NATIONAL QUALITY CENTER

Welcome to the NQC TA Call on

On Your Mark, Get Set, Go! Measuring Clinical Performance

April 14, 2011

Jesse Ungard, MA, HIVQUAL-US Consultant
Jeffrey A Curtis, MS, Clarion University of Pennsylvania

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Funded by HRSA
HIV/AIDS Bureau

Topic and Rationale

- Performance measurement is the process whereby an organization establishes the parameters within which programs, investments, and acquisitions are reaching the desired results.
- This process of measuring performance often requires the use of statistical evidence to determine progress toward specific defined organizational objectives. Wikipedia

Why Measure?

Funded by HRSA
HIV/AIDS Bureau

Reasons to Measure

- Separates what you ***think*** is happening from what ***really*** *is* happening
- Establishes a baseline: ***It's ok to start out with low scores****!*
- Determines whether changes actually lead to improvements
- Avoids slippage

Reasons to Measure (cont.)

- Ongoing / periodic monitoring identifies problems as they emerge
- Measurement allows for comparison across sites, programs, EMAs, TGAs and states and across years
- The Ryan White HIV/AIDS Treatment Extension Act of 2009 mandates performance measurement
- The HIV/AIDS Bureau places strong emphasis on quality management

Objectives

- Develop clinical and non-clinical performance indicators, data collection strategies, and be able to identify and implement key performance measurement steps.
- Understand the balance of performance measurement and quality improvement activities.
- Know how to access existing resources on performance measurement, including HAB, NQC, and HIVQUAL measures.

What to Measure

Funded by HRSA
HIV/AIDS Bureau

What is a Quality Indicator?

- A quality of care indicator is an aspect of patient care that is measured to evaluate the extent to which a facility provides or achieves a particular element of care.
- Generally, based on specific standards of care derived from guidelines issued by a professional society and/or government agency.

Types of Indicators

- Process: Indicators that measure aspects of a client's care, number of visits, wait time, linkage to care, etc.
- Outcome: Indicators that measure health status, lab results, ER visits, mortality, etc.
- Self-Report: Measure client perception of care, satisfaction and knowledge of care.
  - Indicators can be local or collected across a region.

Factors to consider in choosing indicators:

- Relevance: Is the indicator going to measure something important about the quality of your program?
- Measurability: Can you quantify the indicator and generate a count or percentage?
- Accuracy: Do you have access to reliable data that you know is valid?
- Improvability: Are you measuring something that you have control of and can influence?
  - If yes to above, you have a good indicator…

How do you calculate the indicator?

- Determine **Who** is eligible to be measured: Everyone, every site, just 12-mo., just women, etc.
- What care should be received? This determines your **Denominator**: All clients should receive mental health screening at intake. This is the standard for your program.
- What care did the clients actually receive? This determines your **Numerator**. 48/65 new clients received MH screen = **74%**.

Balance Clinical and Non-Clinical Measures

Clinical Measures

- Medical visits
- Labs
- Antiretrovirals
- Prophylaxis
- Screening: Hep, lipids, syphilis, STI, TB, etc.
- Vaccinations: Flu, Pneumo, Hep B
- Counseling: Adherence, HIV risk, Etho, Tobacco

Non-Clinical Measures

- Intakes, multiple elements by category
- Needs assessments
- Treatment plans
- Service requirements
- Monitoring/updates
- Referral/follow-up
- Client involvement
- Linkage to medical care

Data Collection Strategies

- Manual vs. Electronic, Consider Resources
- Decide on sampling plan (sample size, eligible records, random sample)
- Develop data collection tools and instructions
- Balance data from charts, clients, and agency
- Train data abstractors
- Run pilot test and adjust tools accordingly
- Inform staff of the process
- Check data accuracy
- Plan for data analysis, confidentiality, display

Remember Key Performance Measurement Steps:

- Assess local standards of care, US-PHS guidelines, HAB/HIVQUAL/NQC and other measures
- Develop data collection tools at the agency, provider, and client level
- Determine sample size based on utilization
- Plan for data analysis, patient confidentiality, and sharing of results
- Confirm logistics of performance measurement visits

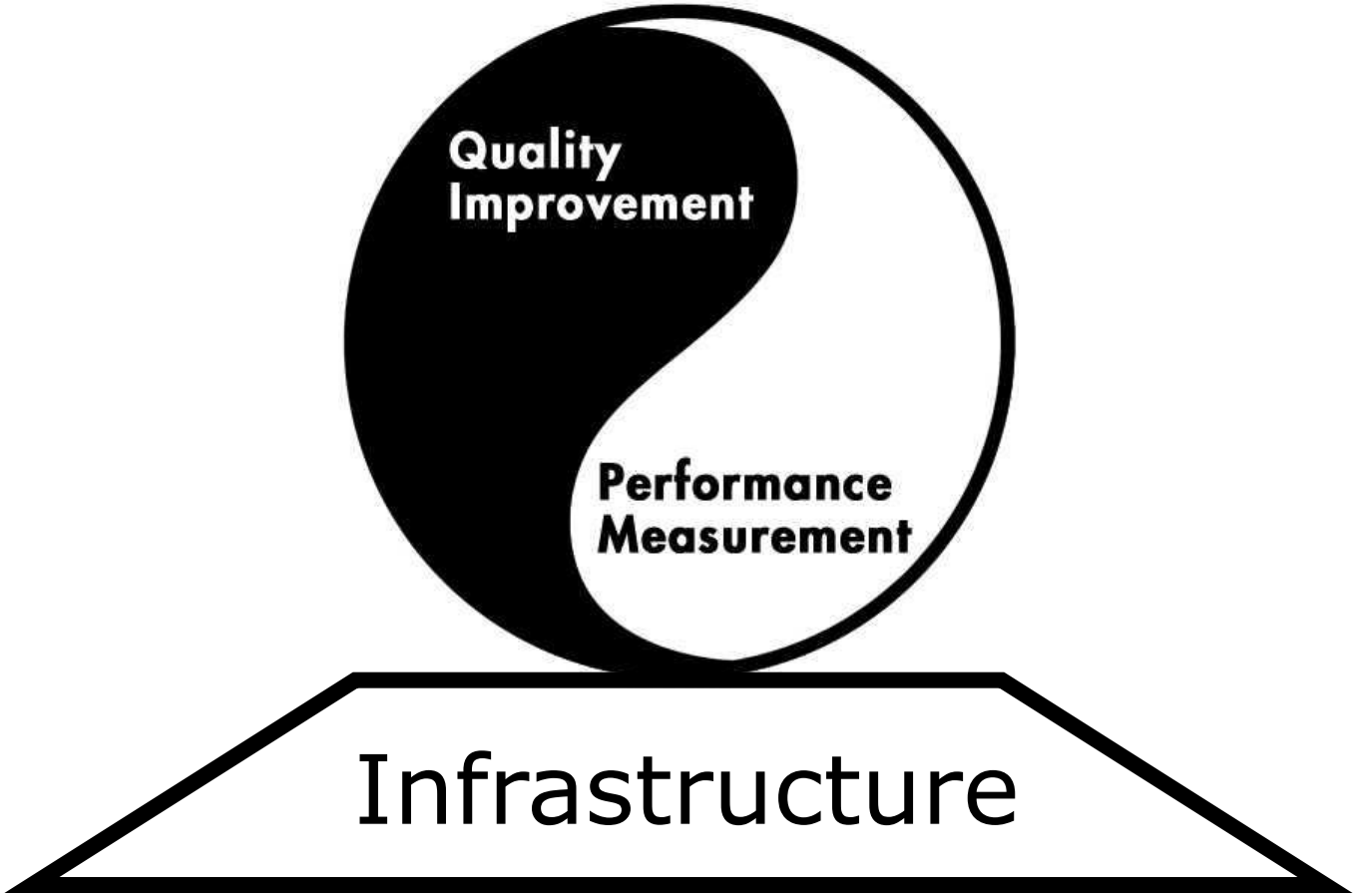
Key Performance Measurement Steps:

- Document and track each PM cycle
- Secure every data collection tool and client survey
- Conduct debriefings after performance measurement is conducted
- Develop performance reports and share!
- Mine data for best practices and cross training opportunities
- Differentiate performance improvement from administrative monitoring

Frequency

- You don’t need to measure everything all of the time. Extrapolate from a sample of time
- Balance the frequency of measurement against the cost in resources
- If limited resources, measure areas of concern more frequently, others less frequent
- Balance the frequency of measurement against the usefulness in producing change
- Consider the audience and how frequently they are setting priorities in certain areas

Linking Performance Measurement and Quality Improvement



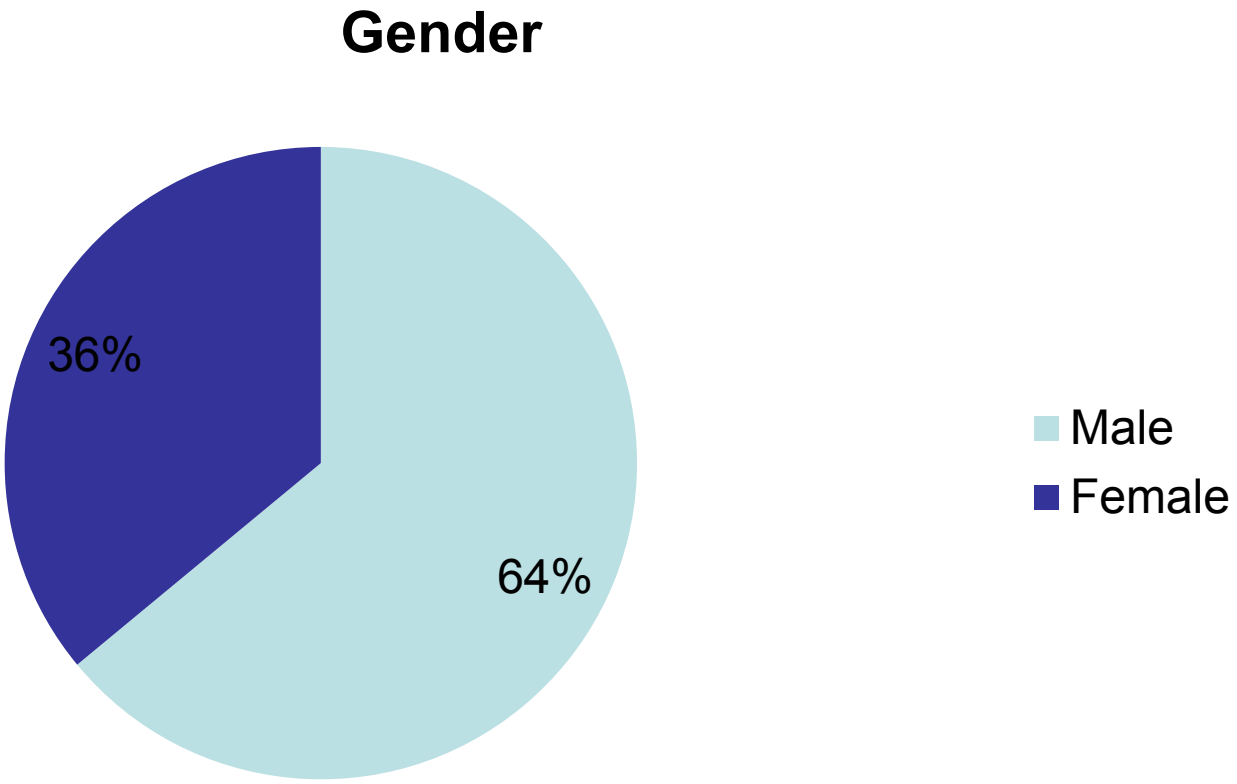
So Now What?

- Prioritize data and develop improvement project teams.
- Write improvement project memos.
- Investigate the process, brainstorm, flowchart, fishbone, etc.
- Conduct rapid PDSA cycles of change.
- Re-measure, evaluate results with stakeholders, storyboard, etc.
- Systemize changes, watch gains, dashboard.
- Celebrate successes!

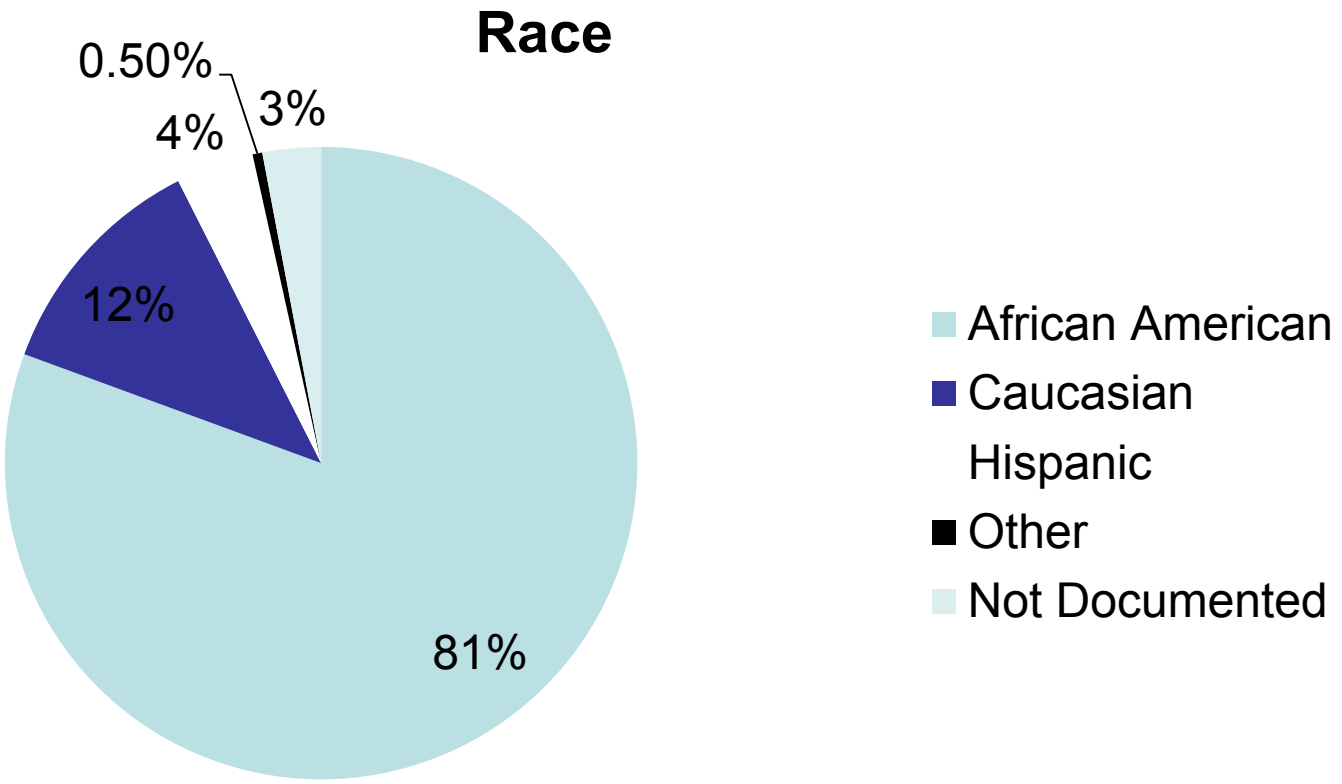
In Baltimore…

- A four-year cycle of reviews by category
- Approximately 25 agencies reviewed per year
- Data collected 3 ways: Chart review, Consumer surveys, QM Org. Assessments
- Immediate debriefings with strengths and areas for improvement
- Category reports blind across vendors
- Agency reports benchmarked to peers
- Improvement plans to the grantee
- Collaborative TA meetings with peers

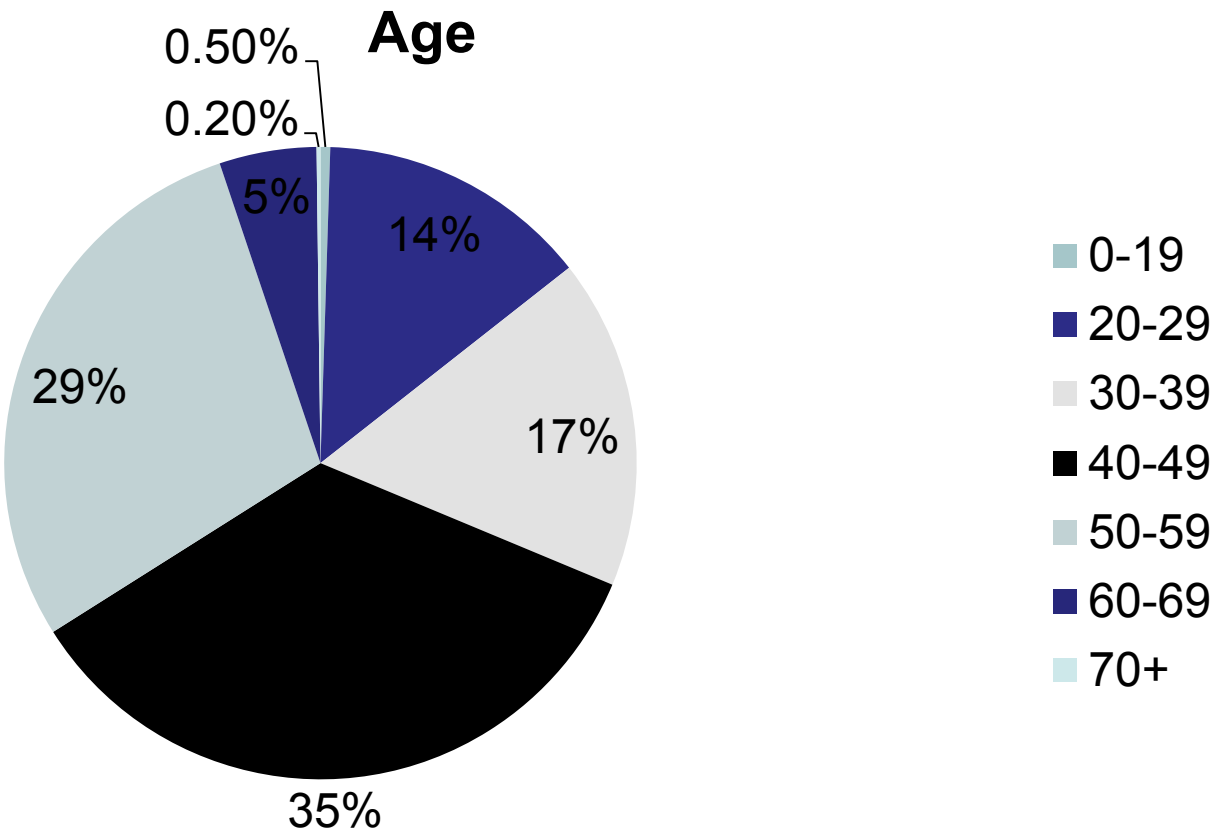
Demographics: Gender, N=563



Race

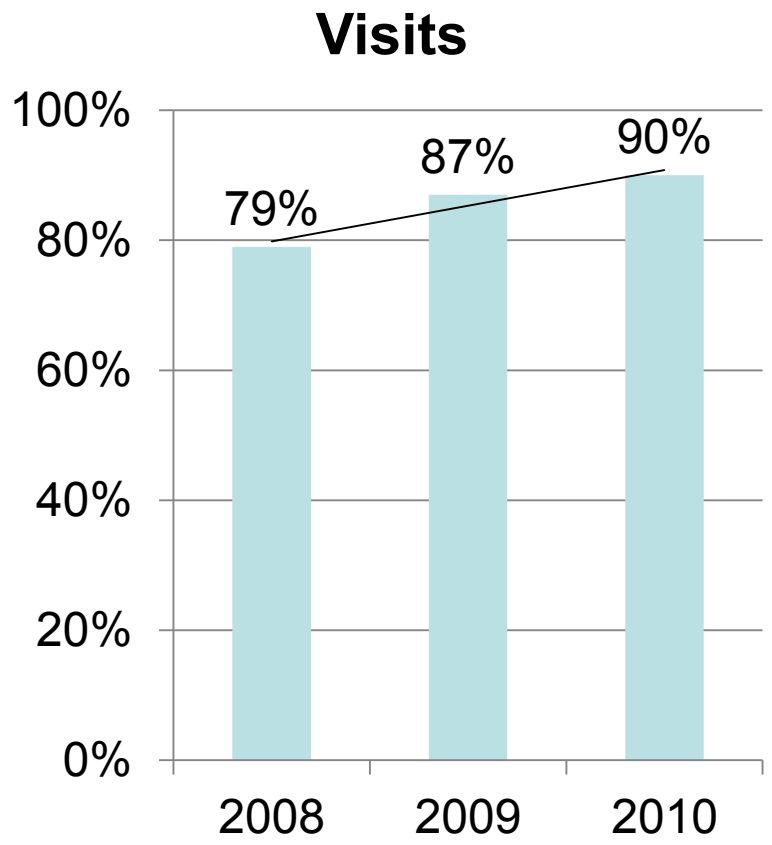

Race
0.50%
3%
4%
12%
81%
African American
Caucasian
Hispanic
Other
Not Documented

Mean Age = 44 Years



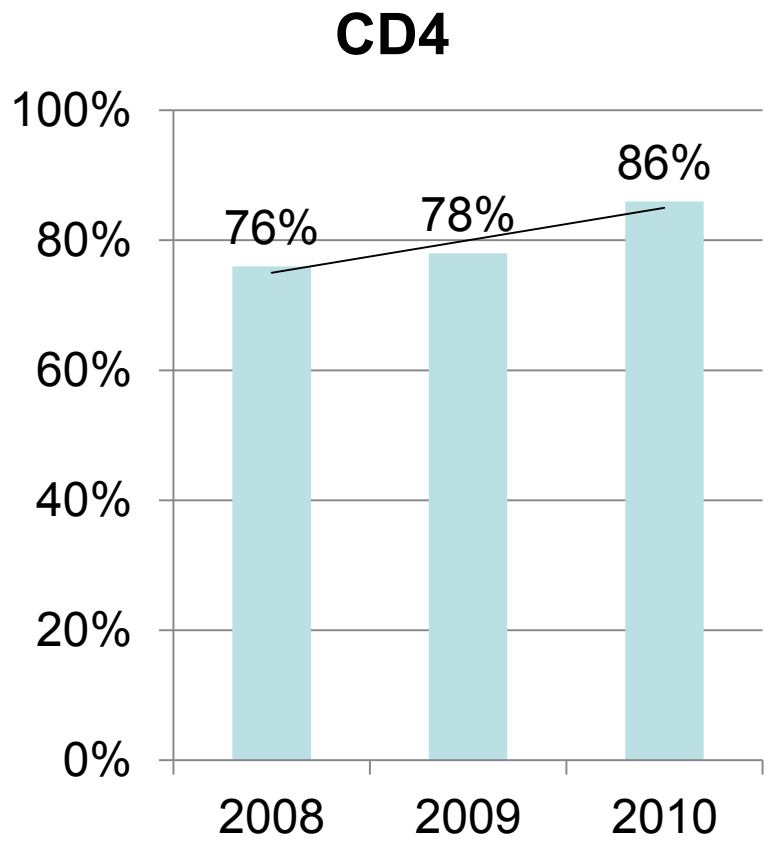
Medical Visits, N=509

- Percentage of clients with HIV infection who had 2 or more medical visits at least 3 months apart in an HIV care setting in the measurement year



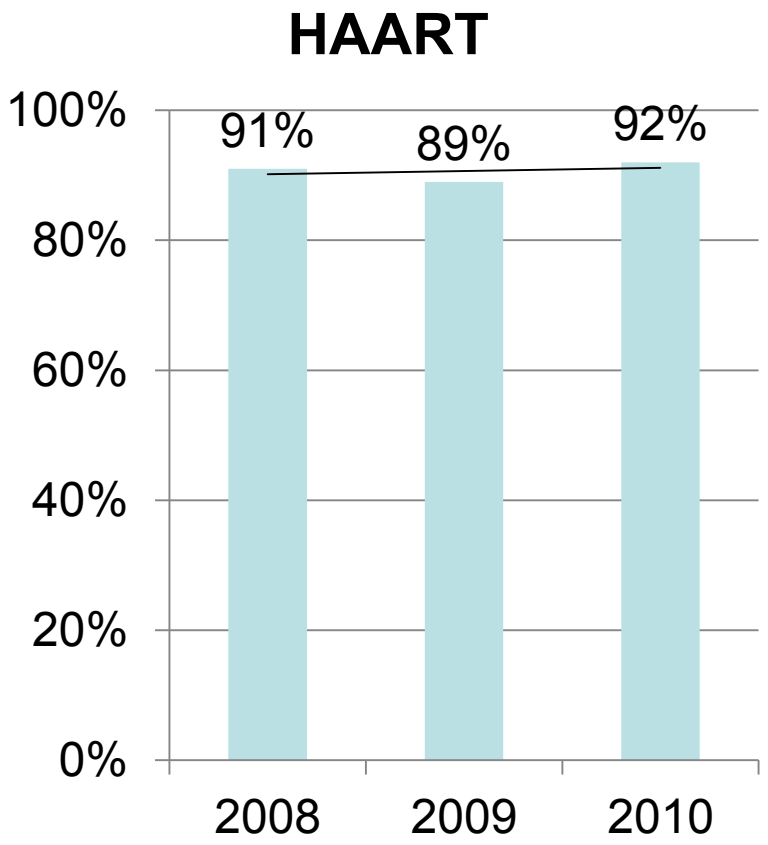
CD4, N=503

- Percentage of clients with HIV infection who had 2 or more CD4 T-cell counts performed at least 3 months apart during the measurement year



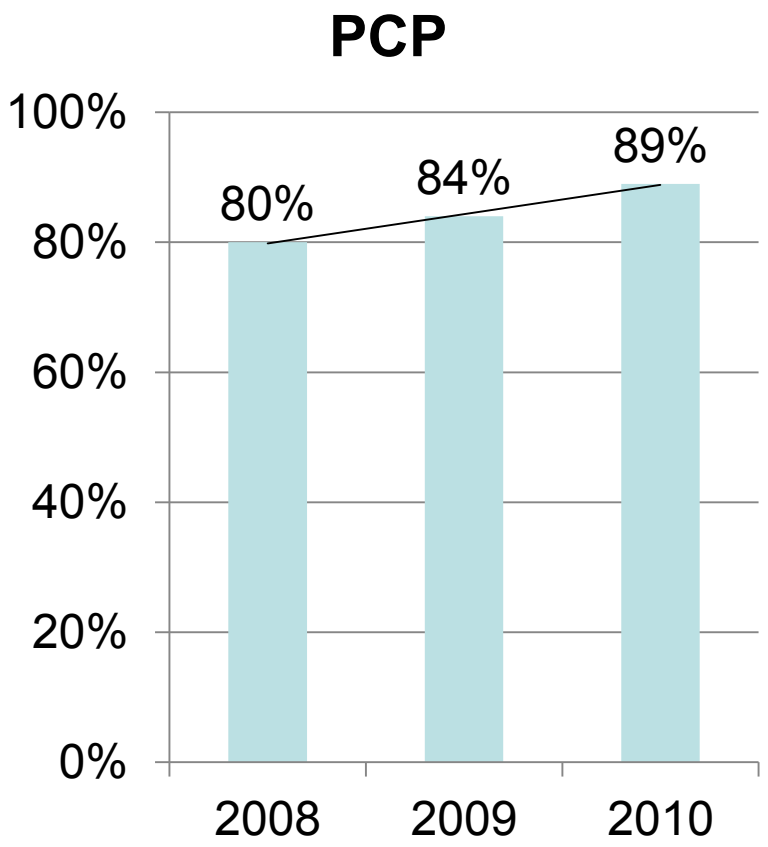
HAART, N=358

- Percentage of clients with AIDS who were prescribed a HAART regimen within the measurement year



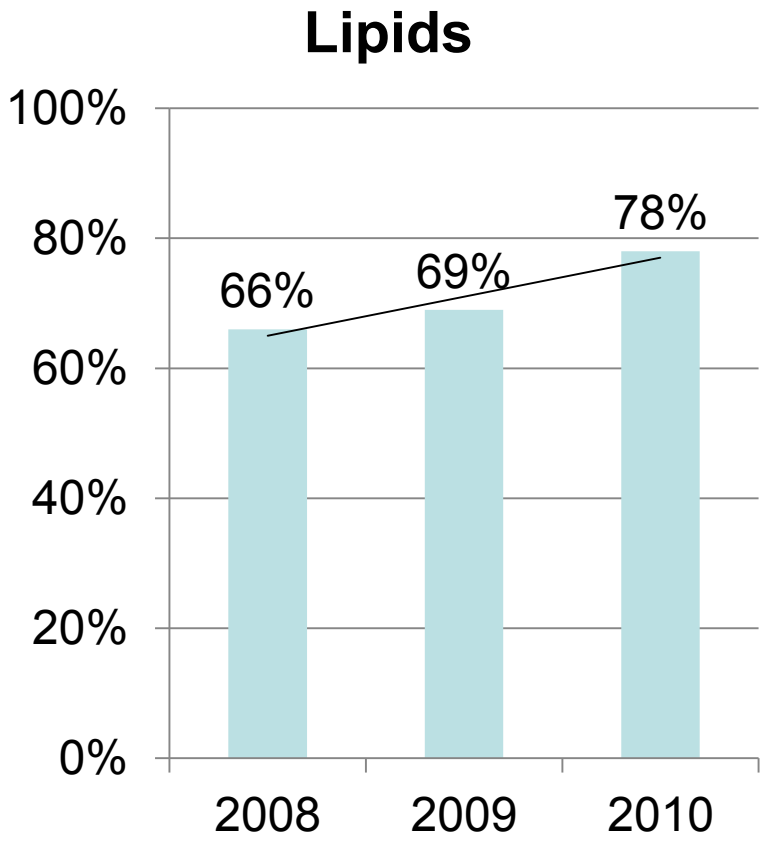
PCP, N=149

- Percentage of clients with HIV infection and a CD4 T-cell count below 200 cells/mm who were prescribed PCP prophylaxis



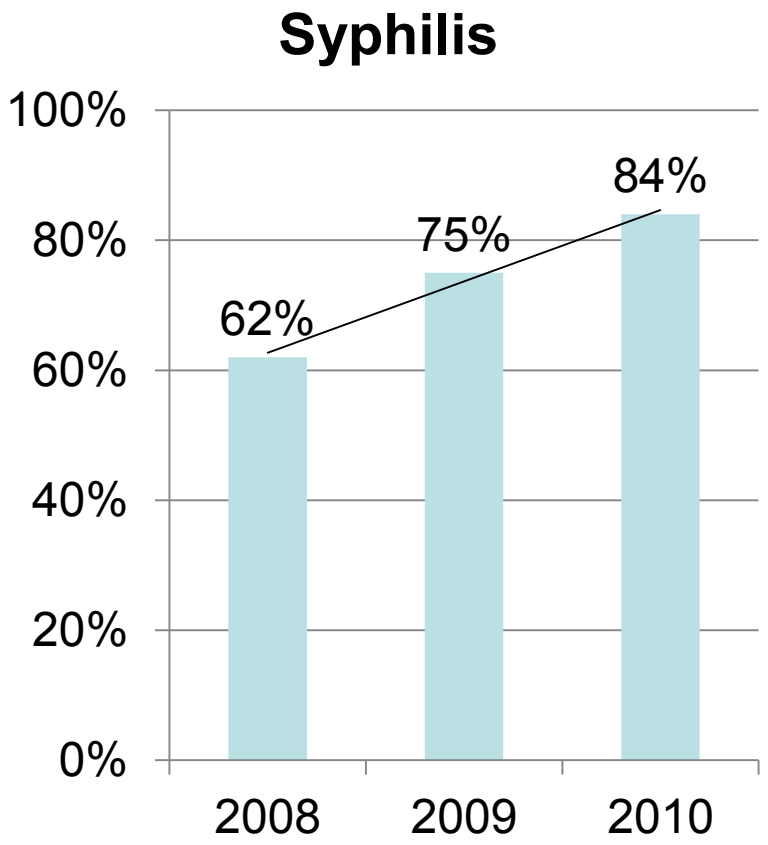
Lipids, N=478

- Percentage of clients with HIV infection on HAART who had a fasting lipid panel during the measurement year



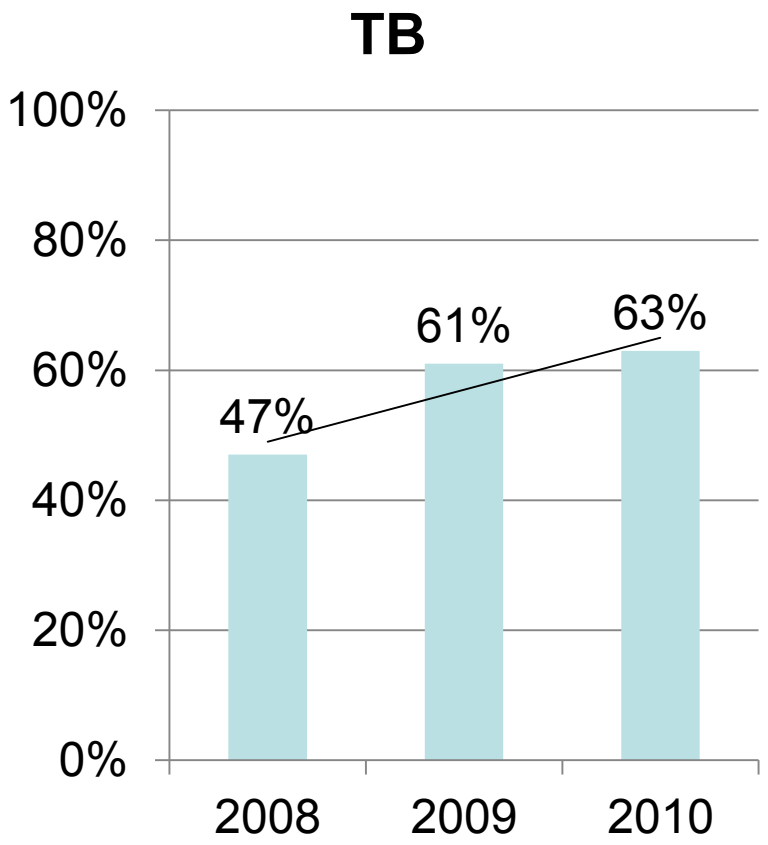
Syphilis, N=549

- Percentage of adult clients with HIV infection who had a test for syphilis performed within the measurement year



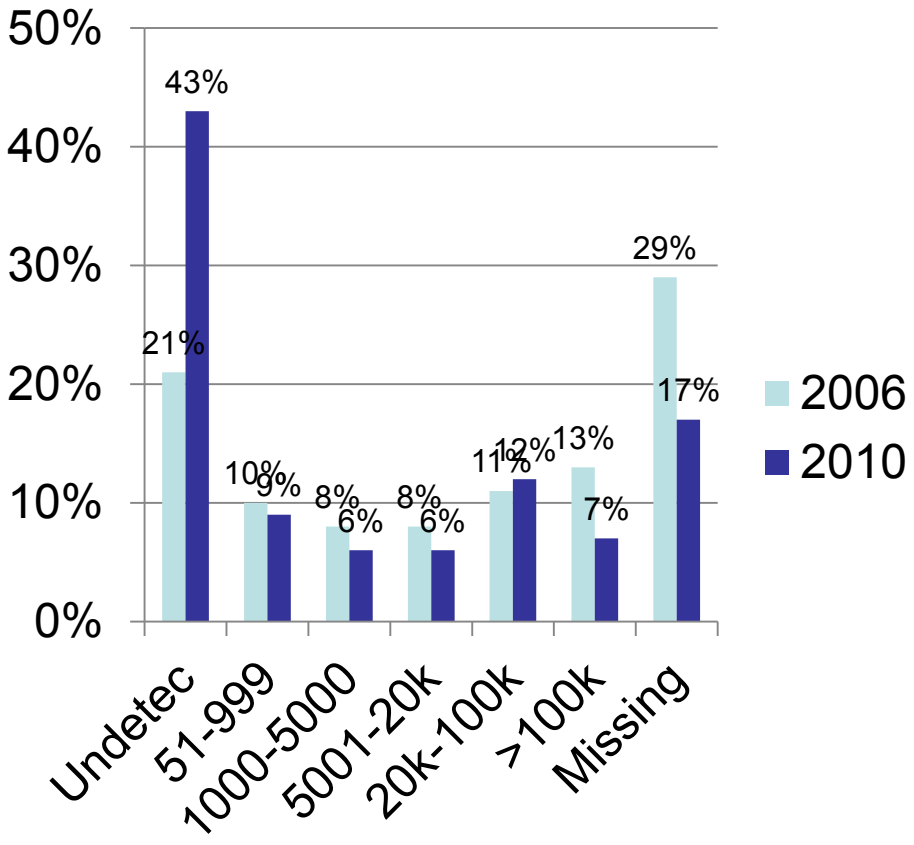
TB, N=465

- Percentage of clients with HIV infection who received testing with results for latent tuberculosis infection since HIV diagnosis

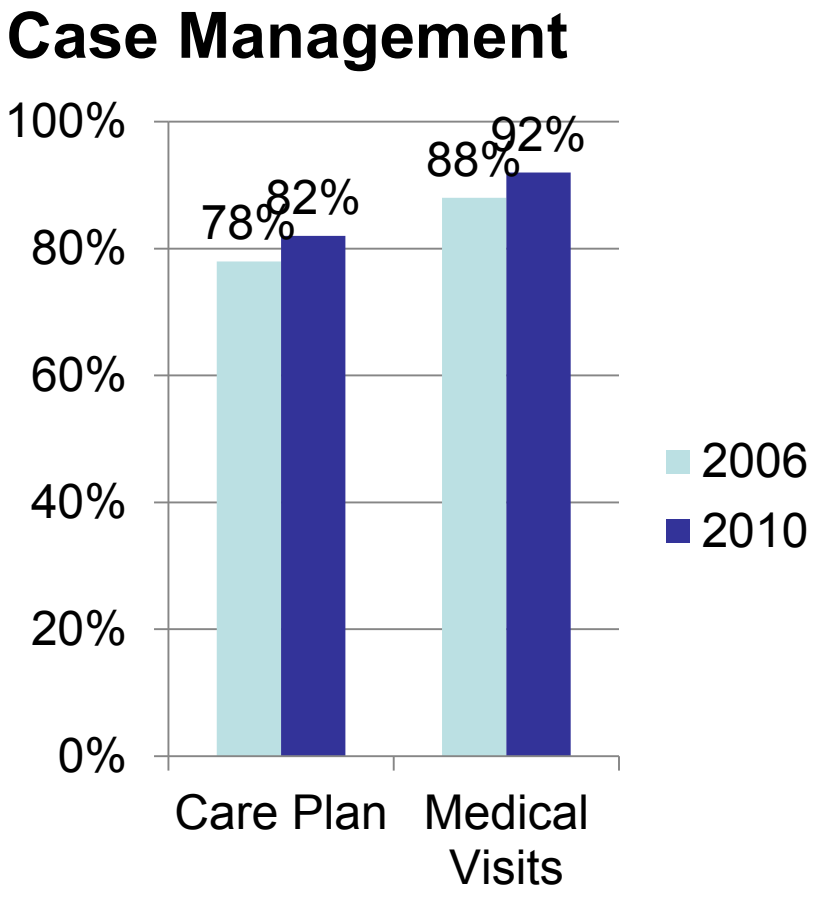


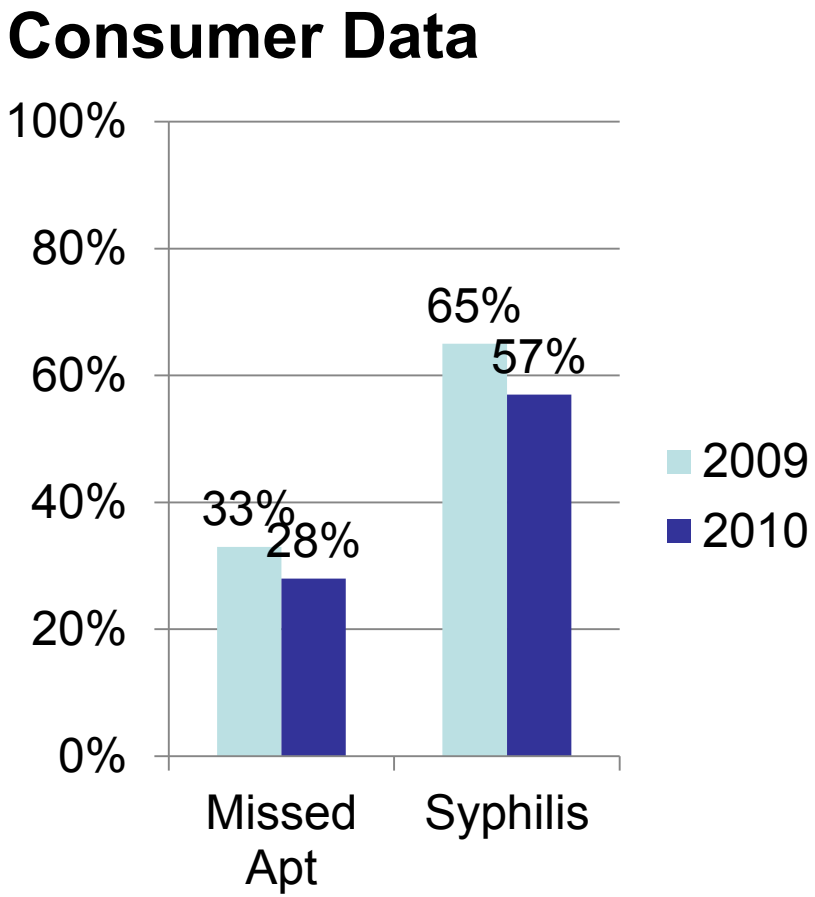
What about outcomes?

- Over 40%, the largest proportion of clients, had a viral load that was undetectable; a substantial increase over a 4 year period, due to both better documentation and less 100K values



What about non-clinical measures?





Lessons Learned

- Be patient
- Be supportive
- Be inclusive
- Understand providers have limited time to work with data
- Provide time and tools for providers to work together and learn from one another
- Leverage existing meetings
- Be realistic: measure a lot, but work on improving a few things at a time

Clarion University of Pennsylvania

Ryan White Part B/C Program

Jeffrey A Curtis, MS
Executive Director

Northwest Rural AIDS Alliance
Clarion University

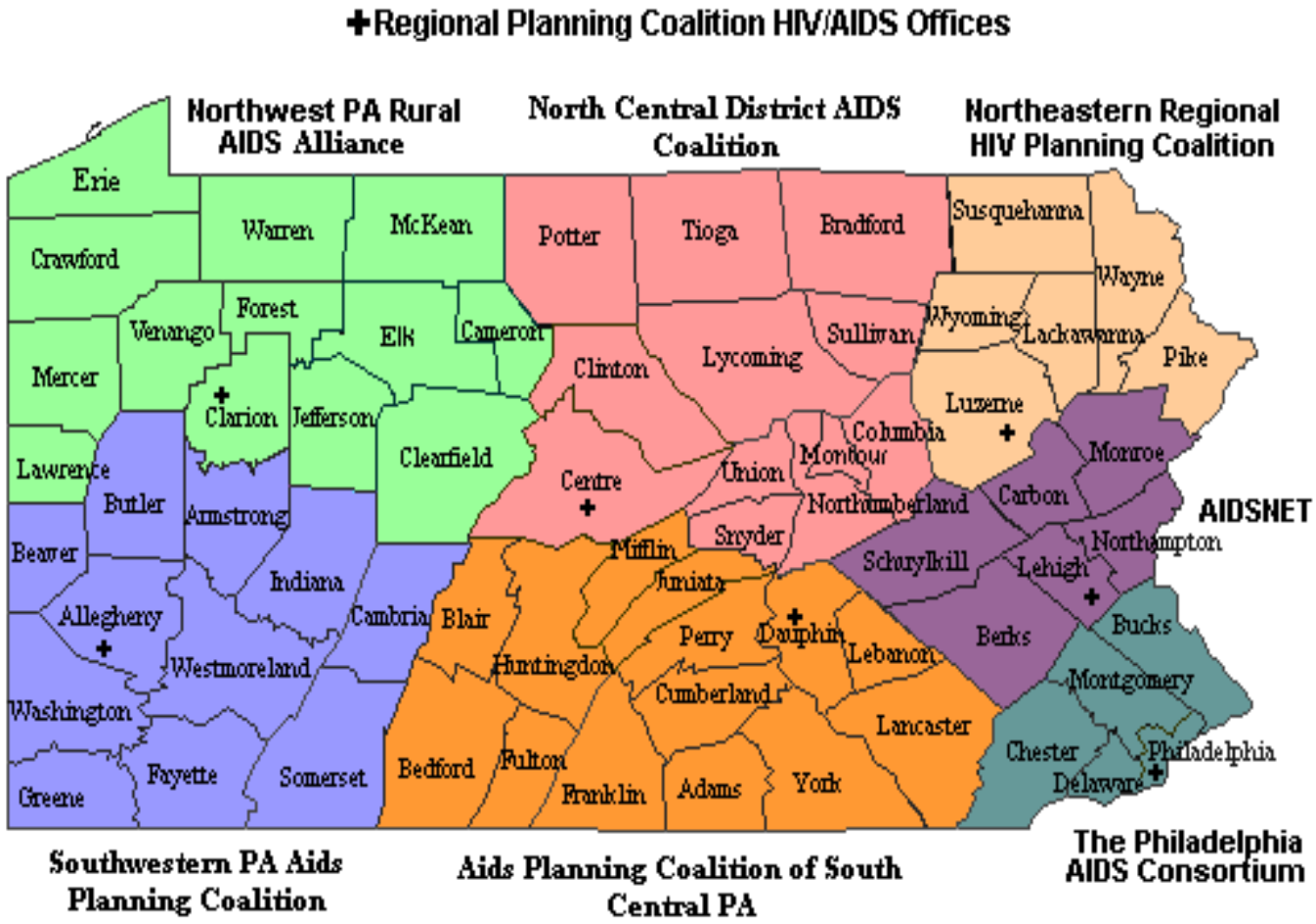
- Can it work in a small, rural area?
- How did we do it at Clarion University?
- Does it really work? Does it really help?
- What is the one true secret to success?

Northwest Region

- Larger than 7 states – 10,288 square miles
- Population of almost 950,000
- Extremely rural
- Lacks infrastructure
- Transportation systems inadequate
- Relatively impoverished
- Culturally conservative

Very Rural Region

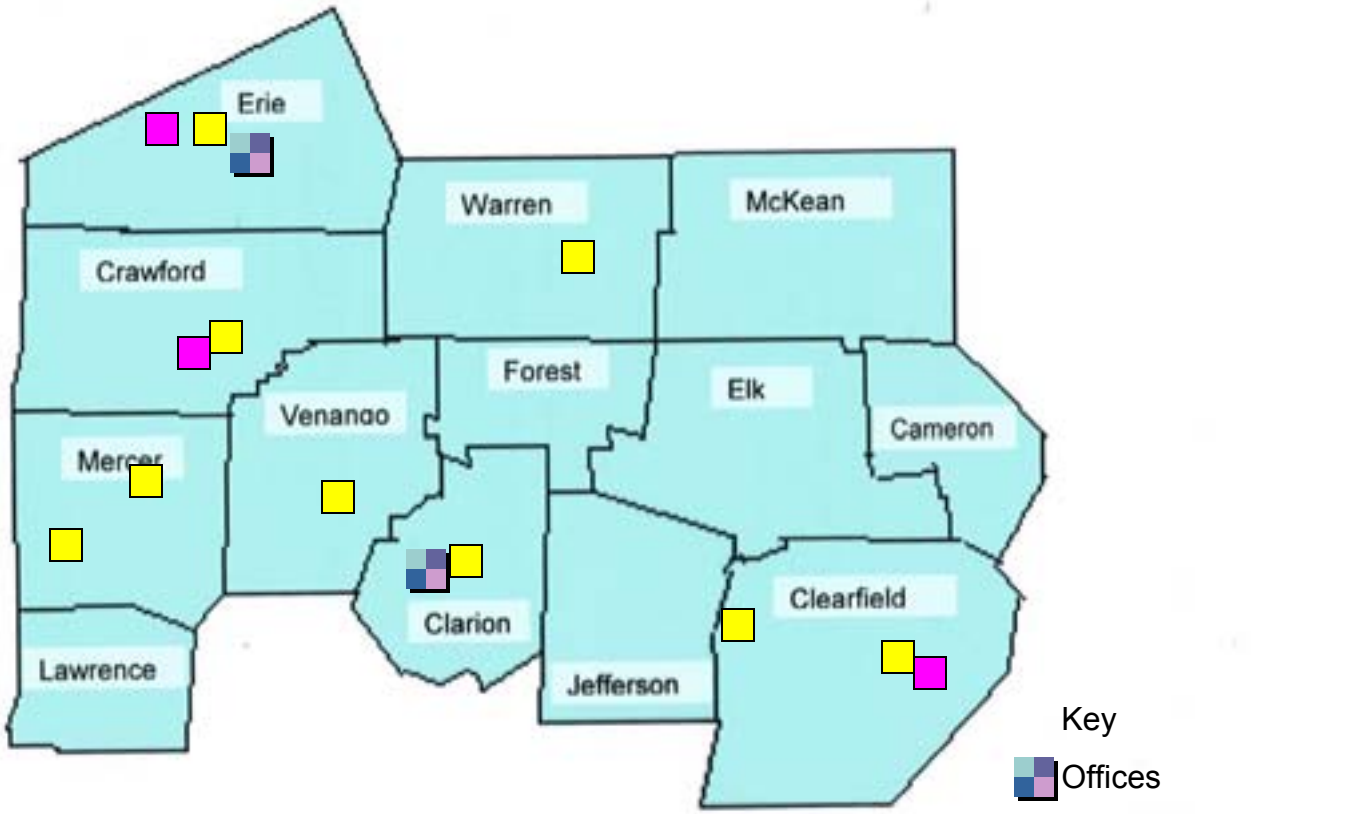
Pennsylvania's Seven Part B Regions



“Have Bag, Will Travel” Model

- Staff:
  - 4 physicians
  - 3 nurses
  - 1 medical service coordinator
- Equipment:
  - Blood draw supplies
  - Patient Charts
  - BIA equipment
  - Computers/Printer
  - Supplements & OTC supplies
  - Medical waste supplies

Northwest Pennsylvania Rural AIDS Alliance



Northwest Alliance

Clarion University of Pennsylvania

Quality management and performance measurement at core of what we do.

We collect close to 50 measures…

every 2 months!

How We Got Started

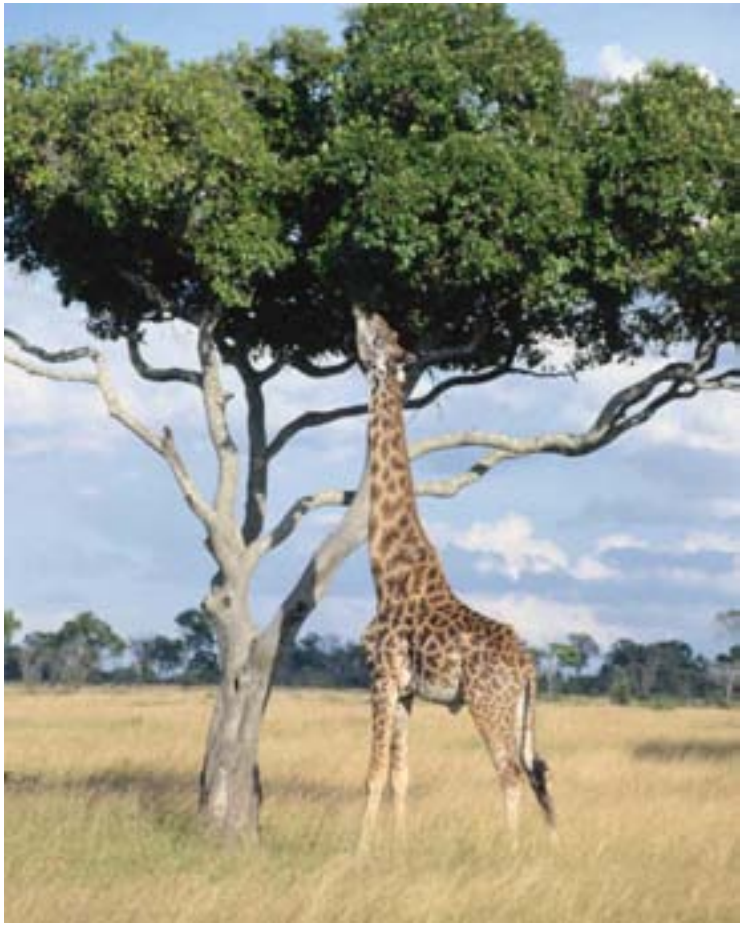
Pick the low-hanging fruit first!

We started with just one measure.

And Then Time Continued

Our agency built capacity over time –

we still pick the low-hanging fruit, but it is much higher now.



Clarion University of Pennsylvania

- Collecting data on:
  - Almost 40 clinic performance measures
  - 5 medical case management measures
  - 2 prevention measures
  - 1 support service measure

What do we do with the Data?

- Do not sample – **100%** because we are small
- Use EMR – data extracted to Access/Excel
- Review charts –

  OF THOSE THAT DO NOT MEET THE STANDARD!
- Document causes
- Make —Rapid Changes" as needed
- Set up quality improvement team if needed

Why Are We Doing This?

Because we have to…

- **But also because it works!!**

Rapid Improvements Made

- 2 or more CD4 counts - 79% to 85%
- Test for Chlamydia - 73% to 86%
- Test for gonorrhea - 71% to 82%
- Toxoplasma screening - 88% to 94%
- Mammogram - 52% to 76%
- Ophthalmology screening - 55% to 66%
- Received Influenza vaccine - 58% to 81%

Major QI Project: Patient Retention

			Referrals From													Inactive Patients									
		Clinic	New Patient	Return of Old Patient	DOH	PCP	FHC	SMC	PHN	Self	Patient	Jail	CHN	CM	Missing in Action	Transfer to Other HIV Care in Region	Transfer to Other HIV Care out of Region	Jail	Moved in Region without HIV Care	Moved out of Region without HIV Care	Refused Care	Died	Never came to first visit **(explanation required)**	Comments
Date	Patient																								
9/4/2007	[redacted]	Erie		X								X													
9/10/2007		Erie		X							X														
9/13/2007		Green	X								X														
9/24/2007		Warren															X								
9/24/2007		Erie															X								
9/24/2007		Erie															X								
9/24/2007		Meadville																X							
	Totals		1	2	0	0	0	0	0	2	0	1			0	0	3	1	0	0	0	0	4	Total Inactive	

Comments	**If a patient never came to the first visit please also select another reason to explain why.**				
	Total number of patients at the beginning of the month is	117	Active patients	117	
	Total number of inactive patients at the beginning of the month is	85	New Patients	1	
	Total number of dead patients at the beginning of the month is	21	Return Old Patients	2	
			Inactive patients	-4	
			Dead		
			Total	116	

Why Patients No Show

Provider: Dr. Ortoski — **Funding Stream: Part C**

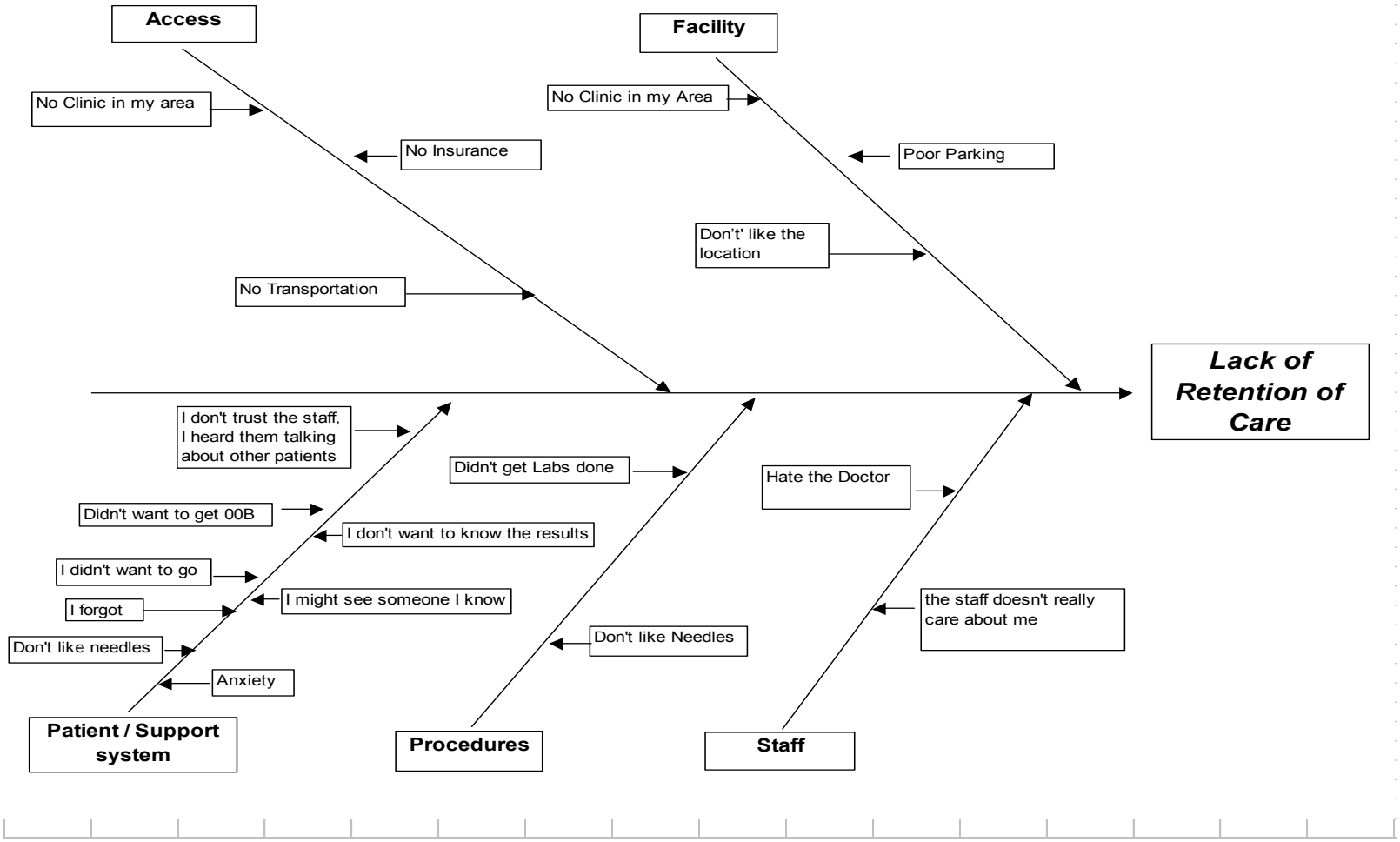
Time	Patient	Next Appt.	Don't Change	New Intake	SPBP	Ins	Labs: Lab Slip Sent	Labs: Labs Received	Labs: Lab draw at clinic (R or S)	Nutrition Counseling	Case Manager	Transportation	Visit Disposition: A	N/S	C	W/I
8:00 AM																
8:30 AM	[redacted]	4/2 @ 10:30				X	1/17-M	done					X			
8:45 AM																
9:00 AM		4/2 @ 2:00		X		X		done	S	X			X			
9:15 AM																
9:30 AM	[redacted]															
9:45 AM																
10:00 AM		5/7 @ 10:00				X		done	S	X			X			
10:15 AM																
10:30 AM																
10:45 AM																
11:00 AM	[redacted]	5/7 @ 11:00				X		1/31/2008	S	X			X			
11:15 AM																
11:30 AM								done						X		
11:45 AM																
12:00 PM																
12:15 PM																
12:30 PM																
1:00 PM																
1:30 PM	[redacted]	5/7 @ 1:30				X		done						X		
1:45 PM																
2:00 PM		4/2 @ 11:30				X		1/30/2008		X				X		
2:15 PM																
2:30 PM																
2:45 PM																
3:00 PM	[redacted]	5/7 @ 2:00				X		not done		X			X			
3:15 PM																
3:30 PM		5/7 @ 3:30				X		1/30/2008	S	X				X		
3:45 PM																
4:00 PM																
4:15 PM																
Space below this line is reserved for cancellations																
	xxx move to March 2008															
	xxx has a lab slip															
	xxx squire lab slip sent															
	xxx lab slip sent															
	xxx arrived inebriated to at clinic - did not see															
	xxx had to work															
	xxx said no babysitter															
	xxx said car trouble - MCM says NV/I															
	Need to fit a new patient in this month															
	Need to fit XXXXXXXXX in if her meds come in															
	Totals		0	1	0	8			4	6	0	0	8	4	0	0
								Total R	0							
								Total S	4							

Visit Disposition Legend

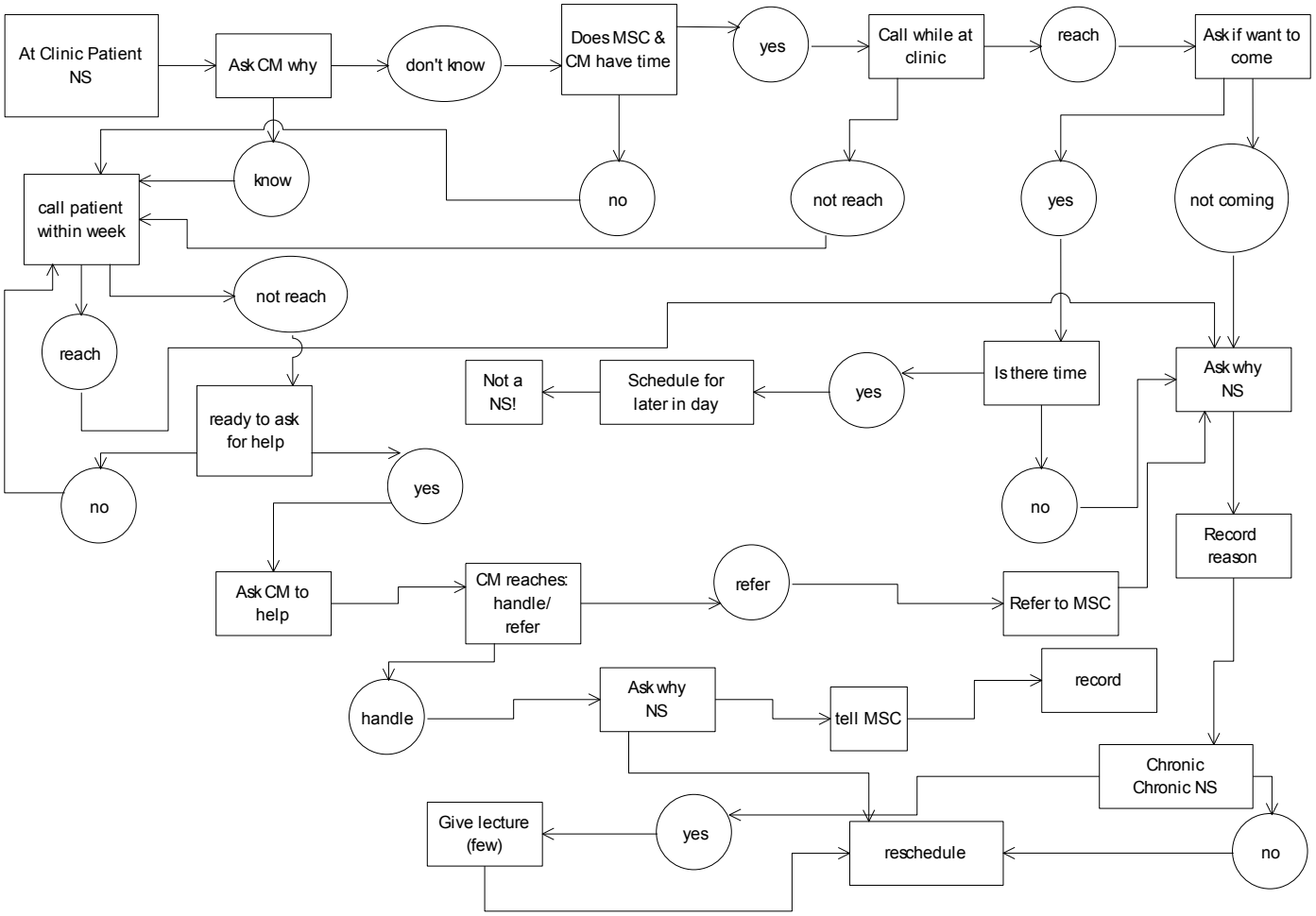
A=Attended
N/S=No Show
C=Canceled
W/I=Walk In

Red cells indicate block out. Make no appointments in red cells.

Fishbone Diagram



Process Map: Follow-Up to No-Show



Aggregate Data for Analysis and Management

Erie	1/1/07-3/31/07	4/1/07-6/30/07	7/1/07-9/30/07	10/1/07-12/31/07	1/1/07-12/31/07
# of clinics per above date	3.5	4	4	3.5	15
Total Patients Scheduled	38	40	43	36	157
Total Patients Seen	26	35	33	35	129
Average patients per clinic	7.43	8.75	8.25	10.00	8.60
Number of No Shows	11	4	10	0	25
Number of Cancellations	1	1	0	1	3
Percent No Show	29%	10%	23%	0%	16%
Percent Cancelled	3%	3%	0%	3%	2%
Totals	**1/1/07-3/31/07**	**4/1/07-6/30/07**	**7/1/07-9/30/07**	**10/1/07-12/31/07**	**1/1/07-12/31/07**
# of clinics per above date	8.5	12.5	11.5	10.5	43
Total Patients Scheduled	83	113	110	105	411
Total Patients Seen	65	94	77	87	323
Average patients per clinic	7.65	7.52	6.70	8.29	7.51
Number of No Shows	16	14	21	13	64
Number of Cancellations	2	6	4	5	17
Percent No Show	19%	12%	19%	12%	16%
Percent Cancelled	2%	5%	4%	5%	4%

Improvement No Show 2006 - 2007

Totals	1/1/07-12/31/07	1/1/06-12/31/06	Change	
# of clinics per above date	43	48	-5.00	
Total Patients Scheduled	411	472	-61.00	
Total Patients Seen	323	329	6.00	
Average patients per clinic	7.51	6.85	0.66	⇧ Good
Number of No Shows	64	103	-39.00	⇩ Good
Number of Cancellations	17	36	-19.00	⇩ Good
Percent No Show	15.6%	21.8%	-6.25%	⇩ Good
Percent Cancelled	4.1%	7.6%	-3.49%	⇩ Good

Conservative estimate of reduction in "down time" is $8,373

The One True Secret

I promised to tell you this….

The One True Secret

WILL

The One True Secret

WILL

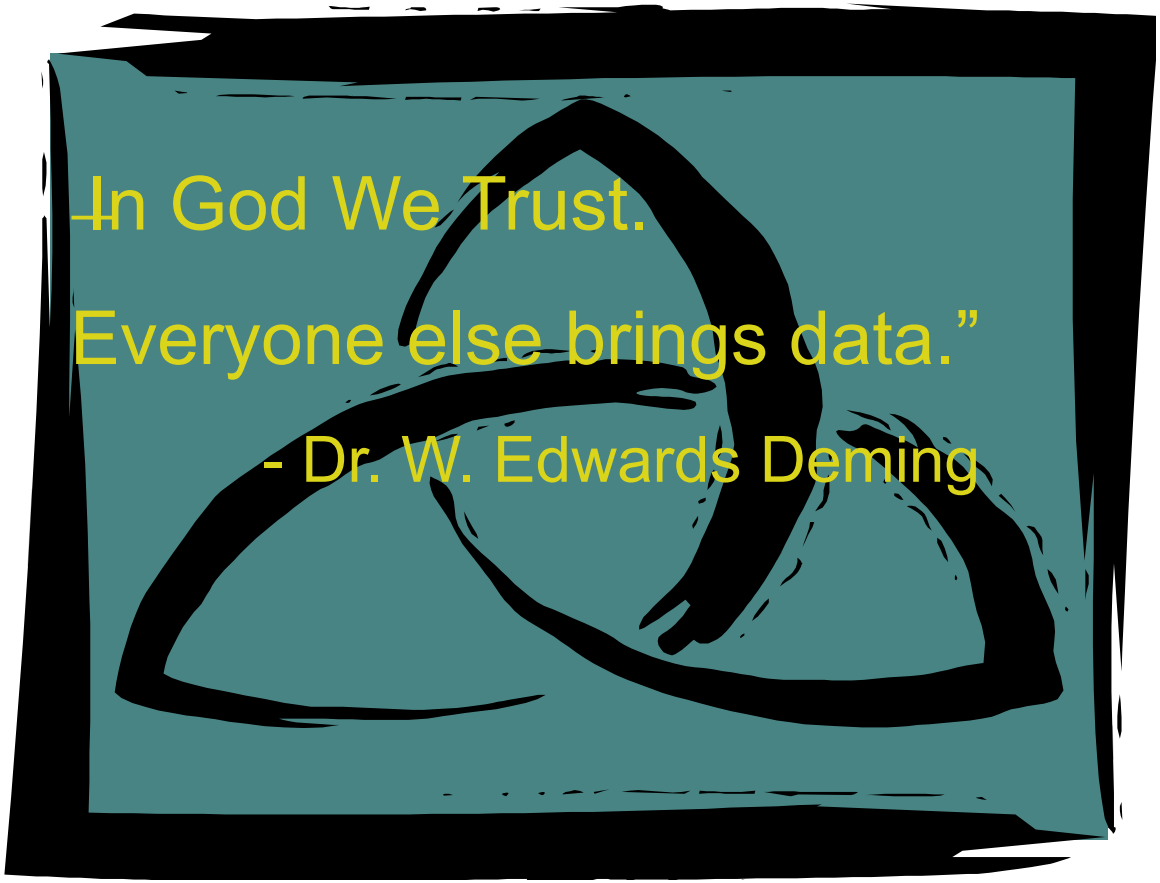
While they were saying among themselves it cannot be done, it was done.

- Helen Keller

Now Submitting Bimonthly Data

- AIDS Care Group
- Albert Einstein Medical Center
- Allegheny-Singer Research Institute
- Clarion University of Pennsylvania
- Drexel University College of Medicine
- Esperanza Health Center
- Family First Health Corporation
- Family Planning Council of
- Southeastern Pennsylvania
- Hamilton Health Center
- Kensington Hospital
- Keystone Rural Health Center
- Lancaster General Hospital
- Lehigh Valley Hospital
- Pennsylvania Department of Health
- Philadelphia Dept of Public Health
- Philadelphia Fight
- Pinnacle Health Hospitals
- Scranton Temple Residency Program
- Two Rivers Health and Wellness
- University of Pittsburgh Medical Ctr.

A Final Thought



Performance Measurement Resources

- HIV/AIDS Bureau Performance Measures: http://hab.hrsa.gov/special/habmeasures.htm
- HIVQUAL Program: https://www.ehivqual.org/
- National Quality Center: http://www.nationalqualitycenter.org/index.cfm/22/19392
- Agency for Healthcare Research and Quality: http://www.qualitymeasures.ahrq.gov/

Sampling Methodology

- HIVQUAL Sampling: http://ehivqual.org/scripts/eHQ%20Sampling%20Methodology%20_OUTSIDE%20NYS.pdf
- Random Selection: http://www.randomizer.org/

Contact Information

Jesse Ungard
HIVQUAL-US Consultant
Baltimore City Health Department, Ryan White Part A Grantee
Jesse.Ungard@baltimorecity.gov 410-396-1408

Jeffrey A Curtis
Clarion University of Pennsylvania, Ryan White Part B and C Program
jcurtis@mail.clarion.edu 814-764-6066

National Quality Center (NQC)
NYSDOH AIDS Institute
90 Church Street—13th Floor
New York, NY 10007-2919
Info@NationalQualityCenter.org
NationalQualityCenter.org