

Session 6A - Data Quality &
Denominator Management
(ID #1138)

Optimizing IIS Registry Data with an Advanced Identity Management Approach

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Government



Agenda

Data and linking challenges

LexisNexis® Risk Solutions
AmplifyID™ Master Person Index

Case study deep dive

Looking forward — digital
credentials





Data and Linking Challenges

More Data = More Room for Error

More data does not always mean more or better insights.

Different data points can contradict each other, or data can become mismatched.



Typos



Similar information



Missing information



Information changes



Data formatting



Identity fraud

Data Management Challenges are Complex and Multifaceted





LexisNexis® Risk Solutions AmplifyID™ Master Person Index

How the AmplifyID™ Master Person Index Works

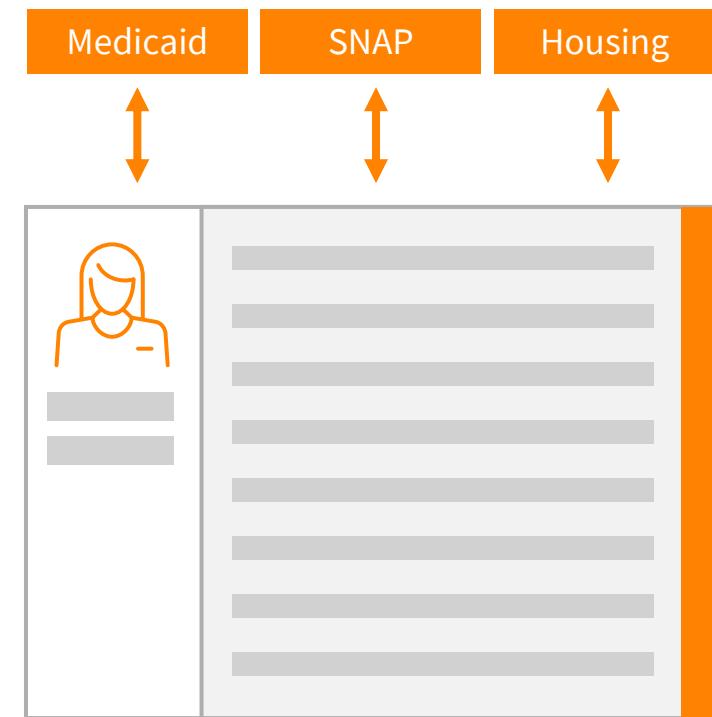
1 Agency Data Sources

Medicaid	SNAP	Housing
 Medicaid ID Name DOB Address	 SNAP ID Name DOB Address	 Housing ID Name Address Phone
 Housing ID Name DOB Address		

2 Referential Data and Linking



3 Complete Picture



How the AmplifyID™ Master Person Index Works

- Creates an agency-specific, HIPAA-compliant unique identifier
- Referential data and machine learning virtually eliminates duplicates and false or missed matches
- Allows for program manager remediation in the case of over- or under-linking
- Maintains unique identifier even when public records cannot be leveraged, or the person is a minor
- Assigns a numerical confidence level for every match, expressed as a percentage
- Supports consortium model

Sufficiently Explores all Credible Matches

Record 1: Jane Robichaux, Atlanta



MATCH | AmplifyID

“Robichaux” is unique enough in Atlanta and “Jane” and Jan similar enough. Records matched.



Record 2: Jan Robichaux, Atlanta



NO MATCH | RULES-BASED

“Jane” and “Jan” are not a match.

Effectively Minimizes False Matches

Record 1: John Smith, Atlanta



MATCH | AmplifyID

Too many “John Smiths” in Atlanta to confidently match. Additional information required.



Record 2: John Smith, Atlanta



NO MATCH | RULES-BASED

The two “John Smiths” are a match.

Solve the Toughest Linking Challenges and Complexities



Seniors & Juniors

John Smith Jr. (orange outline) John Smith Sr. (grey outline)

Relatives

John Smith cousin (grey outline)

Twins

Ronald Smith (grey outline) Donald Smith (grey outline)

Typos & Nicknames

J. Robert Smiht Jr. (orange outline) Jhon R Smith (orange outline) Junior Smith (orange outline) Jack Smith Jr. (orange outline)

Similar Addresses & Names

Jack Smith Jr. Apartment A1 (grey outline) John Smith Jr. Apartment B5 (orange outline)

Cultural Identifiers

José Garcia Rodriguez (grey outline) José Garcia (grey outline)

Homes Sold To Similar Names

Jack and Jane Smith 1245 Apple St. (orange outline) John and Jane Smith 1245 Apple St. (grey outline)

Shared Data

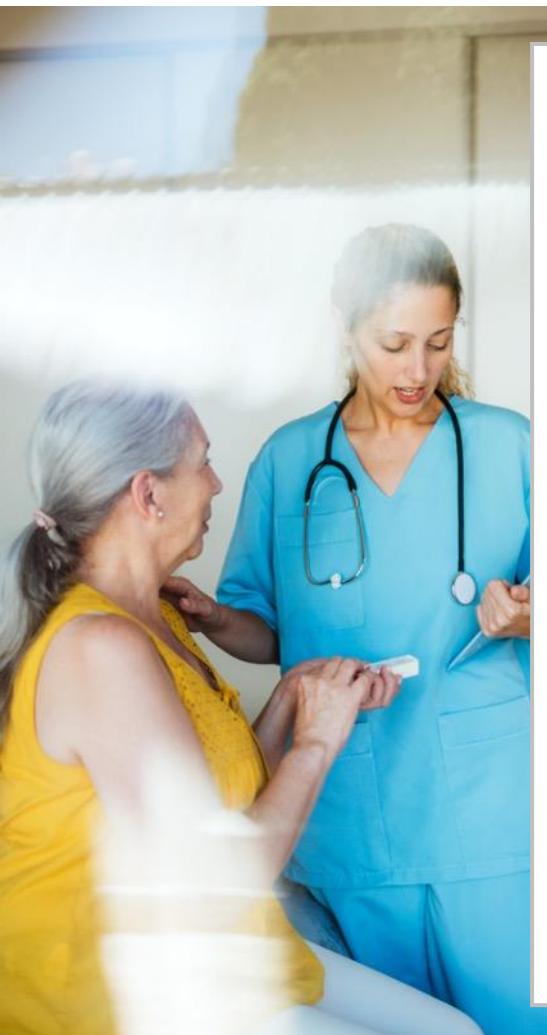
John Smith Jr. (123)-456-7890 (orange outline) Jane Smith (123)-456-7890 (grey outline)

Profile Summary

NAME: John Smith Jr. | DOB: 01/02/1982 | PHONE: (123) 456-7891

ADDRESS: 1245 Apple St, Atlanta, GA | EMAIL: johns82@email.com

Why AmplifyID™ Master Person Index?



Designed for government agencies

99.99% linking precision

Ease of integration

Inclusive of potentially overlooked populations

Enhanced data stewardship and data governance

Continuously updated data on beneficiaries for public agencies.

AmplifyID Master Person Index uses LexID® technology built on statistical probability and machine learning.

Customized, scalable and flexible options available across federal and state HHS and Government Services agencies, including IIS.

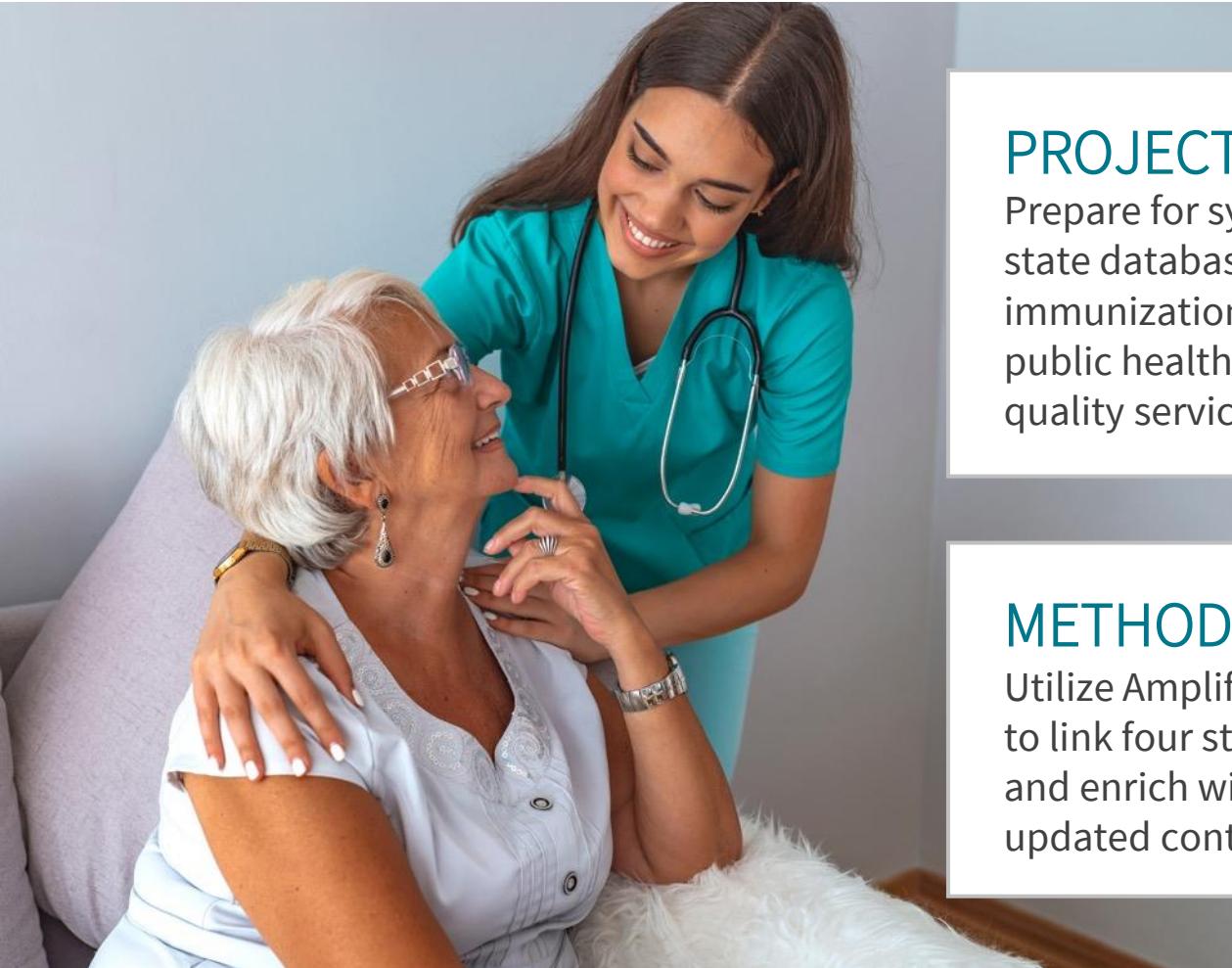
Other solutions leverage clinical data only or financial (credit) data. Both risk missing vulnerable populations that aren't accessing care. AmplifyID Master Person Index references thousands of data sources beyond credit.

Maintain HIPAA compliance and keep control of data matching resolution with program manager override and remediation for your owned data.



Case Study Deep Dive

Case Study Overview



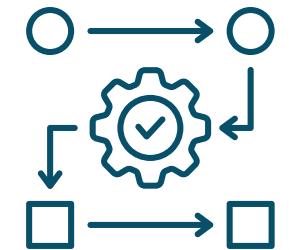
PROJECT GOAL

Prepare for system modernization by linking four separate state databases into a singular understanding of state immunization registry information which will enhance public health infrastructure and ensure the delivery of quality services across their state.



METHODOLOGY

Utilize AmplifyID™ Master Person Index and Batch services to link four state datasets, identify the unique individuals, and enrich with key insights on deceased, out-of-state and updated contact information.



Summary Results

Records processed by AmplifyID Master Person Index	13,188,308 (from four sources)
Distinct AmplifyID Master Person Index IDs	9,533,947
Duplication rate	31.2% across datasets
Out-of-state identities	1,000,000+
High-confidence deceased matches	490,000+
Better addresses for	50%+ of adults
More current addresses for	60%+ of adults
Phones	10,500,000+
Emails	8,900,000+



Finding: Uniquely Identified Individuals



Despite approximately 77,000 records with Date of Birth (DOB) data issues (such as miskeyed dates, inverted dates, missing dates, etc.), AmplifyID Master Person Index **was still able to uniquely identify individuals across the state datasets.**



7,101,652

Unique adult population



2,355,354

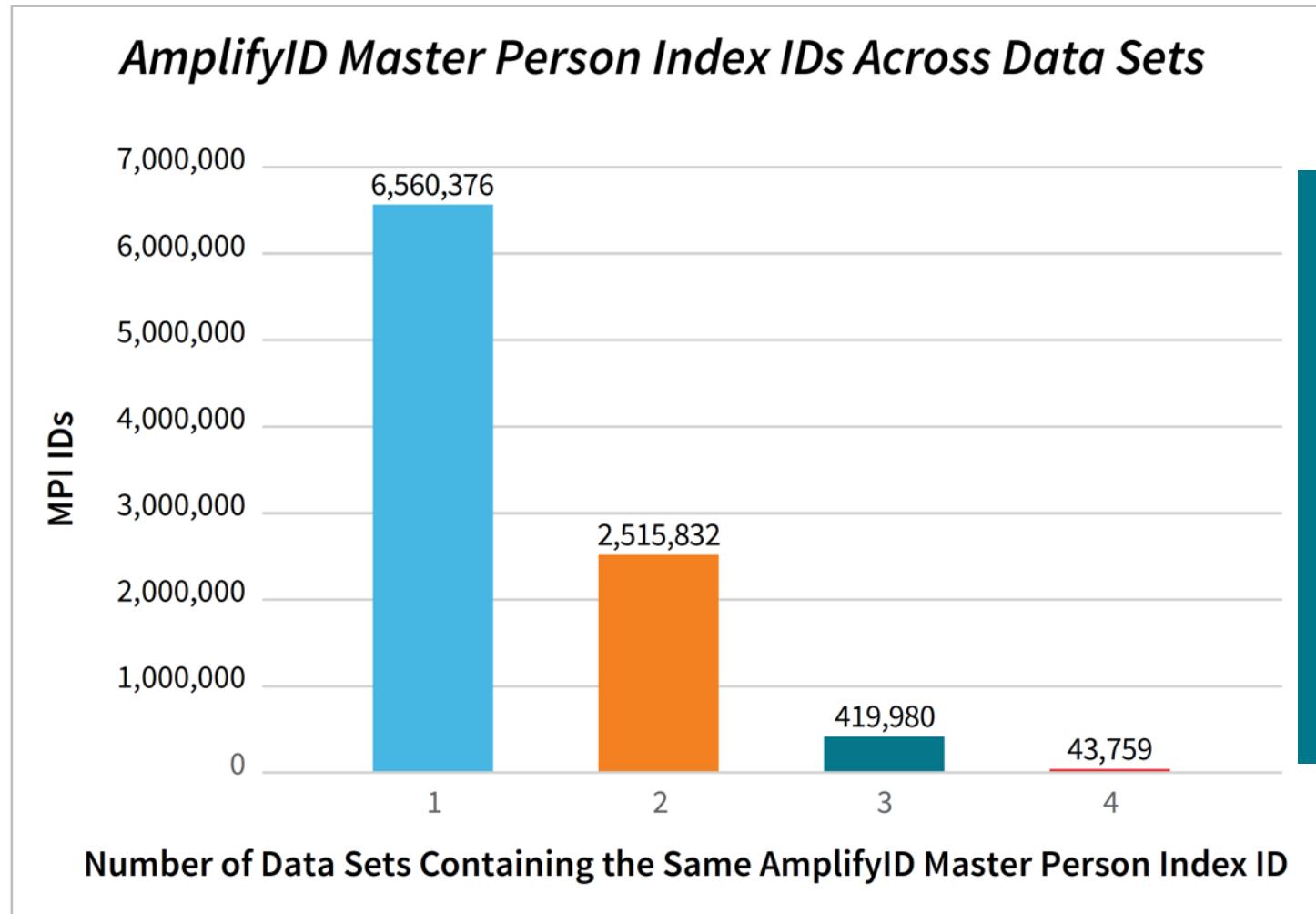
Unique minor population



76,941

Unique individuals with DOB issues that were still able to be identified and linked

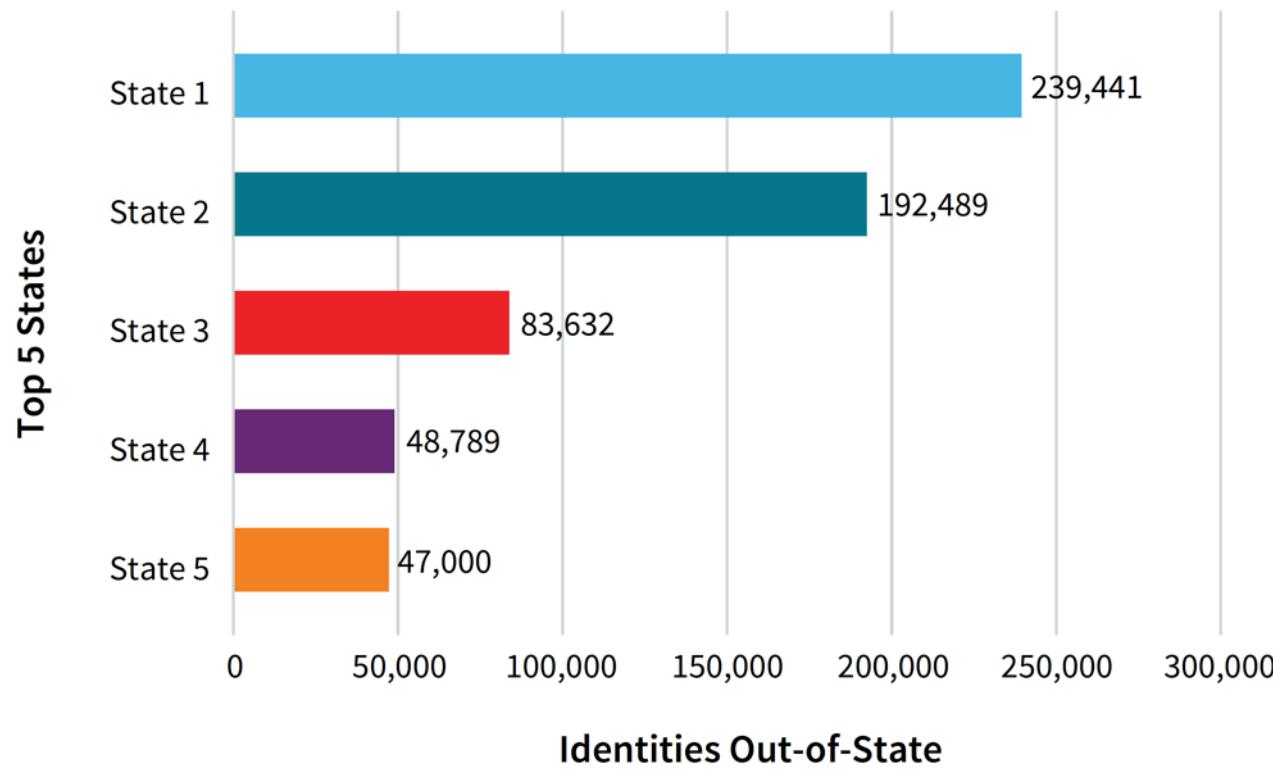
Finding: 31.2% Deduplication Rate



AmplifyID Master Person
Index process found
2,973,571
individuals in
multiple datasets

Finding: Over 1 Million Out-of-State Identities

Top 5 States Where Identities were Found to be Out-of-State



1,054,411 Out-of-state identities



986,326 Adult identities

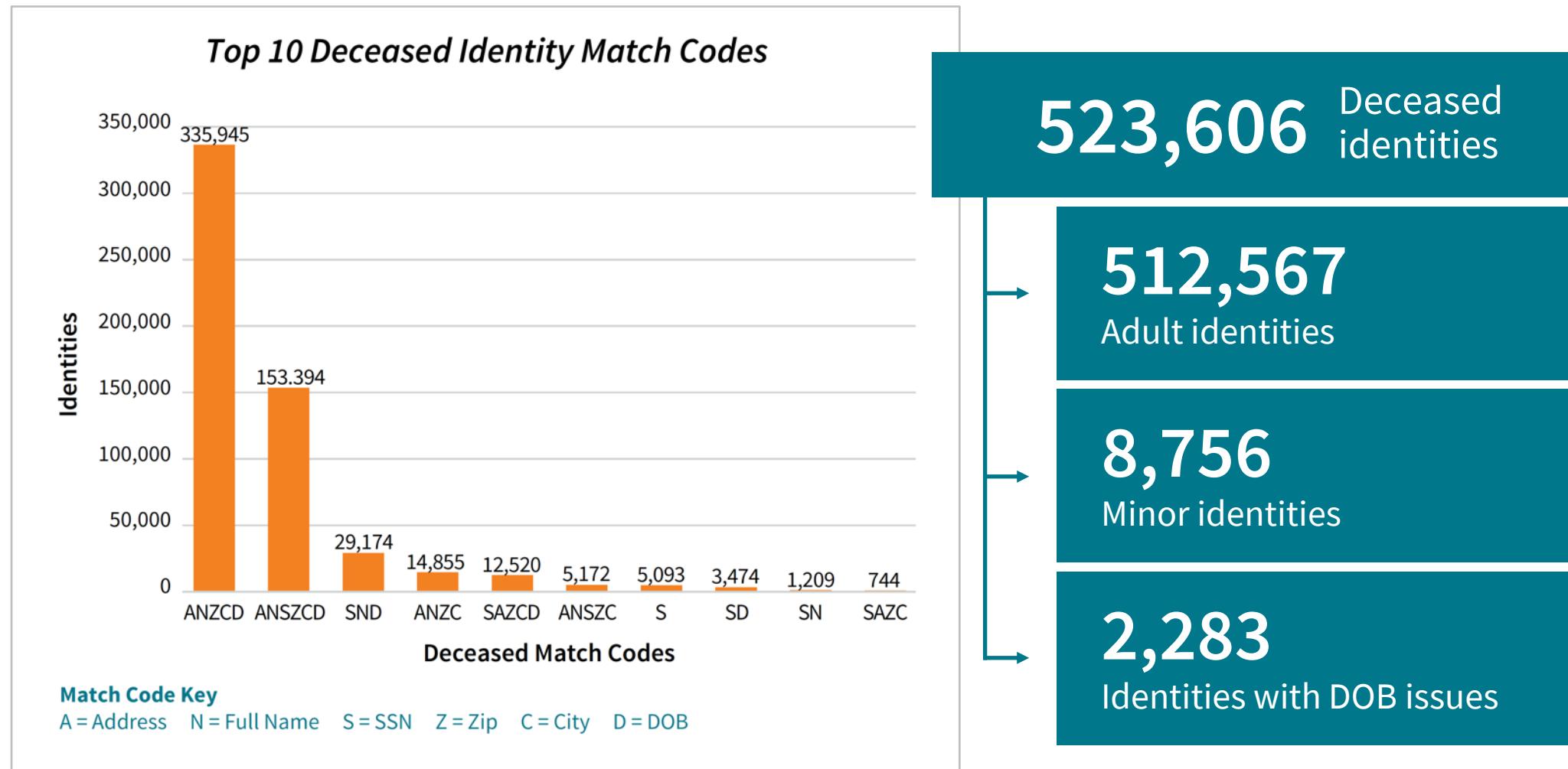


65,898 Minor identities

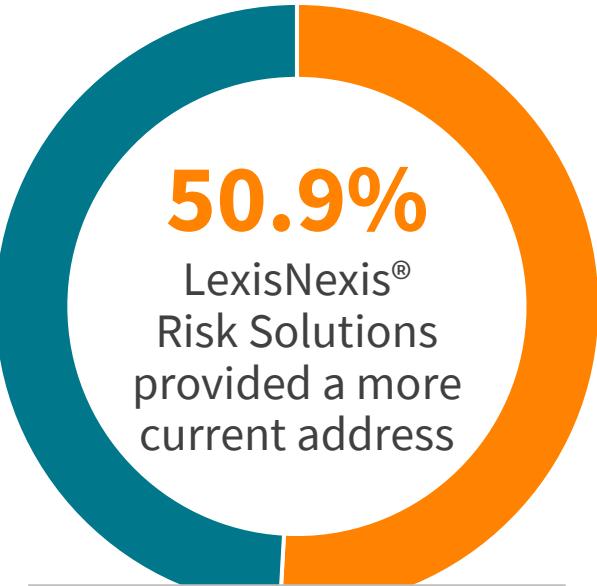


2,187 Identities with DOB issues

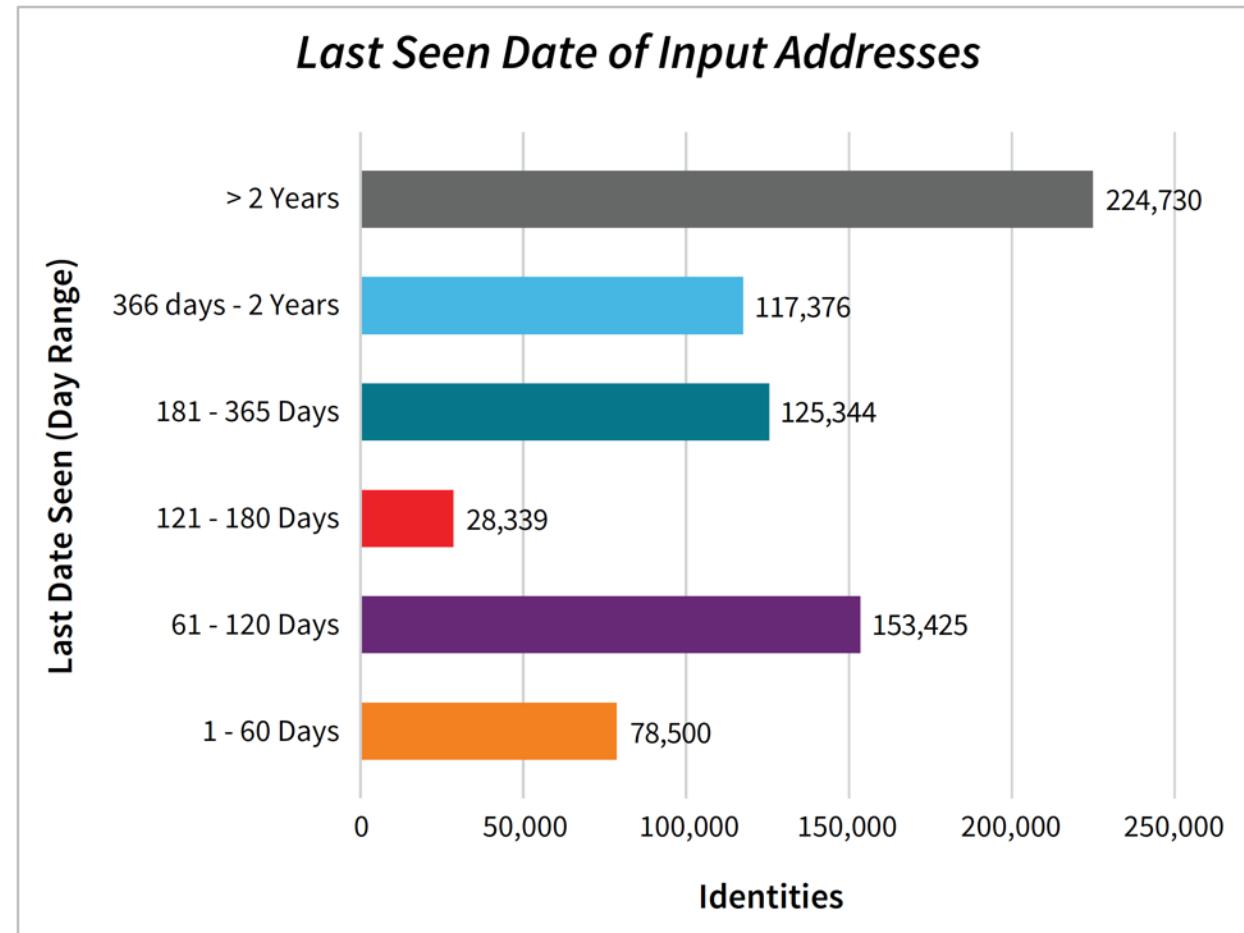
Finding: ~495,000 High-Confidence Deceased Matches



Finding: Better and More Current Address



5,907,913
Identities analyzed
for best address



727,714
Identities updated
with a better address

30.9%
Input addresses
not seen in
LexisNexis
Risk Solutions
data in last 2 years

Finding: Additional Contact Elements



10,555,347

Total phones found



8,900,277

Total emails found



What Can You Accomplish?

With AmplifyID
Master Person
Index,
Departments of
Health will use
more timely,
precise and
comprehensive
data to:



- **Eliminate data silos** with an agency-specific, HIPAA-compliant person-centric, unique identifier across programs
- **Reduce duplication** by ensuring each identity has their own identifier; MPI can help manage the identification and eliminate duplicates in data systems
- **Improve accuracy** and ensure data is consistently linked to the right individual, taking their history and real-world history into account
- **Enhance security** easier to track and monitor access to government programs
- **Reduce friction** for individuals interacting with your agency
- **Decrease administrative burden** for employees



Looking Forward – Digital Credentials

Rapidly Evolving Credentials



1990



Birth certificates
are the foundation
of identity

Together they are partner credentials

- Both start at birth
- Both have evolved from paper records to electronic registries



**Immunization
records** are the
foundation of
health history

2025

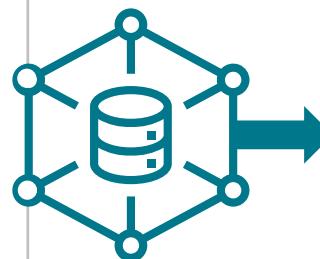


Modernizing Immunization Records for the Digital Future

SYSTEM MODERNIZATION

Bringing legacy systems with various levels of age and technology into the modern era

- Infrastructure improvements
- Expanded data sharing
- Consistent data definitions
- Real-time FHIR APIs
- Improved timeliness and accuracy



DIGITAL CREDENTIALS

Electronic, consumer-managed, proofs-of-identity authorized by an issuer and can be trusted by verifiers or other relying parties

- Consumer authorized
- Digital and wallet ready
- Authoritatively obtained and trustable
- APIs for B2B, G2G and G2B transactions
- Cryptographically verified and tamper evident

March AIRA Discovery Session: The Road to Expanding Consumer Access to Digital Credentials and the Implications for the IIS Community, Presented with Jeff Duncan, state registrar and director, division of Vital Records and Statistics, MI DHHS



LexisNexis®
RISK SOLUTIONS

Government

About LexisNexis Risk Solutions

LexisNexis® Risk Solutions harnesses the power of data and advanced analytics to provide insights that help businesses and governmental entities reduce risk and improve decisions to benefit people around the globe. We provide data and technology solutions for a wide range of industries including insurance, financial services, healthcare and government. Headquartered in metro Atlanta, Georgia, we have offices throughout the world and are part of RELX (LSE: REL/NYSE: RELX), a global provider of information-based analytics and decision tools for professional and business customers. For more information, please visit www.risk. lexisnexis.com and www.relx.com.