Variations in State cCMV Screening Policies and Barriers to Universal Implementation

Samantha Christmas, B.S.

Background

- Cytomegalovirus (CMV) is a common virus affecting all ages, typically causes no to mild symptoms in healthy individuals
  - Spread through bodily fluids
  - Increased exposure in childcare settings
- Congenital Cytomegalovirus (cCMV) occurs when the virus is transmitted from a pregnant person to the fetus during pregnancy
  - Most common infectious cause of birth defects in the United States

Background (Cont.)

- Symptomatic Infants
  - Jaundice, microcephaly, low birth weight, seizures, hearing loss (progressive), and vision problems
  - Neurological complications
- Asymptomatic Infants (90%)
  - Risk for delayed onset of hearing loss and developmental concerns
- Diagnosis with PCR testing within 21 days of birth

Background (Cont.)

- Early Detection of cCMV
  - Hearing monitoring (progressive)
  - Developmental monitoring
  - Access to early intervention
- Types of Screenings
  - Universal screening (all newborns)
  - Targeted screening (meet screening criteria)
  - Educational policies (awareness-based)

Research Questions

- What variables do state cCMV screening guidelines, policies or procedures differ across the United States?
- What variables contribute to a lack of screening guidelines, policies or procedures in states and territories that do not screen for cCMV?

Rationale

- cCMV is common but often under-identified
- Early detection improves developmental outcomes
- cCMV screenings vary across states about which infants are tested, what educational materials are available, etc.
- Increased need for understanding gaps and barriers to identification
- Understanding these differences can inform more standardized and effective screening practices

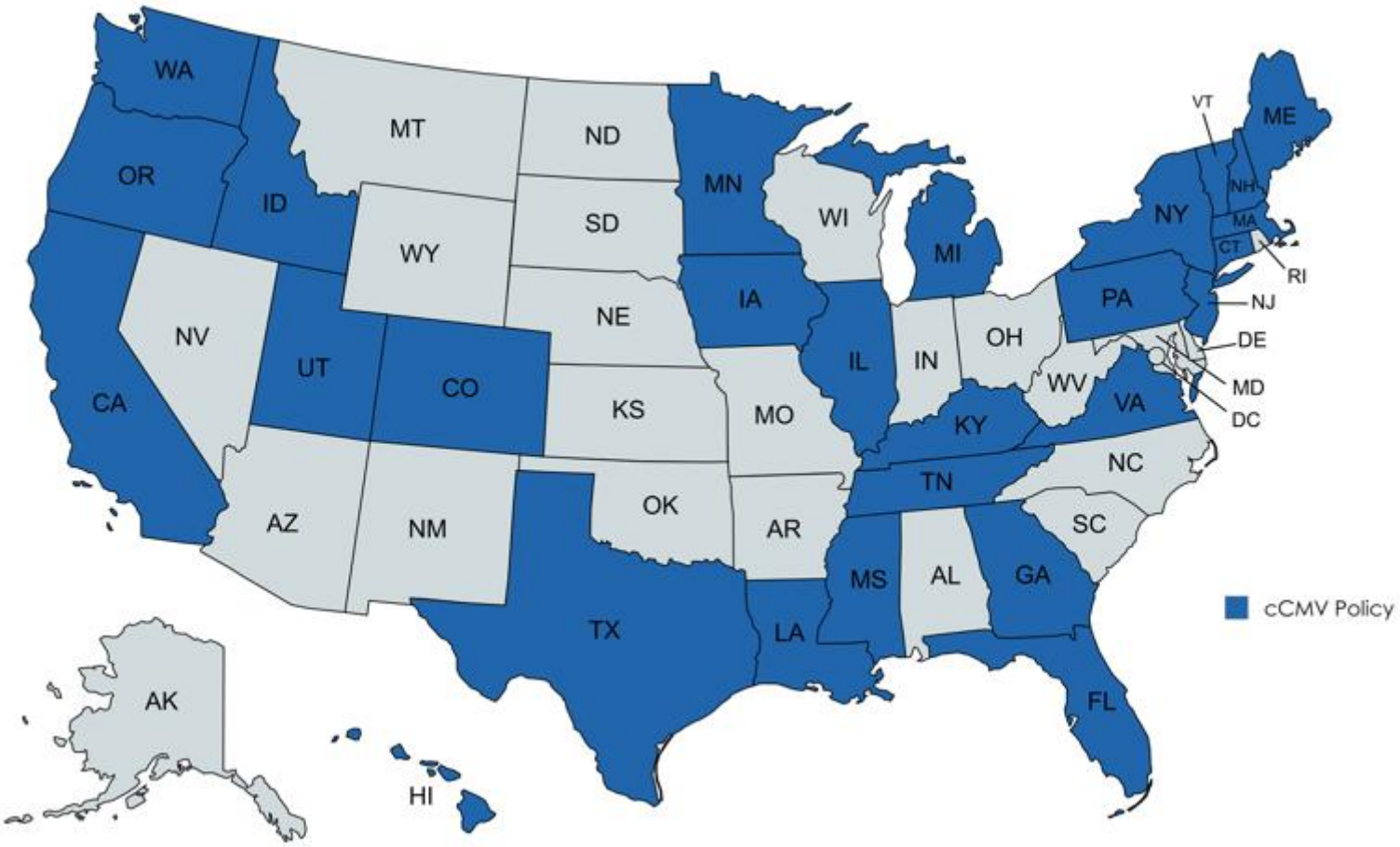
Methods

- Study Design
  - Comparative policy analysis
  - 50 states
  - Publicly available policy data
- Data Sources
  - State statutes and legislation
  - Health department websites
  - Policy summaries

Methods (cont.)

- Variables
  - Policy Information (policy status, effective date, revisions)
  - Educational Components (policy, topics of education)
  - Testing Components (policy, eligibility/criteria)
  - Barriers to Implementation

Results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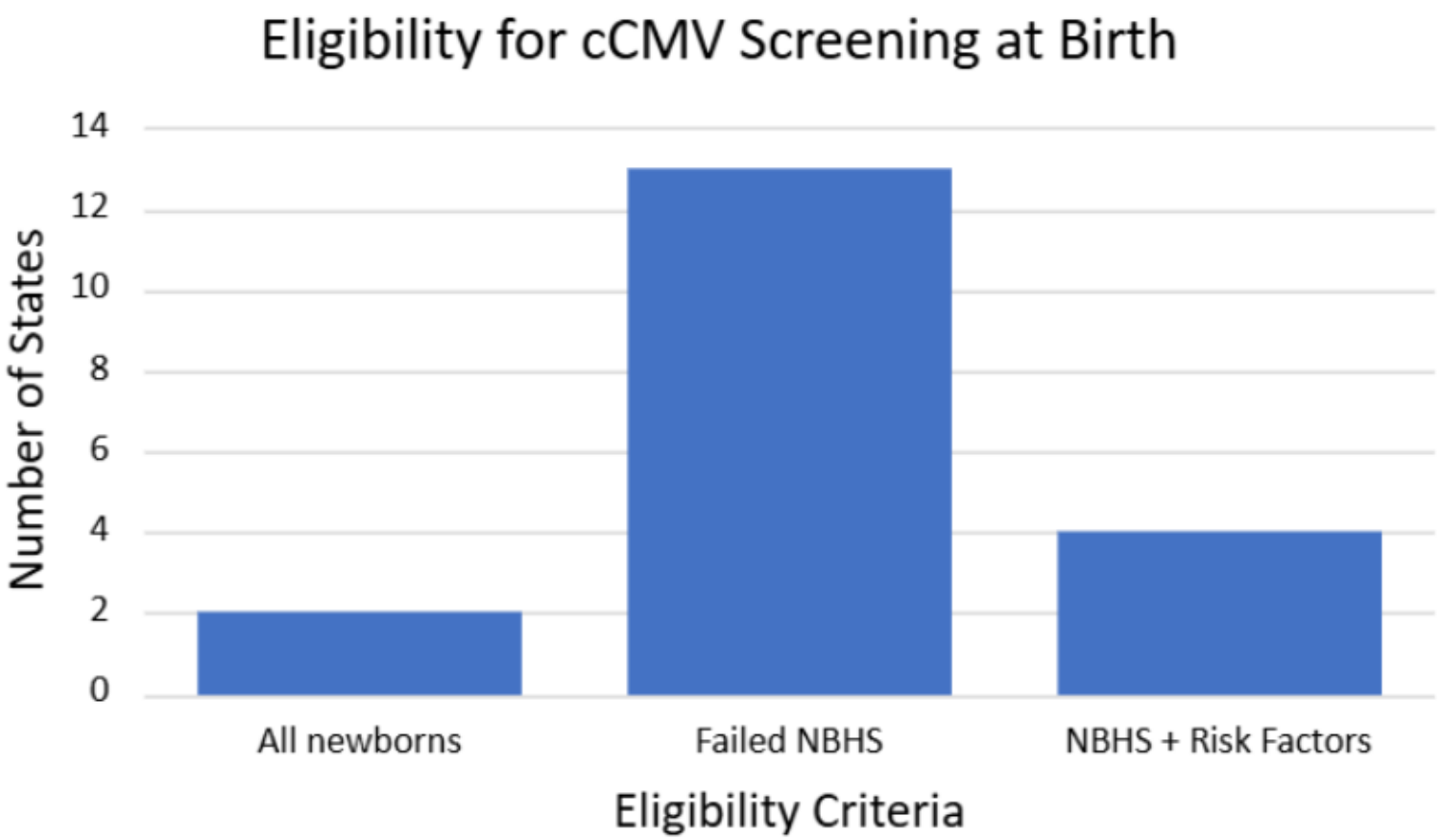
Results (cont.)



Discussion

- High variability in cCMV identification across state policies
  - Universal screenings are implemented in very few states
  - Among states with a screening policy, most rely on targeted screening approaches
  - Educational components are more common than testing requirements
- Leads to inconsistent access to monitoring
  - Policy influences on developmental outcomes

Discussion (cont.)

- Barriers to universal screening implementation
  - Cost and funding
  - Workforce and infrastructure
  - Follow-up care and tracking systems
  - Complexity of implementation
- Current systems do not support consistent identification, monitoring, and follow-up care
  - Policies vary widely across states
  - Barriers limit adoption of universal screenings

Implications

- Need for more standardized screening approaches
- Importance of strengthening early detection systems
- Integration of screening with early intervention services
- Policy-level changes to improve identification and outcomes

Limitations

- Focused on state-level policy, not specific to clinical implementation and practice
  - Possible differences in hospital-level protocols
- Variability in available policy documentation
- Did not assess implementation or outcomes of cCMV policies

References

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