Evaluating HIV Clinical Care Quality in the Massachusetts Sites supported through the Medical Case Management System

Results from 2010-11 review

Lisa Hirschhorn, MD MPH Laureen Kunches PhD Nancy Reinhalter, RN Jeanne Day, MPH Joseph Musolino Jacqueline O'Brien



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Clinical Quality Management (QM)

- Since 1998, through funding received from MDPH and BPHC, JSI has been evaluating quality of care through chart reviews in Massachusetts HIV clinics supported through Ryan White Part A and B funding.
- Initially, sites actively participated in a planning process, including selection of areas of importance and data elements.
- 6 "rounds" of chart review now complete, providing data for over 12 years (1999-2011); patients new to care were added to the cohort in 2002 and 2003 (focused on newly diagnosed).



Data Collection and Analyses

- Focus on clinical process and outcome measures of interest to HRSA/Ryan White Program and MDPH/BPHC
- In 2010-2011, the data collection was focused on HRSA/HAB measures and measures from the National Quality Center (NQC) supported in+care campaign
- Analyses are based on data available from the Electronic Medical Record (EMR) or medical charts
 - Initial year when a site transitioned to EMR saw gaps in documentation



Data Collection and Analyses

- For the 2010-2011 chart reviews, MDPH Office HIV/AIDS and BPHC determined focus: *all* active HIV patients receiving medical case management.
- Sites submitted list of active HIV patients receiving medical case management.
- Trained chart abstractors from JSI perform detailed medical record reviews on stratified sample of approximately 50 patients per site.



Data Collection and Analyses

- For each site, the 50 charts were selected according to the following priorities:
 - Newly diagnosed pts <u>and</u> entered care at site after 12/31/09
 - Up to a maximum of 25 patients
 - Previously reviewed pts, HIV diagnosed <u>after</u> 1/1/03;
 - Previously reviewed pts, HIV diagnosed <u>before 1/1/03;</u>
 - For new sites or site with <50 eligible from the above 3 groups, review included patients in care before 12/31/09 but not previously reviewed



Patient Samples Presented:

- To be included in a review year patients must have had one of the following visits at the site:
 - <u>></u>1 medical visit with a prescribing provider (MD, PA, NP)
 - included in full review
 - <u>></u>1 visit with another provider (i.e., RN, case manager, psychiatry, social service, etc.)
 - reports include patient demographic data if the only visit was with a non-prescribing provider
- All patients reviewed in:
 - 2010: N=1045 (1039 with ≥1 provider visit)
 - 168 newly diagnosed and new to care
 - − 2011: N=1101 (1095 with ≥1 provider visit)
 - 64 newly diagnosed and new to care



Engagement Among Active Patients

- 2010: 95% had 2 or more visits
 - 0.6% had none
- 2011: 96% with 2 or more visits
 - 0.5% had none
- No longer in care end of review year
 - 2010: 10/1045 (1%)
 - **2011: 21/1101 (2%)**
 - Of those patients no longer in care, the majority either transferred, moved or were incarcerated.
 - Only 1 person in each year was lost to follow-up.



Patient Samples Presented Today:



2010 continuing cohort

(previously reviewed patients OR entered care prior to 12/31/2009)



(entered care after 12/31/2009)



2011 all patients

Measures with "*" indicates significant difference (p<.05) between continuing and new to care in 2010



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HAB Performance Measures and in+care Measures

- HAB Group 1 Measures: (n=7)
 - Modified HAB measures
 - Viral Load Suppression (duration on ART not used as inclusion criteria)
- HAB Group 2 Measures: (n=12)
 - Modified HAB measures:
 - Adherence Counseling
 - Cervical cancer screening (PAP or Colposcopy)
 - Lipid screening: performance of <u>any</u> Lipid test
- HAB Group 3 Measures: (n=10)
 - Modified HAB measures
 - all clients for Mental Health screening
 - all clients for Substance Use screening
- in+care Measures:(n=4)

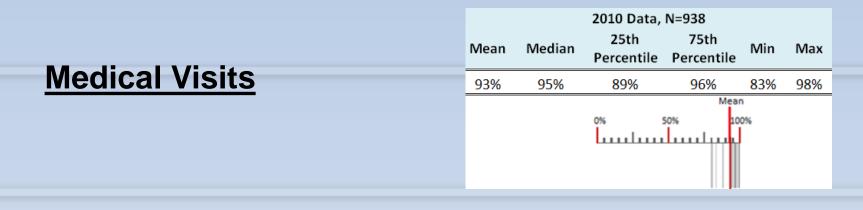
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A Guide through the Measurement Report

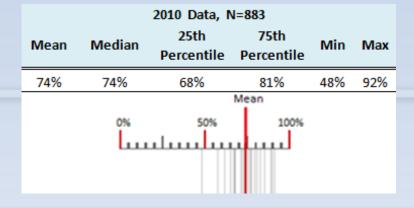
2010 Data, N=938					
Mean	Median	25th Percentile	75th Percentile	Min	Max
93%	95%	89%	96%	83%	98%
Mean 0% 50% 100%					

- Mean
- Median
- Ranges
- Sparklines

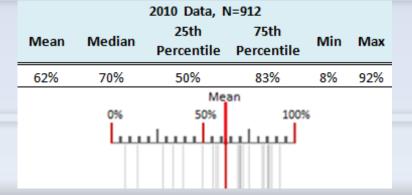




Viral Load Monitoring.

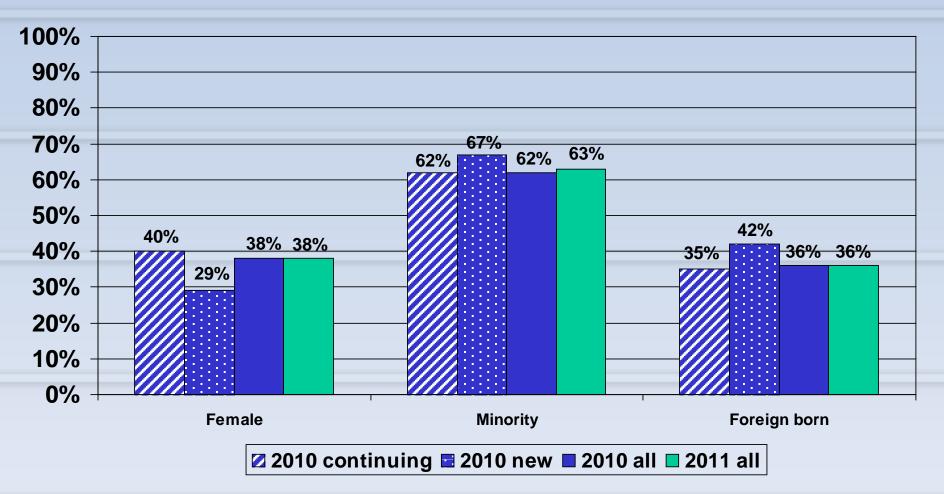


Chlamydia Screening



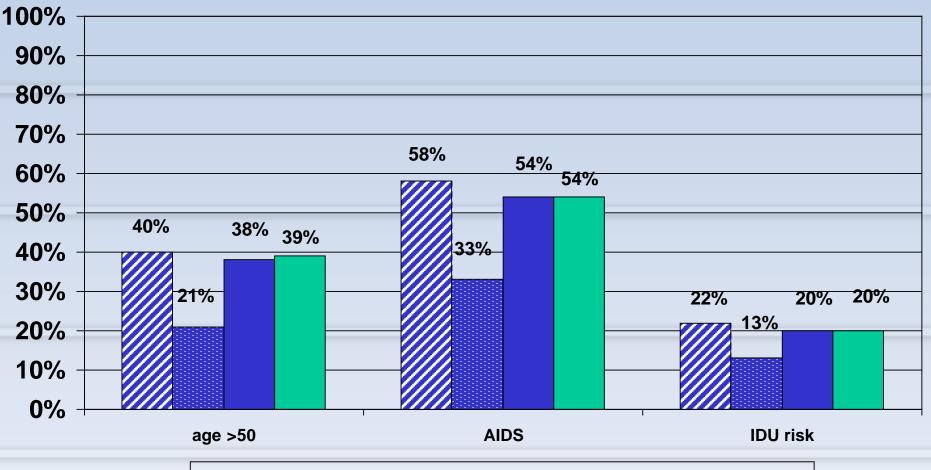










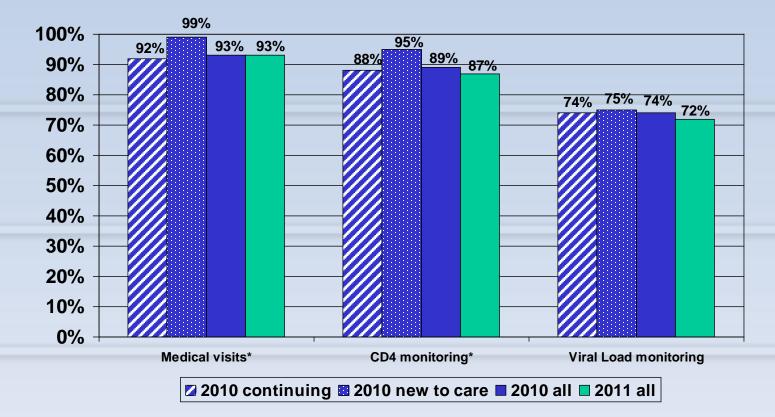


2010 continuing 2010 new to care 2010 all 2011 all



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Monitoring Medical visits, CD4 Counts, Viral Loads



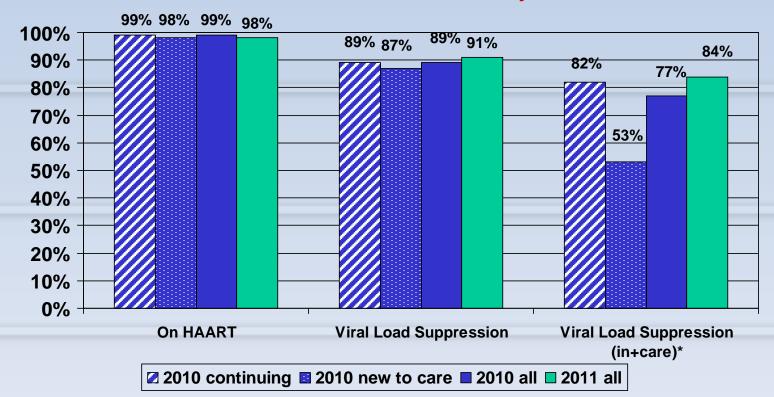
Visits: % clients with \geq 2 more medical visits in an HIV care setting in the year. **CD4:** % HIV clients with \geq 2 CD4 T-cell counts performed @ least 3 months apart **Viral Load:** % of HIV/AIDS patients, regardless of age, with a viral load test performed at least every six months during the measurement year



Monitoring

On HAART, Viral Load Suppression (Modified HAB)

in+care measure)



HAART: % clients with AIDS who are prescribed HAART

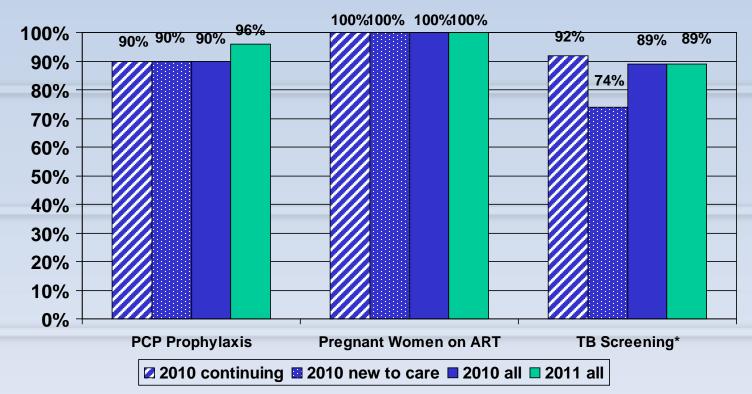
Viral Load Suppression (HRSA/HAB): % HIV/AIDS patients, regardless of age, on ART during review year, whose last viral load in review year was BDL (<200 copies/ml)

Viral Load Suppression (in+care): % HIV/AIDS patients, with a viral load <200 copies/ml at last viral load in the measurement year



Prevention

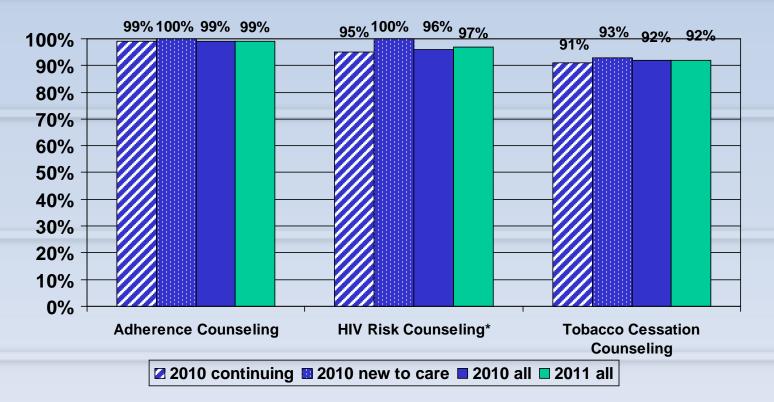
PCP Prophylaxis, Pregnant Women on ART, TB Screening



PCP Prophylaxis: % HIV clients and a CD4 count < 200 cells/mm³ prescribed PCP prophylaxis **Pregnant Women on ART:** % HIV pregnant women who are prescribed antiretroviral therapy **TB Screening:** % HIV clients who received testing with results documented for latent tuberculosis infection since HIV diagnosis

Counseling

Adherence, HIV Risk, Tobacco Cessation Counseling

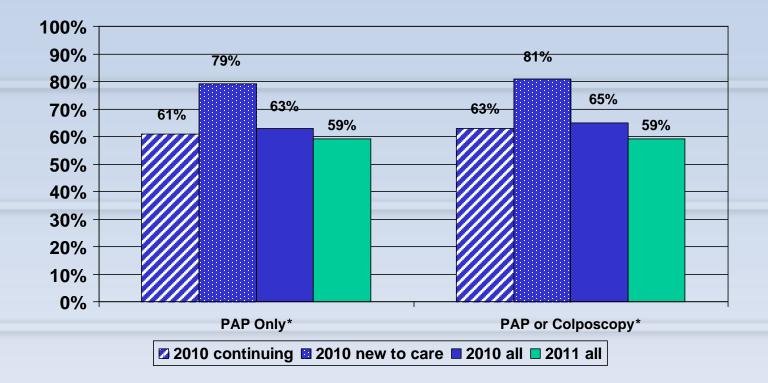


Adherence Counseling: % HIV clients on ARV's who were assessed for adherence in each six month period in the review year

HIV Risk Counseling: % HIV clients who received HIV risk counseling within the measurement year **Tobacco Cessation Counseling:** % HIV clients who received tobacco cessation counseling within the measurement year



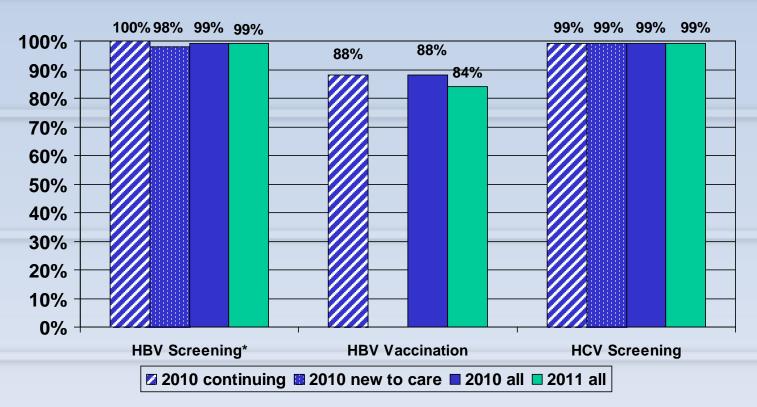
<u>Cervical Cancer Screening</u> PAP, PAP or Colposcopy (modified HAB)



Cervical Cancer Screening : % HIV infected women who have a PAP screening in the measurement year **Cervical Cancer Screening (Modified HAB):** % HIV infected women who have a PAP or Colposcopy screening in the measurement year

<u>Hepatitis</u>

HBV Screening, HBV Vaccination, HCV Screening



HBV Screening: % of patients regardless of age, for whom Hepatitis B screening was performed at least once since diagnosis of HIV/AIDS or for whom there is documented infection or immunity

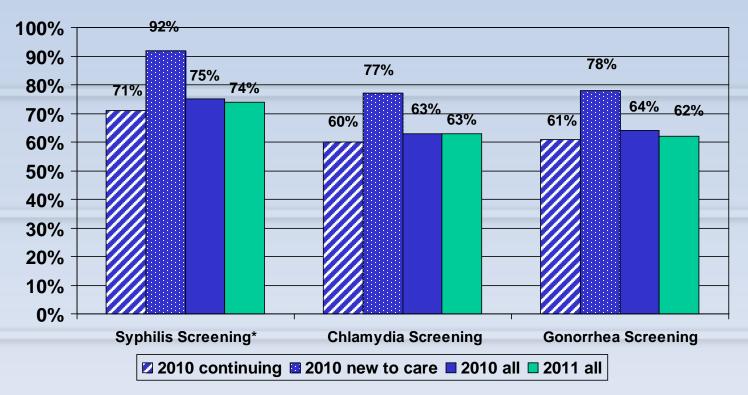
HBV Vaccination: % HIV clients who completed three vaccination series for Hepatitis B (<u>HAB Measure excludes</u> <u>newly enrolled patients</u>)

HCV Screening: % of clients for whom Hepatitis C (HCV) screening was performed at least once since the diagnosis of HIV infection



STD Screening

Syphilis, Chlamydia, and Gonorrhea Screening

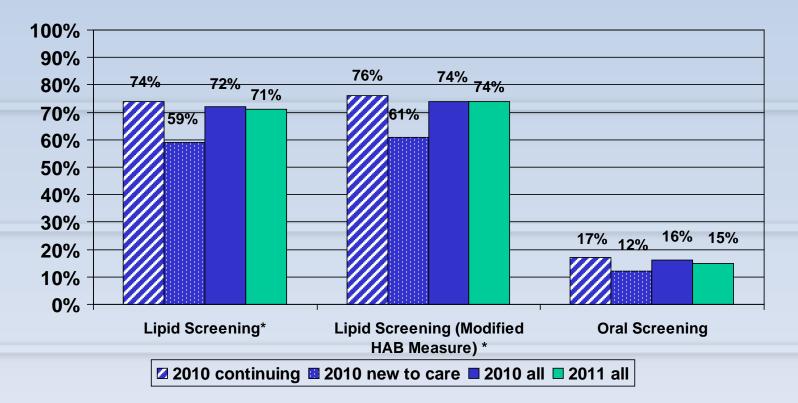


Syphilis Screening: % of adult HIV clients who had a test for syphilis performed within the measurement year **Chlamydia Screening:** % of HIV clients at risk for sexually transmitted infections who had a test for chlamydia performed within the measurement year

Gonorrhea Screening: % of HIV clients at risk for sexually transmitted infections who had a test for gonorrhea performed within the measurement year

Primary Care

Lipid, Lipid (Modified HAB Measure), and Oral Screening

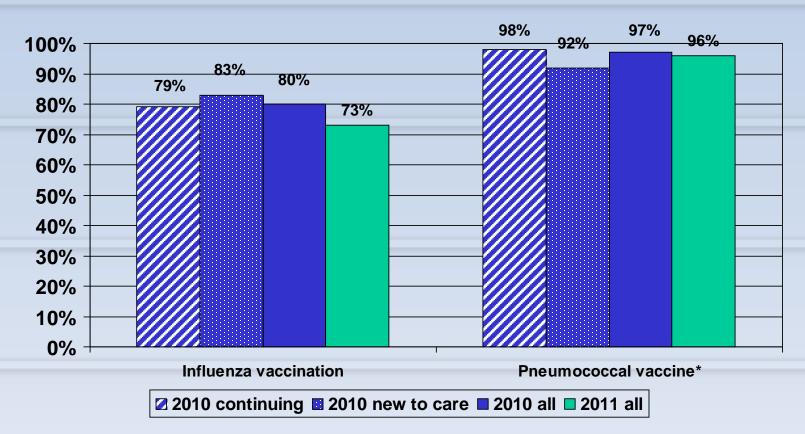


Lipid Screening: % HIV clients on HAART who had a fasting lipid panel during the measurement year Lipid Screening (Modified HAB Measure): % HIV clients on HAART who had any of the lipid screening tests (cholesterol, HDL, LDL, or triglycerides) during the measurement year Oral Screening: % HIV clients who received an oral exam by a dentist at least once during the measurement year



Vaccines

Influenza and Pneumococcal Vaccination

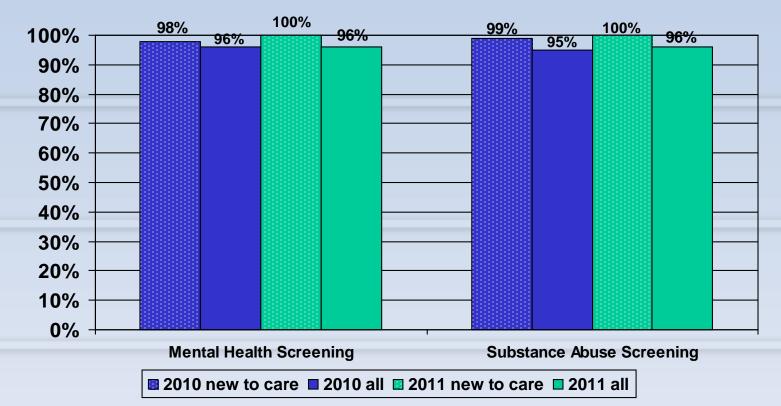


Influenza Vaccination: % HIV who have received influenza vaccination within the measurement year Pneumococcal Vaccine: % HIV clients who ever received pneumococcal vaccine



Screening

Mental Health and Substance Abuse Screening New and All Clients*



Mental Health Screening New Clients: % of new HIV clients who have had a mental health screening

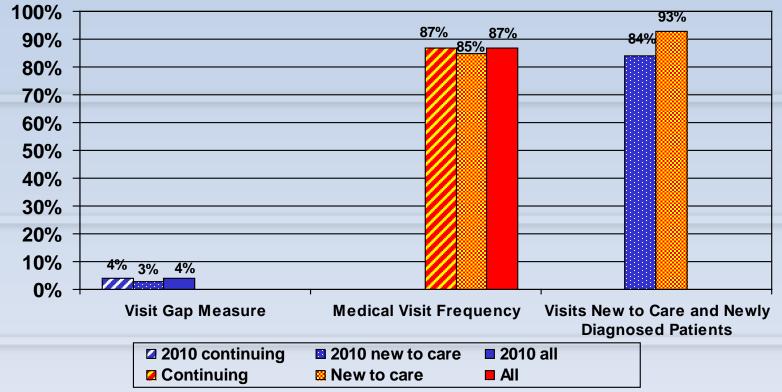
*Mental Health Screening All Clients (Modified HAB): % of HIV clients who have had a mental health screening

Substance Abuse Screening New Clients: % of new HIV clients who have been screened for substance abuse use (alcohol & drugs) in the review year

*Substance Abuse Screening All Clients (Modified HAB): % of HIV clients who have been screened for substance abuse use (alcohol & drugs) in the review year

In + Care Measures

Visit Gap, Medical Visit Frequency, Visits for New to Care Patients



Visit Gap Measure: % HIV/AIDS patients who did not have a medical visit with a provider with prescribing privileges in the last 180 days of the measurement year

Medical Visit Frequency: % HIV/AIDS patients who had >1 medical visit with a provider with prescribing privileges in each 6 month of the 24-month measurement period within >60 days between medical visits (NOTE: Data only from patients in care starting first quarter 2010) Visit for Patients Newly Diagnosed and New to Care: % HIV/AIDS patients who were newly diagnosed and new to care with a

medical provider with prescribing privileges who had a medical visit in each of the 3 month periods in the review year.



Limitations

- Indicators used were from HRSA/HAB
 - Do not ask "why" something was not done
- Only information found in the medical record was used to measure care
 - Case management records not reviewed
 - If not documented, we could not tell if done
- Focus was on process
 - Exceptions were viral load suppression and engagement in care
- Not a good measure of retention
 - Population reviewed already had one visit
- Numbers too small in denominator of some measures to get precise estimate of performance at your site level
- Not a random sample of all patients in care



Summary/Conclusions Statewide Chart Review

- There were a number of areas where excellence was seen
 - Almost all active patients had 2 or more visits and virtually none were LTFU
 - High rates in other measures of visit adherence
 - HAART
 - Coverage was high, with suppression on HAART 91%
 - Clinic suppression rates were also good (even including patients not on ART)
 - All pregnant women on ART
 - Mental Health and Substance Use screening
 - Hepatitis screening

Summary/Conclusions Statewide Chart Review

- Some areas needing improvement:
 - Viral load monitoring (but not CD4)
 - STD screening
 - Pap smears
 - Full lipid screening
 - HBV vaccination



Primary Care

- Some primary care measures had high percentages of patients meeting a particular measure:
 - Any lipid screening
 - lower when looked for full panel performed
- Other measures offer potential areas for improvement:
 - Influenza
 - Oral screening



Who Are Those Newly diagnosed? (n=168 in 2010)

- 21% were age 50 or older
- One-third had AIDS by the end of the review year
 - 29% had their first CD4 count <200 cells/mm³
- Compared with patients already in care
 - Lower percent with IDU risk*
 - Lower percent were women*
 - Slightly higher percent were foreign born*

*all p<.05

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Quality and Newly Diagnosed

- Some areas of care had higher rates for newly diagnosed patients compared with patients already in care
 - Included CD4 count monitoring, cervical cancer screening and syphilis screening in review year
- Other areas of care had lower rates for newly diagnosed patients compared with patients already in care
 - Included lipid screening, TB screening



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Questions?

Email or Call Nancy_Reinhalter@jsi.com 617-482-9485

