EXAMINING THE WASHINGTON STATE PERINATAL HEPATITIS B PREVENTION PROGRAM CASE MANAGEMENT MODEL
Presentation Outline

- Background/Significance
- Purpose
- Methods/Results
  - LHJ
  - States, City, and Canadian Province (Non-WA Sample)
- Discussion
- Implications for Practice
- Conclusion
Hepatitis B one of the most common infectious diseases in the world\textsuperscript{1,2}

Estimated 25,000 infants born to HBsAg-positive mothers in United States each year\textsuperscript{3}

Women of Asian or Pacific Islander (API) descent represent 75\% of HBsAg-positive mothers in the United States\textsuperscript{4}

Washington State has the fifth highest API population in the United States\textsuperscript{4}
2009 Annual Assessment of Progress Toward Goals to Prevent Perinatal HBV Transmission

- Maternal screening 95% for HBsAg
- Identified 45% of the expected HBsAg+ births
- Total case managed 330 infants
  - Ninth highest of the 64 PHBPPs
  - 330 (100%) received HBIG and first HB dose
  - 246 (75%) completed HB series by 8 months
  - 235 (71%) received PVST
Purpose

- Examine the Washington State DOH, Office of Immunization and Child Profile PHBPP case management model
- Evaluate the PHBPP model to improve efficiency, effectiveness and sustainability
- Develop recommendations relevant to the changing healthcare system and evaluate where changes are needed in the model of care
Methods

- Literature review

- Interview questions

- Key informants identified and contacted between December 2014 and March 2015

- Interviews performed between January and March 2015
  - Three in-person, 11 telephone
  - Time range 25 minutes to 1 hour and 25 minutes (average 43 minutes)
Results: LHJ Sample

Washington State LHJs

- Eight selected as key informants
  - Clark · Grays Harbor · King · Kitsap · Pierce*
  - Snohomish · Spokane · Yakima

* Two staff interviewed separately
Results: Non-Washington Sample

- Seven key informants selected from three states, one city, and one Canadian province
  - California
  - Minnesota (two key informants)
  - Michigan
  - New York City
  - Canada British Columbia (two key informants)
Results: LHJ Sample

Professional Training

- RN: 7
- Epidemiologist: 1
- Disease Investigation Specialist: 1
Results: Non-Washington Sample

Professional Backgrounds

- Medical Record Administration
- Family Life Education
- Public Health in Epidemiology
- Public Health Administration and Policy
- Nursing
Results: LHJ Sample

Caseloads

- Grays Harbor (1-2)
- Yakima (4-5)
- Spokane (5)
- Kitsap (5)
- Clark (40)
- Pierce (35-60)
- Snohomish (85)
- King (400-500)
Results: Non-Washington Sample

Caseloads

- Michigan (200)
- Minnesota (400-450)
- New York City (1800)
Results: LHJ & Non-Washington Sample

English Not Primary Language of Family (%)

- Clark
- Grays Harbor
- King
- Kitsap
- Pierce
- Snohomish
- Spokane
- Yakima
- Non-WA Sample
Results: LHJ & Non-Washington Sample

Average Time to Manage Case (months)

*Data not available*
Results: LHJ & Non-Washington Sample

Agencies Involved with Case Manager to Complete Case

- Hospital
- OBGYN
- Pediatrician
- Laboratory
- Other Healthcare Provider
- Other Health Department
- Interpreters*
- WA State DOH*

*Specific to WA State
Results: Complex Cases

WA State LHJs
- Family moved without notification
- Non-compliance by parent(s)
- Language barriers

Non-WA Sample
- Transient families
- Non-compliance by providers/parent(s)
- Language barriers
- Cultural beliefs
- Prematurity
- New cases
- Discrepant lab results
- Infants without immunity after HB series
- Women whose HB status changed during pregnancy
Results: LHJ Sample

PHB Case Management Model

What Works Well
- Electronic capability
- Clear guidelines
- Flexibility
- Close provider and family involvement

Challenges
- Other work obligations
- Lack of provider education
- Difficulty tracking families
- Time consuming
- Lack of face-to-face contact
- System unsustainable if increased caseload
- Uncontrollable factors
Results: Non-Washington Sample
PHB Case Management Model

What Works Well
- Electronic case management systems
- Centralized systems
- Extra surveillance activities

Challenges
- Transient clients
- Lack of reporting
- Lack of electronic systems
- Lack of incentives
- Redundant steps
Results: LHJ Sample
Areas for Improvement

- Increased provider and/or hospital staff education
- Pregnancy status reported from laboratories
- Dedicated PHB forms
- Checklist system
- Written materials in other languages
- Education on cultural norms
- Resources for home visits
Results: Non-Washington Sample
Areas for Improvement

- Entirely online and electronic case management system
- Earlier contact with state coordinators by LHJ
- Outreach to those involved with pregnant women
- Self-contained system
- Balancing responsibilities between Public Health Nurses
Results: LHJ Sample
Barriers to Care

- Lack of provider knowledge and education
- Lack of time
- Poor communication
- Lack of finances
- Lack of resources
- Cultural and language barriers
Results: Non-Washington Sample

Barriers to Care

- Lack of provider and hospital staff knowledge and education
- Cultural and language barriers
- High hospital staff turnover
- Vaccine resistant families
- Inconsistent reporting methods by hospitals
- CDC behind in current practice guidelines
Results: Reimbursement of Case Management Services

- Increasing funding with grants
- Code case management under different programs
  - Children with Special Health Care Needs (CSHCN)
- Billing insurance for case management services
- Relying on CDC for reimbursement solution
Results: LHJ Sample
PHB Module

What Works Well
- Adding multiple pregnancies
- Simple, intuitive, flows well
- Search field function
- Data entered automatically reported to DOH

Challenges
- Lack of real-times lists and reminder system
- Lack of space for multiple lab results
- Poor flow
- Unreliable
- Not intuitive
Results: Non-Washington Sample Information Systems

**Minnesota and New York City**
- Maven
  - Electronic surveillance and case management system

**California**
- Access Database

**Michigan**
- Access Database and Contact Plus

**Canada BC**
- No specific PHB system
Results: Non-Washington Sample

Information Systems

What Works Well

- Supportive IT staff
- Ability to make changes
- Tickler system
- Electronic reporting for providers

Challenges

- Initial set-up/training
- More manual steps
- Lack of integration with immunization registry
- Lack of workflows
- Lack of interfacing of electronic systems for vaccine administration
Discussion

What Works Well

- Case management guidelines
- DOH supportive, available
- Open communication between state and local level
- High (95%) screening rates
Discussion

Challenges

- Need more comprehensive electronic systems
  - Integrated system between PHB module, Washington Disease Reporting System, and Washington Electronic Laboratory Reporting System
  - Re-build PHB module for improved functionality
  - New York City’s Maven surveillance system
  - Health Information Technology support from CDC
Discussion

Challenges

- Lack of provider education, knowledge, and compliance
  - Reporting and PVST
    - New York City laboratory reporting law
    - Changes to Washington Administrative Code (WAC)
    - Sustained educational efforts around PVST
Discussion

Challenges

- Funding sources for case management services
  - Bill for PHB case management
  - Review billable clinical services
  - Develop template for billing codes and/or provider guide
- Support and technical assistance needed from CDC
Implications

Provider level

- Stay current with PHB recommendations
- Identify high risk populations
- Educate support staff

System level

- Incorporating electronic systems
- Annual reference materials and summaries
- Use every opportunity to educate
Conclusion

- Provider and system level issues
- Education for providers
- Electronic systems
Contacts

- Shana Johnny, MN, RN
  - Shana.Johnny@DOH.WA.GOV

- M. Patricia deHart, Sc.D.
  - Pat.deHart@DOH.WA.GOV

- Andrea Eiseman, DNP, ARNP, FNP-BC
  - aeiseman@uw.edu
References


For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711). DOH Publication Number 348-513