

# Enhancing Care Through a Statewide Collaborative: Lessons Learned from Alabama

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# Learning Objectives:

- ❖ Identify successes and challenges to developing a statewide CQI Collaborative
- ❖ Describe effective data collection processes and the subsequent interventions employed to improve outcomes in the continuum of HIV Care
- ❖ Describe how streamlining CQI processes can advance the quality of care
- ❖ Discuss available tools and resources to conduct joint quality improvement efforts in their jurisdiction



# How the Institute of Medicine Defines Quality:

“Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

Institute of Medicine. *Medicare: A Strategy for Quality Assurance*. Vol. 1. (1990)

# What is Quality?

- HRSA defines quality as “the degree to which health or social service meets or exceeds established professional standards and user expectations”.
- Evaluation of the quality of care should consider:
  - Quality of the inputs
  - Quality of the service delivery process
  - Quality of the outcomes, in order to continuously improve systems of care for individuals and populations

# Quality Improvement Requires a Different Approach Than Quality Assurance

|                       | <i>Quality Assurance</i>                       | <i>Quality Improvement</i>       |
|-----------------------|--|----------------------------------|
| <b>Motivation</b>     | Measuring compliance with standards            | Continuously improving processes |
| <b>Attitude</b>       | Required, defensive                            | Chosen, proactive                |
| <b>Focus</b>          | Outliers: “ <i>bad apples</i> ”<br>Individuals | Processes<br>Systems             |
| <b>Responsibility</b> | Few  | All                              |

# Faces of Quality Improvement

|                           | <i>Quality Improvement</i>                   | <i>Clinical Research</i> |
|---------------------------|--|--------------------------|
| <b>Aim</b>                | Improvement of care                          | New knowledge            |
| <b>Test observability</b> | Test observable                              | Test blinded             |
| <b>Sample size</b>        | “Just enough” data, small sequential samples | “Just in case” data      |
| <b>Testing strategy</b>   | Sequential tests                             | One large test           |

*Solberg, Mosser, and McDonald, Journal on Quality Improvement. March 1997, Vol.23, No. 3.*

# ALABAMA QUALITY

Management Group



# Mission Statement

*“The Alabama Regional Quality Management Group exists to ensure that those living with HIV/AIDS in the state of Alabama receive quality healthcare through the collaboration of healthcare partners throughout the state. The mission will be achieved by continuously collecting and analyzing data collected by healthcare partners and evaluating the effect on patient outcomes in accordance with the National HIV/AIDS Strategy, and by nationally and locally recognized standards of care and current HIV research.”*



# Vision Statement

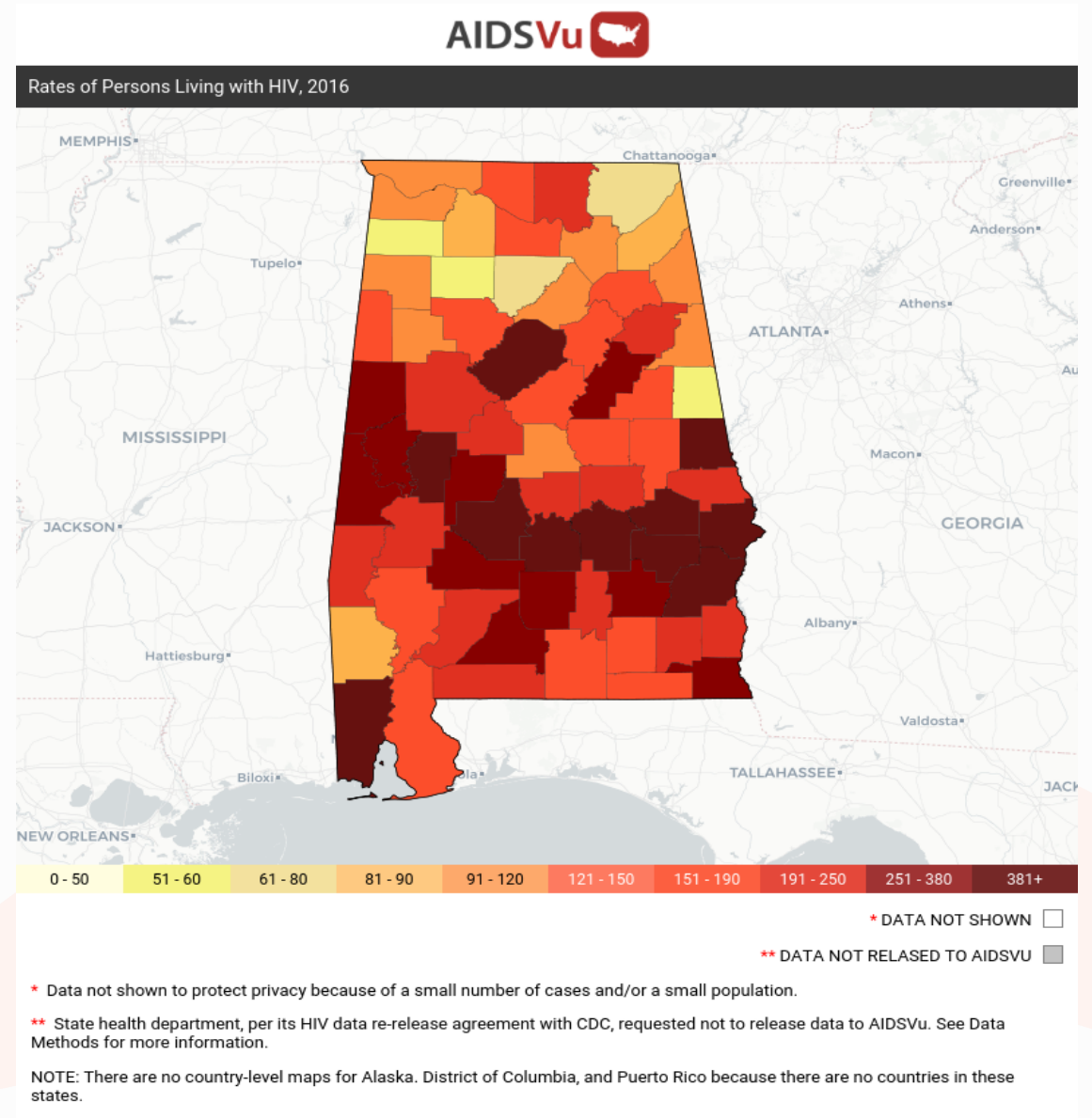
*“We envision optimal health for everyone living with HIV/AIDS supported by a health care system that assures ready access to comprehensive, competent, quality care that transforms lives and communities.”*

# Group Members

- Thrive Alabama-Huntsville, AL
- 1917 Clinic/CFAR-Birmingham, AL
- UAB Family Clinic-Birmingham, AL
- Health Services Center-Anniston, AL
- Whatley Health Services-Tuscaloosa, AL
- Unity Wellness Center-Auburn, AL
- Medical Advocacy and Outreach-Montgomery, AL
- Alabama Department of Public Health-Division of HIV/AIDS Prevention and Care-Montgomery, Alabama
- Franklin Primary Health Center-Mobile, AL
- University of South Alabama Family Specialty Clinic-Mobile, AL
- Birmingham AIDS Outreach-Birmingham, AL
- AIDS Alabama-Birmingham, AL
- AIDS Alabama South, LLC – Mobile, AL
- Selma Friends for Life– Selma, AL

# Group Impact

- In 2018, Alabama had 12,758 individuals diagnosed with HIV
- AQMQ provided services to 6,350 individuals living with HIV; approximately 49.8% of individuals living with HIV in Alabama in 2018.



# History of AQMG

- Formed in 2006 under the guidance of the National Quality Center.
- Original group members were quality leaders in RW Part C and D clinics from Huntsville, Alabama to Mobile, Alabama.
- Participants represented all 67 counties in the state of Alabama.

# Goals of AQMG

1. Collect, prioritize, and analyze agreed upon data using approved CQI methodologies.
2. Identify and promote effective CQI strategies through training opportunities.
3. Enhance understanding and local application of CQI knowledge, methods, and tools directed toward improving patient care.
4. Assist Ryan White grantees in meeting HRSA's QM requirements.
5. Assist with the establishment and implementation of the state quality management plan.

# Data Collection & Analysis

- Viral Suppression
- Retention in Care
- No Show Rates
- New Patients



### AQMG Data Request

Data Submission Date: Wednesday, April 22, 2020

Meeting Date: Friday, April 24, 2020

- Viral Load Suppression Data**

- Time frame: Q1 2020 (January 1, 2020-March 31,2020)
- Metrics

|                    | Numerator | Denominator | Percentage<br>(please round to<br>the first tenth) |
|--------------------|-----------|-------------|--|
| VL<1,000 copies/mL |           |             |  |
| VL<200 copies/mL   |           |             |  |
| VL<48 copies/mL    |           |             |  |

- No Show Data**

- Timeframe: Q1 2020 (January 1, 2020-March 31,2020)
- Metric #1

| Number of Missed Visits | Number of Clients |
|-------------------------|-------------------|
| 1 missed visit          |                   |
| 2 missed visits         |                   |
| 3 missed visits         |                   |
| 4 or more missed visits |                   |

- Metric #2

|  | Numerator<br>(# of No Shows) | Denominator<br>(Number of Arrived<br>Appts + Number of<br>No Shows) | Percentage<br>(Please round to<br>the nearest tenth) |
|--|------------------------------|---|--|
|  |                              |   |  |

- New Patient Data**

- Timeframe Q1 2020 (January 1, 2020-March 31,2020)
- Please see the attached spreadsheet for data shell

### Alabama Regional Quality Group New Pt Report

| Line 1 | Agency Name:   | Date: |  |                   |   | Reporting<br>Period #1: 1/1/20-<br>3/31/20 | Reporting Period<br>#2: 4/1/20-<br>6/30/20 | Reporting<br>Period #3<br>7/1/20-9/30/20 | Reporting Period<br>#4 10/1/20-<br>12/31/20 | TOTAL |
|--------|--|-------|--|-------------------|---|--|--|--|---|-------|
| 3      |  |       |  |                   |   |  |  |  |   |       |
| 4      | 1) Newly Diagnosed (within past 90 days) PLWHs who are linked to HIV care                    |       |  |                   |   |  |  |  | 0   |       |
| 5      | 2) Previously Diagnosed PLWHs who have never been in care                                    |       |  |                   |   |  |  |  | 0   |       |
| 6      | 3) PLWHs returning to care after more than a 12 month absence                                |       |  |                   |   |  |  |  | 0   |       |
| 7      | 4) PLWHs newly enrolling into the program who have transferred from another medical provider |       |  |                   |   |  |  |  | 0   |       |
| 8      | <b>Total for Reporting Period</b>  |       |  |                   | 0 | 0  | 0  | 0  | 0   |       |
| 10     | Of the Total New In Reporting Period, Number who are:  |       |  |                   |   |  |  |  |   |       |
| 11     |  |       |  | Black             |   |  |  |  |   |       |
| 12     |  |       |  | Hispanic/Latino   |   |  |  |  |   |       |
| 13     |  |       |  | MSM               |   |  |  |  |   |       |
| 14     |  |       |  | Black MSM         |   |  |  |  |   |       |
| 14     |  |       |  | Youth (13-24 yrs) |   |  |  |  |   |       |

**INSTRUCTIONS:**

Line 1: Enter Agency Name and Report Date

Lines 4-7: Enter the number PLWHs enrolled in care in each of the four categories for each reporting period.

Line 8: Enter the total number of PLWHs enrolled during the Reporting Period. **TOTAL** = sum of all four categories

Line 10-14: Enter the number of newly enrolled PLWHs (if any) from that period that fit each demographic category.

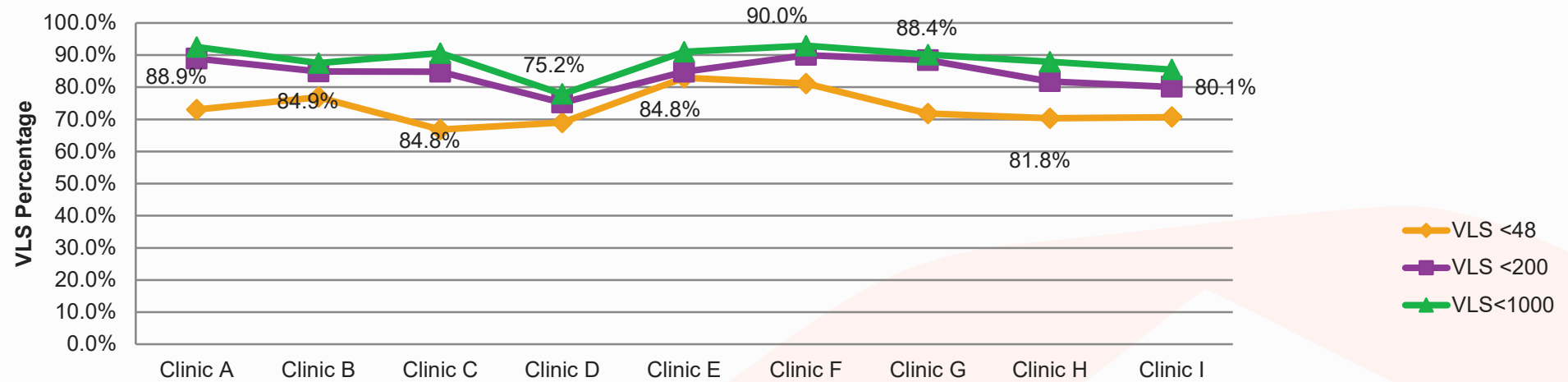
# Data Collection & Analysis

- **Viral Load Suppression:** *The viral load is a laboratory test used to determine the amount of virus in a person's blood stream.*
  - VL<48
  - VL<200
  - VL<1,000
- **Retention in Care**
  - Patients have at least 2 medical visits per year with one visit during the 1<sup>st</sup> 6 months of the year AND one visit during the 2<sup>nd</sup> 6 months of the year.



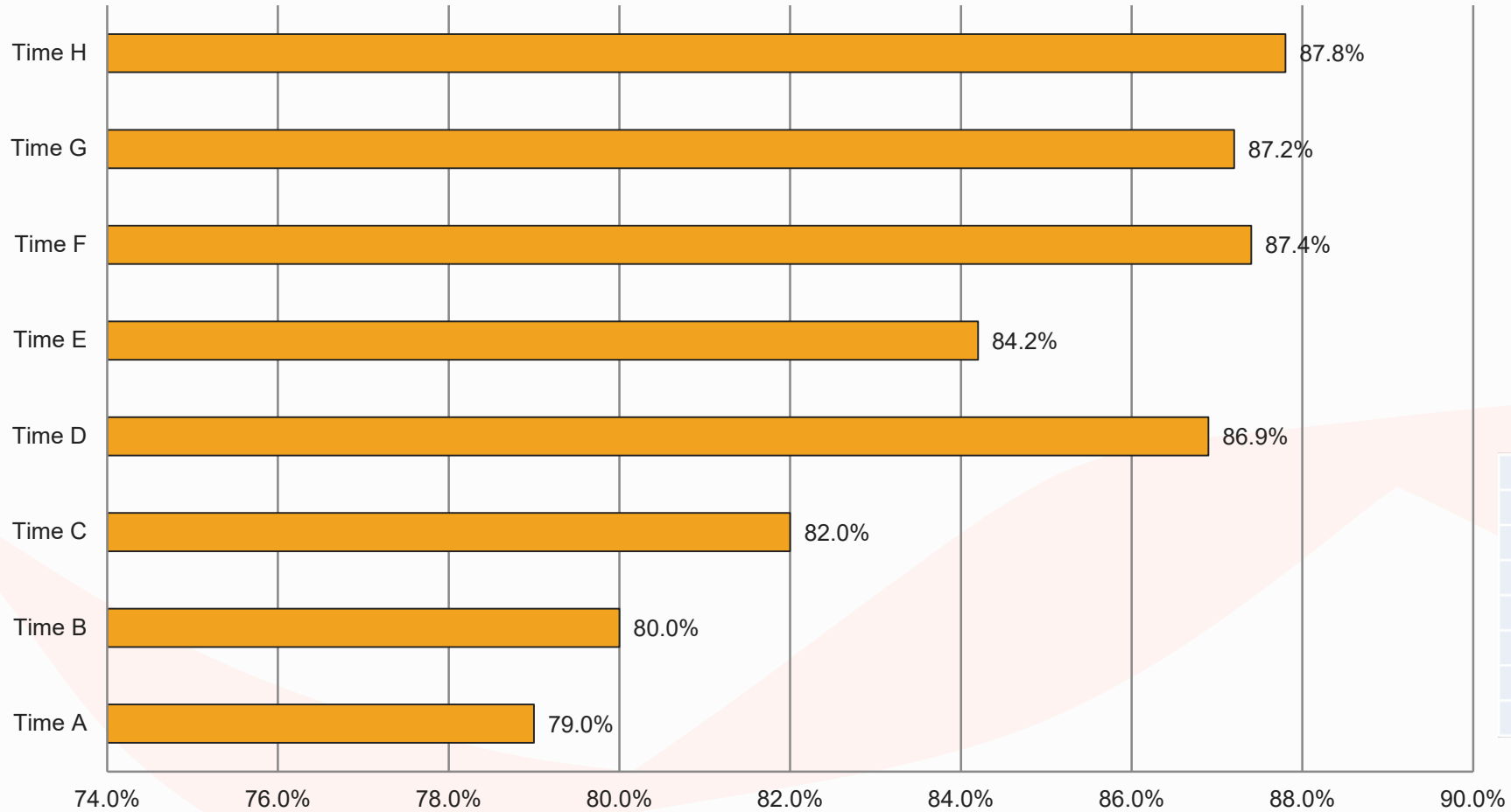
# Data Analysis

## AQMG VLS Data Q4-2019



**AQMG Mean VL<200: 88.1%**  
**VS RWHAP 2017 US and Territories: 85.9%**  
**2017 RWHAP Clients in AL: 84.6%**

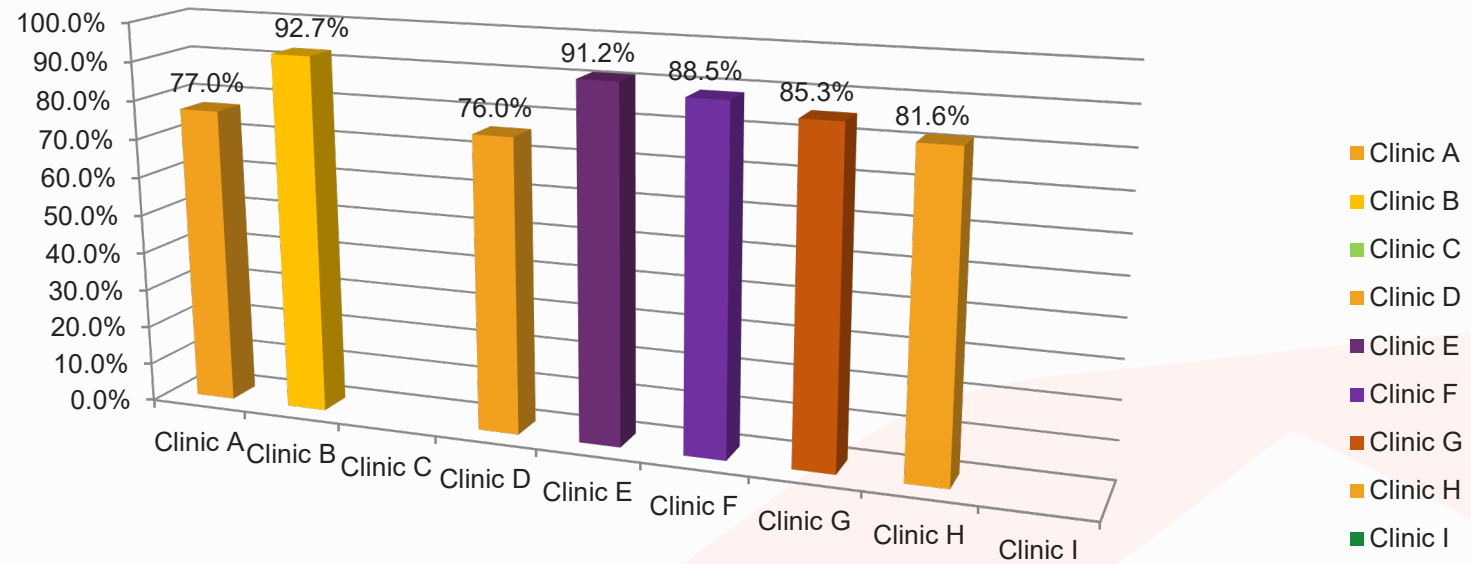
# AQMG Mean VL Over Time



Series1

|           |        |       |
|-----------|--------|-------|
| 8/1/2013  | Time A | 79.0% |
| 2/1/2014  | Time B | 80.0% |
| 5/1/2014  | Time C | 82.0% |
| 1/1/2019  | Time D | 86.9% |
| 4/1/2019  | Time E | 84.2% |
| 7/1/2019  | Time F | 87.4% |
| 10/1/2019 | Time G | 87.2% |
| 1/24/2020 | Time H | 87.8% |

## AL Quality Management Group 2018 Retention In Care

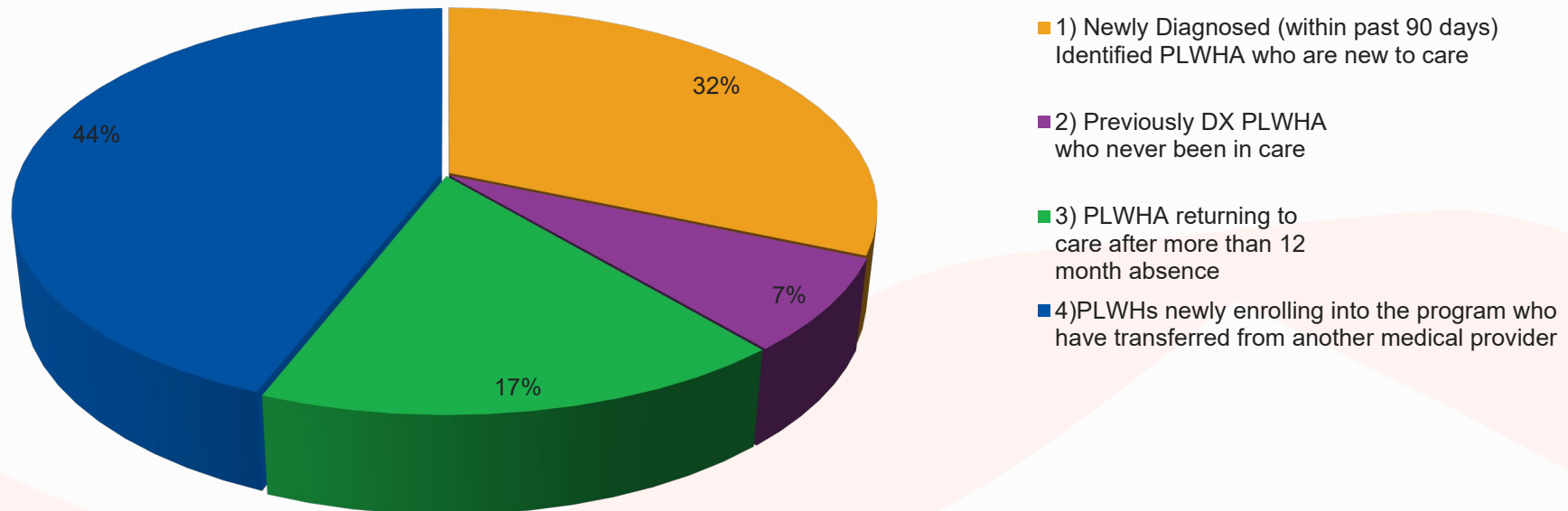


**RWHAP Retention Rate AL: 86.8%**  
**RWHAP Retention Rate US and Territories: 80.9%**

# Group Priorities

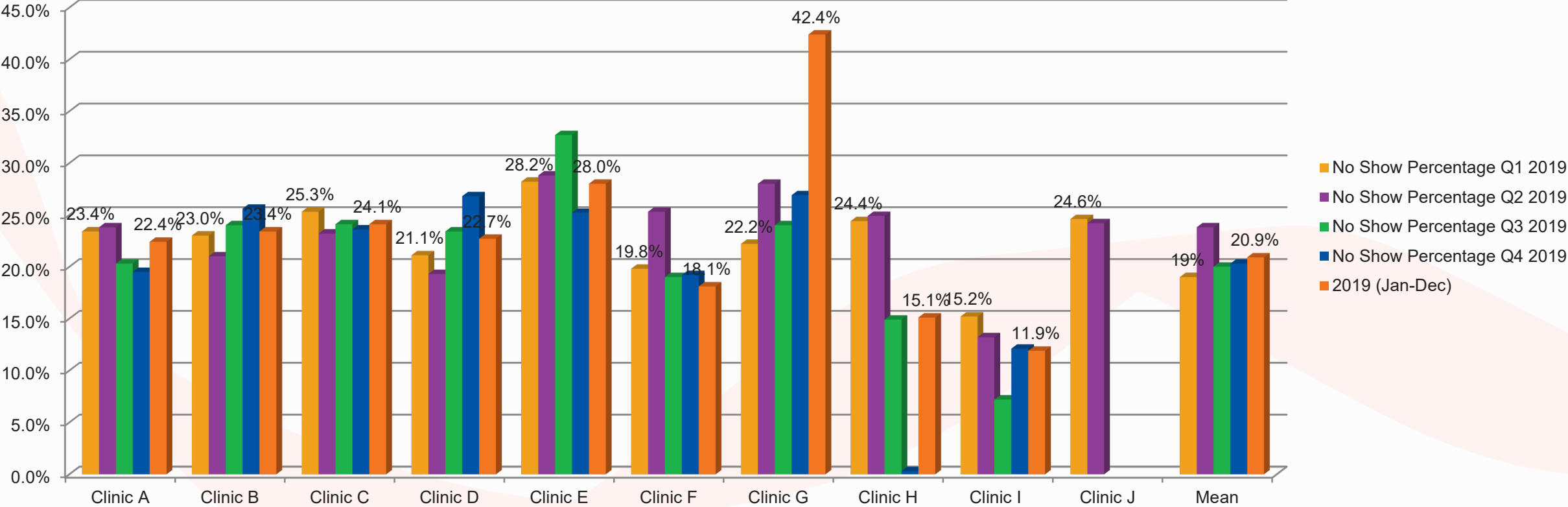
- New Patients
  - 1) Newly Diagnosed (within past 90 days) Identified PLWHA who are new to care
  - 2) Previously DX PLWHA who never been in care
  - 3) PLWHA returning to care after more than 12 month absence
  - 4) PLWHs newly enrolling into the program who have transferred from another medical provider
- No Show Rates
  - \*\*New for 2015\*\*
  - The percentage of patients who were a no-show for at least one HIV specific medical visit

# AL Quality Management Group New Patient Distribution Jan. 1, 2019-Dec. 31, 2019



# AQMG

## No Show Percentage Q1-Q4 2019



# Why No Show Rates?

- **Retention in Care**
  - *Patients have at least 2 medical visits per year with one visit during the 1<sup>st</sup> 6 months of the year AND one visit during the 2<sup>nd</sup> 6 months of the year*
- **No Show**
  - *The percentage of patients who were a no-show for at least one HIV specific medical visit*
- **Research**
  - *Retrospective data analysis by the UAB 1917 Clinic showed that patients who missed visits within the first year after initiating treatment for HIV were at higher risk of dying than patients who attended all scheduled appointments.*

## Missed Visits and Mortality among Patients Establishing Initial Outpatient HIV Treatment

Michael J. Mugavero,<sup>1</sup> Hui-Yi Lin,<sup>2</sup> James H. Willig,<sup>1</sup> Andrew O. Westfall,<sup>4</sup> Kimberly B. Ulett,<sup>1</sup> Justin S. Routman,<sup>1</sup> Sarah Abrams,<sup>1</sup> James L. Raper,<sup>1</sup> Michael S. Saag,<sup>1</sup> and Jeroan J. Allison<sup>3</sup>

Divisions of <sup>1</sup>Infectious Diseases, <sup>2</sup>Medical Statistics Section, and <sup>3</sup>General Internal Medicine, Department of Medicine, and <sup>4</sup>Department of Biostatistics, University of Alabama at Birmingham

**Background.** Dramatic increases in the number of patients requiring linkage to treatment for human immunodeficiency virus (HIV) infection are anticipated in response to updated Centers for Disease Control and Prevention HIV testing recommendations that advocate routine, opt-out HIV testing.

**Methods.** A retrospective analysis nested within a prospective HIV clinical cohort study evaluated patients who established initial outpatient treatment for HIV infection at the University of Alabama at Birmingham 1917 HIV/AIDS Clinic from 1 January 2000 through 31 December 2005. Survival methods were used to evaluate the impact of missed visits during the first year of care on subsequent mortality in the context of other baseline sociodemographic, psychosocial, and clinical factors. Mortality was ascertained by query of the Social Security Death Index as of 1 August 2007.

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**Methods.** A retrospective analysis nested within a prospective HIV clinical cohort study evaluated patients who established initial outpatient treatment for HIV infection at the University of Alabama at Birmingham 1917 HIV/AIDS Clinic from 1 January 2000 through 31 December 2005. Survival methods were used to evaluate the impact of missed visits during the first year of care on subsequent mortality in the context of other baseline sociodemographic, psychosocial, and clinical factors. Mortality was ascertained by query of the Social Security Death Index as of 1 August 2007.

**Results.** Among 543 study participants initiating outpatient care for HIV infection, 60% missed a visit within the first year. The mortality rate was 2.3 deaths per 100 person-years for patients who missed visits, compared with 1.0 deaths per 100 person-years for those who attended all scheduled appointments during the first year after establishing outpatient treatment ( $P = .02$ ). In Cox proportional hazards analysis, higher hazards of death were independently associated with missed visits (hazard ratio, 2.90; 95% confidence interval, 1.28–6.56), older age (hazard ratio, 1.58 per 10 years of age; 95% confidence interval, 1.12–2.22), and baseline CD4<sup>+</sup> cell count <200 cells/mm<sup>3</sup> (hazard ratio, 2.70; 95% confidence interval, 1.00–7.30).

**Conclusions.** Patients who missed visits within the first year after initiating outpatient treatment for HIV infection had more than twice the rate of long-term mortality, compared with those patients who attended all scheduled appointments. We posit that early missed visits are not causally responsible for the higher observed mortality but, rather, identify those patients who are more likely to exhibit health behaviors that portend increased subsequent mortality.



## Data for Care (D4C) Alabama: Clinic-Wide Risk Stratification With Enhanced Personal Contacts for Retention in HIV Care via the Alabama Quality Management Group

Maira Sohail, MPH,<sup>a</sup> Jeremiah Rastegar, MPA,<sup>b</sup> Dustin Long, PhD,<sup>c</sup> Aadia Rana, MD,<sup>b</sup>  
Emily B. Levitan, PhD,<sup>a</sup> Harriette Reed-Pickens,<sup>b</sup> David Scott Batey, PhD,<sup>d</sup> Kelly Ross-Davis, MS,<sup>b</sup>  
Kathy Gaddis, MSW,<sup>b</sup> Ashley Tarrant, MPH,<sup>e</sup> Jitesh Parmar, MPH, MBA, MPA,<sup>f</sup>  
James L. Raper, PhD, CRNP, JD,<sup>b</sup> and Michael J. Mugavero, MD<sup>b</sup>

**Background:** The Alabama Quality Management Group (AQMG), a consortium of 9 Ryan White-funded part C and D clinics, distributed statewide was established in 2006 under the guidance from the Health and Resources Services Administration with a clinical quality improvement (CQI) focus.

non-D4C-1917 clinics during the intervention period (April 2018–February 2019,  $P = 0.049$ ).

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**Background:** The Alabama Quality Management Group (AQMG), a consortium of 9 Ryan White-funded part C and D clinics, distributed statewide was established in 2006 under the guidance from the Health and Resources Services Administration with a clinical quality improvement (CQI) focus.

**Methods:** We describe the origins and evolution of the AQMG, including requisite shifts from aggregate clinic-wide to de-identified individual-level data reporting for implementation of the Data for Care (D4C-AL) Alabama program. The D4C-AL strategy uses a clinic-wide risk stratification of all patients based on missed clinic visits in the previous 12 months. Intermediate (1–2 missed visits) and high-risk patients (>3 missed visits) receive the evidence-informed Retention through Enhanced Personal Contact intervention. We report on a pilot of the D4CAL program in 4 of 33 primary HIV care clinics at the UAB 1917 Clinic.

**Results:** Among 3859 patients seen between April 2018 and February 2019, the missed visit rate was not significantly different between the D4C-1917 (19.2%) and non-D4C clinics (20.5%) in a preintervention period (May 2017–April 2018). However, a significantly lower missed visit rate was observed in the D4C-1917 vs.

non-D4C-1917 clinics during the intervention period (April 2018–February 2019,  $P = 0.049$ ).

**Conclusions:** The AQMG has been transformed into a health service research and implementation science platform, building on a shared vision, mission, data reporting, and quality improvement focus. Moreover, CQI may be viewed as an implementation strategy that seeks to enhance uptake and sustained use of effective interventions with D4C-AL representing a prototype for future initiatives embedded within extant quality improvement consortia.

**Key Words:** HIV, AIDS, continuum, retention, missed visits  
(*J Acquir Immune Defic Syndr* 2019;82:S192–S198)

### INTRODUCTION

The fragmentation of the U.S. health care system is well documented, with administrative (eg, scheduling, coding, and billing) and health services delivery data captured in electronic health records serving as a unifying factor across myriad practice settings, and represents an opportunity for coordinated, concerted, system-level improvements to enhance the delivery, uptake, and quality of HIV services. Governmental departments and agencies are routinely requiring the reporting of systematic data at the individual level and in aggregate to regulate and measure the effectiveness of service delivery. Because data and access to data have improved, health care organizations, providers, and hospitals now have an opportunity to incorporate quality improvement

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# AQMG Successes

- Routine meetings for past 12 years.
- Multidisciplinary team
  - Consumer representation
- Congressional presentation
- Drivers of policy changes
  - Data sharing agreements
  - Data 2 Care Project
- Secured funding for Data 4 Care Intervention
- Created brand identity for group



# AQMG Challenges

- Peer-Led group
- Consumer involvement
- Geographical disbursement of members
- Remaining Focused




# Sustainability Plan for Alabama

- ❖ Continue quarterly meetings to sustain and improve relationships with relevant stakeholders
- ❖ Evaluate methods to engage remaining agencies who do not participate in the group.
- ❖ Continue data collection and review of clinical outcomes to ensure we are meeting and/or exceeding HRSA standards. Continue group discussions to determine additional projects and funding opportunities.

# Advanced Training Programs





- ✓ Training-of-Trainers (TOT) Program
- ✓ Training of Quality Leaders (TQL) Program
- ✓ Training on Coaching Basics (TCB) Program
- ✓ Training of Consumers on Quality (TCQPlus) Program



**NQC Training on Coaching Basics Guide**  
 Facilitator Manual to Guide HIV Providers on Quality Management


New York State Department of Health AIDS Institute  
 Health Resources and Services Administration


 NATIONAL QUALITY CENTER



**NQC Training of Quality Leaders Guide**  
 Facilitator Manual to Build Capacity of HIV Providers to Lead Quality Management Activities


New York State Department of Health AIDS Institute  
 Health Resources and Services Administration HIV/AIDS Bureau


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**NQC Training-of-Trainers Guide**  
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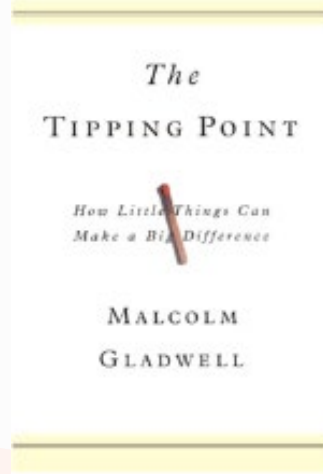
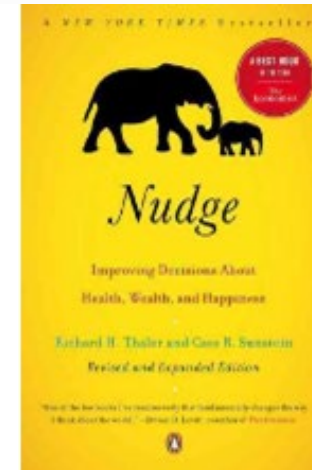
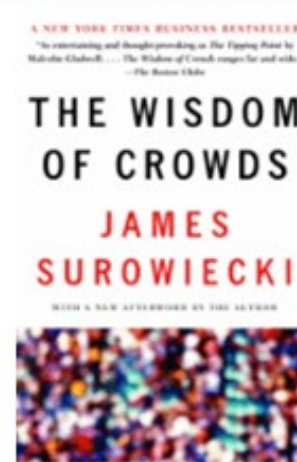
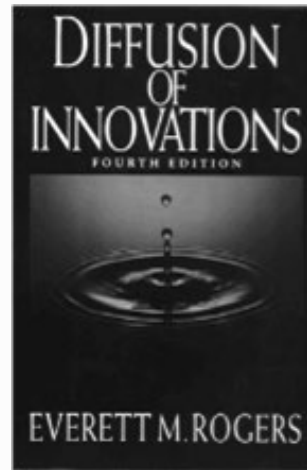


**NQC Training of Consumers on Quality (TCQ)**  
 Facilitator Manual to Build Capacity of People Living with HIV to Actively Participate in Quality Improvement Activities

New York State Department of Health AIDS Institute  
 Health Resources and Services Administration HIV/AIDS Bureau

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# Additional Resources



A small group of thoughtful people can change the world. Indeed it is the only thing that ever has.

--Margaret Mead





# Thank You!

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