NATIONAL QUALITY CENTER

# Impacting the Cascade: Drilling Down Data to Improve Patient Care

RWPs in NQC's Regional Groups in

E. Pennsylvania, Massachusetts and Mississippi

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# Welcome!Welcome!Welcome!

# Can "Better Become Best?"

**Results**

What is Best? Is it 75% 85% 95% 100%

**Process**

What is the "Best" Continuous Quality Improvement Process?

# Outcomes

- Understand a tested process improvement intervention to using drilled down data to increase VL suppression (and retention).

- Share results across multiple states and from several RW programs with varying caseload sizes.

# Overview

- Rationale
- How to drill down data
- Interventions:  Targeted interventions to improve Care and  MCM Coordination
- Results
- Key Learnings
- Large Group Q&A

# Drilling Down Data – WHY?

To have an in-depth understanding of patient barriers to care

# Which comes first? Analysis of

Disparity Data or Patient Level Reasons

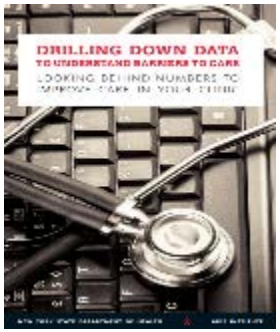

Use of drilled down data by MDTs to target interventions to increase VL suppression across multiple states – 10 RWHAPs
Caseload range: 150 - 4,000

# How to Drill Down Data

## Who are the 20% - 30%? How To Find Out?

# What is Drilling Down the Data?

It is a process of analyzing your patient care data in increasing detail to understand who is meeting performance measures and who is not




The information on these slides are taken from and adapted from NYSDOH AIDS Institute, "Drilling Down Data To Understand Barriers to Care," 2/2015. For more information: hivguidelines.org

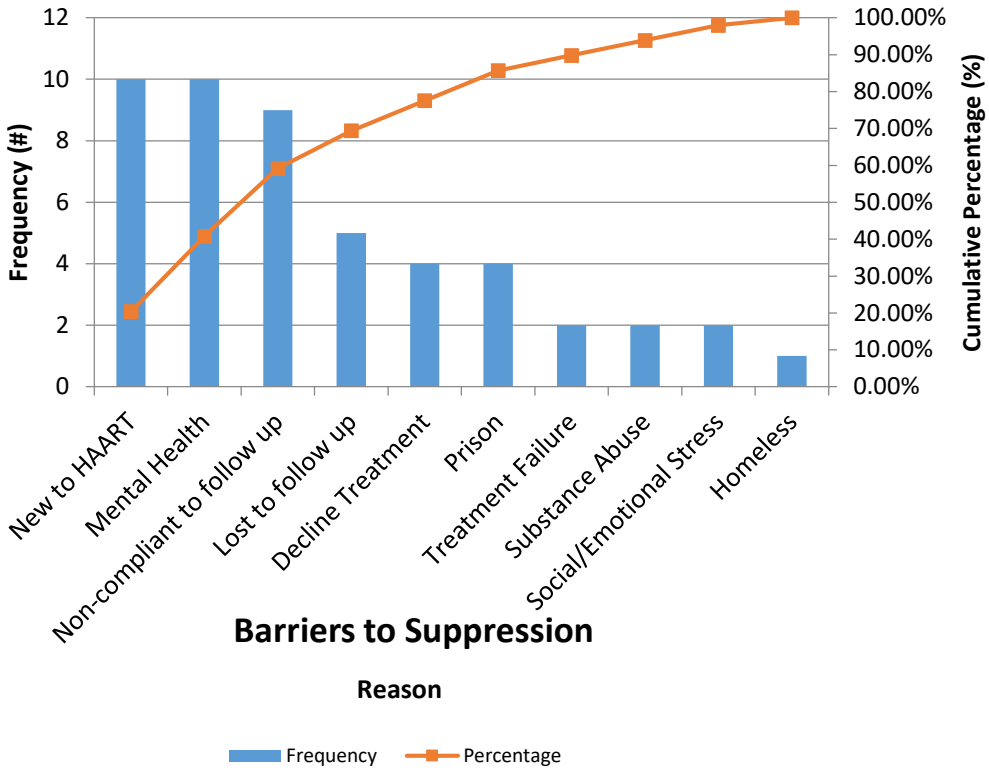
# Why Drill Down the Data?

- Helps identify barriers to care
- Helps look beyond the numbers
- Helps identify areas for improvement
- Encourages involvement from all clinic team members
- Helps to improve care in the clinic

# Four Steps to Drilling Down the Data

1. Develop a list of patients who do not meet the defined criteria (not suppressed) of your measure
2. Identify reasons why each patient is not during a Multidisciplinary Team Meeting (MDT) with everyone participating
3. Tally the reasons
4. Develop targeted follow-up plans to address the most common or relevant issues by staff members agreed upon during the MDT meeting

# Two Ryan White HIV/AIDS Programs (RWHAP) E. Pennsylvania and Mississippi




| Reasons | Total |
|---|---|
| Non-Compliant | 15 |
| Newly Enrolled | 9 |
| Mental Health | 6 |
| Transferred | 6 |
| Re-Entered Care/Meds Restarted | 3 |
| Waiting on Lab Results | 3 |
| Deceased | 1 |
| Resistant | 1 |
| Other | 1 (incarcerated) |

St. Luke's University Hospital Network

Magnolia Medical Center

# Prioritization Strategies – By Disparity Group

## Key Populations

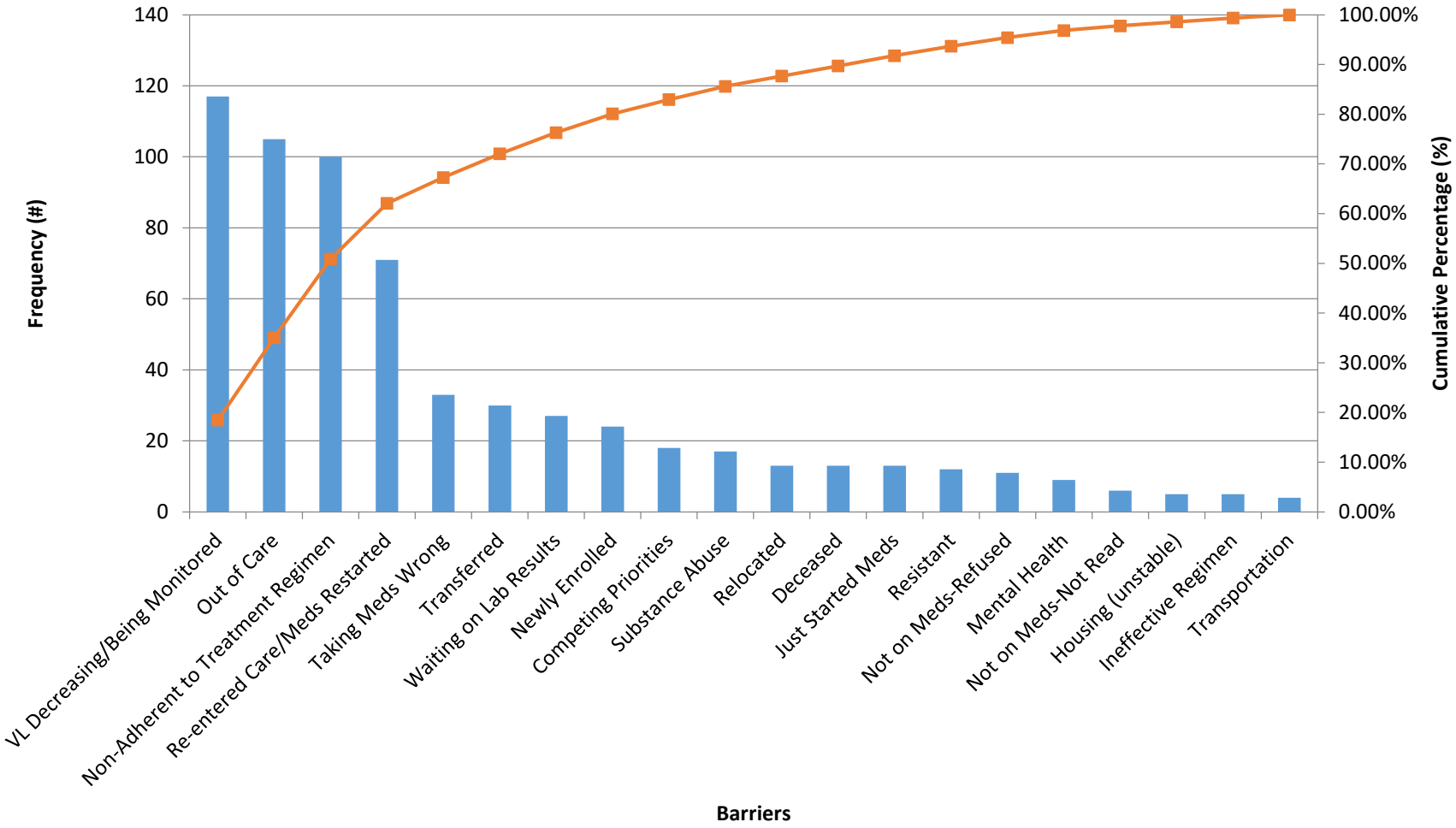
| Key Population | Barrier | # of Patients |
|---|---|---|
| Men Who Have Sex with Men | Transportation | 4 |
| | Unstable Housing | 6 |
| | Insurance | 1 |
| | Disclosure Issues | 11 |
| | Refuses Treatment | 1 |

# Mississippi Statewide Barriers
# Root Causes for Non Suppression

5 RW Programs
Total HIV caseload:
Total non suppressed <200:
633 patients – 56*= 577

| Reasons | Total |
|---|---|
| **Non-Adherent to Treatment Regimen** | **100** |
| Not on Meds- Refused | 11 |
| Not on Meds- Not Ready | 6 |
| **Ineffective Regimen** | **5** |
| Resistant | 12 |
| **Re-entered Care/Meds Restarted** | **71** |
| **Taking Meds Wrong** | **33** |
| **Waiting on Lab Results** | **27** |
| Transferred* | 30 |
| Relocated* | 13 |
| Deceased* | 13 |
| **Out of Care** | **105** |
| Just Started Meds | 13 |
| **VL Decreasing/Being Monitored** | **117** |
| Newly Enrolled | 24 |
| Substance Abuse | 17 |
| Mental Health | 9 |
| Competing Priorities | 18 |
| Housing (Unstable): | 5 |
| Transportation | 4 |

# Mississippi Statewide Barriers to Suppression



# Step 4: Develop a Targeted Follow-Up Plan

1. Using data from steps 2 and 3, identify that are most critical to patient health and that affect most patients
2. Develop a plan to address these issues
3. Consider prioritizing your follow-up by examining the needs of key populations or by individual patients
4. Report out the progress/status of patients at multidisciplinary team meetings
5. Document.

# Benefits

1. Your clinic will be able to serve those most in need by tailoring activities to best meet those needs
2. Your clinic will be more likely to achieve improvement
3. Your clinic can target resources more wisely
4. Foster ongoing relationships with patients by meeting their needs
5. Improve overall engagement in care

# Targeting Interventions to Improve Care and Case Management Coordination

## QI Process

- Continuous use of drilled down data by a multidisciplinary team
- Target patient or sub population level interventions
- Continuous measurement of results to effect outcomes
- Continuous tweaking of managing coordination of interventions

# *Increasing Viral Load Suppression Rates*

| Reasons | Total |
|---|---|
| Non-Compliant | 15 |
| Resistant | 1 |
| Re-Entered Care/Meds Restarted | 3 |
| Waiting on Lab Results | 3 |
| Transferred | 6 |
| Deceased | 1 |
| Mental Health | 6 |
| Newly Enrolled | 9 |
| Other | 1 (incarcerated) |

## Process and Interventions- Care Coordination

*Pro. Coordinator-Print list of clients not suppressed

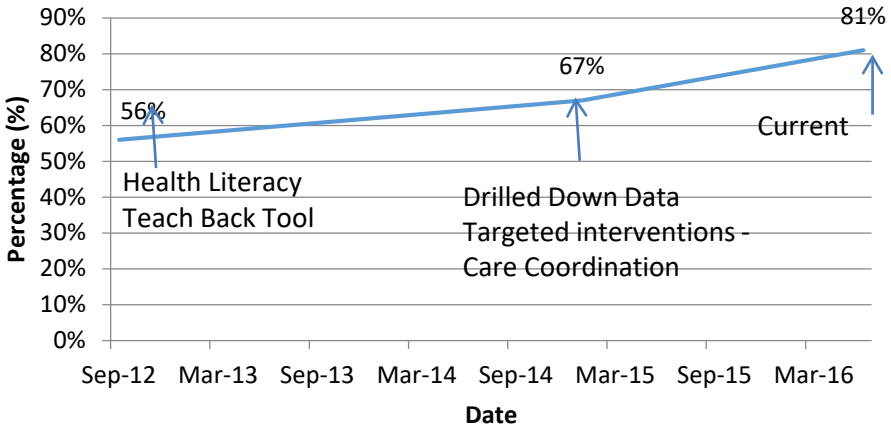
*NP and Pro. Coordinator- review list &compare to lab results; start HART

*SW/Case Manager- reminder calls for apt, arrange transportation to apt, pharmacy verification of pick up

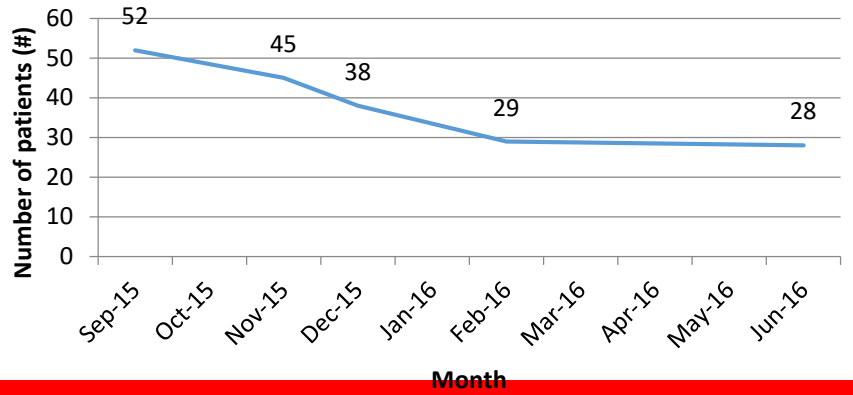
*Data Clerk –Check data for errors

*Multidisciplinary Team: ongoing adherence education and address barriers

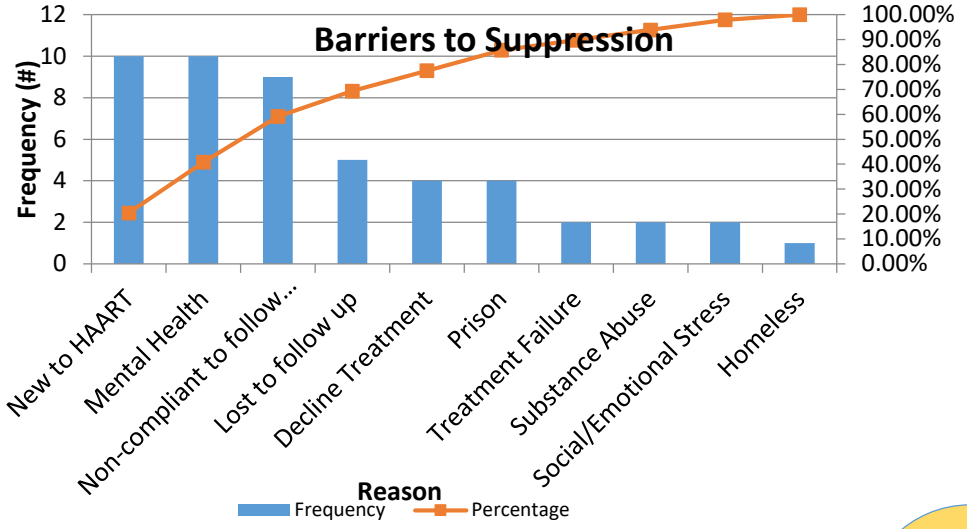
**Viral Load Suppression Rates Across Interventions**

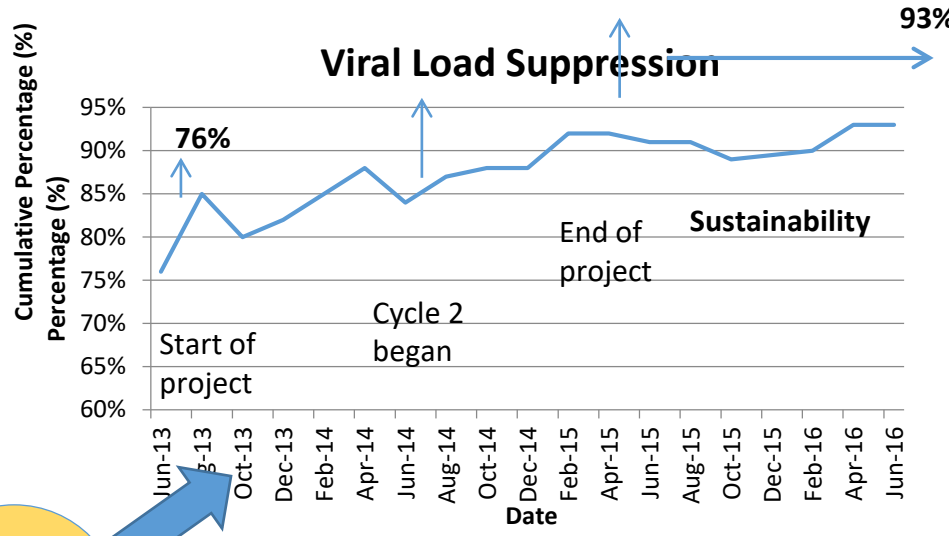



**Patients Not Suppressed**



# AIDS Services Center: Viral Load Suppression QI




- **Project Review:**

1. Created Fishbone & Driver diagrams to identify barriers to vir suppression
2. **Utilized CAREWare to identify non-suppresse patients (not in numerator)**
3. **Categorized patients by barriers to identify which barriers impact VLS the most**
   - **Pareto diagram to analyze data –*above***
4. Interventions tested with a PDSA for 5 of the largest barriers to VLS

**Drilled Down Data**

**SUSTAINING Improved Care Coordination:**

- **Continually drilling down data**
  - Review "not in numerator" list monthly
    - Identify ("drill down") barriers to suppression and utilize project interventions, as needed
  - Involve entire multidisciplinary team in drill-down efforts as part of *program protocol*

# Mental Health Barriers and Impact on Delivery of Care

**Establish guiding frameworks for patient-centered care & quality improvement**

| | |
|---|---|
| Population health | Cultural competency |

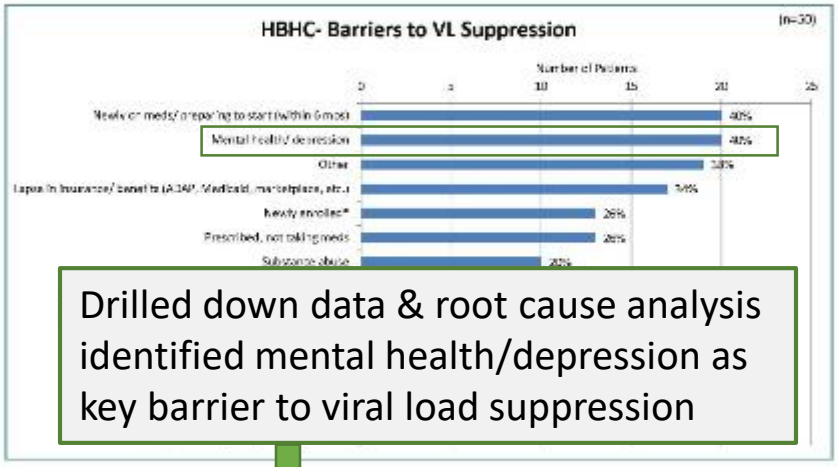
**Identify mental health as important barrier to viral load suppression & respond with CQI tools**

| | |
|---|---|
| Root cause analysis | PDSA & direct work w/ staff |

**Integrate mental health support & options into primary care**

| | |
|---|---|
| Accessible, responsive care | Harm reduction |

# Site 4: Howard Brown Health Center




Drilled down data & root cause analysis identified mental health/depression as key barrier to viral load suppression

PCMH reporting & care plan workflows

Improved VL suppression & care integration

## Howard Brown Health RW CQM

- Root cause analysis – Drilled down data
- PDSA/QI cycles – Process improvement
- User-friendly reporting infrastructure
- PCMH integration – Care planning

| Measurement Period | Viral Load Suppression |
|---|---|
| 10/1/2014 – 9/30/2015 | 80.45% |
| 4/1/2015 – 3/31/2016 | 83.30% |

**CHRONIC DISEASE MANAGEMENT**

Patients Scheduled On: *05/03/2016*

| Doctor | Patient ID | Patient Name | Problem | Visit Date/Time |
|---|---|---|---|---|

**PCMH DAILY CARE MANAGEMENT PLANS**

Patients Scheduled On: *01/14/2016*

| Site | Doctor | PatientId | Legal Name | Needs Care Plan | | | | | | Visit Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Last Viral Load | Depression Dx | Sliding Scale | Diabetes Dx | HbA1c %-Obsvalue | Nbr Total NoShow | |

Howard Brown Health

# What Does It Take to Sustain Improved Patient Outcomes?

- Use of drilled down patient level data to target interventions and improve management of:
- care coordination
- medical case management

# WEEKLY MULTI DISCIPLINARY MTGS – Process to Manage 320 Patients 85% <200 VL – 3 years!

Prepare Reports Identifying Patients Not Suppressed.

**RE- START WEEKLY MTGS-3/MONTH**
- REVIEW PATIENTS
- TAKE NOTES
- DEVELOP CARE PLAN TEMPLATE
- DEVELOP PATIENT SPECIFIC CARE PLANS
- TEAM MAKES RECOMMENDATIONS
- ASSIGNED STAFF PRESENT PLAN TO PATIENT FOR PATIENT INPUT
- FOLLOW –UP ON RECCOMENDATIONS
- INTERVENTION IS INDIVIDUALIZED

**RN INTERVENTION**
- DEVELOP AND IMPLEMENT CARE PLAN
- FOLLOW -UP

**SOCIAL WORK INTERVENTION**
- FOLLOW-UP ON PLAN
- Increase visit to 45 min for VL>200

**Provider Engaged in tracking and monitoring (After initial PDSA)**

**PEER NAVIGATOR INTERVENTION**
- FOLLOW –UP ON PLAN

***

BARRIERS TO VIRAL LOAD SUPRESSION
- SUBSTANCE ABUSE
- HOMELESSNESS
- NOT ATTENDING APPOINTMENTS
- MENTAL HEALTH ISSUES
- REFUSE MEDICATIONS

DATA ENTRY

SCHEDULED TEAM MEETINGS- REVIEW RESULTS OF INTERVENTIONS
# OF PATIENTS WITH VL >200 REVIEWED
# WITH TARGETED CARE PLANS
PATIENT RESPONSE TO INTERVENTION

# Sustained Continuous Improvement of VL Suppression

| Nov 2012 | Feb 2013 | July 2013 | Jan 2014 | May 2014 | Jan 2015 | July 2015 44pts | July 2016 24pts |
|---|---|---|---|---|---|---|---|
| 74% | 76% | 81% | 84% | 86% | 86% | 86% | 92% |

**Intervention: Care Coordination by Multi Disc Team**

Caseload: 350

- Drilled down data to identify patients <200
- Development of tailored Care Plans
- Assigned specific staff
- Approx 20 pts at a given time for team

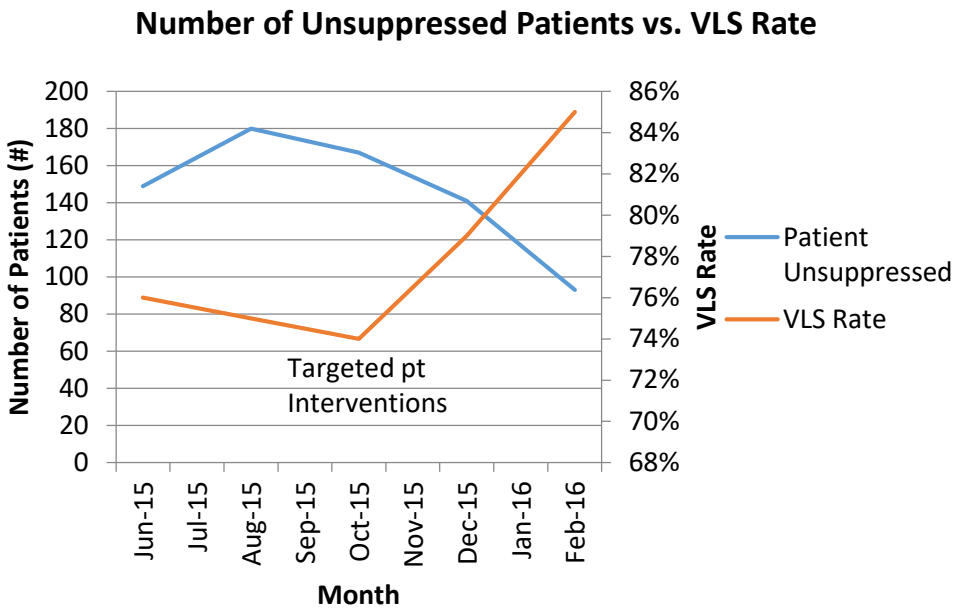
- RN: Side Effect Mgt-Pill boxes weekly/monthly
- Peers: face to face or telephone coaching
- Peer Support/Youth Support Groups – emotional support
- SWs: Partner Notification support; MH assessment and referral; SA assessment and referral

# Sustaining Continuous Improvement in Care Coordination June 2016

SeMRHI
Southeast Mississippi Rural Health Initiative, Inc.
A Network of Community Health Centers

## Targeted Interventions

- teach-back tool,
- daily patient huddle (multi-disciplinary approach),
- re-engage out of care patients,
- new LCSW in February 2016 to address behavioral health issues impacting adherence and retention.
- July 2016 to provide intense medical case management (MCM) to address barriers of non suppressed pts.



# Improved MCM

## Sustaining Interventions and Outcomes

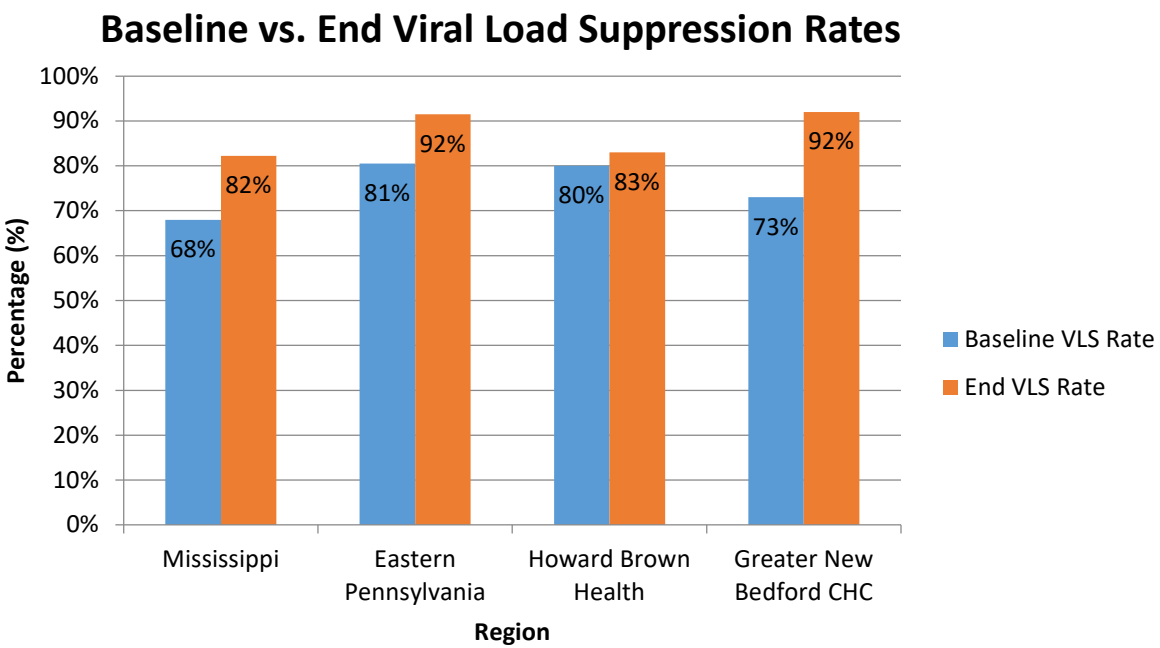
### above 90% VL suppression

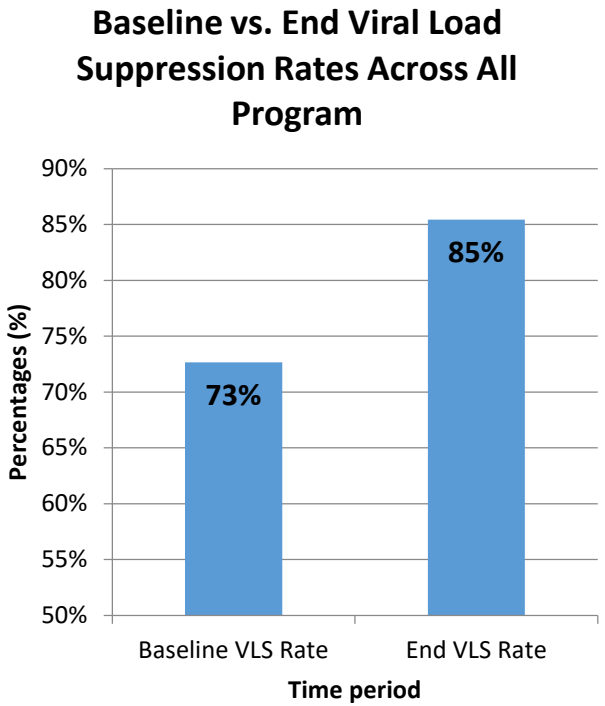
| Outreach | Case Management | Treatment Adherence Counseling | Financial Counseling | Social Work |
|---|---|---|---|---|
| • Lost to Care<br>• No phone<br>• No phone response<br>• Missed appointments<br>• Not virally suppressed | • Intensive support for accessing services<br>• Paperwork help<br>• Needs EFA<br>• Needs housing assistance | • Comes regularly<br>• Needs mental health services<br>• Not virally suppressed | • ADAP/<br>• Insurance lapses<br>• Not compliant due to financial issues<br>• Needs ongoing financial support | • Has immediate need<br>• Needs mental health referral<br>• No need for case management |

# Is this Approach Evidence- Informed?

- Use of drilled down data by multidisciplinary teams to target interventions
- A method or technique that:
  - Has consistently shown superior results,
  - Is replicable - implemented across RW programs in varied locations – rural, urban; south, north, central US; different size patient caseloads, and
  - Can be benchmarked.

# Results of Improving Care and MCM Coordination: 10 RWHAPs across Chicago, EPA, MA, and MS



# MS Statewide Care Coordination – Peer Exchange of Successful Interventions

| **Using Drilled Down Data to Target Interventions** | **Total: 5 MS RWPs** |
|---|---|
| Transportation | 5 |
| Assist with co-pays | 4 |
| Mail order meds | 3 |
| Reminder calls | 4 |
| Pill planners | 3 |
| Mental Health Services (psychiatrist) | 4 |
| Housing assistance | 2 |
| Extra adherence education, Health Literacy Teach Back Adherence Tool | 4 |
| Targeted Provider communication | 3 |
| Pharmacy verification of meds | 3 |
| Refer patient out of care to District SWs | 3 |
| Home visits | 2 |
| Clinical team response to medication problems | 1 |
| Alarms set on patient phones | 2 |

# Benefits and Learnings

- Important not to lose bigger picture of ending the epidemic
- More in-depth understanding of our patients
- Expand staff experience in QI and therefore buy-in
  - Data and interventions are integrated into morning huddles
  - Data and results are shared at consumer meetings
- A lot of work, but rewarding to team and patients
- Increasingly allows more time for patients not suppressed
- Continuous process and analysis of data
  - Ex. resulted in hiring bi-lingual peer
- Tweaked ARTAS (evidence-based) to meet needs of sub population – those below the poverty level

# Large Group Discussion – Q&A

# Acknowledgement, Presenters and Contact Information

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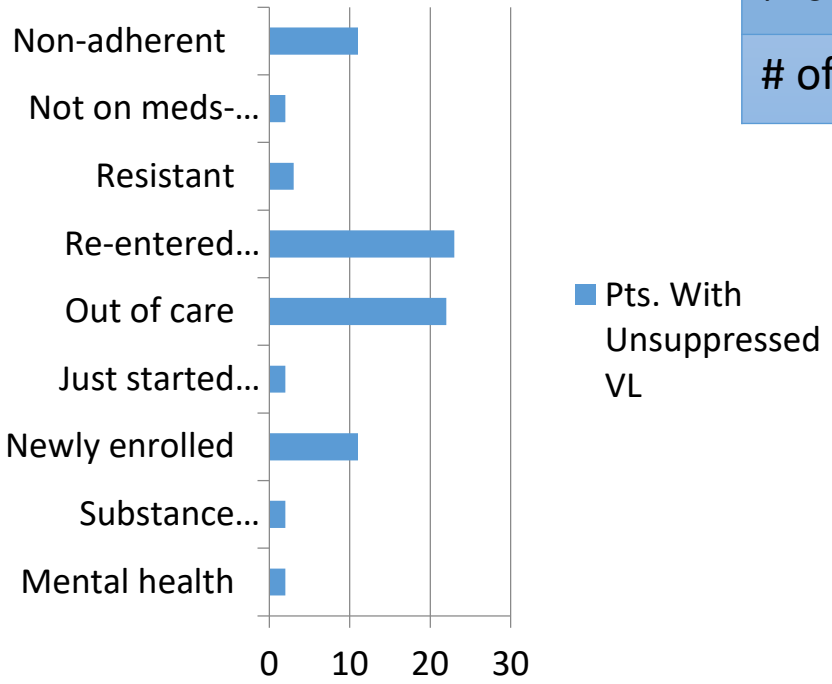
# Viral Load Suppression

**Viral Load Suppression: Strive for 80% of patients to achieve VL suppression.**

| | Baseline | Post intervention |
|---|---|---|
| % suppressed | 77% | 85% |
| # of patients | 121 | 77 |

## Reasons for Unsuppressed VL- Drilled Down Data

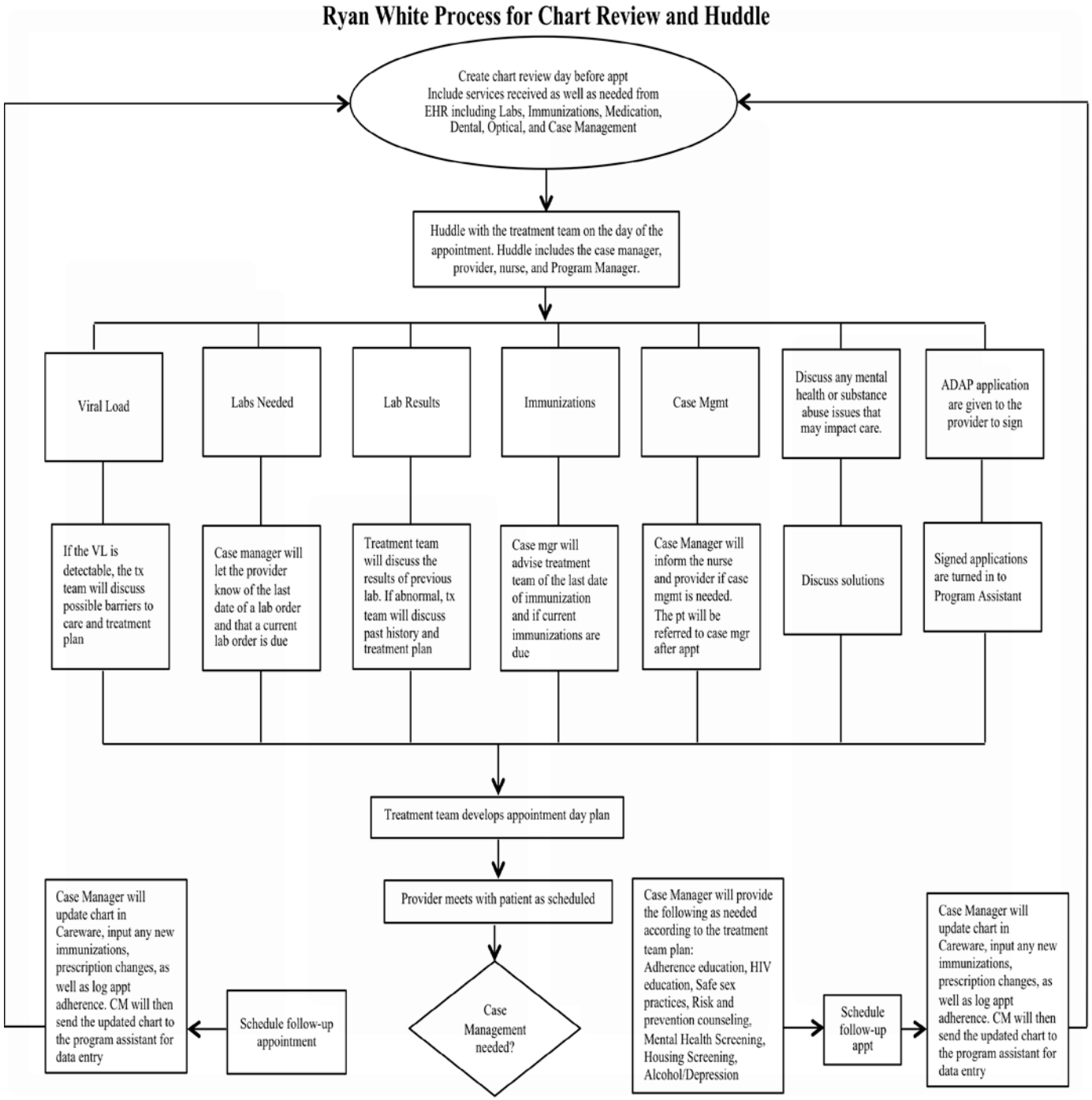



## Interventions – Care Coordination

- Medical Case management interventions (HIV & adherence education, addressing barriers to care, etc.)
- Engaging those who are out of care or are soon to be via outreach efforts

## Next Steps

- Discuss non-adherent pts. cases in depth during morning huddles to address possible barriers
- Ensure frequent VL monitoring
- Follow-up with pts. either non-compliant or out of care.




Coastal FHC in Biloxi, MS.

Thus far, a sub-group has met outside of the huddle to identify list of patients not suppressed to agree on a follow up plan to help patients keep their appointments.

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# VL Suppression: Interventions and Results

| Baseline | District SW/DIS | Care Coordination |
|---|---|---|
| 65% | 69% | 80% (164/205) |

| Reasons | Total 41 |
|---|---|
| **Non-Adherent to Treatment Regimen** | **17** |
| Re-entered Care/Meds Restarted | 0 |
| Waiting on Lab Results | 0 |
| Transferred | 1 |
| Relocated | 0 |
| Deceased | 2 |
| **Out of Care** | **8** |
| Just Started Meds | 2 |
| **VL Decreasing/Being Monitored** | **8** |
| Newly Enrolled | 2 |
| Mental Health | 1 |

**Targeted Interventions – Improving Care Coordination**

**Out of Care** – continue partnership w DSWs and DIS
**Non-Adherent to Treatment Regimen** – team approach to discuss concerns w patients
**VL Decreasing –** monitor patients; check in
**Mental Health –** partner with client's caregiver to support importance of medication adherence, distribute pill bottle alarm as a medication reminder


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# Family First Health
# Retention QI Project

| Measure | Initial (As of 7/1/14) | Goal | Actual (As of 6/30/16) |
|---|---|---|---|
| Medical visit frequency | 70.60% | 75% | **81.22%** |
| Viral load suppression | 85.44% | maintain | **90.04%** |

## Improving Care Coordination:

**Sub population Intervention: ARTAS** – tweaked for sub-population

**Policy changes:** 5-month limit on medication refills; no refills if lab work incomplete

**Process changes:** quarterly review of Out of Care client list at provider meetings; weekly huddles to discuss all clients scheduled for a visit; use of DOH field staff to locate clients

**Expected consequence: increase in VL suppression rates!**

**Drilled down retention by**

- Age
- Risk factor
- Gender
- By provider
- Poverty level
- Ethnicity
- Site (FFH vs sub-contractor)

**Results**

No disparity except **75% out of care were under 100% poverty** - Sub population of Focus


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# Ryan White Clinical Quality Improvement

## QI Project Example: Mental Health & Viral Load Suppression

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MAGNOLIA MEDICAL CLINIC

A MEMBER OF THE GREENWOOD LEFLORE HOSPITAL CLINIC NETWORK

*The Convenience of a Clinic, the Resources of a Hospital*


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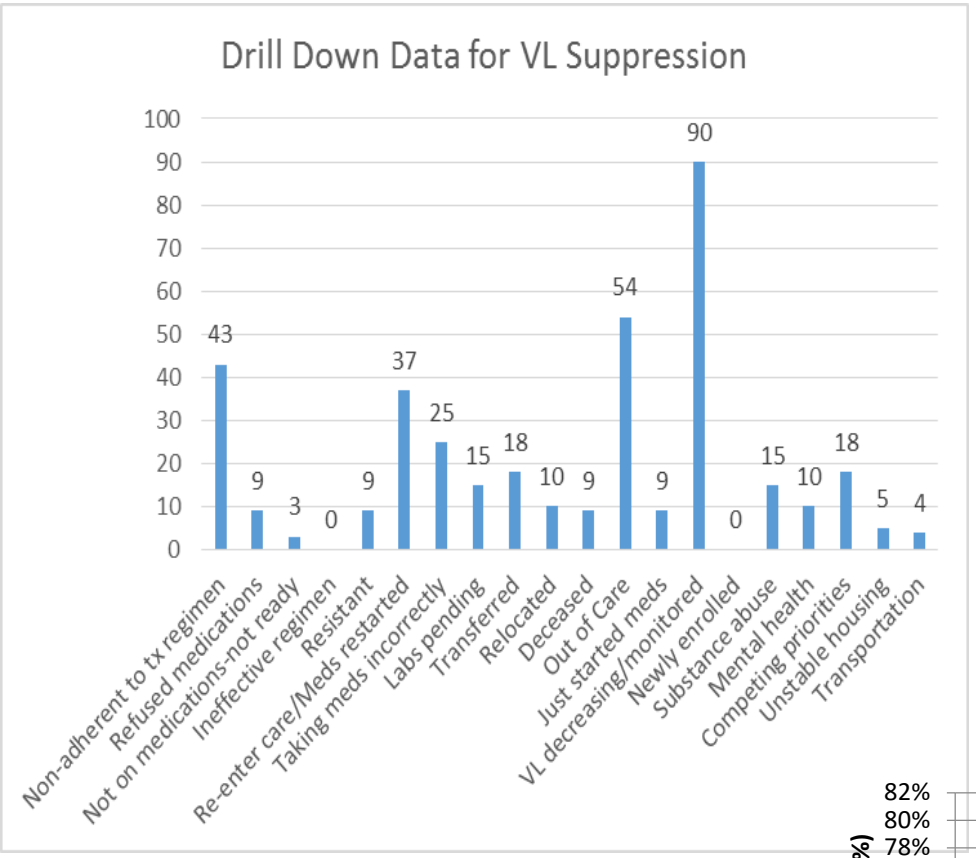



# Increasing VL Suppression

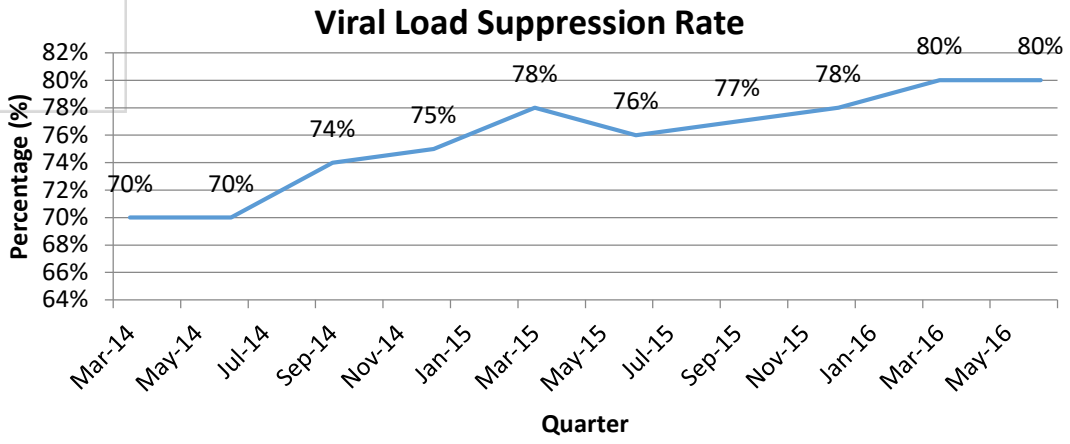
March 2016 – Data analysis excluding transferred, relocated, deceased.

| # of pts | 383 | 330 |
|---|---|---|
| % suppressed | 79% | 81.6% |

Interventions

March 2014 – Adherence Tool

March 2016: =refer out of care patients to MSDH for re-engagement

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# Acknowledgements and Additional RG Members Achieving above 80% and 90%


- Katey Ruppert, St. Luke's University Hospital Network, PA
  - Excel support for this presentation
- Mississippi SDH – ongoing strong support and leadership of QI
  - Chloe Bernard, James Stewart, Stephanie Hedgepeth


Achieving above 80% and 90% using drilled down approach

- EPA RG additional members
  - Glen Young, RWP Director, Center for Public Health, Reading – above 90%
  - Diane Morrow, RWP Director, Keystone Migrant HC – above 90%
- Mississippi Statewide QM Group - GA Carmichael CHC- above 80% - not in data analysis
- MA Statewide QM Group additional members– above 90%
  - Adrianne Jiles, Data and QI Coordinator, Holyoke HC
  - Susan Finnegan, RN, RWP Director, Julie Talbot, Data Manager, Lynn CHC

# National Quality Center

Special acknowledgement to Anna Lechowska, QI/Data Coordinator, Arnot Ogden Medical Center, Elmira, NY for her seminal work in this area and maintaining a VL suppression rate of 93-95%

and to

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