





Performance Measure:	CD4 Cell Count <sup>1</sup>	Nation	al Quality	Forum #:	404			
Percentage of pa	patients aged six months and older with a diagnosis of HIV/AIDS, with at least two CD4 cell							
counts or percentages performed during the measurement year at least 3 months apart								
Numerator:	Patients with at least two CD4 cell counts or percentages performed during the							
Numerator.	measurement year at least 3 months apart							
Denominator:	All patients aged 6 months and older with a medical visits during the measurement year	_	-					
Patient Exclusions:	None							
Data Elements:	<ol> <li>Does the patient, aged six months and older, have a diagnosis of HIV/AIDS? (Y/N)         <ul> <li>a. If yes, did the patient have at least two medical visits during the measurement year, with at least 90 days in between each visit? (Y/N)</li></ul></li></ol>							
Comparison Data:	National HIVQUAL: Every 4 months: Percentage of patients for whom one or more CD4 count was performed during each four-month trimester of the review period at least 60 days apart Every 6 months: Percentage of patients for whom one or more CD4 count was performed during each six month semester of the review period at least 60 days apart  ( <a href="http://www.hivqualus.org/">http://www.hivqualus.org/</a> and <a href="http://www.nationalqualitycenter.org/index.cfm/35778/">http://www.hivqualus.org/</a> and <a href="http://www.nationalqualitycenter.org/index.cfm/35778/">http://www.nationalqualitycenter.org/index.cfm/35778/</a> index.cfm/22/82627)							
		2007	2009	2011	]			
	Every 4 months (median)	64.4%	-	56%				
	Every 6 months (median)		91.1%	91%				
U.S. Department of Health & Human Services Guidelines:	Adult guidelines: <sup>2</sup> "In untreated patients, Comonths to determine the urgency of ART initiated to assess the immunologic response to discontinuation of prophylaxis for opportune.  Pediatric guideline: <sup>3</sup> "Baseline laboratory as cell) count/percentage and HIV RNA level, baseline assessment of ARV resistance using Antiretroviral Resistance Testing). Within 4 to children receiving ART should be seen toreferentiated toxicities.  "Thereafter, medication adherence and regions."	tiation. In ART and t istic infection seessments should be g a genotyp to 8 weeks eceive labo tage, plasn	patients or he need fo ons (AI)." <sup>1</sup> s including done befo e assay als after initia ratory test na HIV RNA	n ART, the r initiation CD4 T lym ore initiation so is recom sting or cha s to evalua a level [vira	cD4 count is or phocyte (CD4 on of therapy. A nmended (see anging therapy, ate the al load]) and to			





## **HIV/AIDS Bureau Performance Measures**

	assessed every 3 to 4 months in children taking ARV drugs. Some experts monitor CD4 cell counts and HIV RNA levels less frequently in children and youth who are adherent to therapy and have sustained viral suppression and stable clinical status for more than 2 to 3 years." <sup>2</sup>
Use in Other	
Federal	None
Programs:	
References/ Notes:	<sup>1</sup> The HIV/AIDS Bureau did not develop this measure. The National Committee on Quality Assurance developed this measure. Measure details available at: <a 2"="" href="http://www.qualityforum.org/Projects/im/Infectious Disease Endorsement Maintenance 2012/Infectious Disease Consensus Standards Endorsement Maintenance 2012.aspx #t=2&amp;p=2%7C1%7C&amp;s=">#t=2&amp;p=2%7C1%7C&amp;s=</a> <sup>2</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at <a href="http://aidsinfo.nih.gov/ContentFiles/Adultand">http://aidsinfo.nih.gov/ContentFiles/Adultand</a> AdolescentGL.pdf. Section accessed July 25, 2013. C-3. <sup>3</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available at <a href="http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf">http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf</a> . Accessed July 25, 2013. H-1 and 2.







Performance	HIV Drug Resistance Testing Before	National Quality Forms #4 None				
Measure:	Initiation of Therapy	National Quality Forum #: None				
Percentage of patients, regardless of age, with a diagnosis of HIV who had an HIV drug resistance test performed before initiation of HIV antiretroviral therapy if therapy started during the measurement y						
Numerator:	Number of patients who had an HIV drug resistance test performed at any time before					
Denominator:	<ul> <li>Number of patients, regardless of age, with a diagnosis of HIV who</li> <li>were prescribed HIV antiretroviral therapy during the measurement year for the first time; and</li> <li>had a medical visit with a provider with prescribing privileges<sup>3</sup> at least once in the measurement year</li> </ul>					
Patient Exclusions:	None					
Data Elements:	<ol> <li>Does the patient, regardless of age, have a diagnosis of HIV/AIDS? (Y/N)         <ul> <li>a. If yes, was the patient seen by a provider with prescribing privileges during the measurement year? (Y/N)</li></ul></li></ol>					
Comparison Data:	a. If yes, list date.  National HIVQUAL: Percentage of patients on ART for a minimum of 12 weeks with one visit in each six month period of the review period who are considered suppressed as derived from the last recorded viral load of the review period; suppressed defined as the viral load is <200 copies/mm³ (either detectable or undetectable) OR <400 copies/mm³ (and undetectable) ( <a href="http://www.nationalqualitycenter.org/index.cfm/35778/index.cfm/22/82627">http://www.nationalqualitycenter.org/index.cfm/35778/index.cfm/22/82627</a> )  Description of the review period who are considered suppressed as derived from the last recorded viral load of the review period; suppressed defined as the viral load is <200 copies/mm³ (either detectable or undetectable) OR <400 copies/mm³ (and undetectable) ( <a href="https://www.nationalqualitycenter.org/index.cfm/35778/index.cfm/22/82627">https://www.nationalqualitycenter.org/index.cfm/35778/index.cfm/22/82627</a> )					
U.S. Department of Health & Human Services Guidelines:	Adult guidelines: <sup>4</sup> "HIV drug-resistance testing infection at entry into care regardless of whet initiated immediately or deferred (AII). If there considered at the time of ART initiation (CIII). "Genotypic testing is recommended as the preantire troviral (ARV)-naïve patients (AIII)."	her antiretroviral therapy (ART) will be apy is deferred, repeat testing should be				







	Pediatric guidelines: <sup>5</sup>									
		Table 15. Sample Schedule for Clinical and Laboratory Monitoring of Children Before and After Initiation of Antiretroviral Therapy (page 2 of 2)								
		Entry Into Care	Monitoring Pre-Therapy <sup>1</sup>	ART Initiation <sup>1</sup>	1–2 Weeks on Therapy <sup>2</sup>	4–8 Weeks on Therapy	Every 3–4 Months <sup>3</sup>	Every 6–12 Months	ARV Switch	
	Resistance Testing	Х							Х	
	Adherence Evaluation			X	X	X	X		Х	
	Lipid Panel	Х		X				Х		
	Urinalysis	Х		Х				X		
Use in Other										
Federal	None									
Programs:										
References/ Notes:	<sup>1</sup> HIV drug resistance testing may occur either during or prior to the measurement year, as long as it is performed before ARV therapy is initiated. <sup>2</sup> The focus of the measure is on initiation of first antiretroviral regimen for HIV treatment, not prophylaxis or re-initiation. <sup>3</sup> A "provider with prescribing privileges" is a health care professional who is certified in his/her jurisdiction to prescribe medications. <sup>4</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at <a href="http://aidsinfo.nih.gov/ContentFiles/Adultand/AdolescentGL.pdf">http://aidsinfo.nih.gov/ContentFiles/Adultand/AdolescentGL.pdf</a> . Section accessed July 25, 2013. C-9. <sup>5</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available at <a href="http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf">http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf</a> . Accessed July 25, 2013. H-3.									







Performance	Influenza Immunization <sup>1</sup>	National Quality Forum #: 41					
Measure:		reasonal Quanty Foram m 12					
Percentage of page	atients aged 6 months and older seen for a visi	t between October 1 and March 31 who					
	received an influenza immunization OR who reported previous receipt of an influenza immunization						
Numerator:	Patients who received an influenza immunization OR who reported previous receipt* of						
	an influenza immunization during the current season						
	*Previous receipt can include: previous recei	pt of the current season's influenza					
	immunization from another provider OR fror	n same provider prior to the visit to which the					
	measures is applied (typically, prior vaccinati	on would include influenza vaccine given					
	since August 1st).						
Denominator:	All patients aged 6 months and older seen fo						
Patient	Documentation of medical reason(s) for its contact that the second	not receiving influenza immunization (eg,					
Exclusions:	patient allergy, other medical reasons)						
	2. Documentation of patient reason(s) for n	ot receiving influenza immunization (eg,					
	patient declined, other patient reasons)	at receiving influence increase in the					
	3. Documentation of system reason(s) for n						
Data	vaccine not available, other system reaso	er, have at least one medical visit between					
Elements:	<ol> <li>Did the patient, aged six months and olded</li> <li>October 1 and March 31? (Y/N)</li> </ol>	er, have at least one medical visit between					
Lieilieilts.	• • •	uenza vaccination or report previous receipt					
	<ul> <li>a. Did the patient receive an influenza vaccination or report previous receipt of an influenza vaccination? (Y/N)</li> </ul>						
		,,,					
	***Greater measure specification detail is av	vailable including data elements for each					
	value set at http://www.lantanagroup.com/e	_					
Comparison	National HIVQUAL: Percentage of patients w	ho received an influenza vaccination during					
Data:	the review period (http://www.hivqualus.org	g/ and http://www.nationalqualitycenter.org/					
	index.cfm/35778/index.cfm/22/82627)						
		2009 2011					
	Median	61.9% 67%					
U.S.	_	mmended foradults and children who have					
Department of	immunosuppression (including immunosupp	ression caused by medications or by human					
Health &	immunodeficiency virus)." <sup>2</sup>						
Human							
Services							
Guidelines:	Contage for Modicage and Madicaid Carrier	FLID Incontino Drogram magazina /minata					
Use in Other Federal	Centers for Medicare and Medicaid Services	- ,					
Programs:	eCQM Library.html	Guidance/Legislation/EHRIncentivePrograms/					
References/	<sup>1</sup> The HIV/AIDS Bureau did not develop this m	neasure The American Medical Association					
Notes:	convened Physician Consortium for Performa						
140163.	· ·	p://www.lantanagroup.com/especnavigator/					
	this incasure. With details available at. Itt	p.// vv vv vv.iaiitaiiagi oup.com/ espechavigator/					







#measurelist/20130614.

<sup>2</sup>Centers for Disease Control and Prevention. Prevention and Control of Influenza: Recommendations from the Advisory committee on Immunization Practices (ACIP). MMWR 2007; 56(RR#6)[1-60]. Accessed August 14, 2013. Page 2. Available at: http://www.cdc.gov/mmwr/PDF/rr/rr5606.pdf.







Performance Measure:	Lipid Screenii	ng			Nation	al Quality	/ Forum #	t: None	
Percentage of patherapy and who							ribed HIV	antiretr	oviral
Numerator:	Number of pa	atients who	o had a fast	ing lipid pa	nel in the	e measure	ement ye	ar	
Denominator:	who had a me	Number of patients, regardless of age, who are prescribed HIV antiretroviral therapy and who had a medical visit with a provider with prescribing privileges <sup>2</sup> at least once in the measurement year							
Patient Exclusions:	None								
Data Elements:	1	<ol> <li>Does the patient, regardless of age, have a diagnosis of HIV? (Y/N)         <ul> <li>a. If yes, did the patient have at least one medical visit during the measurement year? (Y/N)</li></ul></li></ol>							
Comparison Data:	National HIVQUAL:  2007: Among patients who were on HAART during the review period, percentage who had cholesterol & triglycerides checked during the review period  2009: Percentage of patients who had a lipid profile (cholesterol & triglycerides checked) during the review period  2011: Percentage of patients for whom a lipid screening was performed during the review period. At a minimum, lipid screening should include determination of cholesterol, high-density lipoprotein (HDL) and triglyceride levels  (http://www.hivqualus.org/ and http://www.nationalqualitycenter.org/index.cfm/35778/index.cfm/22/82627)   2007 2009 2011  Median 90.5% 85.7% 83%								
U.S. Department of Health & Human Services Guidelines:	Therapy <sup>a</sup> (	aboratory Mo page 2 of 2) try Follow- to up before		Follow-up 2–  8 weeks post-ART initiation or modification   Consider 4–8 weeks after starting new ART regimen that affects lipids		·	•	Treatment failure	Clinically indicated







		Pediatric guidelines:  Table 15. Sample Schedule for Clinical and Laboratory Monitoring of Children Before and After Initiation of Antiretroviral Therapy (page 2 of 2)								
			Entry Into Care	Monitoring Pre-Therapy <sup>1</sup>	ART Initiation <sup>1</sup>	1–2 Weeks on Therapy <sup>2</sup>	4–8 Weeks on Therapy	Every 3–4 Months <sup>3</sup>	Every 6–12 Months	ARV Switch
		Lipid Panel	X		X				X	
Use in Other Federal Programs:	No	None								
References/ Notes:	<sup>2</sup> A the <sup>3</sup> Pa an Hu <u>Ad</u> <sup>4</sup> Pa Gu	<sup>1</sup> A fasting lipid panel consists of fasting cholesterol, HDL, calculated LDL and triglycerides. <sup>2</sup> A "provider with prescribing privileges" is a health care professional who is certified in their jurisdiction to prescribe ARV therapy. <sup>3</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at <a href="http://aidsinfo.nih.gov/ContentFiles/Adultand-AdolescentGL.pdf">http://aidsinfo.nih.gov/ContentFiles/Adultand-AdolescentGL.pdf</a> . Section accessed July 25, 2013. C-3. <sup>4</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available at <a href="http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf">http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf</a> . Accessed July 25,								







Performance Measure:	Tuberculosis Screening <sup>1</sup>	National Quality Forum #: 408			
Percentage of patients aged 3 months and older with a diagnosis of HIV/AIDS, for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberc skin tests) at least once since the diagnosis of HIV infection					
Numerator:	Patients for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection.  NOTE: Results from the tuberculin skin test must be interpreted by a health care				
Denominator:	professional.  All patients aged 3 months and older with a divisits during the measurement year, with at le				
Patient Exclusions:	Documentation of Medical Reason for not test (e.g., patients with a history of positive)				
Data Elements:	<ol> <li>Does the patient, aged three months and older, have a diagnosis of HIV/AIDS? (Y/N)         <ul> <li>a. If yes, did the patient have at least two medical visits during the measurement year, with at least 90 days in between each visit? (Y/N)</li></ul></li></ol>				
Comparison Data:	National HIVQUAL: 2006 & 2007: Percentage of patients without prior positive test or TB treatment who received a TB test with documented result during the past 24 months 2011: Percentage of patient for whom an LTBI screening was performed and the results were read either during the review period or the twelve months preceding the start of the review period ( <a href="http://www.hivqualus.org/">http://www.hivqualus.org/</a> and <a href="http://www.nationalqualitycenter.org/">http://www.nationalqualitycenter.org/</a> index.cfm/35778/index.cfm/22/82627)				
U.S. Department of Health & Human Services Guidelines:	Median 75.1%  Adult guidelines: <sup>2</sup> "Testing for LTBI at the tim regardless of an individual's epidemiological r diagnostic tests for LTBI who have advanced H and no indications for initiating empiric LTBI they start ART and attain a CD4 count ≥200 ce recommended only for HIV-infected patients exposure to those with active TB."  Pediatric guideline: <sup>3</sup> The cornerstone of diagr (LTBI) is the tuberculin skin test (TST), administrations.	isk of TB exposure. Individuals with negative HIV infection (CD4 cell count <200 cells/mm³) reatment should be retested for LTBI once ells/mm3. Annual testing for LTBI is who are at high risk of repeated or ongoing mostic methods for latent TB infection			





## **HIV/AIDS Bureau Performance Measures**

	children with HIV infection are at high risk for TB, annual testing of this population is recommended to diagnose LTBI (AIII).
Use in Other	recommended to diagnose 2131 (rum).
Federal	None
Programs:	
References/ Notes:	<sup>1</sup> The HIV/AIDS Bureau did not this measure. The National Committee on Quality Assurance developed this measure. Measure details available at: <a adult_oi.pdf"="" aidsinfo.nih.gov="" contentfiles="" href="http://www.qualityforum.org/Projects/im/Infectious Disease Endorsement Maintenance 2012/Infectious Disease Consensus Standards Endorsement Maintenance 2012.asp x#t=2&amp;p=2%7C1%7C&amp;s= 2Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Available at &lt;a href=" http:="" lvguidelines="">http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf</a> . Accessed August 24, 2013. F-2. <sup>3</sup> Centers for Disease Control and Prevention. Guidelines for the Prevention and Treatment of Opportunistic Infections Among HIV-Exposed and HIV-Infected Children. MMWR 2009;58(No. RR-11). <a href="http://aidsinfo.nih.gov/contentfiles/Pediatric_Ol.pdf">http://aidsinfo.nih.gov/contentfiles/Pediatric_Ol.pdf</a> . Accessed August 24, 2013. Page 20.







Performance Measure:	Viral Load Monitoring	Na	ntional Qua	ality Forum	<b>1#:</b> None			
Percentage of patients, regardless of age, with a diagnosis of HIV with a viral load test performed at least every six months during the measurement year								
Numerator:	Number of patients with a viral load test	Number of patients with a viral load test performed at least every 6 months						
Denominator:		Number of patients, regardless of age, with a diagnosis of HIV/AIDS who had at least two medical visits during the measurement year, with at least 60 days in between each visit						
Patient Exclusions:	Patients newly enrolled in care during las	t 6 mont	hs of the n	neasureme	ent year			
Data Elements:	1. Does the patient, regardless of age, have a diagnosis of HIV/AIDS? (Y/N)  a. If yes, did the patient have at least two medical visits during the measurement year, with at least 60 days in between each visit? (Y/N)  i. If yes, list the dates the viral load tests were performed.  1. Were viral load tests performed at least every six months during the measurement year? (Y/N)							
Comparison Data:	National HIVQUAL: Every 4 months: Percentage of patients for whom at least one viral load test was performed in each four-month trimester of the review period at least 60 days apart Every 6 months: Percentage of patients for whom at least one viral load test was performed in each six month semester of the review period at least 60 days apart ( <a href="http://www.hivqualus.org/">http://www.hivqualus.org/</a> and <a href="http://www.nationalqualitycenter.org/index.cfm/357">http://www.hivqualus.org/</a> and <a href="http://www.nationalqualitycenter.org/index.cfm/357">http://www.nationalqualitycenter.org/index.cfm/357</a> index.cfm/22/82627)							
	Every 4 months Every 6 months	2007 62.7% 90.3%	2009	2011 54% 90%				
U.S. Department of Health & Human Services Guidelines:	Every 6 months   90.3%   89.4%   90%    Adult guidelines:  "Plasma HIV-1_RNA (viral load) should be measured in all HIV-1-infected patients at baseline and on a regular basis thereafter, especially in patients who are on treatment, because viral load is the most important indicator of response to antiretroviral therapy (ART) (AI).  "Plasma viral load should be measured before initiation of therapy and preferably within 2 to 4 weeks, and not more than 8 weeks, after treatment initiation or after treatment modification (BI). Repeat viral load measurement should be performed at 4- to 8-week intervals until the level falls below the assay's limit of detection (BIII)."  Pediatric guideline:  "Baseline laboratory assessments including CD4 T lymphocyte (CD4 cell) count/percentage							







	and HIV RNA level, should be done before initiation of therapy. Within 4 to 8 weeks after initiating or changing therapy, children receiving ART should be seen toreceive laboratory tests to evaluate the effectiveness of therapy (CD4 count/percentage, plasma HIV RNA level [viral load]) and to detect medication-related toxicities Assessment of initial virologic response to therapy is important because an initial decrease in HIV viral
	load in response to ART should be observed after 4 to 8 weeks of therapy."
Use in Other	
Federal	None
Programs:	
	<sup>1</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of
	antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and
	Human Services. Available at <a href="http://aidsinfo.nih.gov/ContentFiles/Adultand">http://aidsinfo.nih.gov/ContentFiles/Adultand</a>
References/	AdolescentGL.pdf. Section accessed July 25, 2013. C-7.
Notes:	<sup>2</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children.
	Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available at
	http://aidsinfo.nih.gov/contentfiles/lyguidelines/pediatricguidelines.pdf. Accessed July 25,
	2013. H-1 and 2.

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