Gap analysis for the Ryan White funded Linkage-To-Care Program

Yvonne Tam

Preceptor: Denise Freeman

Field Operations Manager

Baltimore City Health Department

Background

- Baltimore City Health Department
  - Bureau of STD/HIV Prevention
    - Target population: intravenous drug users, men who have sex with men, and men and women who exchange sex for money or drugs
    - Active outreach
    - Two STD clinics at Druid and Eastern
    - HIV/AIDS surveillance system

Background

- Linkage-to-care program
  - Help HIV positive patients to
    - Access and remain in primary care
    - Remove social, logistical, and service barriers to access care
    - Navigate through social and medical support services
- Problem → the number of patients tested positive for HIV < number of positive patients linked to care
  - The need to perform a gap analysis to maximize effectiveness of linkage-to-care program
  - Major determinant of the performance of linkage-to-care program → HIV/AIDS surveillance system
  - Objective → develop a revised HIV surveillance standards and operating procedure

Public Health Context

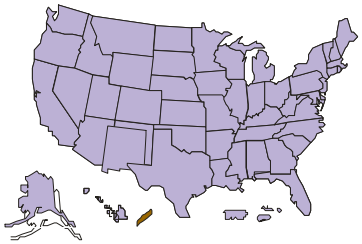
- Importance of HIV/AIDS surveillance system
  - Monitor incidence and prevalence, morbidity and mortality
  - Identify changes in trends of HIV transmission and at risk populations
  - Provide indicators for evaluation and determine how to allocate resources
  - Data facilitates access to health, social and prevention services, and medical treatment

Methods

1. Orientation at the Bureau of STD/HIV Prevention
2. Document current HIV surveillance procedures
3. Research and develop list of best practices of operating procedures and standards of HIV surveillance system
4. Compare current procedures with list of best practices and attributes
5. Construct revised HIV surveillance procedures

How HIV/AIDS Surveillance Works

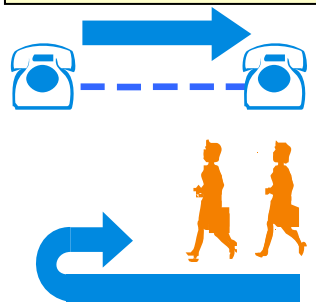
People with HIV/AIDS



Sources of Reports

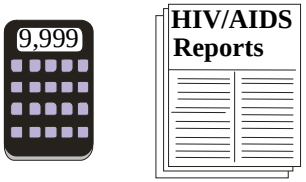
- -Hospital Practitioners
- -Private Practitioners
- -Public Clinics
- -Laboratories

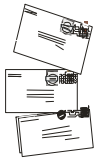
Passive Reporting



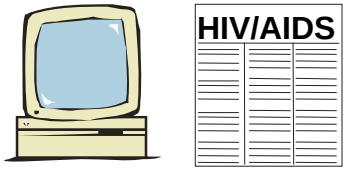
Active Case Finding

Local Health Dept





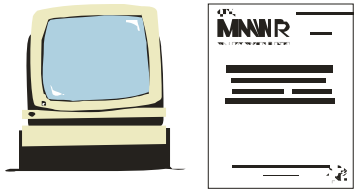
State Health Dept



Dissemination

- -Local Bulletins
- -HIV/AIDS Surveillance Reports
- -Supplemental Reports
- -CDC HIV/AIDS Web Sites
- -Public Information Data Set
- -Surveillance Slide Sets

CDC



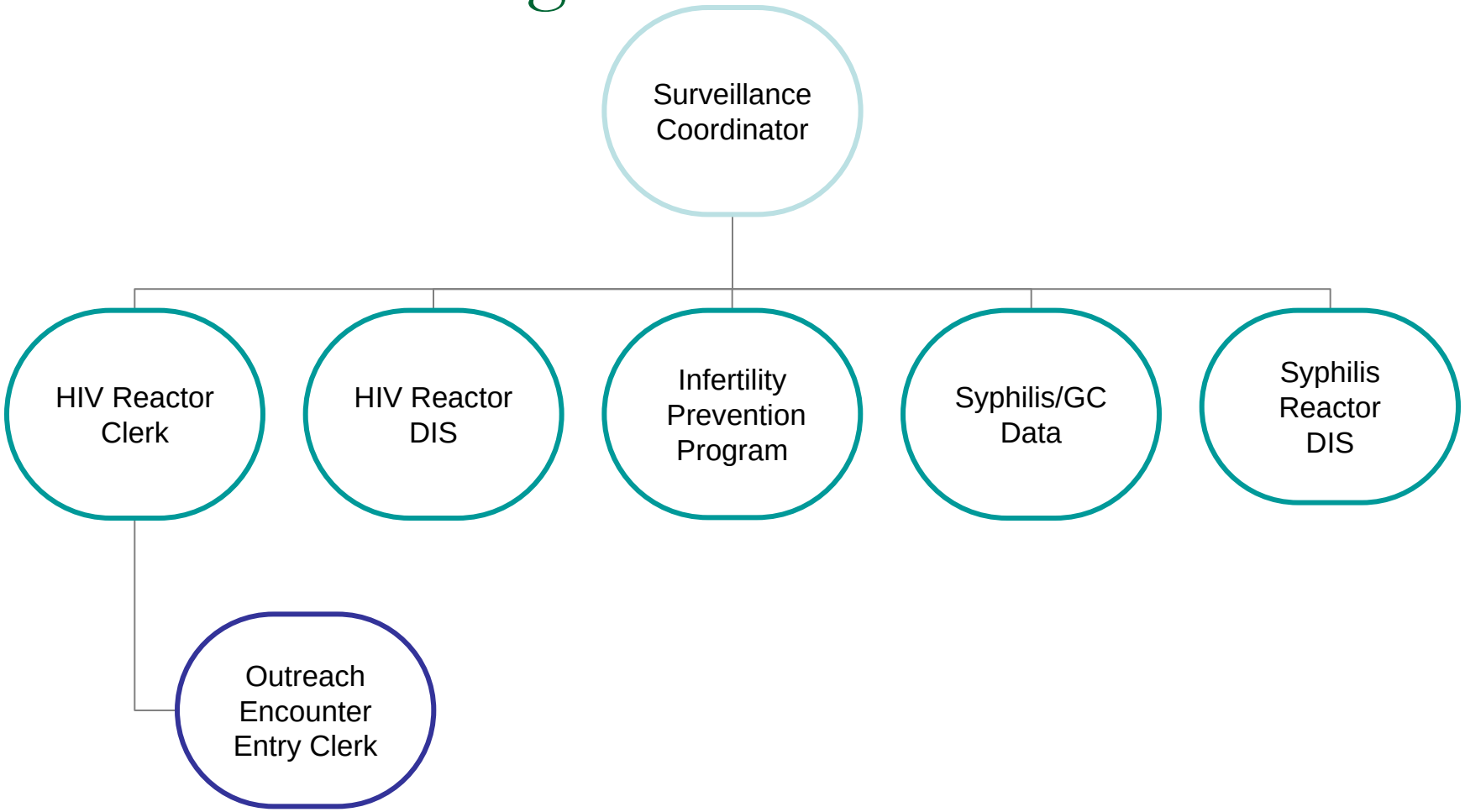
Results – Current HIV surveillance procedures

- 4 procedures
  - Protocol A: Reports received by mail and fax
  - Protocol B: Reports received by phone
  - Protocol C: Reports from Emergency Room Rapid Testing Program
  - Protocol D: Reports from Out of Jurisdiction

Results – Best Practices and Attributes of HIV Surveillance Systems

- Simple
- Sensitive
- Timely
- Acceptable
- Useful
- Stable
- Flexible
- Positive predictive value
- Data quality
- Representative

Results – Revised HIV Surveillance Procedures: Organizational Chart



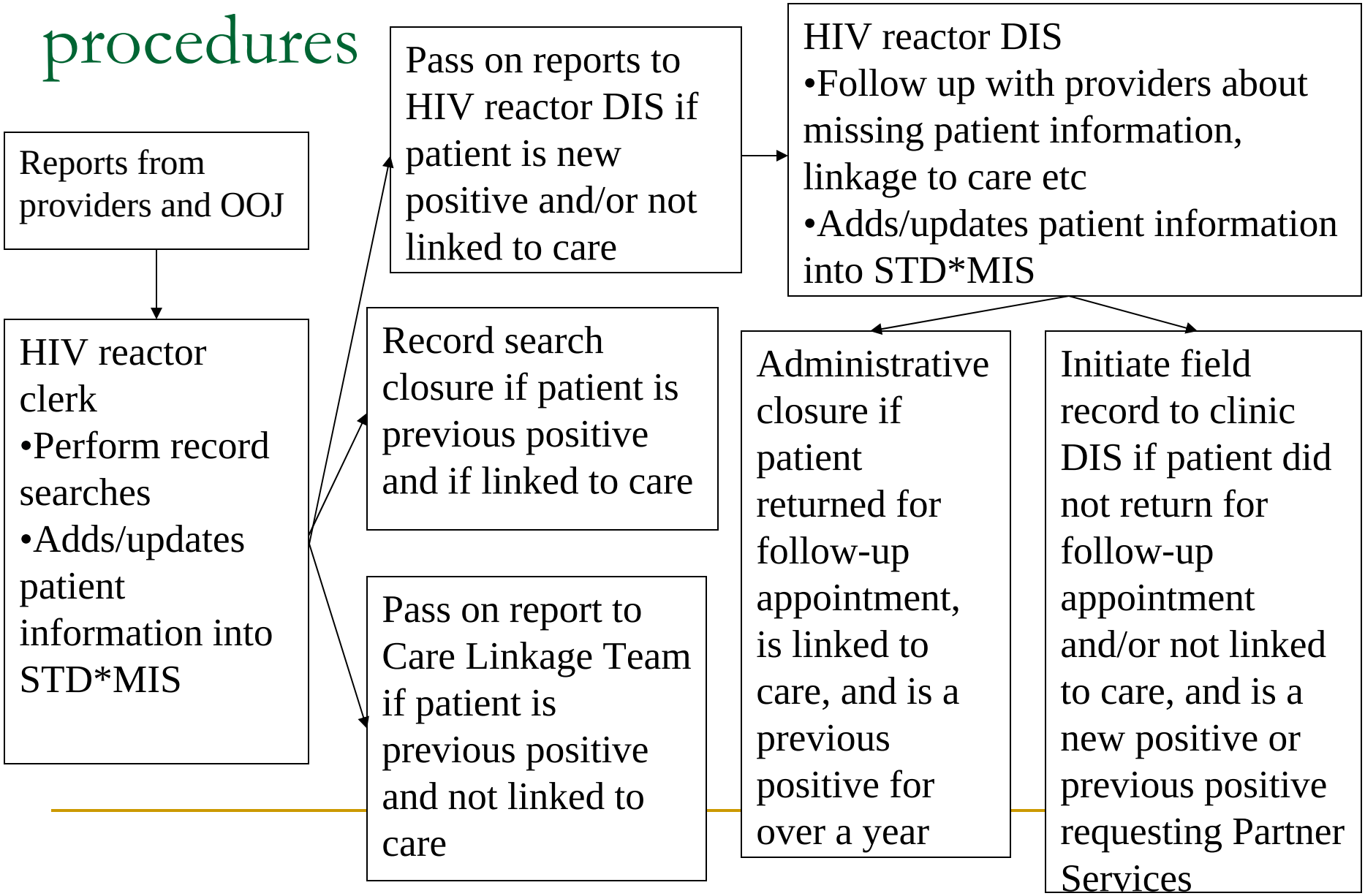
Results – Revised HIV Surveillance Procedures: Components of System

1. Population under surveillance
2. Period of time of data collection
3. Data collection
4. Reporting sources of data
5. Data management
6. Data analysis and dissemination
7. Patient privacy, data confidentiality, and system security
8. Records management program

Results – Revised HIV Surveillance Procedures: Data Collection

- HIV Surveillance Form
  - Patient Name
  - Date of Birth
  - Has the patient been notified of results?
  - Follow-up Appointment
  - Laboratory Information
  - Diagnosis
  - Symptoms
  - Medication
  - Treatment (if Positive for Syphilis)
  - Provider Name
  - Pregnant Females?
  - Sex Partners listed in the Chart
  - Patient Locating Information

Results – Revised HIV surveillance procedures



Results – Revised HIV surveillance Procedures: Standards

- Priorities
  - Pregnant females
  - New positives under the age of 25
  - New positives
  - Previous positives with repeated STD bacterial infection
  - Previous positives without documentation of PTC

- Administratively closed
  - All negative WB test results
  - Previous positives enrolled in care with no new infections

- Time standards
  - Data entered into STD*MIS within 1-2 days of receiving report by HIV Reactor Clerk
  - Field records initiated to DIS within 1-2 days of completion of surveillance procedures
  - DIS starts investigation within 1 day of receiving record and has up to 2 weeks to close the record

Discussion – Gaps and Obstacles

- Incentives for HIV testing led to a lot of positives who were re-tests
- How long should be spent beyond the 2 weeks standard to locate positive patients
- Inter-state comparisons difficult due to different code-based systems
- Other factors that undermine performance of linkage-to-care program
  - Logistics
  - Behavioral factors
- Most evaluation reports of surveillance systems are not publicized

Discussion – Conclusion and Lessons Learned

- Status of the revised HIV surveillance procedures → under review
- Public health significance of HIV surveillance system and linkage-to-care program
  - Assessment
    - Monitor health status
    - Diagnose and investigate health problems and hazards
  - Assurance
    - Evaluate effectiveness of health services
    - Research for new insights to health problems

References

1. Johnson S. BCHD STD/HIV Prevention Program, Non-Traditional Outreach Application. In. Baltimore: Ryan White CARE Act 2005.
2. CDC. HIV/AIDS Surveillance Methods Atlanta: CDC; 2002.
3. Janssen RS. HIV/AIDS Surveillance and the Ryan White Care Act - Charge to the Committee and Overview of Study Issues. Washington DC: Centers for Disease Control and Prevention; 2002.
4. DHMH M. Instructions for Maryland Communicable Disease Morbidity Reporting. Baltimore: Maryland Department of Health and Mental Hygiene; 2007.
5. BCHD. Baltimore City Health Status Report, 2008. Baltimore: Baltimore City Health Department Office of Epidemiology and Planning 2008.
6. Flemming T. Proposed HIV Surveillance Reactor Desk Protocol. Baltimore: Baltimore City Health Department Bureau of STD/HIV Prevention; 2008.
7. DSHS T. HIV/STD Surveillance. In: Program Operating Procedures and Standards. Texas: Texas Department of State Health Services 2009.
8. BCHD. Syphilis Reactor Procedures. Baltimore: Baltimore City Health Department Bureau of STD/HIV Prevention 2003.
9. Dyck D. Gap analysis of health services. Client satisfaction surveys. AAOHN J 1996;44:541-9.
10. Stanley M. Lemon MAH, P. Frederick Sparling, Eileen R. Choffnes, and Alison Mack. Global Infectious Disease Surveillance and Detection: Assessing the Challenges -- Finding Solutions, Workshop Summary. Washington, DC: The National Academies Press; 2007.
11. Fidler MGBaDP. Global Public Health Surveillance under New International Health Regulations. Emerging Infectious Diseases 2006;12.
12. Roberts D. Surveillance - Bioterrorism Epidemiology: Missouri Department of Health; 2008.
13. German RR. Updated Guidelines for Evaluating Public Health Surveillance Systems - Recommendations from the Guidelines Working Group MMWR Morb Mortal Wkly Rep 2001;50:35.
14. IOM. The Future of Public Health. Washington DC: National Academy Press; 1988.
15. NPHPSP. 10 Essential Public Health Services Atlanta: CDC Office of the Chief of Public Health Practice, National Public Health Performance Standards Program 2008.