

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



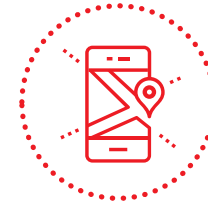
Similar information



Missing information



Information changes



Data formatting



Identity fraud

Data Management Challenges are Complex and Multifaceted









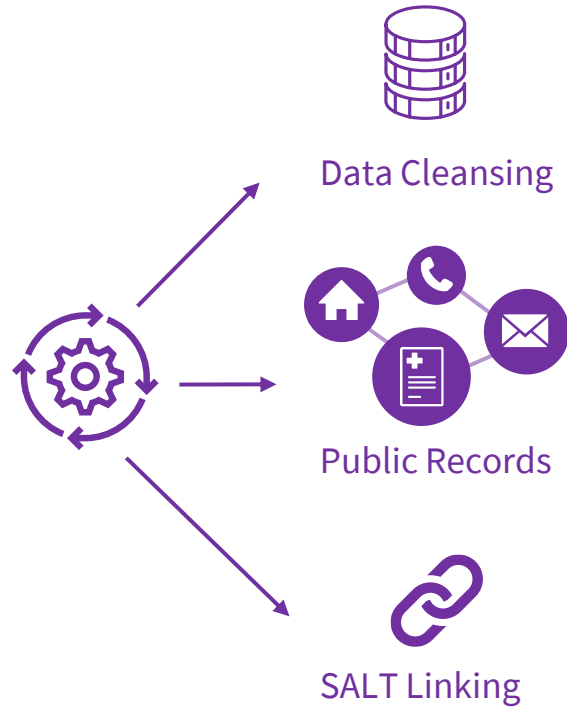
LexisNexis® Risk Solutions AmplifyID™ Master Person Index

How the AmplifyID™ Master Person Index Works

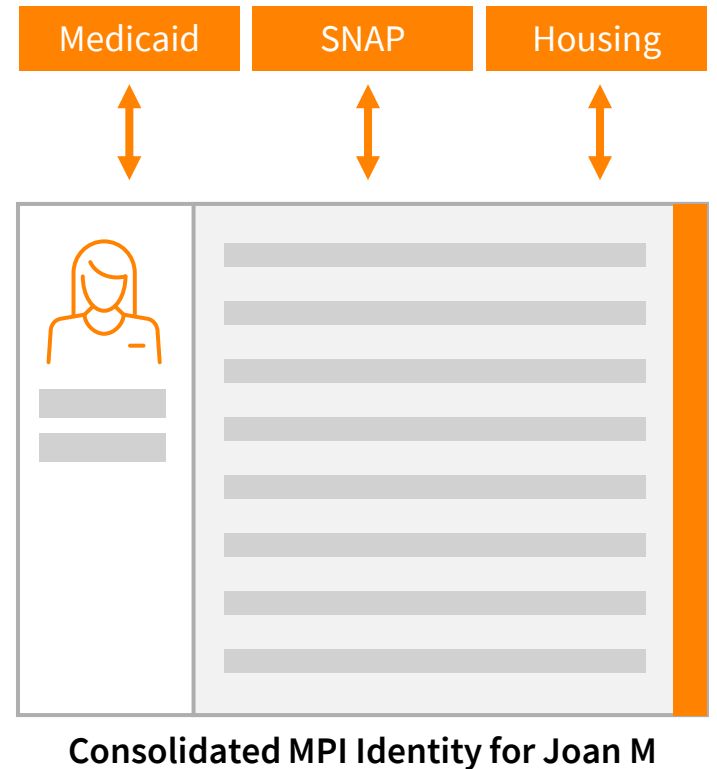
1 Agency Data Sources

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



Record 2: Jan Robichaux, Atlanta



MATCH | AmplifyID

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



NO MATCH | RULES-BASED

“Jane” and “Jan” are not a match.

Effectively Minimizes False Matches

Record 1: John Smith, Atlanta



Record 2: John Smith, Atlanta



MATCH | AmplifyID

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



NO MATCH | RULES-BASED

The two “John Smiths” are a match.

Solve the Toughest Linking Challenges and Complexities



Seniors & Juniors

John Smith Jr.

John Smith Sr.

Relatives

John Smith cousin

Twins

Ronald Smith

Donald Smith

Typos & Nicknames

J. Robert Smiht Jr.

Jhon R Smith

Junior Smith

Jack Smith Jr.

Similar Addresses & Names

Jack Smith Jr.
Apartment A1

John Smith Jr.
Apartment B5

Cultural Identifiers

José Garcia Rodriguez

José Garcia

Homes Sold To Similar Names

Jack and Jane Smith
1245 Apple St.

John and Jane Smith
1245 Apple St.

Shared Data

John Smith Jr.
(123)-456-7890

Jane Smith
(123)-456-7890

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.

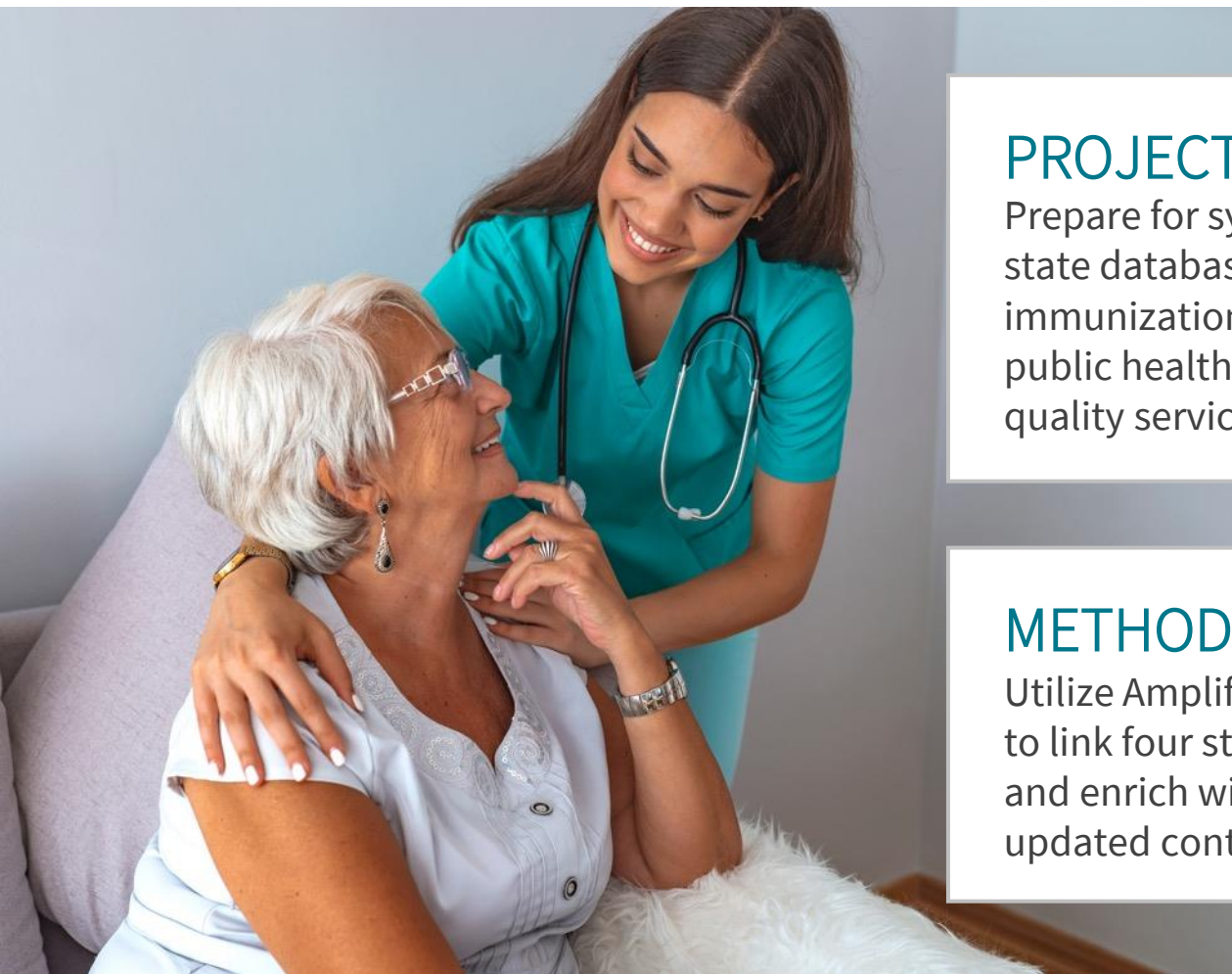
Other solutions leverage clinical data only or financial (credit) data. Both risk missing vulnerable populations that aren't accessing care. AmplifyID Master Person Index references thousands of data sources beyond credit.

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



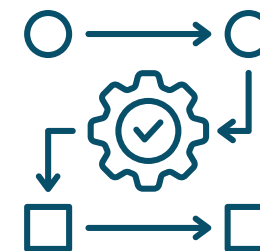
PROJECT GOAL

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.



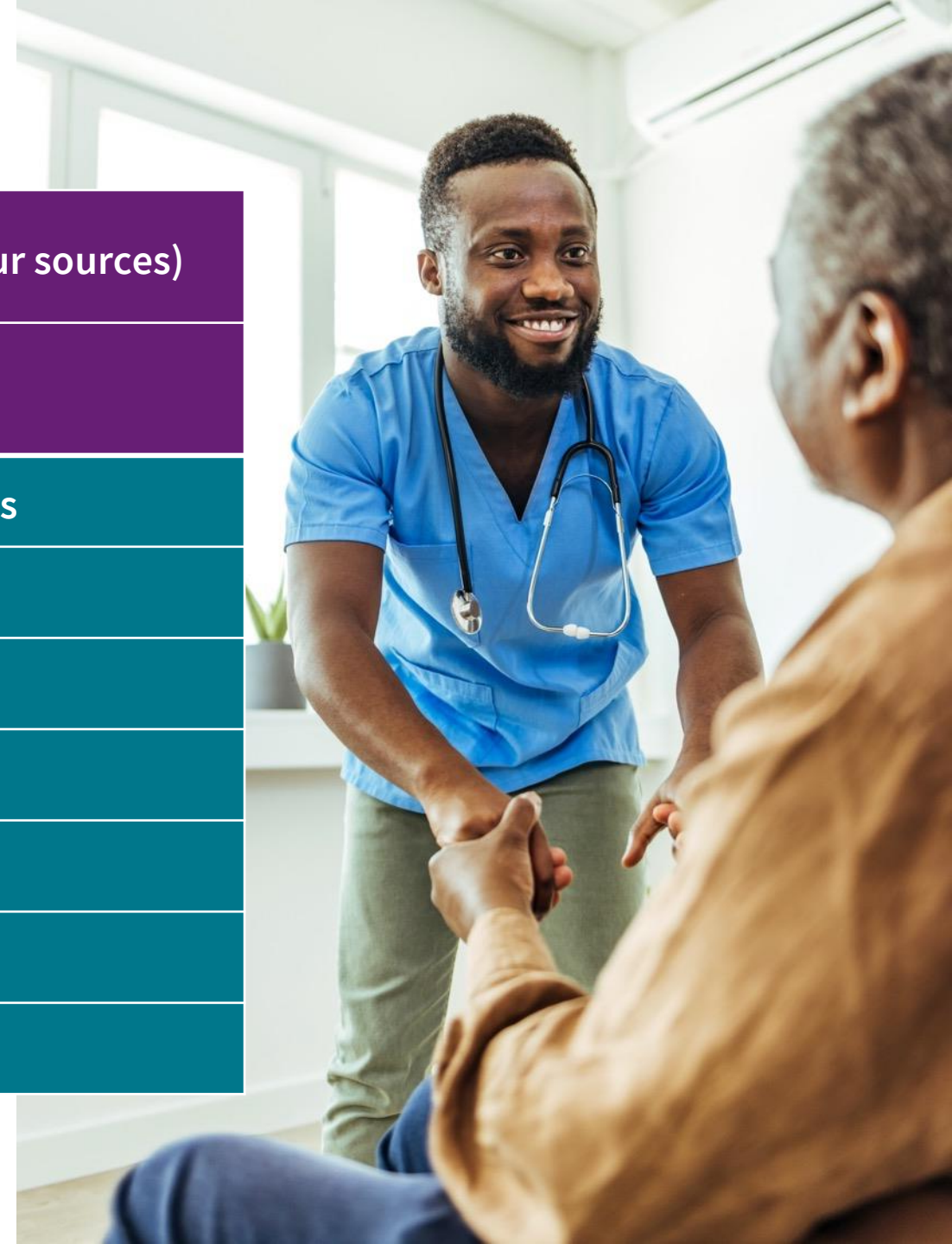
METHODOLOGY

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

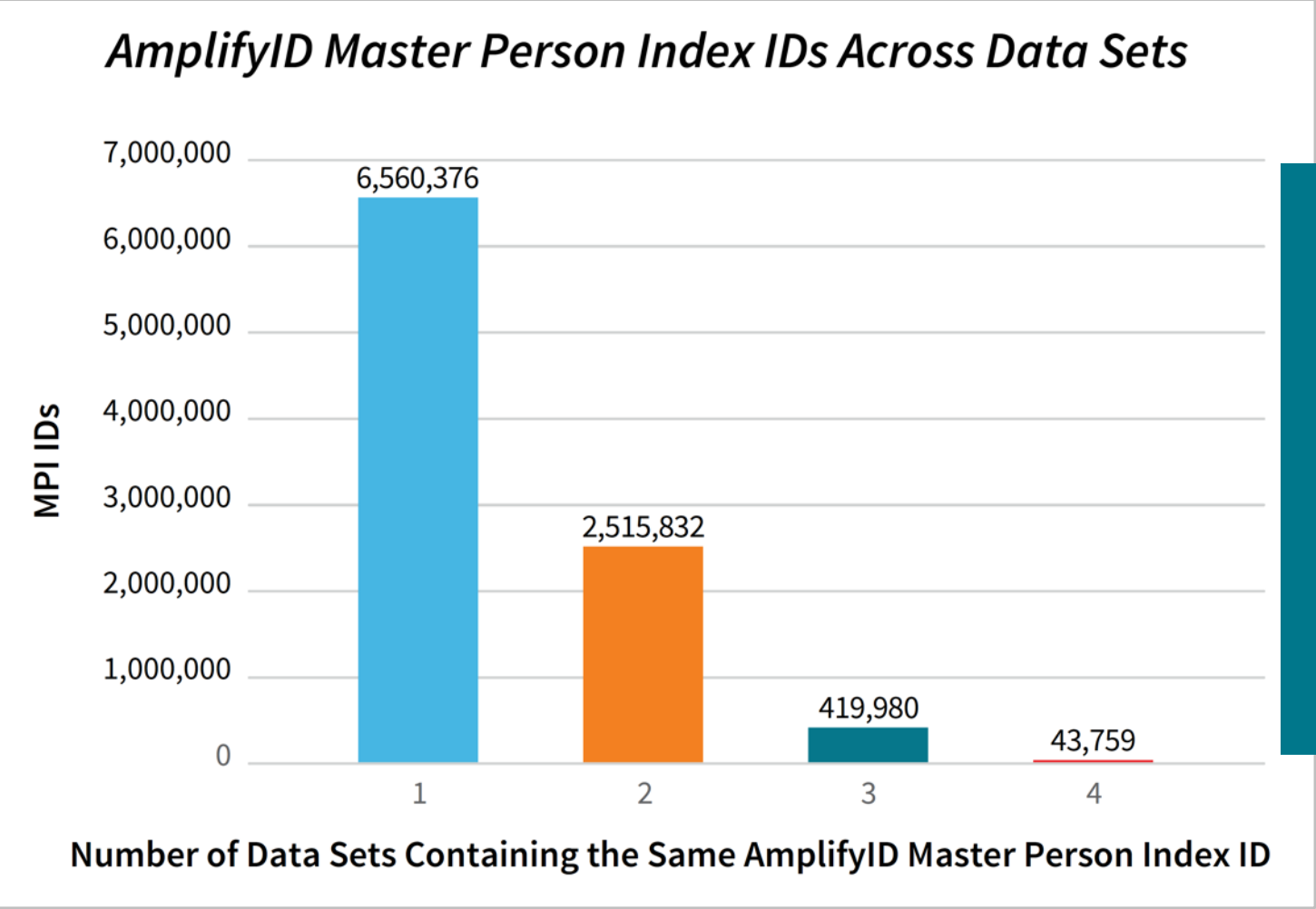
Unique minor
population



76,941

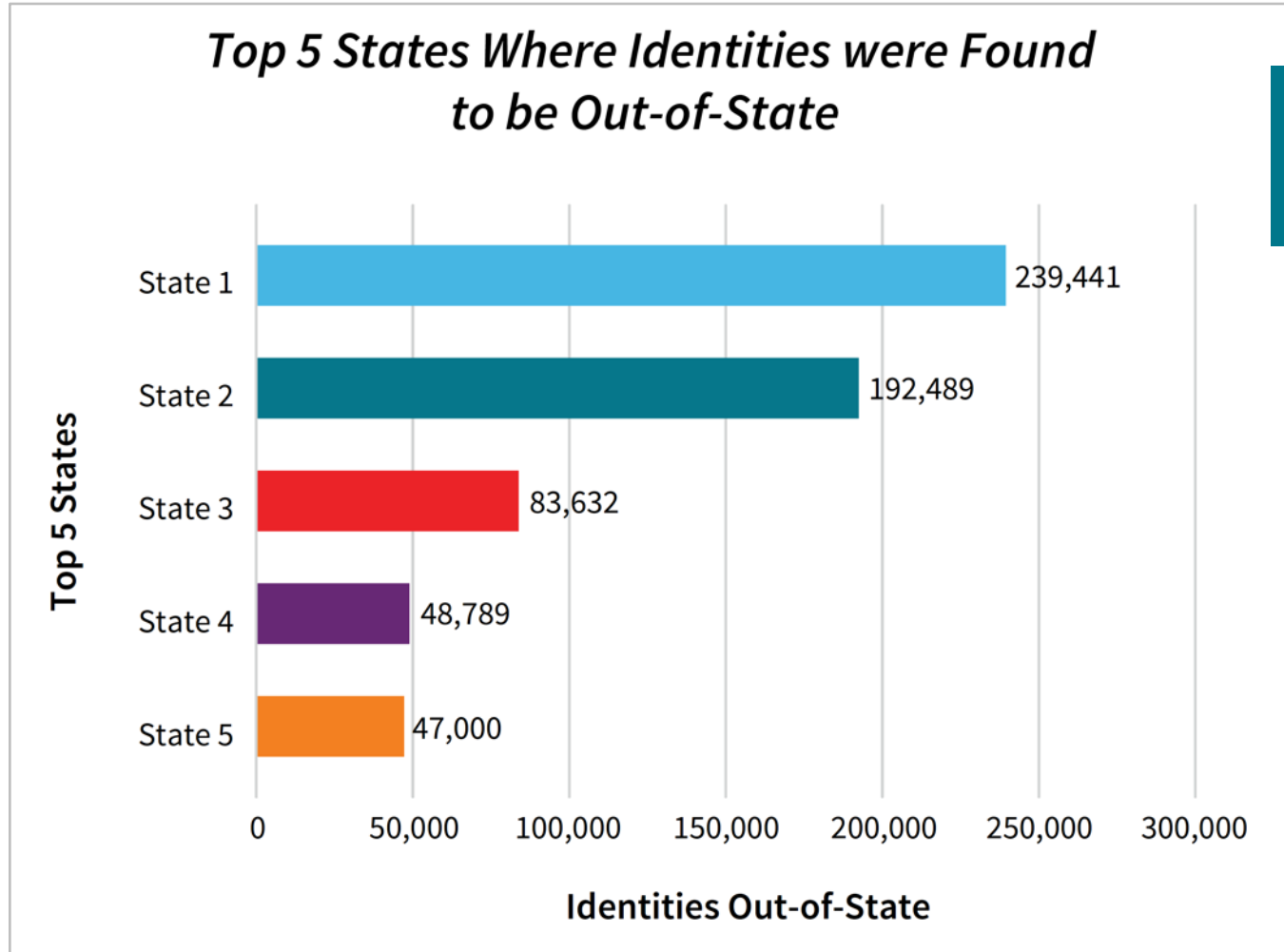
Unique individuals with
DOB issues that were still able
to be identified and linked

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



1,054,411 Out-of-state identities



986,326
Adult identities

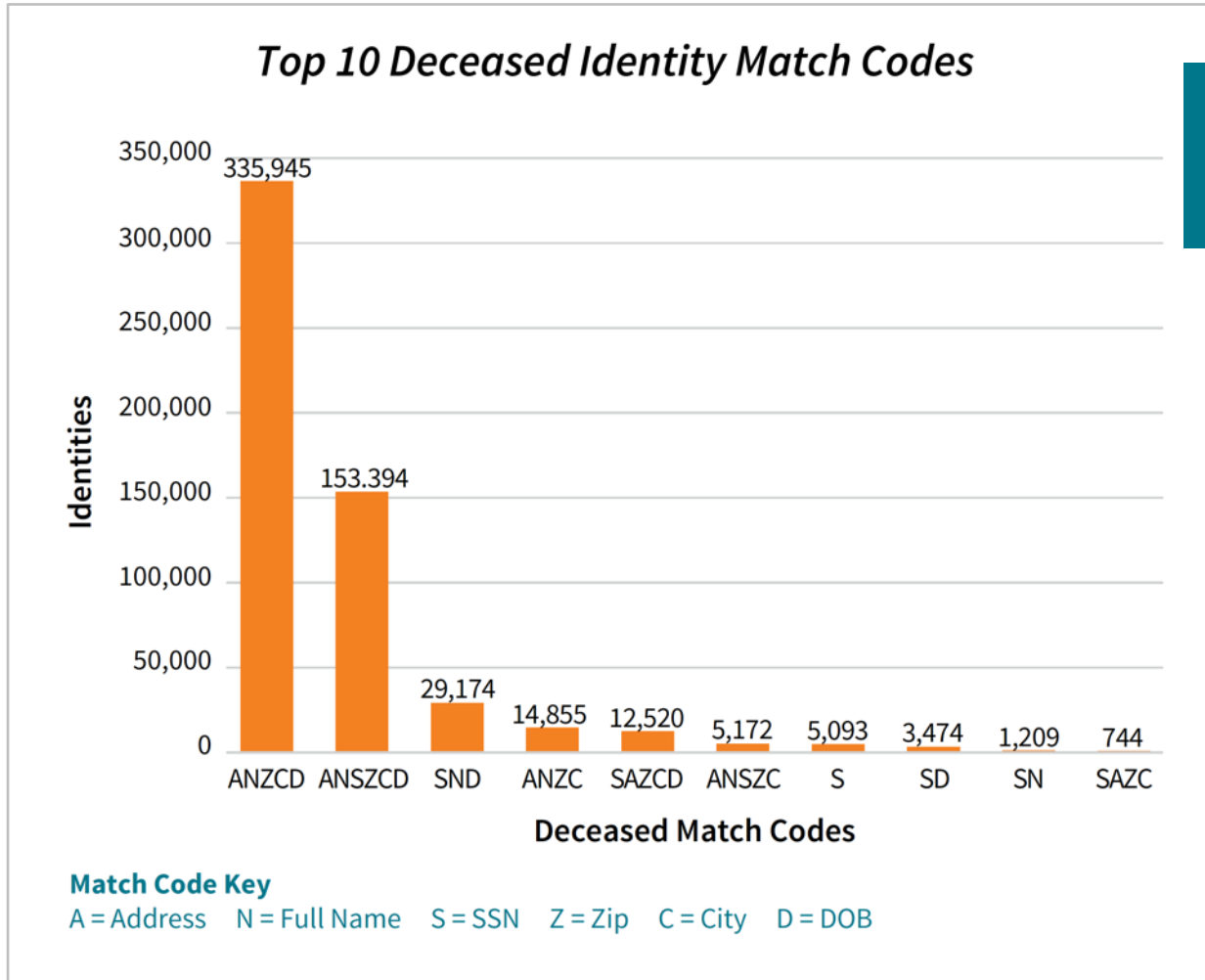


65,898
Minor identities



2,187
Identities with DOB issues

Finding: ~495,000 High-Confidence Deceased Matches



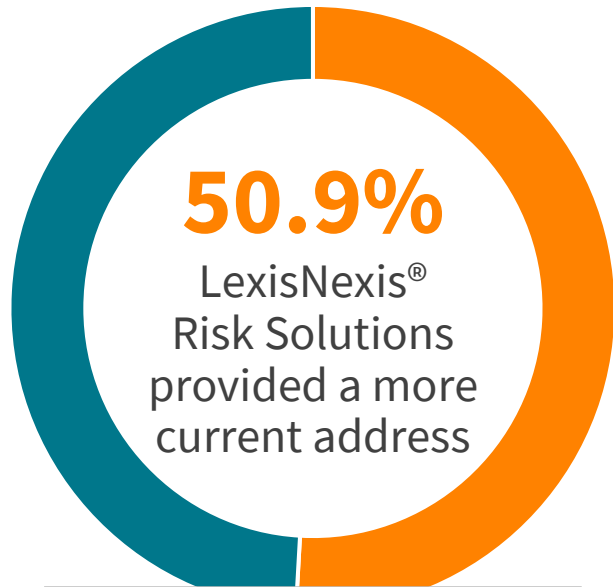
523,606 Deceased identities

512,567
Adult identities

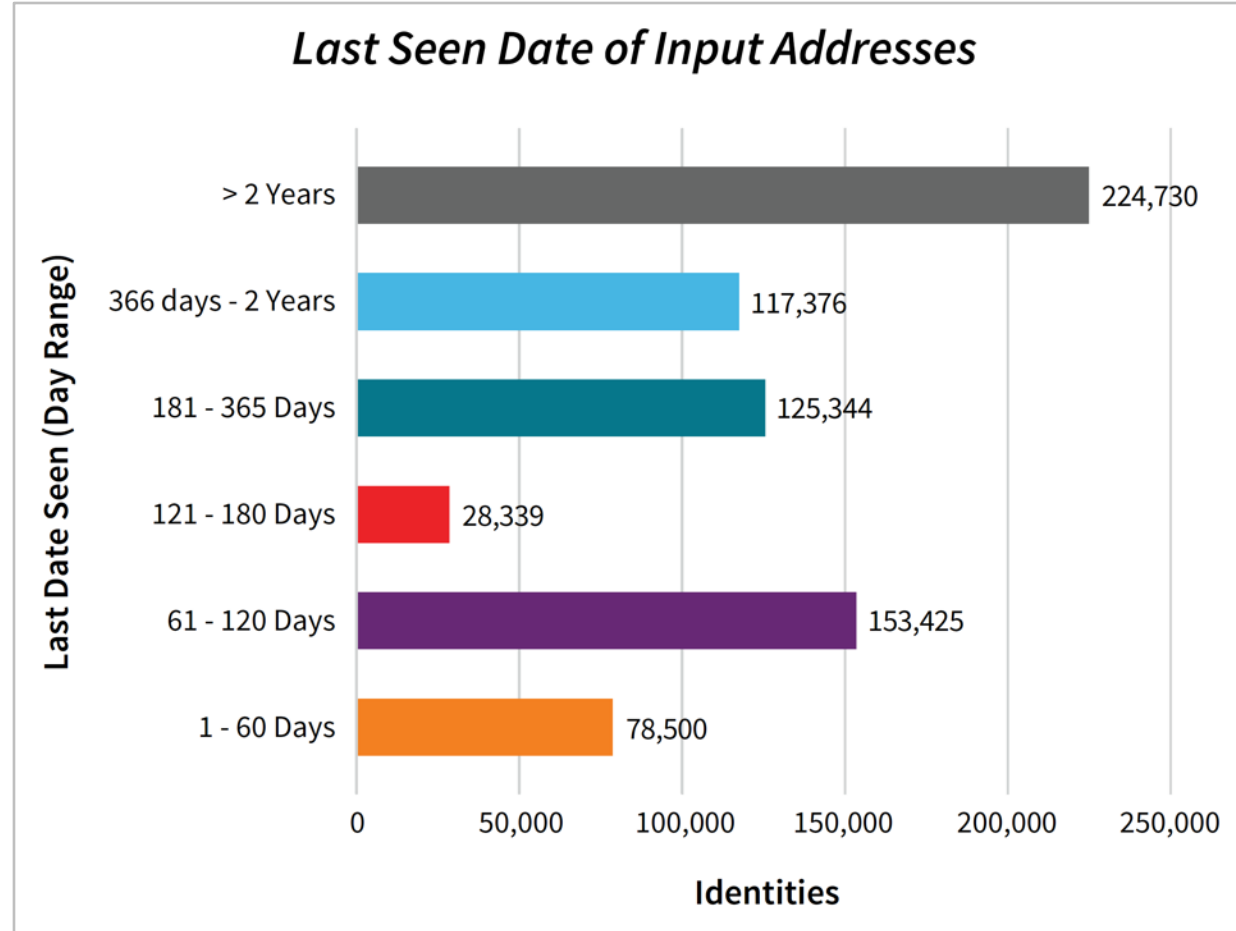
8,756
Minor identities

2,283
Identities with DOB issues

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:

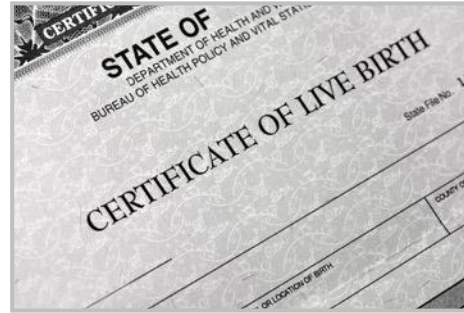


- **Eliminate data silos** with an agency-specific, HIPAA-compliant person-centric, unique identifier across programs
- **Reduce duplication** by ensuring each identity has their own identifier; MPI can help manage the identification and eliminate duplicates in data systems
- **Improve accuracy** and 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



Birth certificates
are the foundation
of identity



1990

Together they are partner credentials

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

2025



Immunization records
are the foundation of
health history

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



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.