



Performance Measurement in HIV care

Denver

April 7, 2011

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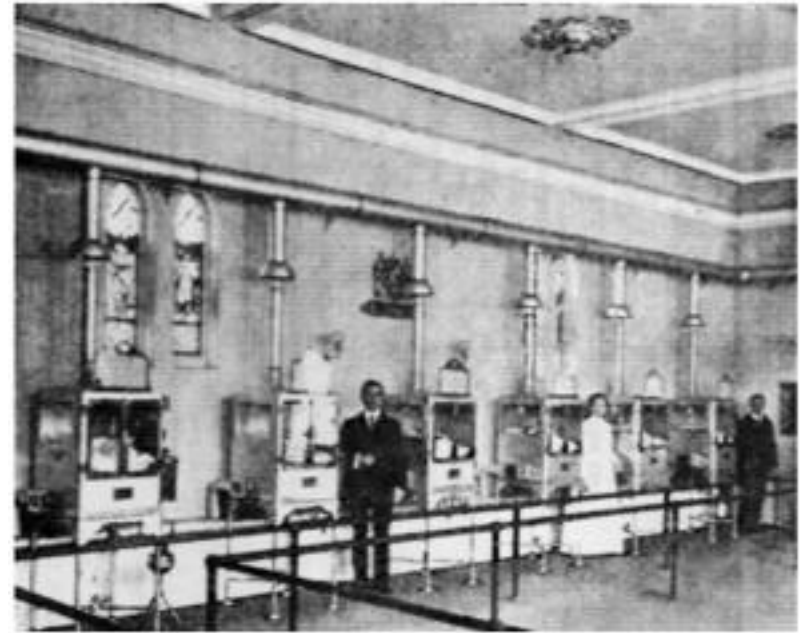
Learning Objectives

Upon completion of this presentation, learners should be better able to:

- Make a case in your practice setting for the importance of routine performance measurement in HIV care
- Demonstrate national trends of HIV care based on key performance indicators

Where We Learn

- Childhood mortality in 1870 - 1 in 5 babies died before learning to crawl; 75% decline in infant mortality rates between 1950 and 1998
- 1870s, Stephane Tarnier, Parisian obstetrician at the Maternite de Paris; saw chicken incubators in a nearby zoo; hired Odile Martin, zoo's poultry raiser to construct a similar device for newborn babies
- Study of 500 babies: mortality of low-weight babies dying within weeks of birth was reduced from 66% to 38% using the new incubator



[neonotology.org]

How Dangerous is Halloween?

- ‘Razor blades are put into kids candy at Halloween’ - California and New Jersey passed laws that carry special penalties for candy-tamperers
- Study: ‘where children actually harmed by tampered candy at Halloween?’
- Findings: between 1958 and 1985 no instance was found where strangers caused children life-threatening harm by tampering with their candy



[Joel Best, Gerald Horiuchi, Social Forces, 32, 488-99]

Why Measure?

- Separates what you *think* is happening from what is *really* happening
- Establishes a baseline: *It's ok to start out with low scores!*
- Helps to avoid putting ineffective solutions in place
- To monitor improvements and prevent slippage
- Indicate whether changes lead to improvements
- Standardized measures allow for comparing performance across sites

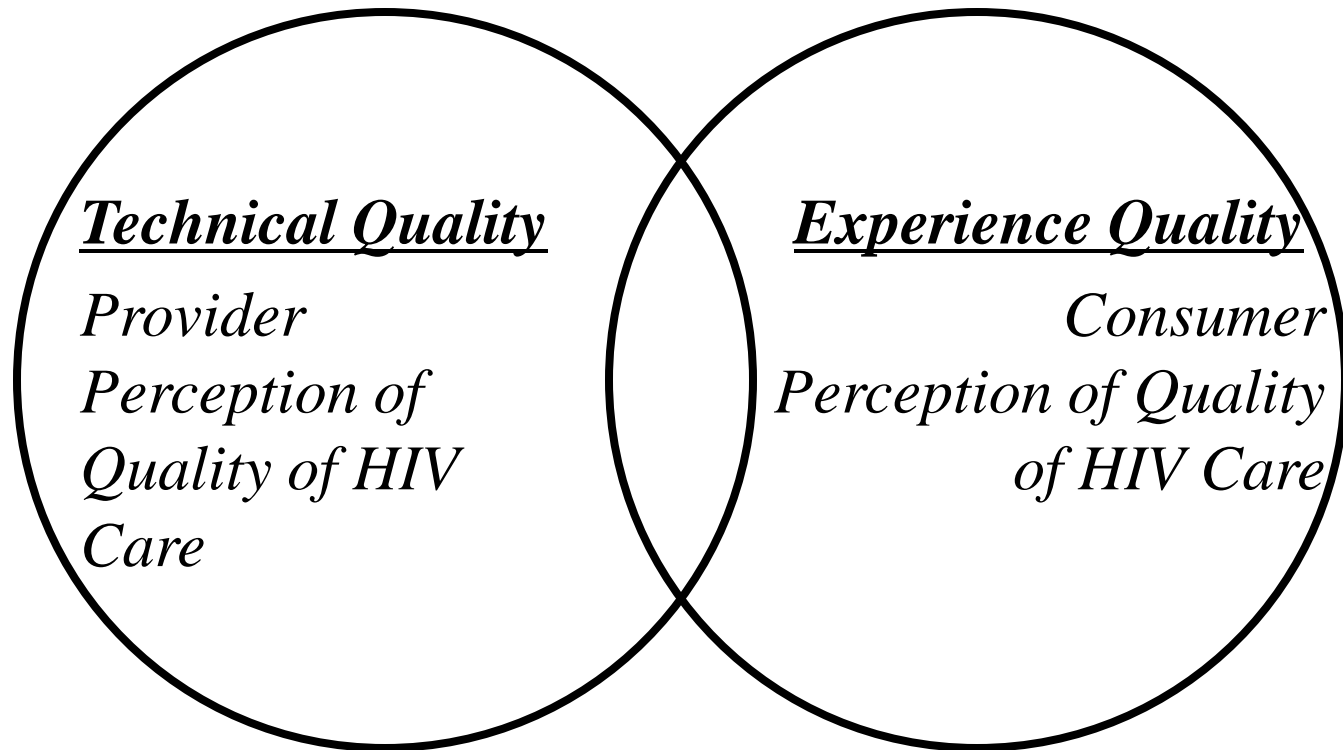
*Im*balance between Performance Measurement
and Quality Improvement Activities



Balance between Performance Measurement and Quality Improvement Activities



Dimensions of Quality



Leonard Berry, Texas A&M University, IHI conference 2001

No Complaints

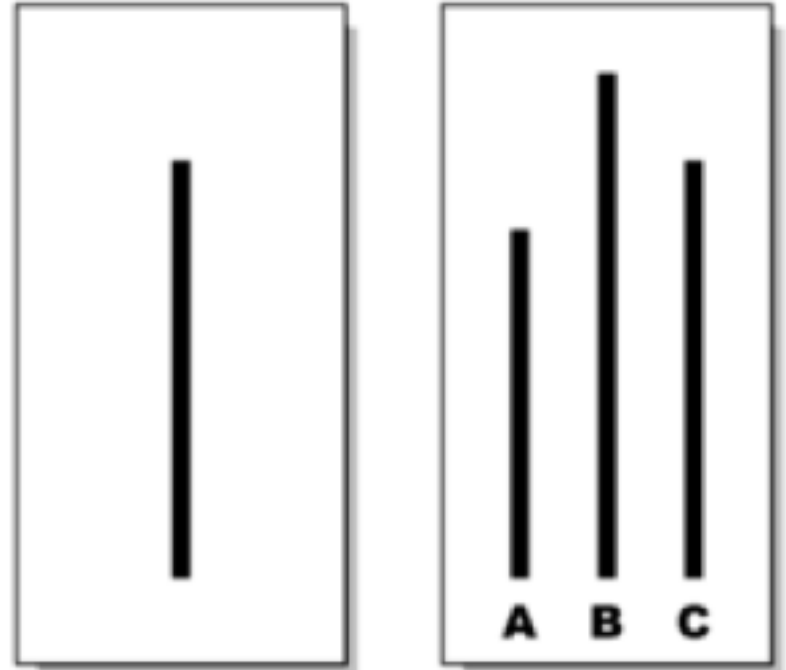
- 26 of 27 people with complaints do not complain
- 91% of those who complain are not returning
- 82-95% of consumers can be reengaged if complain is quickly and respectfully resolved
- 5 times more expensive to get new consumers than to keep a customer



[Janelle Barlow, Claus Moller, A Complaint Is a Gift, Berret-Koehler]

We Need a Dissenter

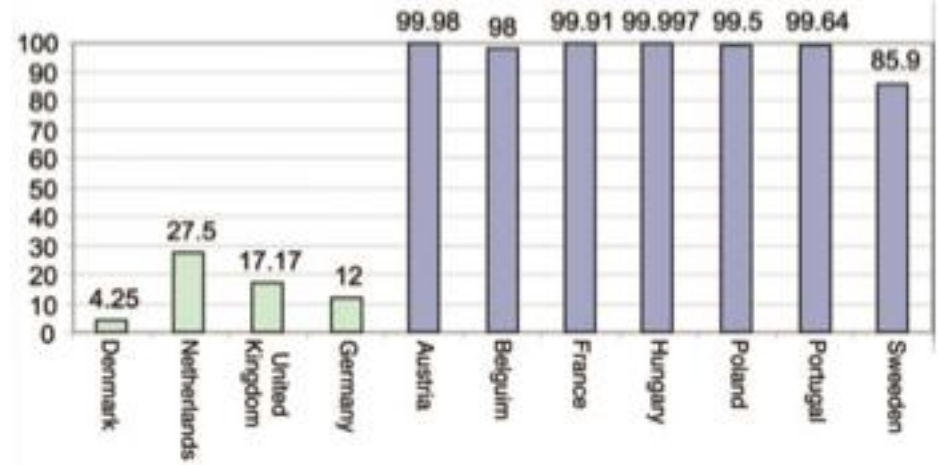
- Study: groups of seven participants (one subject and 6 study participants) to 'match' a particular line with one of three comparison lines; first two rounds everyone agrees, last round 6 participants study agree on an incorrect line
- Results: 37% of people erred in which group pressure supported the incorrect answer; existence of at least one dissenter dramatically reduced conformity and error (75% error reduction)



[Solomon Asch, Opinions and Social Pressure, Readings about the Social Animal 13, 1995]

Do We Understand the Data?

- Since 1988, 360,000 organs have been transplanted (80% from deceased patients)
- In Jan 2009 more than 90,000 Americans were on waiting lists for organ transplantations; up to 60% will die while on the list



[Janelle Barlow, Claus Moller, A Complaint Is a Gift, Berret-Koehler]

“In God We Trust, all others bring data.”

What is a Quality Indicator?

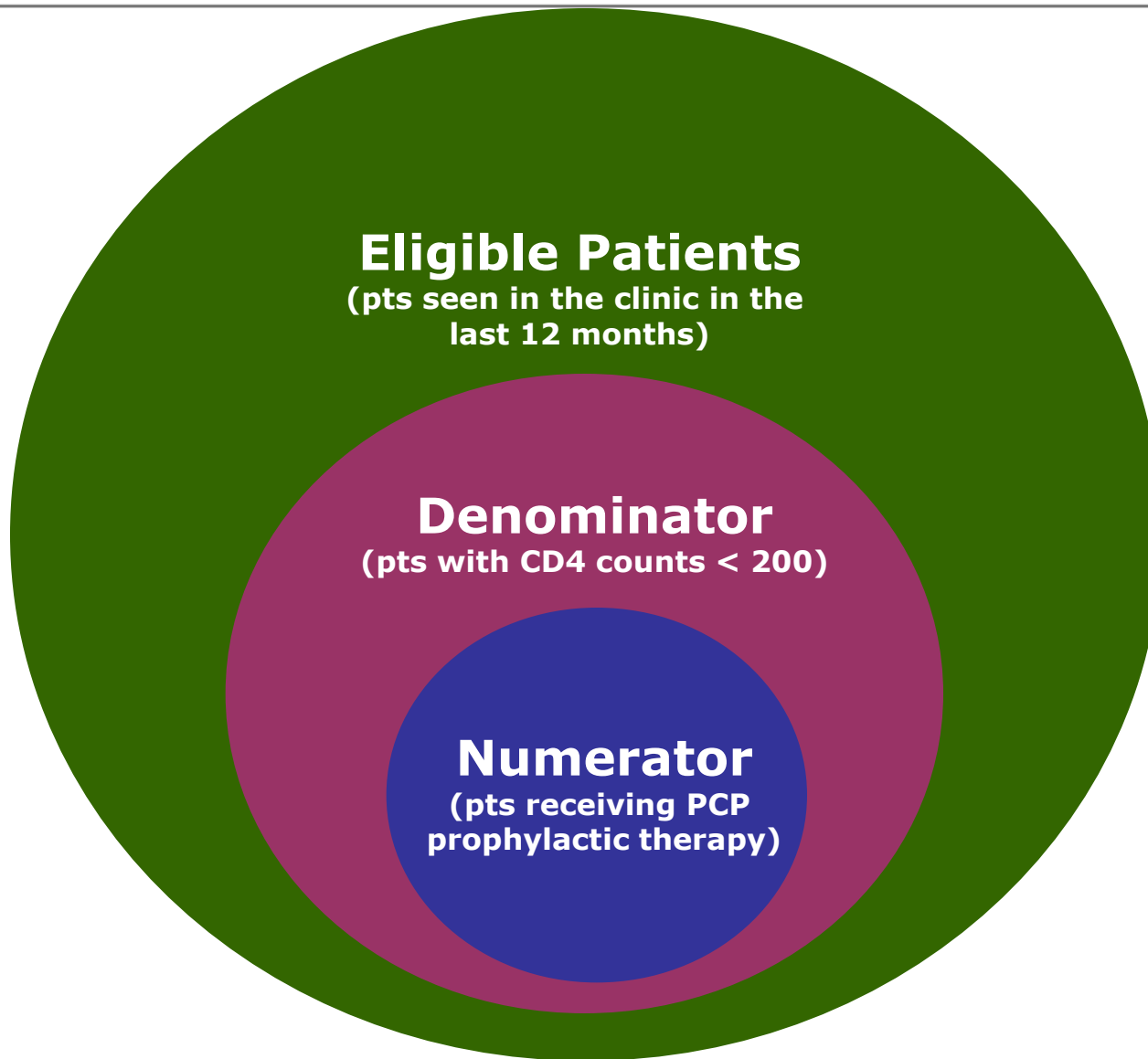
- A quality indicator is tool to measure specific aspects of care and services that are optimally linked to better health outcomes while being consistent with current professional knowledge and meeting client needs.

What Makes a Good Indicator?

- Relevance
 - Does the indicator affect a lot of people or programs?
 - Does the indicator have a great impact on the programs or patients/clients in your EMA, State, network or clinic?
- Measurability
 - Can the indicator realistically and efficiently be measured given finite resources?

What Makes a Good Indicator? (Cont'd.)

- Accuracy/Validity
 - Is the indicator based on accepted guidelines or developed through formal group-decision making methods?
- Improvability
 - Can the performance rate associated with the indicator realistically be improved given the limitations of your services and population?



How Will You Define Who is Eligible to be Evaluated?

- Location: all sites, or only some?
- Gender: men, women, or both?
- Age: any limits?
- Client conditions: all HIV-infected clients, or only those with a specific diagnosis?
- Treatment status?

Tips for Defining Indicators

1. Base the indicator on guidelines and standards of care when possible
2. Include staff and consumers when developing an indicator to create ownership
3. Be clear in terms of patient / program characteristics (gender, age, patient condition, provider type, etc.)
4. Set specific time-frames in indicator definitions

Cross-Part Collaborative

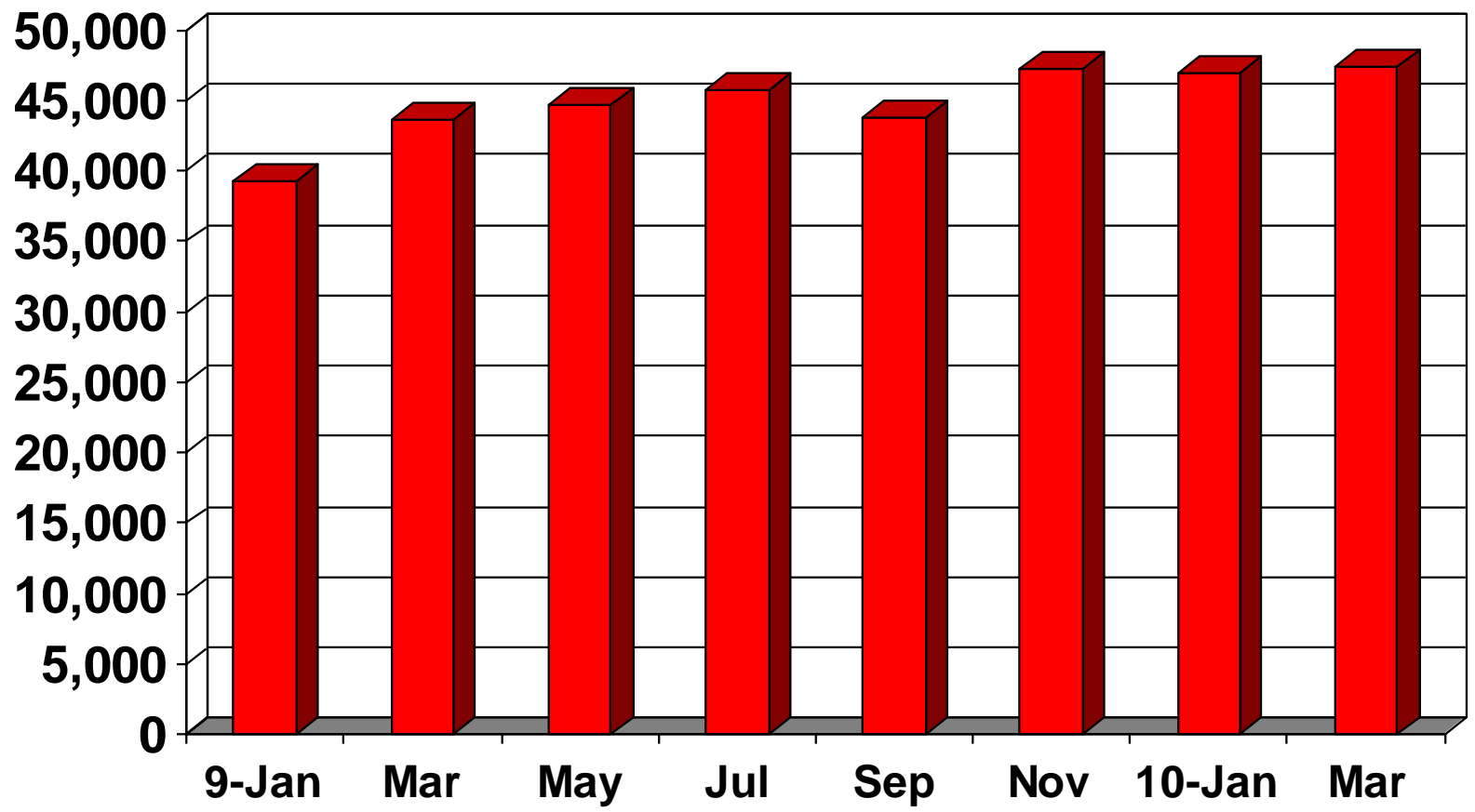
- Managed by the National Quality Center (NQC)
- 5 State Teams: CT, NJ, PA, TX, & VA with representation from every Part
- 86 Part A, B, C, D & F grantees from the 5 States
- 18 Months: initiated Oct 2008 and will run through April 2010
- 4 Learning Sessions: Oct '08; April '09; Oct '09; April '10
- Potential impact – reported number of AIDS cases, all ages, cumulative through 2007 – 192,018 (19% of AIDS Cases in the US)

Cross-Part Collaborative: Measures

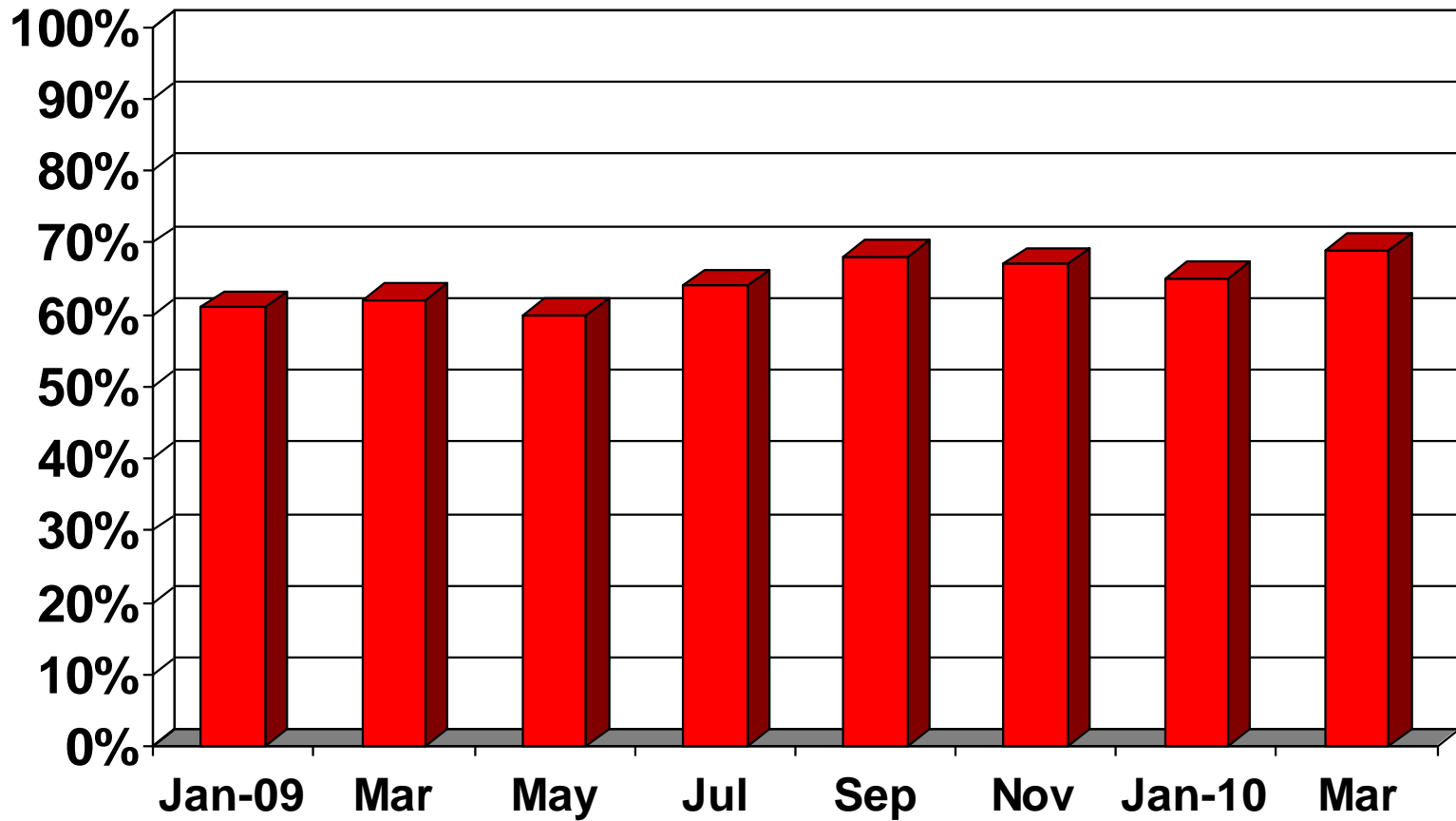
State Teams submit data bi-monthly on:

- Percentage of clients with HIV infection who had 2 or more CD4 tests performed in the measurement year
- Percentage of clients with AIDS who are prescribed HAART
- Percentage of clients with HIV infection who had two or more medical visits in an HIV care setting in the measurement year
- Percentage of clients with HIV infection and a CD4 T-cell count below 200 cells/mm³ who were prescribed PCP prophylaxis

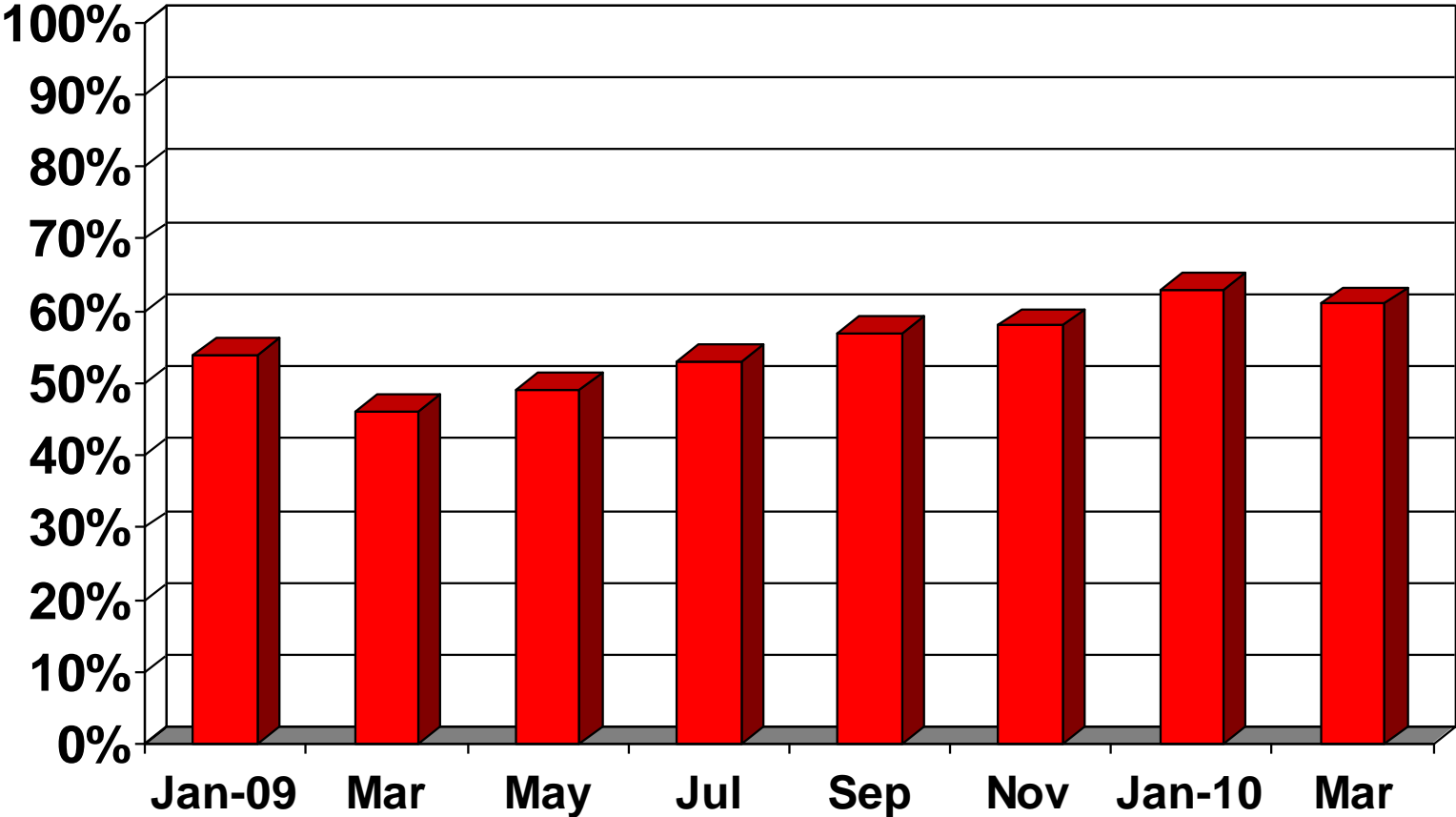
Total Number of Patient Records Included Across All 5 States (for CD4 Indicator)



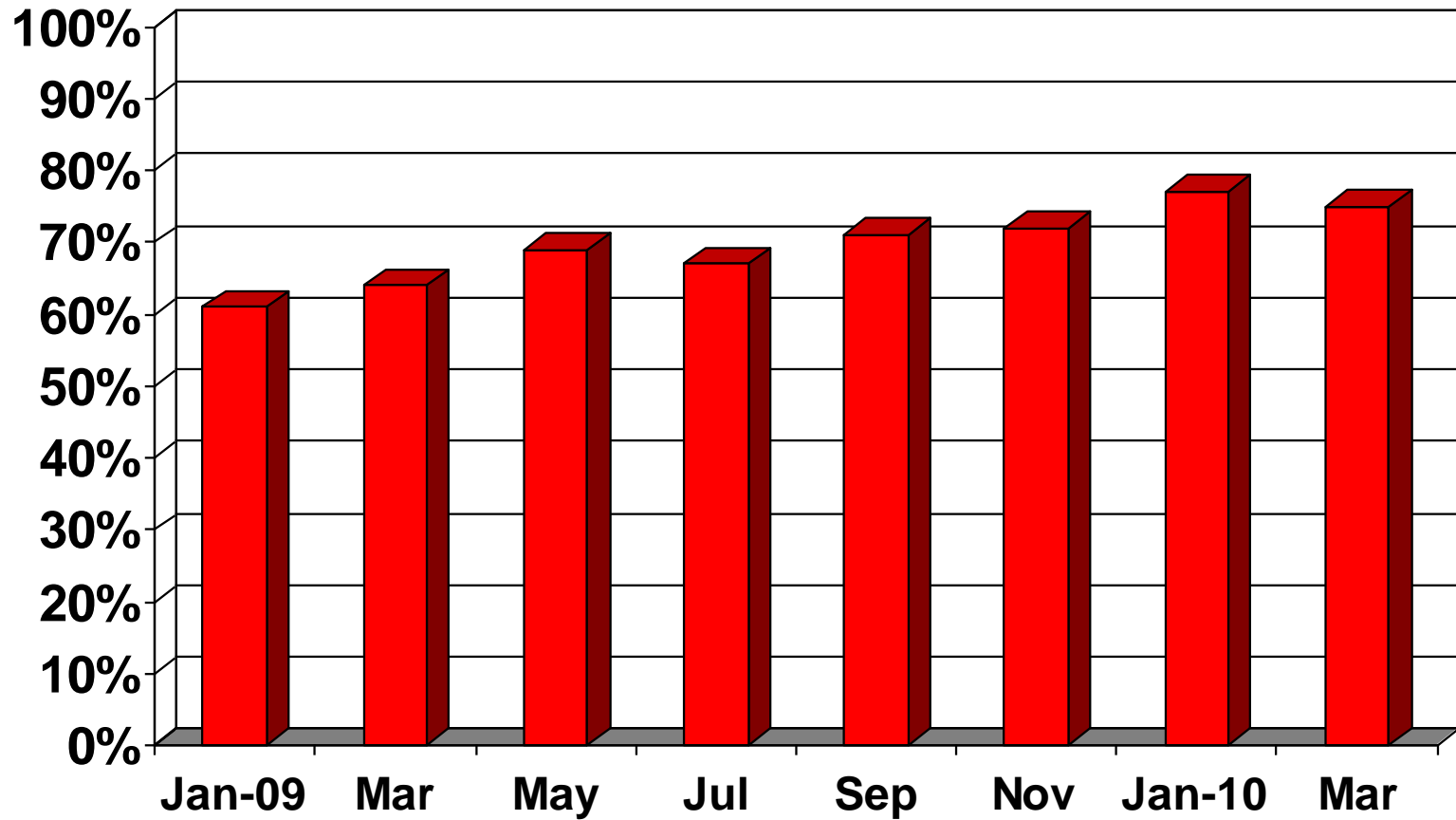
Percentage Included Across All 5 States: CD4 Indicator



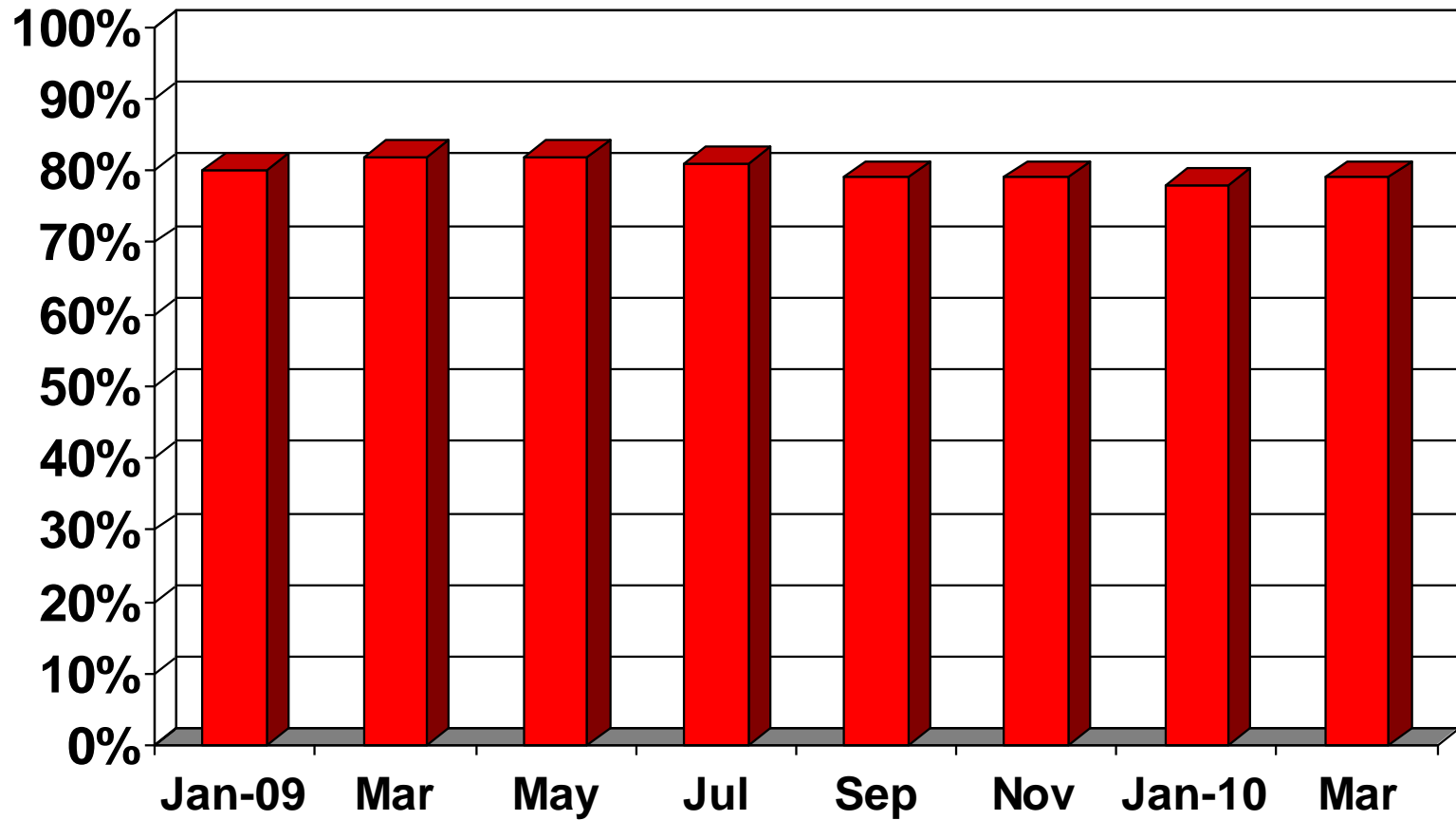
Percentage Included Across All 5 States: PCP Prophylaxis



Percentage Included Across All 5 States: HAART



Percentage Included Across All 5 States: Medical Visit



Example: Eligibility Definition by HIVQUAL

- HIV+ ambulatory patients, who have had at least 2 primary care visits in last 12 months; with at least 1 primary care visit within the last 6 months

HIVQUAL Indicator Topics – Adults and Adolescents

- ARV therapy management
- HIV monitoring (CD4 and VL testing)
- HIV specialist care
- Antiretroviral therapy medication
- Treatment education
- Adherence to ARV therapy
- PCP prophylaxis
- MAC prophylaxis
- Gynecology exams
- Tuberculosis screening (PPD)
- Syphilis screening
- Hepatitis C screening
- Vaccination
- Substance use
- Mental health care
- Dental care
- Ophthalmologic care
- Lipid screening
- Basic patient education

HIVQUAL Indicator Topics – Pediatric

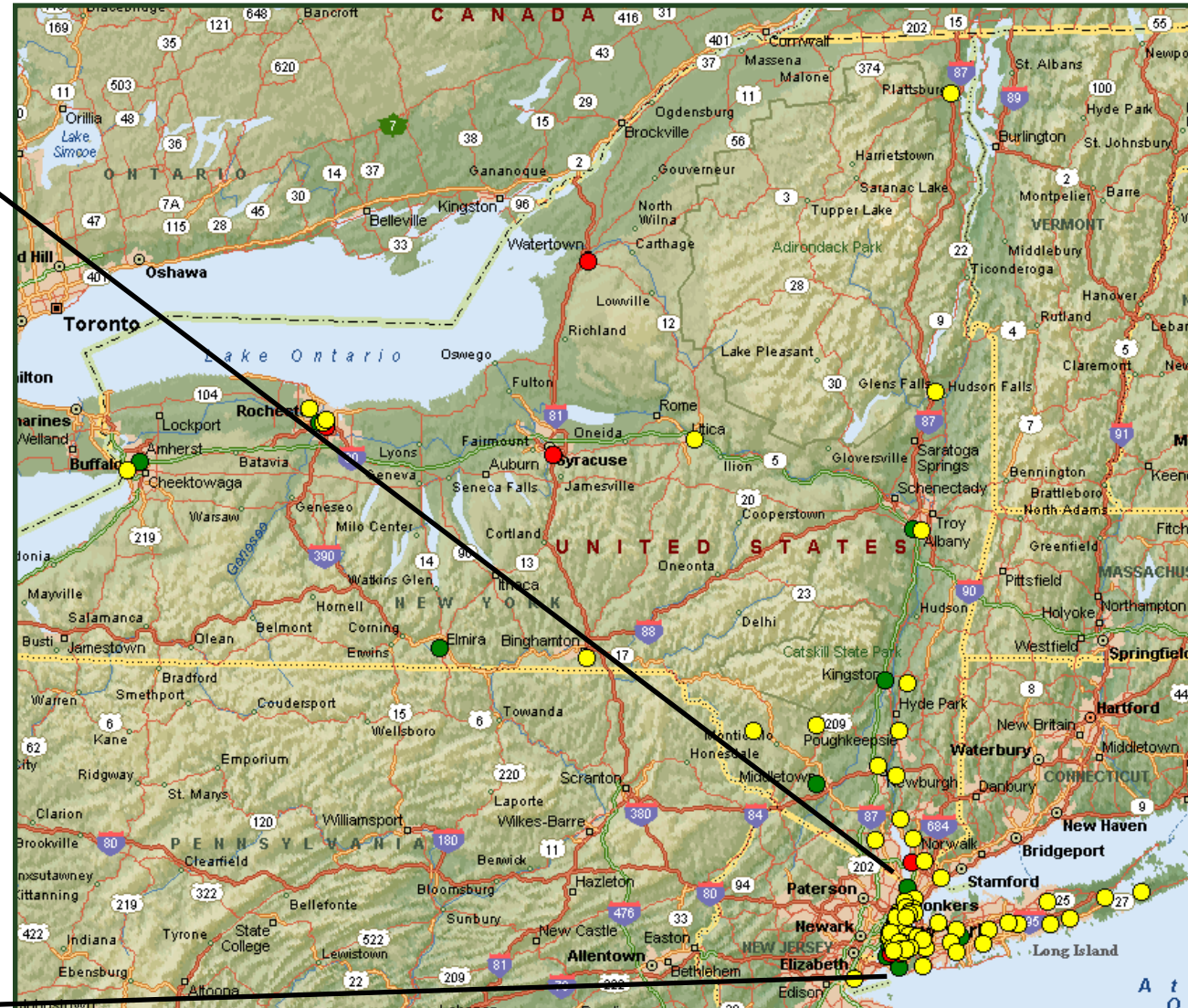
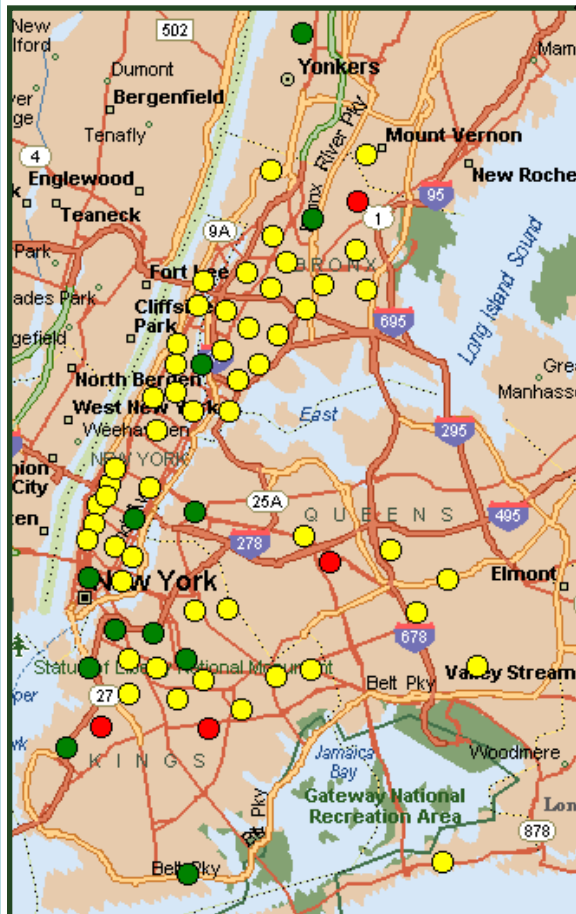
- ARV therapy management
- HIV monitoring (CD4 and VL testing)
- HIV pediatric specialist care
- Antiretroviral therapy
- Medication adherence
- PCP prophylaxis
- MAC prophylaxis
- Routine vaccinations
- Neurodevelopmental assessments
- Multidisciplinary care plan

HIVQUAL – Case Management

- Complete psychosocial assessment
- Patient knowledge screening
- Treatment adherence assessment
- Service care plan & coordination of care
- Access and continuity
- Self-management: client participation in care planning

HIV Programs Reporting in 2007 (174 out of 184 sites self-reported = 95%)

- = 1x Submission (n=12)
- = 2 - 4 Submissions (n=113)
- = 5 Submissions (n=49)



Limitations

- Eligibility criteria focus on those patients in care (2-visit requirement)
- Sampling methodology has changed over time
 - Sample size was increased
 - Women were oversampled before 2007
- Proportion of NYS sites submitting HIVQUAL data has increased
- Denominators for certain indicators are small (e.g., PCP prophylaxis)
- Data are not validated every year

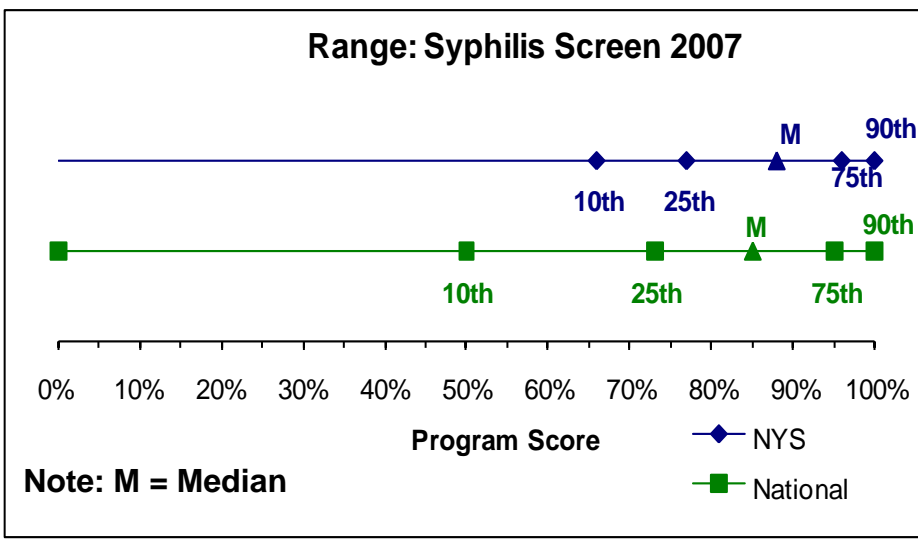
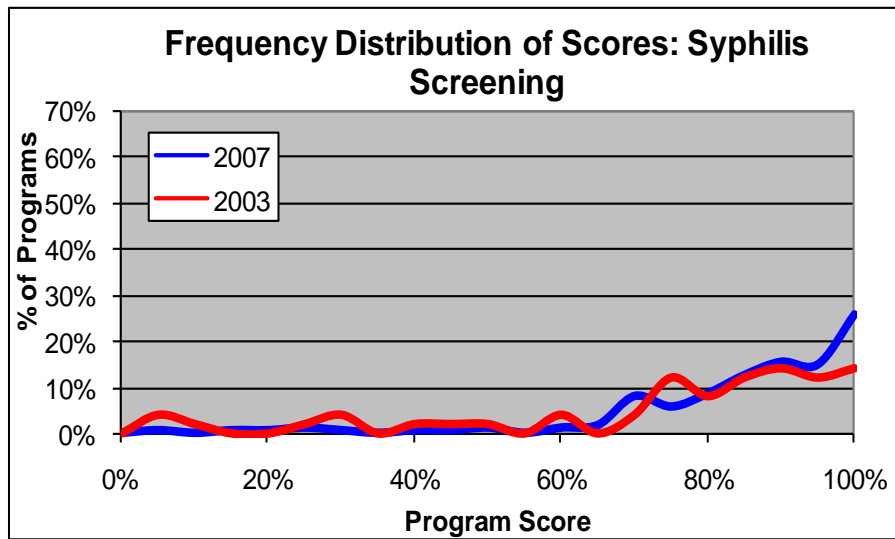
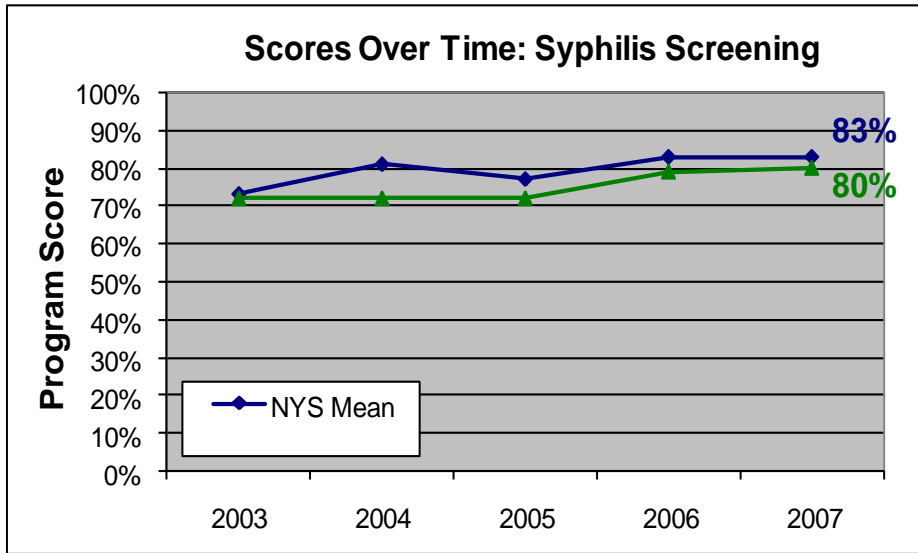
Syphilis Screening

Indicator Definition: Percentage of eligible patients who received serum syphilis screening during the review period

(n = 11,131 in eligible NYS patients in 2007)

Key Findings:

- Since 2004 no major improvements
- Only 25% of NYS facilities have a score of 77% or less

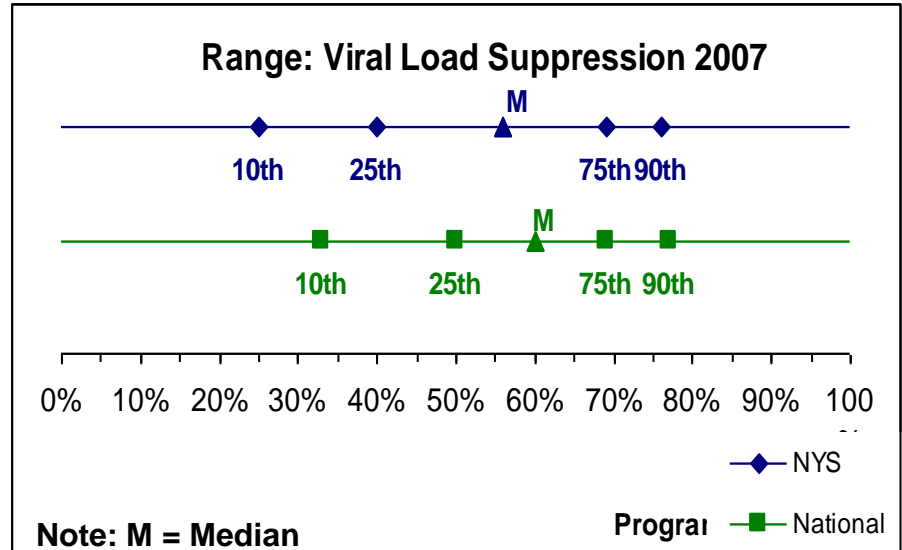
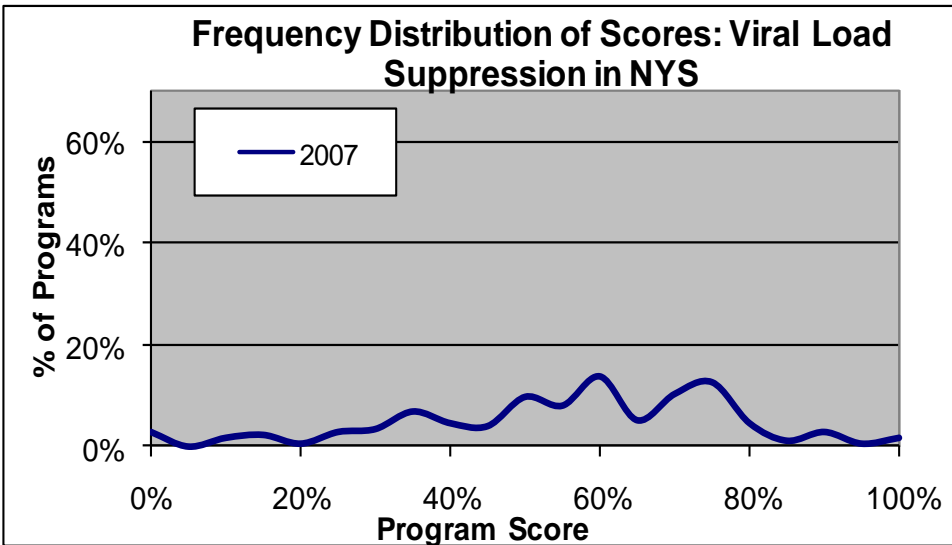
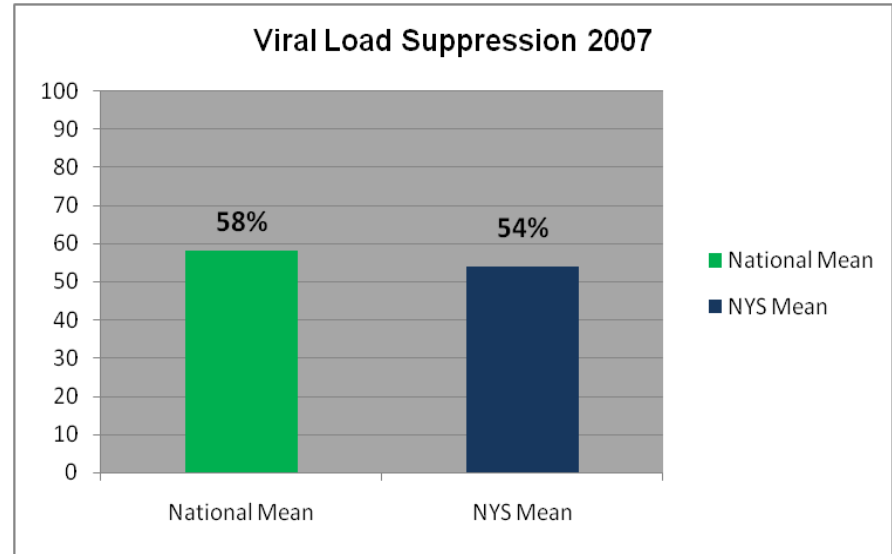


Viral Load Suppression (2007 Report)

Indicator Definition: Among eligible patients on ARV with at least two VLs in the calendar year, percentage whose VL remained 400 or below throughout the annual review period
 (n = 7,773 eligible NYS patients in 2007)

Key Findings:

- Mean shows improvement over time



Mental Health Screening

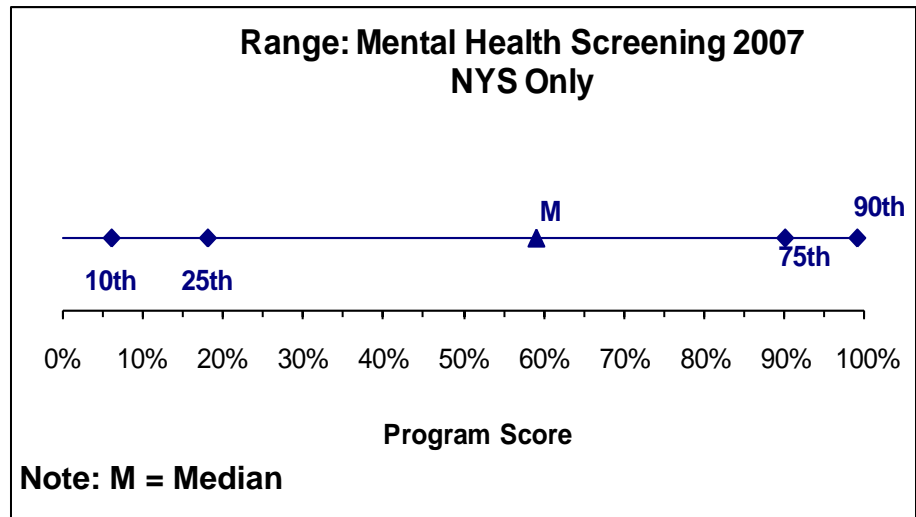
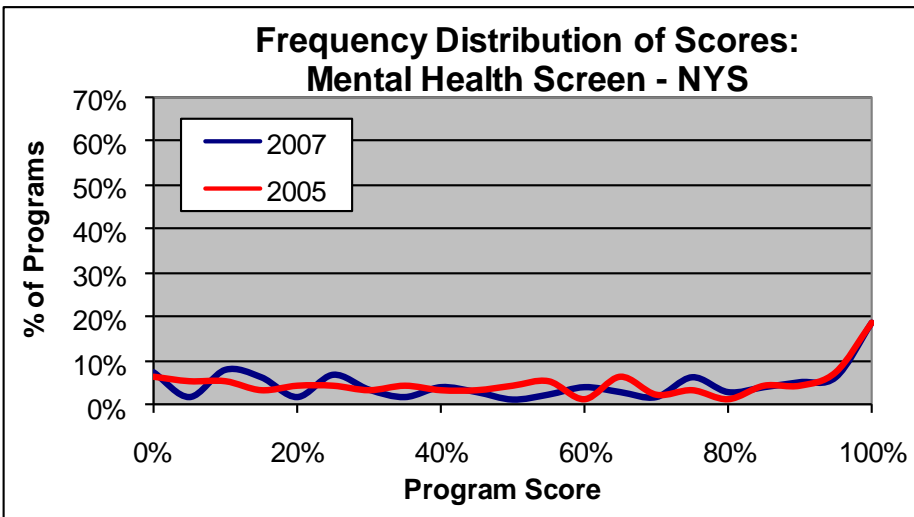
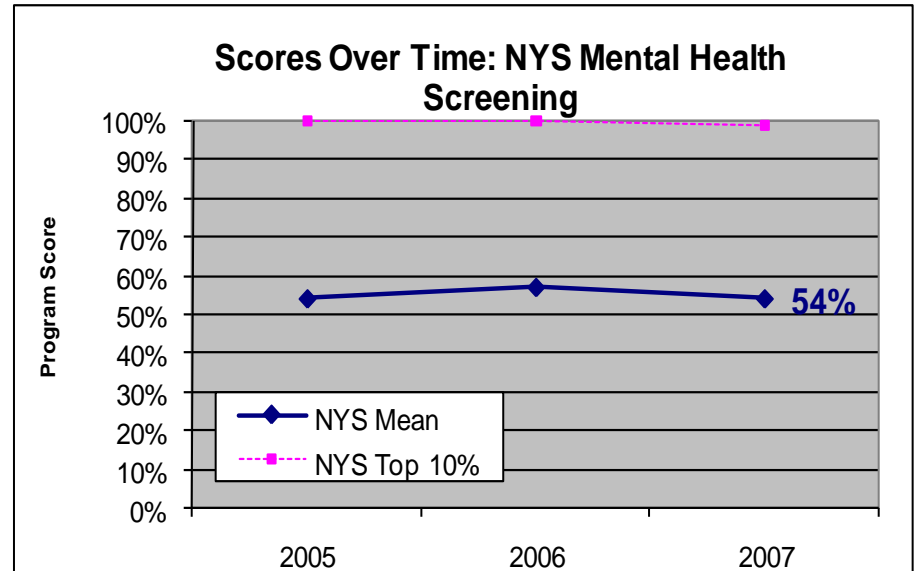
Indicator Definition: Percentage of eligible patients who received all required components of a mental health screening

(n = 10,302 in eligible NYS patients in 2007)

MH screening for all the following: cognitive functioning, depression, anxiety, sleeping habits, appetite, psychiatric history and psychosocial issues

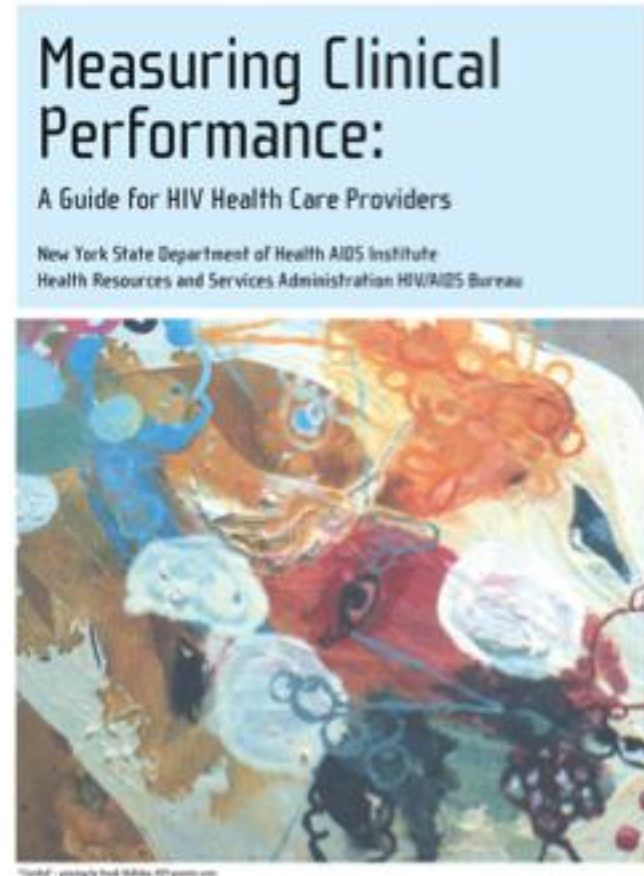
Key Findings:

- No improvement since 2005



HIVQUAL-US

- HIVQUAL-US is a great resource for sample indicators and data collection tools.
- ‘Measuring Clinical Performance’ is a guide for HIV providers to learn more about indicator development and data collection.
- www.HIVQUAL.org





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