



Linking Medicaid & Birth Certificate Data

Presentation to the NH CHIS Users Group

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Why Link Birth Certificates & Medicaid Data?

- Birth certificates have rich data on:
 - Maternal and paternal demographics
 - Characteristics of prenatal period
 - Characteristics of birth
 - Birth outcomes
- Medicaid claims give information on:
 - Mother's prenatal utilization and costs
 - Baby's utilization and costs in hospital and in first year

Why Link Birth Certificates & Medicaid Data?

- Goal: Append Medicaid IDs (for baby and mother) to birth certificate data
- Allows us to answer questions on:
 - Utilization and cost of prenatal care
 - Utilization and cost of care among babies in the first year
 - Impact of prenatal care on outcomes
 - Cost of complicated newborns in the first year

What Methods Did We Use?

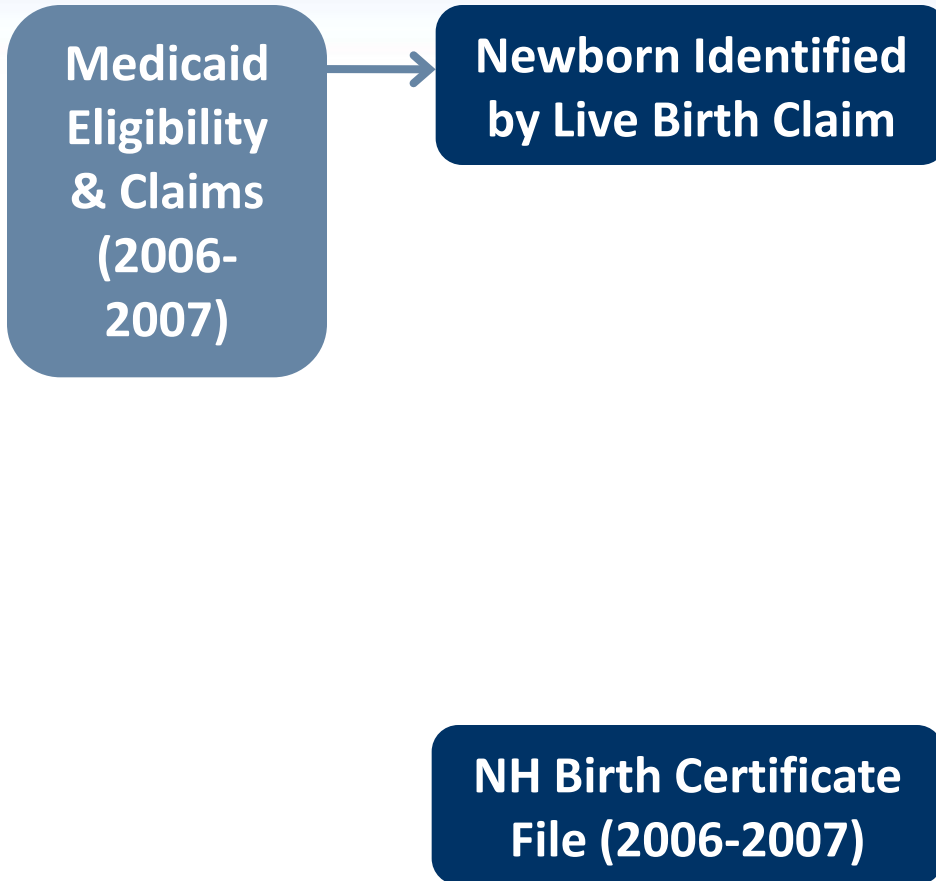
Newborn Linkage

Medicaid
Eligibility
& Claims
(2006-
2007)

NH Birth Certificate
File (2006-2007)

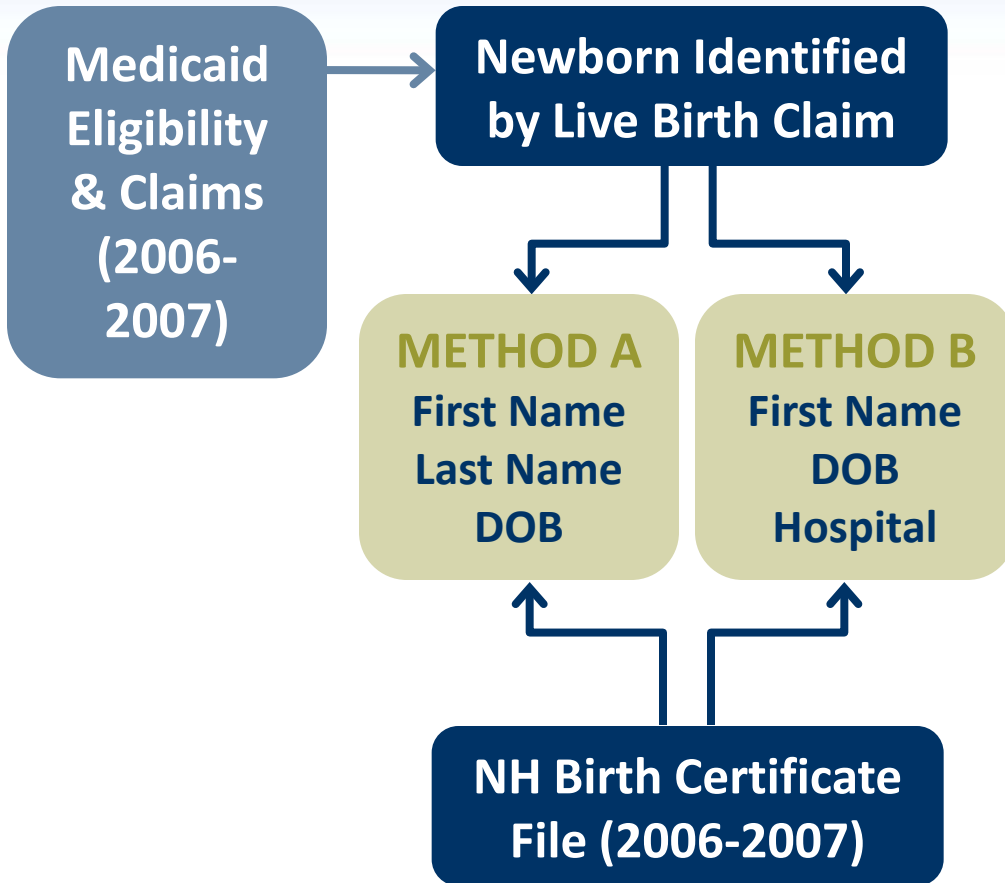
What Methods Did We Use?

Newborn Linkage



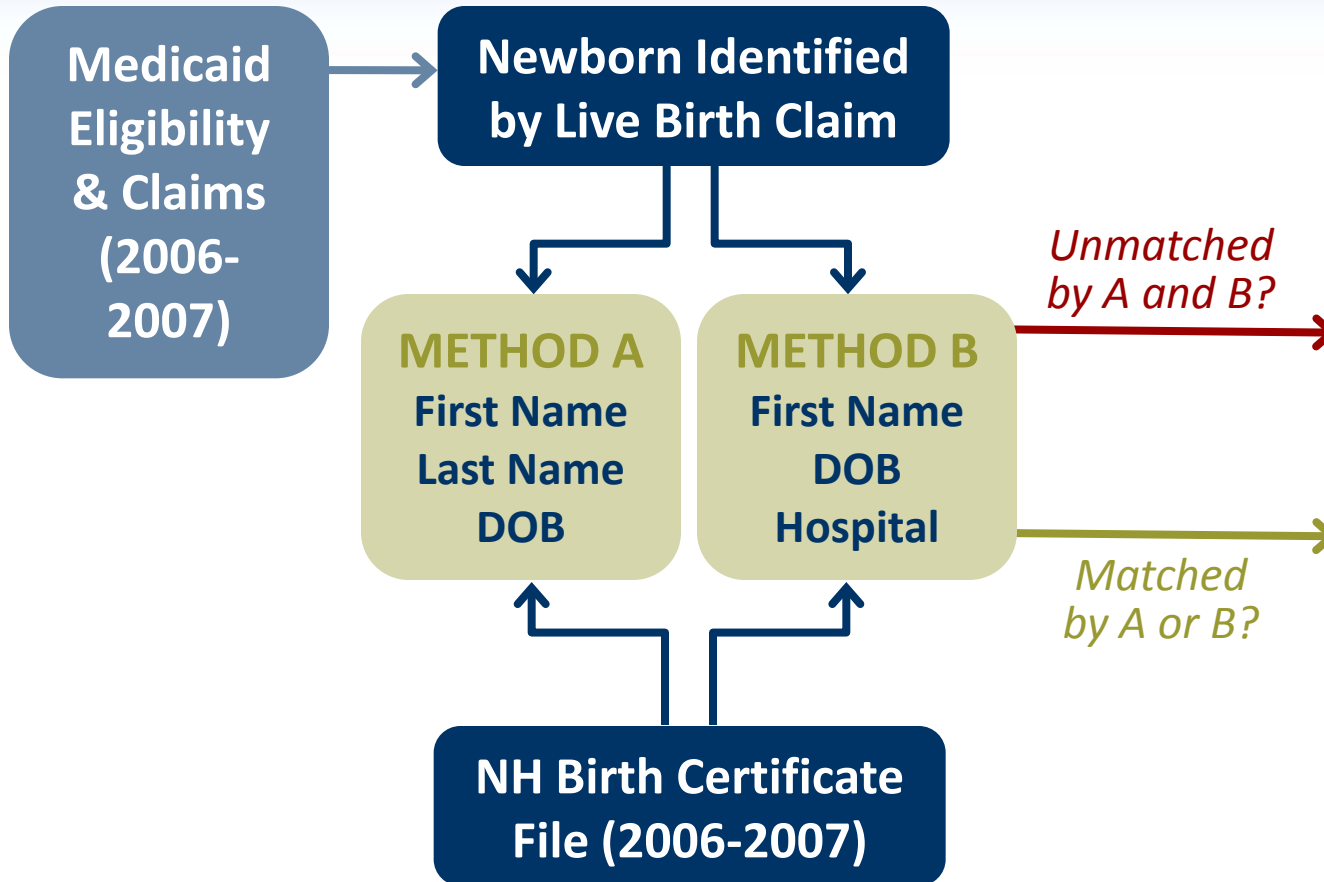
What Methods Did We Use?

Newborn Linkage



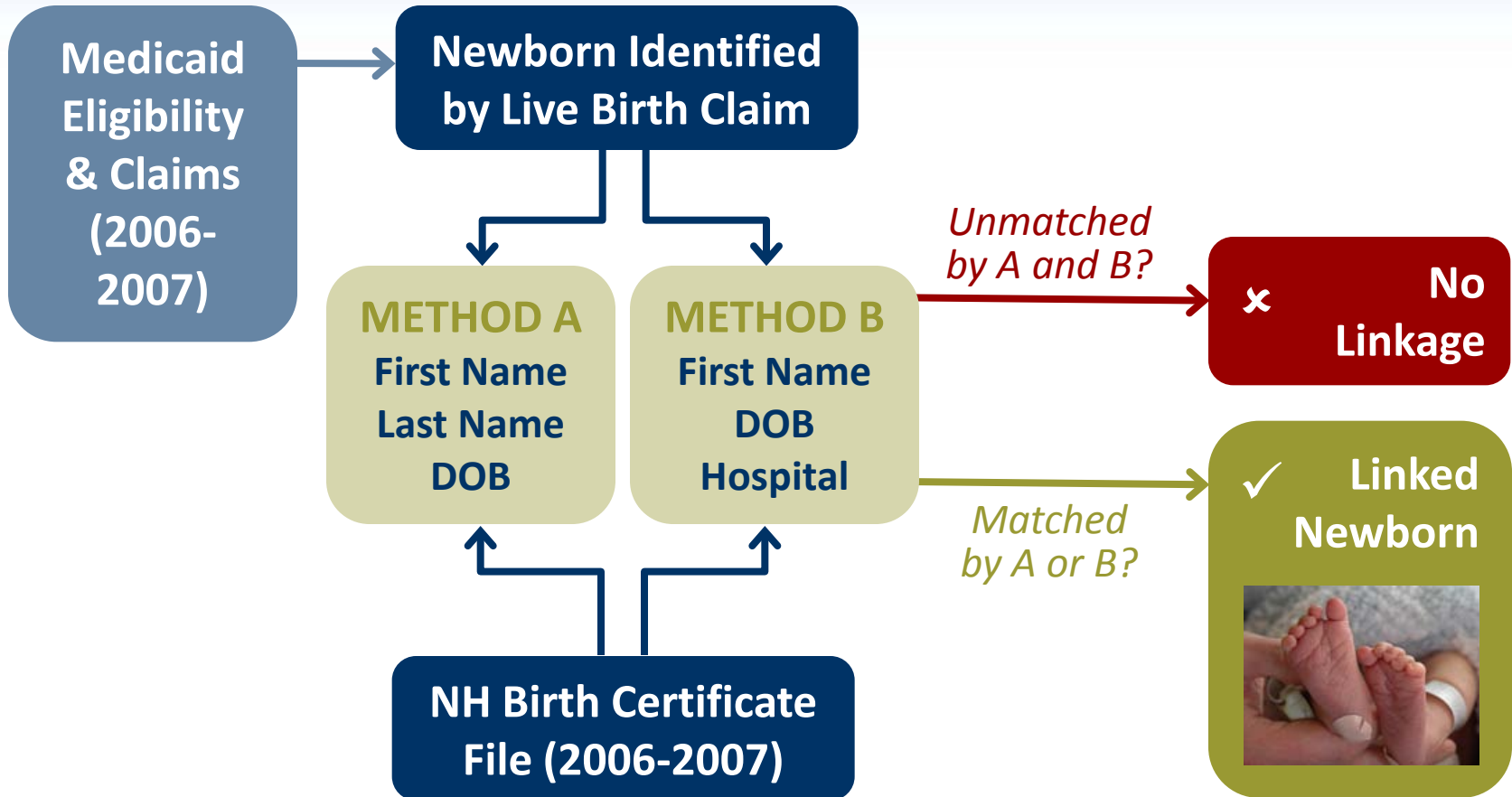
What Methods Did We Use?

Newborn Linkage



What Methods Did We Use?

Newborn Linkage



What Methods Did We Use?

Maternal Linkage

**Medicaid Eligibility
& Claims (2006-2007)**

**Linked
Newborn**

What Methods Did We Use?

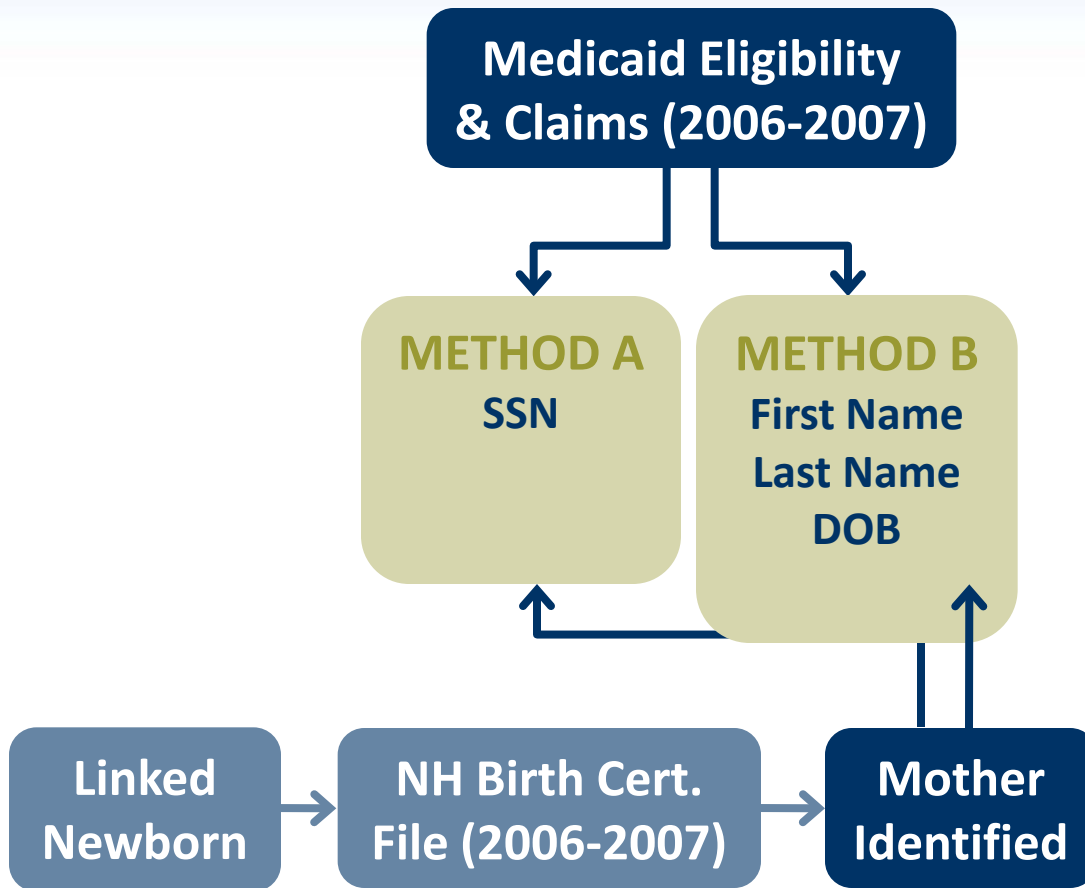
Maternal Linkage

**Medicaid Eligibility
& Claims (2006-2007)**



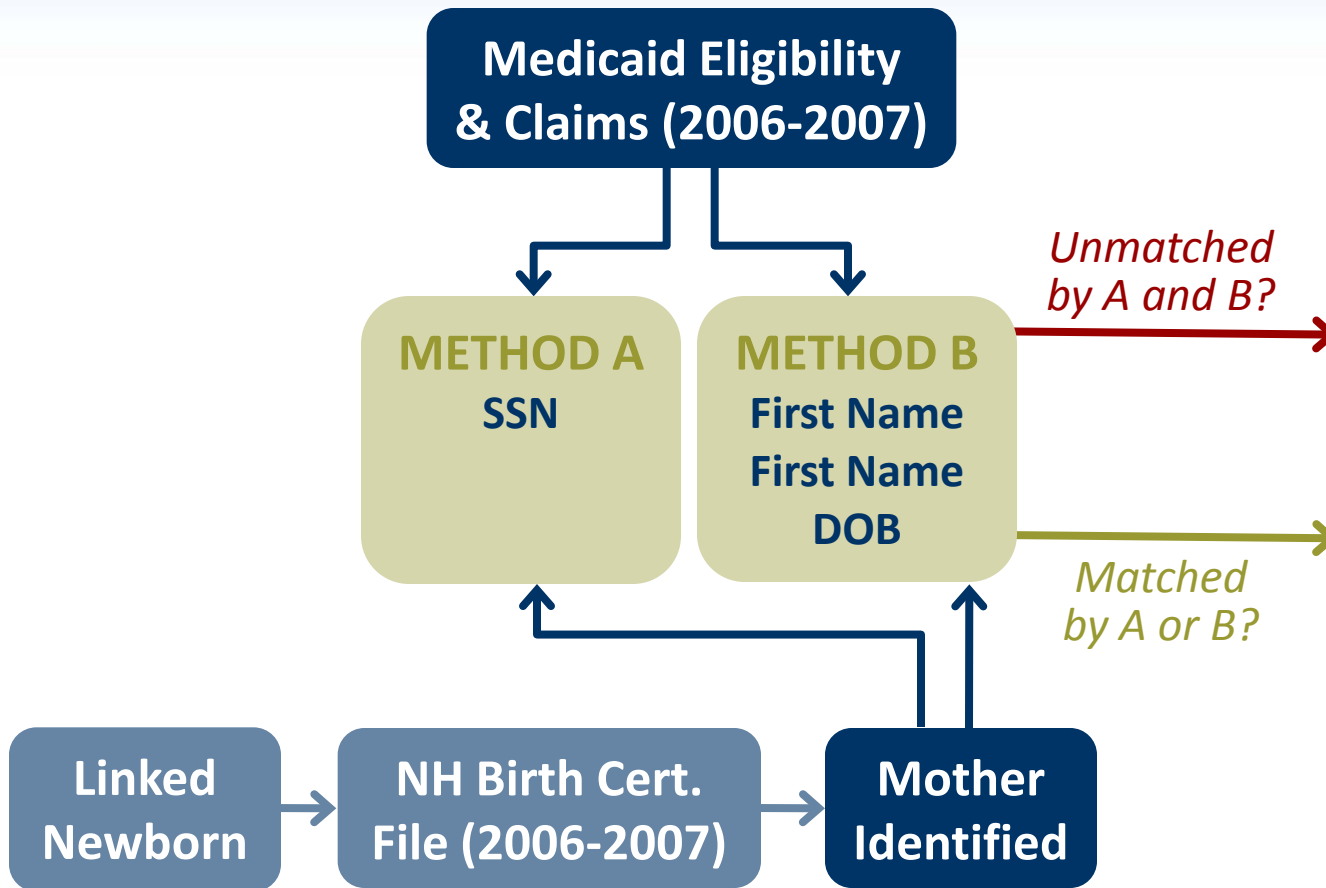
What Methods Did We Use?

Maternal Linkage



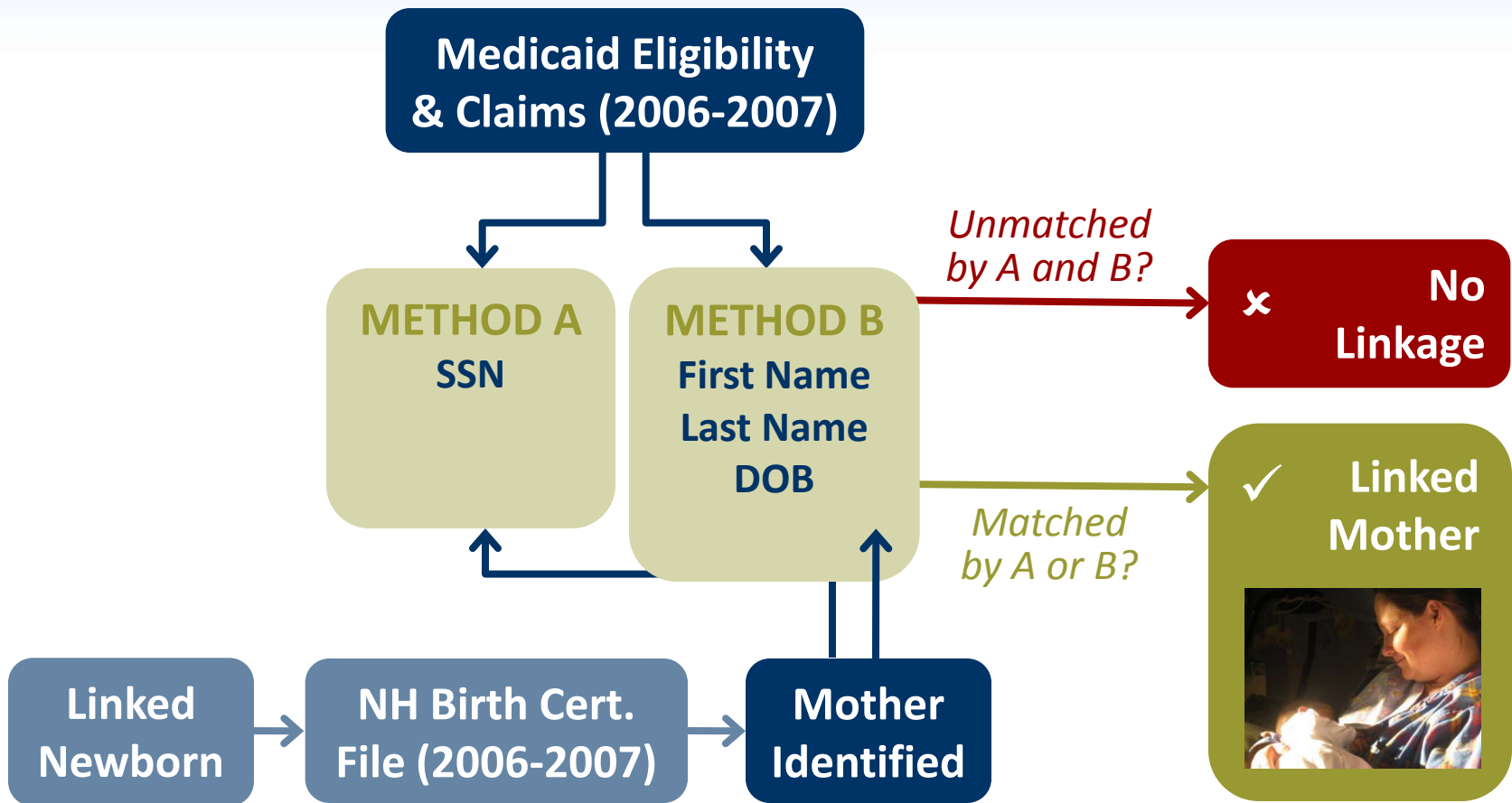
What Methods Did We Use?

Maternal Linkage

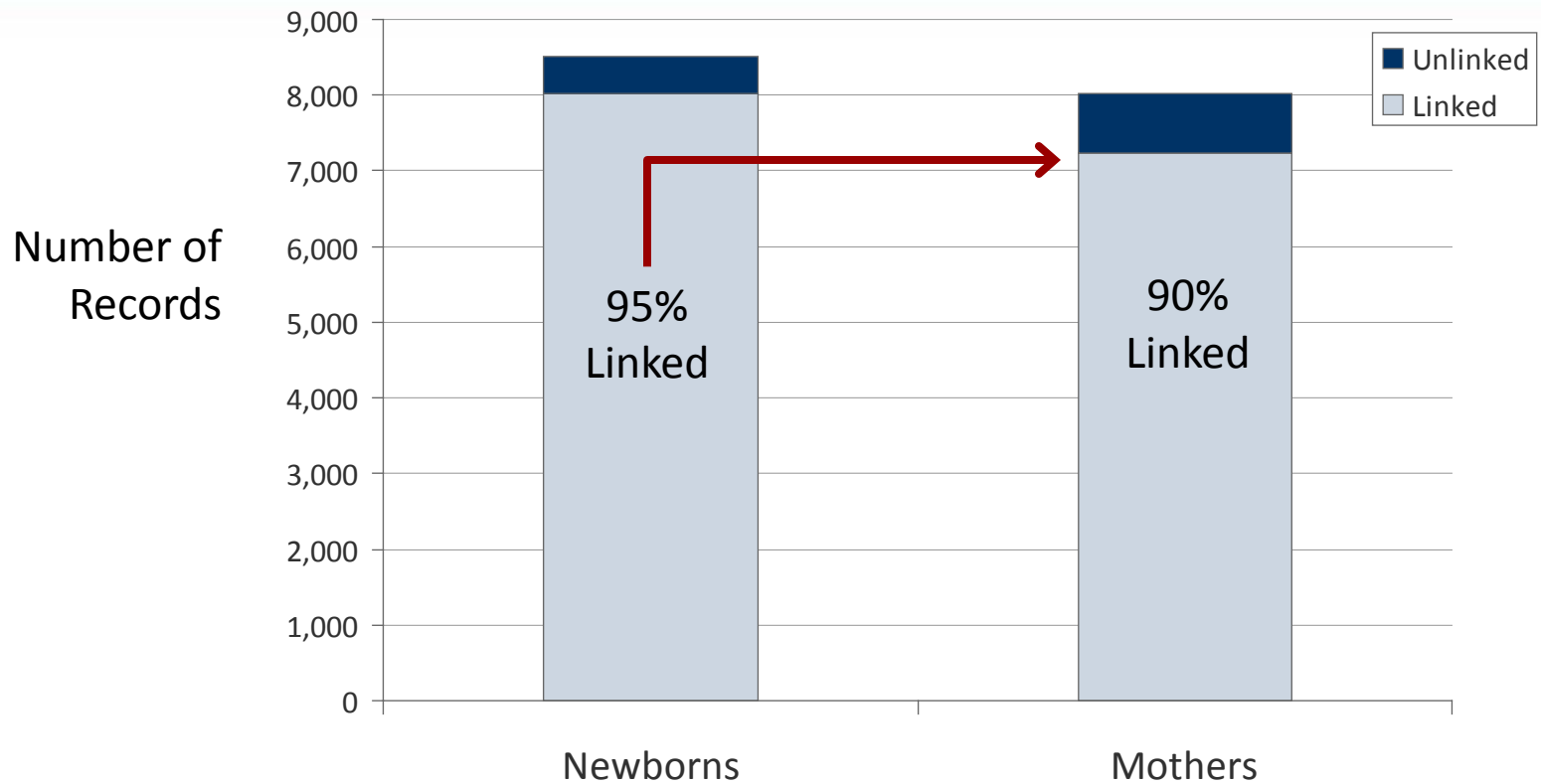


What Methods Did We Use?

Maternal Linkage



How Successful Were We?



What Did We Learn?

Selected Maternal Characteristics

Payer for Delivery	Medicaid	Other
Average age (years)	24.8	30.1
Average prenatal visits	12.3	12.6
% Non-white	11%	7%
% Reporting tobacco use	38%	12%
Infertility treatment	0.4%	3%
Previous preterm birth	2.5%	1.8%

What Did We Learn?

Newborn Characteristics – Singleton Births

Payer for Delivery	Medicaid	Other
Average gestational age (weeks)	38.9	38.9
Premature (<37 weeks)	8.0%	6.6%
Low birth weight	6.1%	4.1%
Low 5-min APGAR	1.6%	1.4%

How Do We Plan to Use Linked Data?

- Studies under way
 - Patterns of delivery of care
 - High-cost newborns
- Answering future questions
 - Access to prenatal care
 - Cost of care
 - Efficacy of interventions
 - Following cohorts of babies into the future



Reliable data. Informed decisions. Strategic advantage.

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