

VIRGINIA DEPARTMENT OF HEALTH (VDH)

RYAN WHITE PART B 2010 QUALITY IMPROVEMENT PROJECTS SUMMARY

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VIRGINIA RYAN WHITE PART B QUALITY IMPROVEMENT PROJECT SUMMARY REPORT

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Background

The mission of the Ryan White Part B (RWB) Quality Management (QM) program is to ensure the highest quality of medical care and supportive services for people living with HIV/AIDS in Virginia. As a component of the QM Program, the Quality Management Advisory Committee (QMAC), identified and implemented four Quality Improvement Projects (QIPs) to further investigate specific issues.

The first series of medical chart reviews occurred from May to June 2010 covering four sites. One site from the Northern; Eastern; Southwest, and Northwest regions participated. During the chart reviews, all the selected performance measures were reviewed for a 12-month period defined from April 2009 to March 2010, and the tuberculosis screening measure was assessed at least once since the diagnosis of HIV infection. The reviewers were able to review a total of 297 charts.

Methodology

The selected clinical performance measures for these QIPs were based on the HIV/AIDS Bureau (HAB) approved clinical performance measures for adults and adolescents. These measures determine compliance with national standards of HIV/AIDS care, such as the Public Health Services (PHS) Guidelines. The charts reviewed were randomly selected and HIV diagnosed clients versus AIDS diagnosed clients were oversampled to ensure statistically significant numbers for the performance measures.

Data Collection Tool

A chart review tool was developed based on the five selected performance measures. The tool was tested by the Southwest Consortia lead agent and a revision was completed by the Part B grantee, HIV Care Services (HCS) based on feedback received. The chart review tool was later converted over to the Virginia Client Reporting System (VACRS) database to facilitate data analysis. Instructions were developed and shared with stakeholders to clarify the QIP process and measures.

Process

Prior to the review, a list of client identifiers for those receiving medical care services were pulled from VACRS and submitted by the Survey and Evaluation Research and Laboratory (SERL). Clients' eligibility for review was checked including the presence of a valid consent form to release information. Using the random sampling methodology, reviewers worked with the agencies to determine the number of charts for review. Chart reviewers completed the data collection forms for each chart reviewed. Each form was assigned a client Unique Record Number (URN) used to link the client's chart number to the VACRS data base. At the end of each review, the QIP team held an exit conference to discuss pertinent findings including the overall summary and recommendations.

Most Important Finding:
 Ryan White Part B providers are providing excellent care based upon information found in the charts.

- Review of Process**
- NW-FAHASS; paper records; team of 6 reviewed 100
 - SW-Carillion; EMR team of 4 (plus 1) reviewed 100
 - E-C3ID-TRHD; EMR; team of 2 reviewed 21
 - N-Alexandria HD; paper; team of 4 reviewed 80

First Round
 These four sites are the first sites to be reviewed in the QIP. Other providers will be scheduled in the future

Successful Highlights

Paper	EMR
<ul style="list-style-type: none"> • Charts well organized • Team leader assigned charts to reviewers 	<ul style="list-style-type: none"> • Can filter data as needed • Ease of chart flow, and readability

- Useful Tools and Resources**
- Drug charts, list of meds for HAART
 - List of PCP prophylaxis meds
 - Complete list of OIs (including CD4 AIDS defining values)
 - Johns Hopkins Bartlett Book

- Challenges**
- Access to computers and orientation to EMR
 - Reading handwritten notes
 - Variety of filing systems in charts
 - Experience of staff with reviewing med recs and clinical

Helpful tip!
 It is extremely helpful to have a staff member orient you to the chart or EMR. It will save a lot of time!

- Future Recommendations**
- Clinical background is helpful
 - Med rec review experience
 - Appoint a leader for each site
 - Be sure to differentiate between QIP and Peer Review
 - Reassure site as to the purpose of the visit
 - Develop one master spreadsheet

Remember!
 It is ok to find inconsistencies. The purpose of the reviews is to find areas to improve quality of care and services as well as data

The following key HIV clinical performance measures were reviewed:

- Percent of Ryan White (RW) clients with HIV who have 2 or more CD4 T-cell counts completed in the measurement year.
- Percent of RW clients with AIDS who have been prescribed Highly Active Antiretroviral Treatment (HAART).
- Percent of RW clients with HIV who have 2 or more medical visits in an HIV setting.
- Percent of RW clients with HIV and CD4 T-cell count <200 who have been prescribed Pneumocystis pneumonia/jirovecii (PCP-PJP) prophylaxis
- Percent of RW clients with HIV infection who receive testing with results documented for Tuberculosis Infection (TBI) since HIV diagnosis.

Key Findings

In the table below are the rates for all of the five performance measure assessed during the QIPs. In the body of the document, each performance measure is described and findings are reported by agency rates.

Tips to understand the tables:

- A-** Name of the agencies; Total number of charts reviewed; Number matched in VACRS; List of the selected indicators - (1,3, and 5) HIV status with at least one medical visit, (2) AIDS status and (3) those with CD4 count less than 200 count.
- B-** Total number of charts reviewed.
- C-** Number of variables found in the charts.
- D-** Performance according to the chart review ($C/B*100$).
- E-** Number of variables found in the VACRS.
- F-** Performance according to the VACRS ($E/B*100$).
- G-** Number of matching variables from the charts to the VACRS.
- H-** Performance of reporting information already in the charts to the VACRS ($G/C*100$).

Tables:

SITE A	B	C	D	E	F	G	H
Total Charts Reviewed = 78							
Number Matched in VACRS = 69							
Indicators	Denominator from Chart Review	Numerator from Chart Review	% Met Indicator in Chart Review	Numerator from VACRS	% Met Indicator in VACRS	Number from Numerator of CR in VACRS	% of Numerator from CR in VACRS
Indicator 1 (2 or more CD4)	77	66	85.71%	63	81.82%	56	84.85%
Indicator 2 (AIDS Dx, HAART)	39	36	92.31%	28	71.79%	28	77.78%
Indicator 3 (2 or more Med vsts)	77	72	93.51%	42	54.55%	39	54.17%
Indicator 4 (CD4 < 200, PCP)	12	9	75.00%	10	83.33%	8	88.89%
Indicator 5 (LTBI results)	77	64	83.12%	32	41.56%	28	43.75%

D- Good performance in documenting provided services.

F- Improvement needed with medical visits, and monitoring the screening of TB is still a concern.

H- Same finding as F.

SITE B	B	C	D	E	F	G	H
Total Charts Reviewed = 97 (28-RWB)							
Number Matched in VACRS = 25							
Indicators	Denominator From Chart Review	Numerator from Chart Review	% Met Indicator in Chart Review	Numerator from VACRS	% Met Indicator in VACRS	Number from Numerator of CR in VACRS	% of Numerator from CR in VACRS
Indicator 1 (2 or more CD4)	23	18	78.26%	17	73.91%	14	80.00%
Indicator 2 (AIDS Dx, HAART)	11	11	100.00%	4	36.36%	4	38.89%
Indicator 3 (2 or more Med vsts)	23	21	91.30%	16	69.57%	15	48.48%
Indicator 4 (CD4 < 200, PCP)	4	1	25.00%	4	100.00%	1	100.00%
Indicator 5 (LTBI results)	23	9	39.13%	1	4.35%	1	13.64%

D- Good performance in documenting provided medication. Improvement needed in documenting CD4 and medical visits. There is a concern with documenting PCP and TB.

F- Shows a clear data management problem.

H- 13.64% of achievements to report TBI information already in the charts to VACRS database. This is a significant concern related to the data management process.

SITE C	B	C	D	E	F	G	H
Total Charts Reviewed = 101							
Number Matched in VACRS = 95							
Indicators	Denominator From Chart Review	Numerator from Chart Review	% Met Indicator in Chart Review	Numerator from VACRS	% Met Indicator in VACRS	Number from Numerator of CR in VACRS	% of Numerator from CR in VACRS
Indicator 1 (2 or more CD4)	96	81	84.38%	31	32.29%	27	33.33%
Indicator 2 (AIDS Dx, HAART)	40	36	90.00%	24	60.00%	21	58.33%
Indicator 3 (2 or more Med vsts)	96	80	83.33%	74	77.08%	64	80.00%
Indicator 4 (CD4 < 200, PCP)	36	26	72.22%	24	66.67%	21	80.77%
Indicator 5 (LTBI results)	96	65	67.71%	54	56.25%	39	60.00%

D- Good performance in documenting provided services.

F- Shows a clear data management problem with the highest performance rate of 77.08%.

H- Improvement needed, 33.33% of data entry performance is very low.

SITE D	B	C	D	E	F	G	H
Total Charts Reviewed = 21							
Number Matched in VACRS = 20							
Indicators	Denominator From Chart Review	Numerator from Chart Review	% Met Indicator in Chart Review	Numerator from VACRS	% Met Indicator in VACRS	Number from Numerator in CR in VACRS	% of Numerator from CR in VACRS
Indicator 1 (2 or more CD4)	21	20	95.24%	16	76.19%	16	80.00%
Indicator 2 (AIDS Dx, HAART)	10	9	90.00%	9	90.00%	8	88.89%
Indicator 3 (2 or more Med vsts)	21	19	90.48%	16	76.19%	16	84.21%
Indicator 4 (CD4 < 200, PCP)	4	4	100.00%	1	25.00%	1	25.00%
Indicator 5 (LTBI results)	21	17	80.95%	9	42.86%	8	47.06%

D- Good performance in documenting provided services.

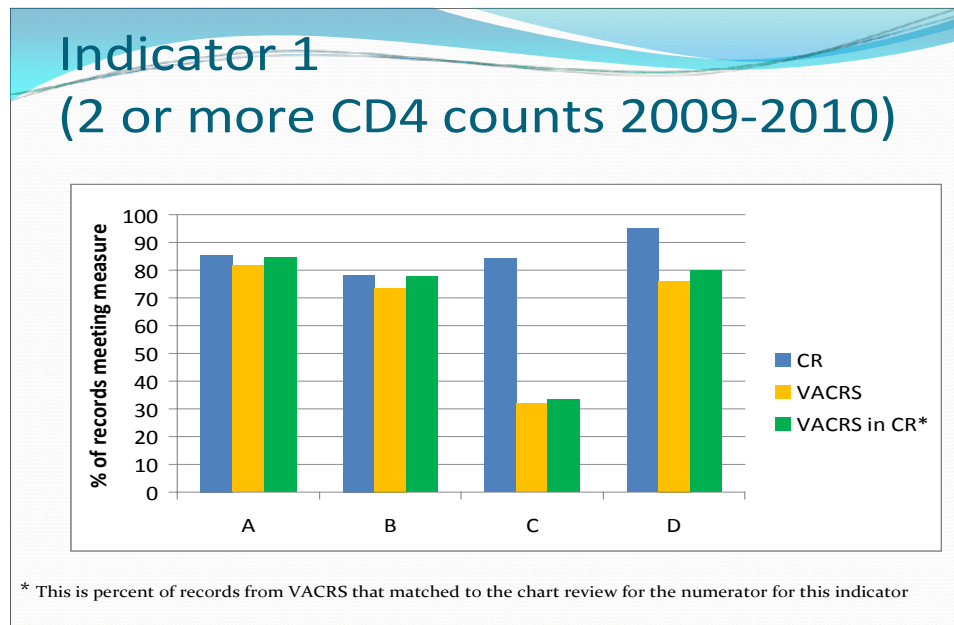
F- Improvement needed with PCP and LTBI screening data management.

H- Improvement needed, 25% (CD4) and 47% (LTBI) of data entry performance are very low.

Table below compile findings from the four sites.

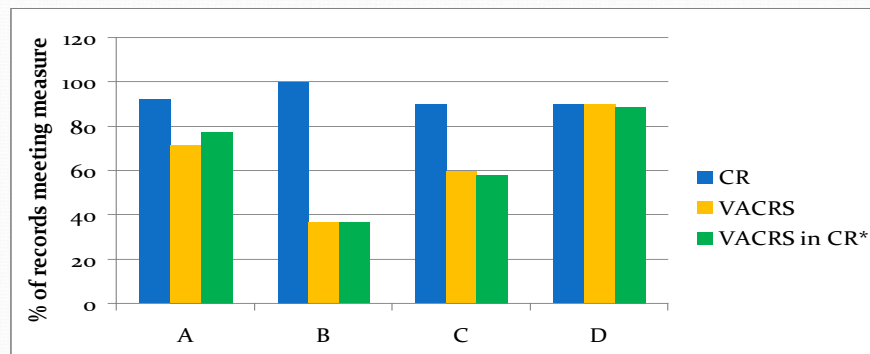
State	B	C	D	E	F	G	H
Total Charts Reviewed = 297							
Number Matched in VACRS = 264							
Indicators	Denominator From Chart Review	Numerator from Chart Review	% Met Indicator in Chart Review	Numerator from VACRS	% Met Indicator in VACRS	Number from Numerator of CR in VACRS	% of Numerator from CR in VACRS
Indicator 1 (2 or more CD4)	240	197	82.08%	144	60.00%	123	62.43%
Indicator 2 (AIDS Dx, HAART)	107	99	92.52%	68	63.55%	64	64.64%
Indicator 3 (2 or more Med vsts)	240	204	85.00%	151	62.91%	135	66.17%
Indicator 4 (CD4 < 200, PCP)	66	45	68.18%	48	72.72%	36	80.00%
Indicator 5 (LTBI results)	240	168	70.00%	98	40.83%	78	46.42%

Graphs:



The above graph shows that according to the chart review results, three sites were over 80% with this measure. Three agencies show over 80% met indicator using charts reviewed, which is greater than the state threshold of 75%. However, at one site, the rate of clients' VACRS data was less than 35%, and none of the sites exceeded 80% using data from VACRS.

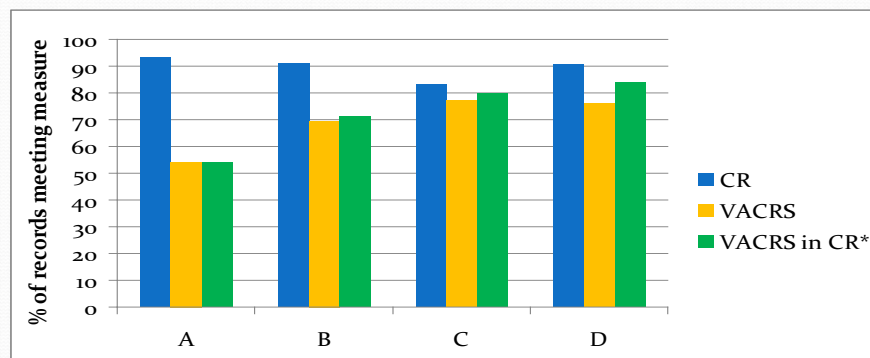
Indicator 2 (AIDS Dx prescribed HAART)



* This is percent of records from VACRS that matched to the chart review for the numerator for this indicator

The above graph shows that according to the chart review results, all four sites were over 80% with this measure. In all four agencies, the rate shows over 90% from charts reviewed which is greater than the state threshold of 90%. However, at two sites, between 60% and 90% met the indicator according to VACRS data, and one site showed only 40% meeting indicator according to VACRS.

Indicator 3 (2 or more medical visits in 2009-2010)

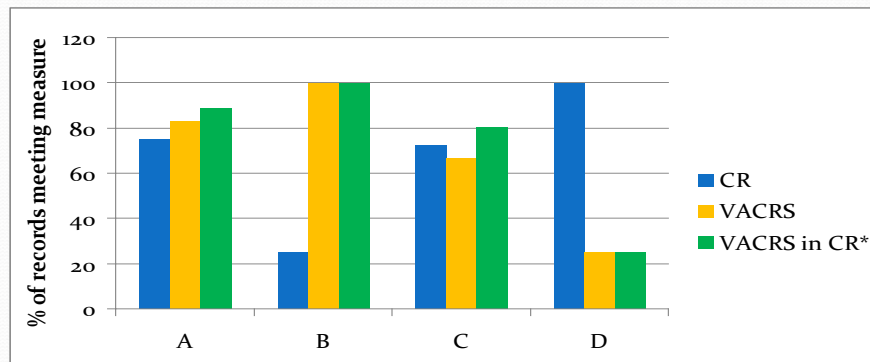


* This is percent of records from VACRS that matched to the chart review for the numerator for this indicator

The above graph shows that according to the chart review results, all four sites were 70% and over with this measure. In four agencies, the rates show between 70% and 90% from charts reviewed which was smaller than the state threshold of 95%. In addition, two sites showed 70% attainment in VACRS and two sites showed 50% or below according to VACRS.

Indicator 4

CD4 < 200, Received PCP Prophylaxis



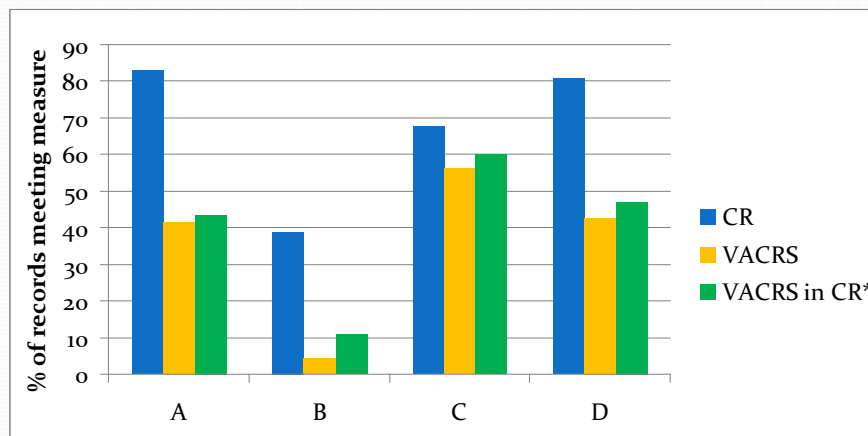
* This is percent of records from VACRS that matched to the chart review for the numerator for this indicator

The above graph shows that according to the chart review results, one agency was 100% and another site accounted for 40% compliance with this measure.

In three agencies, show 65% by charts reviewed, which was greater than the state threshold of 50%. However, at one site, 25% of clients met the indicator according to VACRS, and one site accounted for less than 20% attainment in VACRS.

Indicator 5

TBI since HIV diagnosis



* This is percent of records from VACRS that matched to the chart review for the numerator for this indicator

The above graph shows that according to the charts review results, three agencies accounted or more than 75%, which is greater than the state threshold of 50%. However, at one site, only 40% of clients met the indicator according to VACRS, and one site accounted for less than 10% attainment in VACRS.

Discussion

There is a need to use the results of these QIPs to improve quality of care. Providers play an active role in the activities of quality improvement (QI) and can lead these efforts by asking questions to determine how improvements can be made. The opportunities to systematically measure clinical performance have provided useful information that can lead to better care for the patients we serve. Findings from these performance measures are discussed below.

The race, ethnicity, and risk factors analysis was not done at this time. The eligibility criteria were mainly based on clients who had at least two medical visits during the 12-month review period. One agency had a low rate for this measure because it is a third party provider, thus, dealing with several medical service providers. VDH selected this site to complete the chart review with the aim of comparing issues regarding encounters at primary medical sites versus third party payers.

Obviously, a lot of work still needs to be done and we may experience some challenges. Linking issues identified throughout these QIPs indicates that the dialogue with the providers is very important. Providers are dealing with incorporating data collection in their daily work and applying it in a practical way to improve the quality of health care performance. If we take into account the experience from other projects, the four providers are heading in the right direction when it comes to providing quality of care based on documented records (charts/electronic medical records-EMRs).

Chart review showed excellent compliance with the HAART measure. Data points to problems with the lack of data entry into VACRS and/or a lack of successful importing/uploading of transferred data to VACRS or a combination of both. Agencies seem to have a harder time entering TBI data into VACRS.

Regarding the third party site; 97 records were reviewed, but only 46 had documentation of the medical visits, including 12 for RWB. It was noted that the third party provider has difficulty getting medical information from the health care providers.

Recommendations

After the QIPs data findings have been reviewed by the agency and the process for improvement identified, the next step will be to decide where opportunities for improvement exist. This process is described as the PDSA (Plan-Do-Study-Act) process. The first step for each provider is to investigate its care process in greater detail.

Once a change in a particular step of the process has been selected, a pilot test of the change can be quickly implemented and evaluated. If the pilot is successful, the change can be adopted widely. If the pilot is not successful, another change can be selected and tested. Ongoing cycles of change and re-measurement must be implemented to test and try different ideas to determine which result will improve care. QI activities can range from a single team focusing on improving one aspect of care to a comprehensive QI program supported by a wide variety of improvement projects, with a well-established plan and an oversight committee.

Sustainability is probably the biggest challenge that clinics face in the field of QI. The key to sustaining QI in the clinic is the development of an infrastructure that supports

ongoing QI activities encouraged by the agency's leadership. Leaders are expected to play an important role in both catalyzing and supporting QI activities.

Conclusion:

Overall, according to the chart review, most agencies excelled in documentation of the five selected performance measures. These QIPs would not have been possible without the support of the Consortia lead agencies, QMAC and the local RW funded clinics. VDH thanks the chart reviewers and the staff members at each of the four sites for their participation in these projects.

A BIG Thank You



To Our Four Site Colleagues And Lead Agencies For Coordinating The QIPs!

Thank you, Leaders!