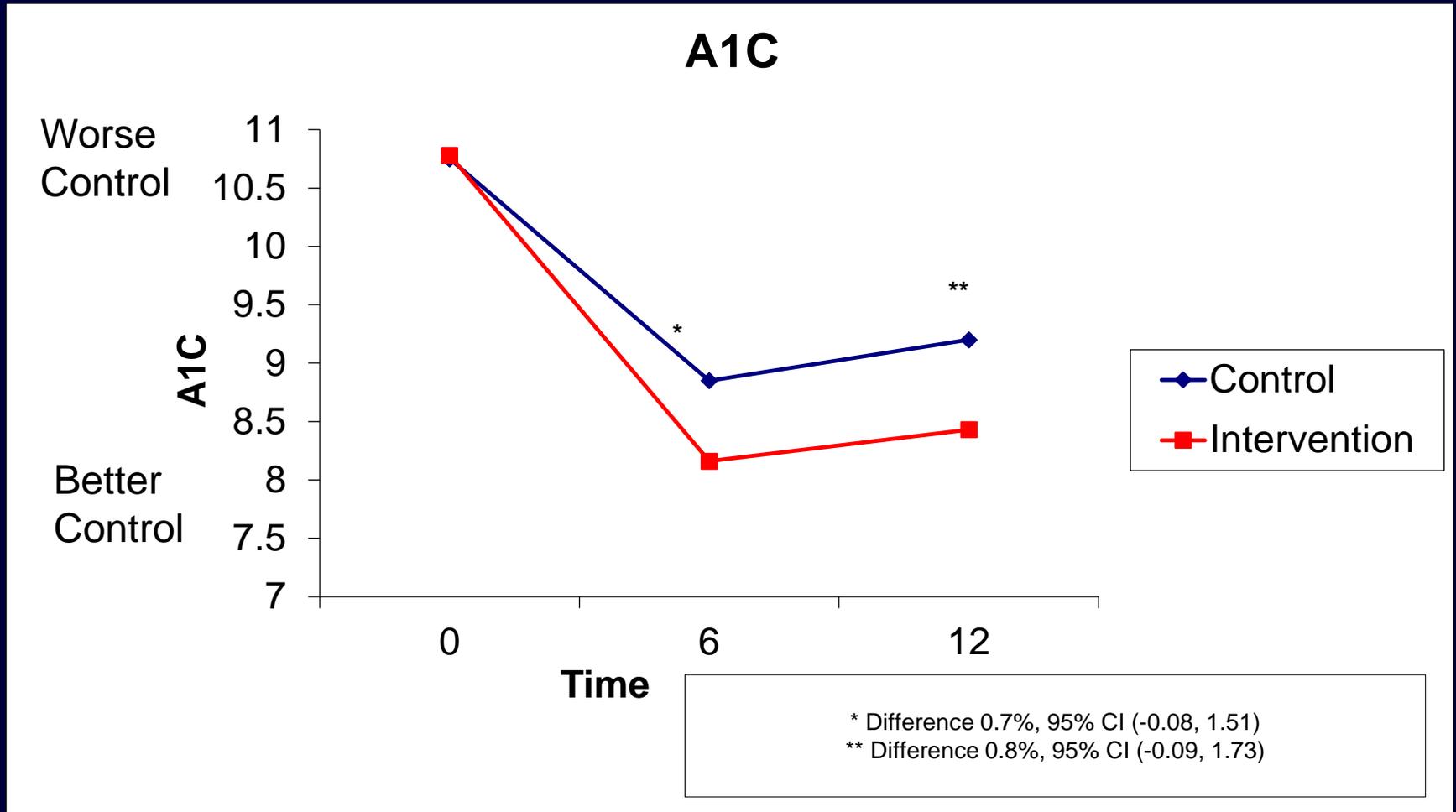
- Primary Measures
 - A1C
 - Blood pressure
 - Aspirin use
- Secondary Measures
 - Diabetes knowledge
 - Treatment satisfaction
 - Medical visits
 - Potential harms

Demographics

Variable	Control (n=105)	Intervention (n=112)
Age, mean (SD), y	56.7 (10.8)	53.5 (12.5)*
Female, No. (%)	59 (56%)	63 (56%)
African American, No. (%)	62 (59%)	78 (70%)
Household Income ≤\$20,000, No. (%)	78 (76%)	77 (69%)
Less than HS education, No. (%)	46 (44%)	40 (36%)
REALM Score, median (IQR)	57 (32-64)	55 (31-62)
Low Literacy, No. (%)**	34 (32%)	49 (44%)

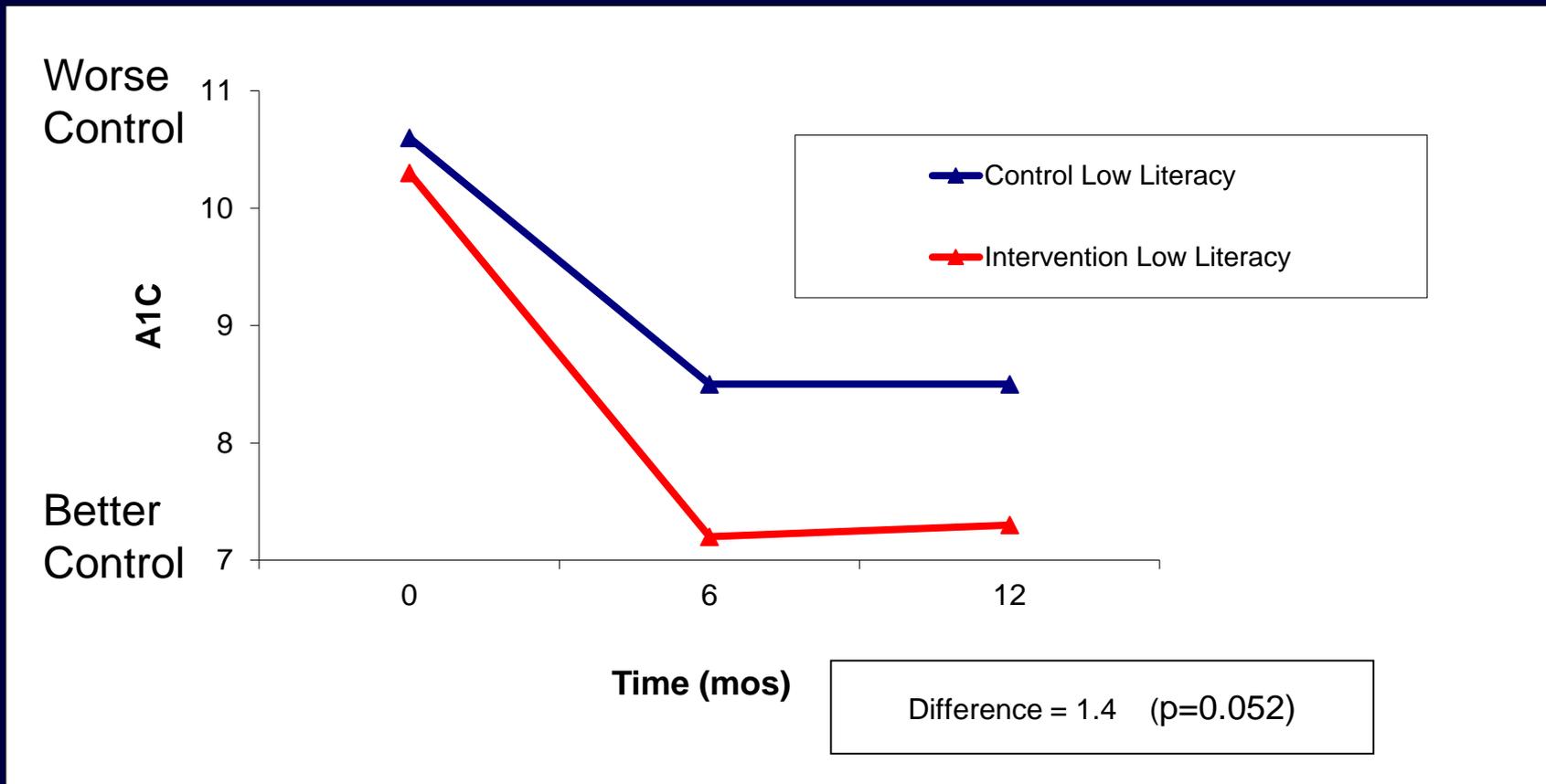
** Defined as ≤6th Grade Literacy Level on REALM

Improvement in A1C



Results According to Literacy Status

Diabetes Control: Results for Patients with Literacy at or Below 6th Grade Level



Rothman et al. *JAMA* 2004, **292**(14):1711-1716.

Tools for Your Practice: Prepare for the Day, the Huddle

One Simple Tool of Planned Care: Clinic Huddles

- Proactively anticipate and plan for the work at hand
 - At the beginning of the day,
 - follow-up issues from the day before
 - review the work for the day
 - wrap up at end-of-day
 - plan for tomorrow
- Keep focused and short
- Include a variety of staff

How Does a Huddle Work?

Huddle Sheet

Practice: Cedars Family Practice

Date: October 31, 2002

Aim: Enable the practice to proactively anticipate and plan actions based on patient need and available resources, and contingency planning.

Follow ups from Yesterday

- Green, Yoder, Wheeler, Foster - check labs and do follow up per Dr. Martin (Carol)
- Need to plot phone volume on data wall and check to see if any trends are obvious (Susie)

"Heads Up" for Today: (include special patient needs, sick calls, staff flexibility, contingency plans)

- Mrs. Smith coming in today - usually brings her husband for blood pressure check (add 10 minutes to appointment time); Be sure they both receive flu shot
- If Mrs. Walker calls, Dr. Orzo wants to be interrupted

Meetings:

Patrick at Manager's Meeting from 8-9:30 am

Staff:

Mary leaving early for Halloween, John can cover her evening hours.
George can be on call this evening if more patients due to Halloween.

Review of Tomorrow and Proactive Planning

- Call Mrs. Jones . . . She has missed 2 appointments
- Since we mailed out lab tests on Mr. Wood - call lab if results are not received today
- Nancy Bacon was seen yesterday - cancel this appointment

Meetings:

Staff meeting 12-1

Staff:

More tools for your practice:
Create an environment of continuous
improvement, the Model for
Improvement (MFI) and use of Plan-Do-
Study-Act (PDSA) cycles



Model for Improvement

What are we trying to accomplish?

- Aim

How will we know that changes are an improvement?

- Measures

What changes can we make that will result in an improvement?

- Changes/Evidence-based strategies



PDSA: Plan-Do-Study-Act Cycles for Testing Change

- Plan
 - What's your aim for this cycle?
 - Predictions/Hypothesis
 - Develop your plan to test the change
 - Who? What? When? Where?
 - What will your measures be?
- Do
 - Perform your test/change
 - Collect data

PDSA: Plan-Do-Study-Act Cycles for Testing Change

- Study:
 - Analyze your data
 - Did they fit your predictions?
 - Did you encounter problems?
 - What did you learn?
- Act:
 - Should you expand size/scope of test or are you ready to implement the change?
 - If not, what changes are needed for next PDSA cycle

Where do you Start?

15 Example Strategizing Office Improvements Using Patient, Provider, and Process Knowledge

You have collected data about your patients, your people and the processes of patient care. This worksheet will help you put all your new information together to analyze your practice to identify opportunities for improvements and then plan PDSA cycles to test your new changes.

Step #1: Collect practice data using this workbook to identify strengths and improvement opportunities

Step #2: Insert improvement opportunities into the following table

Step #3: Identify specific causes linked to improvement opportunities

Patient Improvements (Satisfaction, Walk Through)	Specific Cause	Provider Improvements (Unplanned Activity Cards)	Specific Cause	People Improvements (Activity Survey Sheets)	Specific Cause	Process Improvements (Cycle Time, Process Assessment Tool)	Specific Cause
1. Staff Variation in office/phone procedure	Staff not trained	5. Waiting for supplies	Room not stocked	9. Data Management	EMR, Staff Compliance with Input	13. Long check-in time	Receptionist answers phone and registering
2. No scheduled time for staff communication	No staff meetings to discuss pts.	6. Missing forms	Not stocked/anticipated	10. Staff have fixed roles	No cross training	14. Messaging	Everyone takes messages differently
3. Exam rooms dirty	No one assigned to cleaning	7. Phone Interruptions	Necessary/Unnecessary	11. Staff Communication	No tools/process/meeting	15. Test Reporting	Long process
4. Poor pt. education about processes	No time for education	8. Too much e-mail	Communication vs. info	12. Interpretation of Info	Human variation	16. Rooming patients varies	No standardization

Step #4: From the above, Identify importance of waste and ease to change

Using this graph, plot each of the above waste/delays by number. Consider where the waste/delay falls on the continuum of importance of waste and the ease to change. Those numbers that fall in the upper right hand quadrant will be the important waste issues and the easiest to change. Start with these first as you roll out PDSA cycles.



** Upon review of Step #4, we decide to flow chart #5, "Waiting for Supplies". See steps 5 and 6.

Small group Discussion: Identify Systems Issues

- Reflection/Discussion:
 - Where do your patients get health information?
 - How can you be an effective agent of change?
 - How do you ensure that your patients get all the information they need?
- Activity:
 - Develop a PDSA action plan to be implemented

The End

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