

eHEALTH INITIATIVE





Key Survey Findings from the State of Patient Matching in America

February 13, 2020

2:00 – 3:00 p.m.

Today's Speakers



Vince Vitali
*Vice President of Strategy,
NextGate*



Dr. Shaun Grannis
*Vice President for Data
and Analytics at the
Regenstrief Institute*

Agenda

- **Welcome & Introductions**

- Jennifer Covich Bordenick, CEO, *eHealth Initiative*

- **Presentation:**

- Jennifer Covich Bordenick, CEO, *eHealth Initiative*

- **Shaun Grannis, MD, MS, FAAFP, FACMI**, Vice President for Data and Analytics at the Regenstrief Institute, Professor of Family Medicine, and holds the Sam Regenstrief Chair for Biomedical Informatics at the Indiana University School of Medicine

- **Vince Vitali, CHCIO, FHIMSS, FCHIME**, VP of Strategy, NextGate

- **Q&A**



Housekeeping

- **All participants are muted**
- Use the **Q&A** box to ask a question related to the presentation
- Use the chat box is for *technical difficulties* and other questions / comments



Presentation slides are in the eHI resource Center
<https://www.ehidc.org/resources>



eHI's Mission

To serve as the industry leader in **convening executives** and multi-stakeholder groups to **identify best practices** that **transform healthcare** through the use of **technology and innovation**



eHI Leadership Council



Booz | Allen | Hamilton



CRISP



EHNAC



EPSTEIN
BECKER
GREEN



GUNDERSEN
HEALTH SYSTEM.



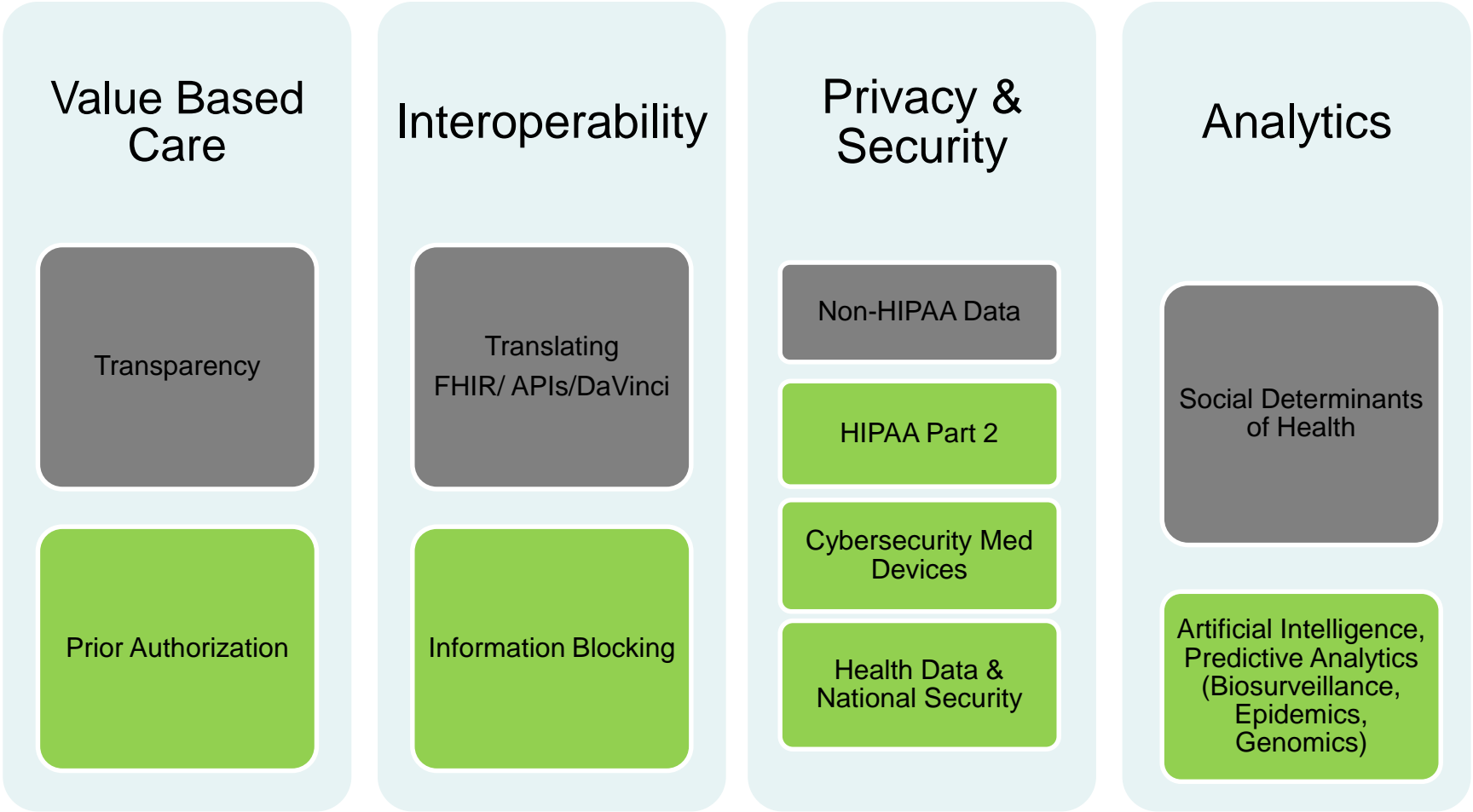
Hogan Lovells



Our Members



Current Areas of Focus





Thousands of Resources

- Best Practices
- Reports
- Surveys
- Policy Briefings
- Comment Letters

Analytics
Examine how healthcare data can provide insight across claims, cost, clinical, and more.

A close-up of a hand holding a glowing blue digital interface with binary code and data points.

Consumers
Explore how individuals and families experience healthcare.

A smiling woman and child looking at a tablet together.

Interoperability
Discover how healthcare technology works together.

A 3D rendering of yellow and white geometric shapes representing interconnected data or systems.

Medication Adherence
Understand barriers and solutions for medication use.

A pair of hands holding several white and blue pills.

Policy
Stay up to date with what's happening with healthcare policy and how it affects stakeholders.

A view of the United States Capitol building under a cloudy sky.

Precision Medicine
Examine how customized medical care is evolving.

A hand holding a glowing blue DNA double helix structure.

Privacy & Cybersecurity
Explore the ways in which patient and health system data is being protected.

A hand holding a smartphone with a glowing green screen, set against a background of blue digital data.

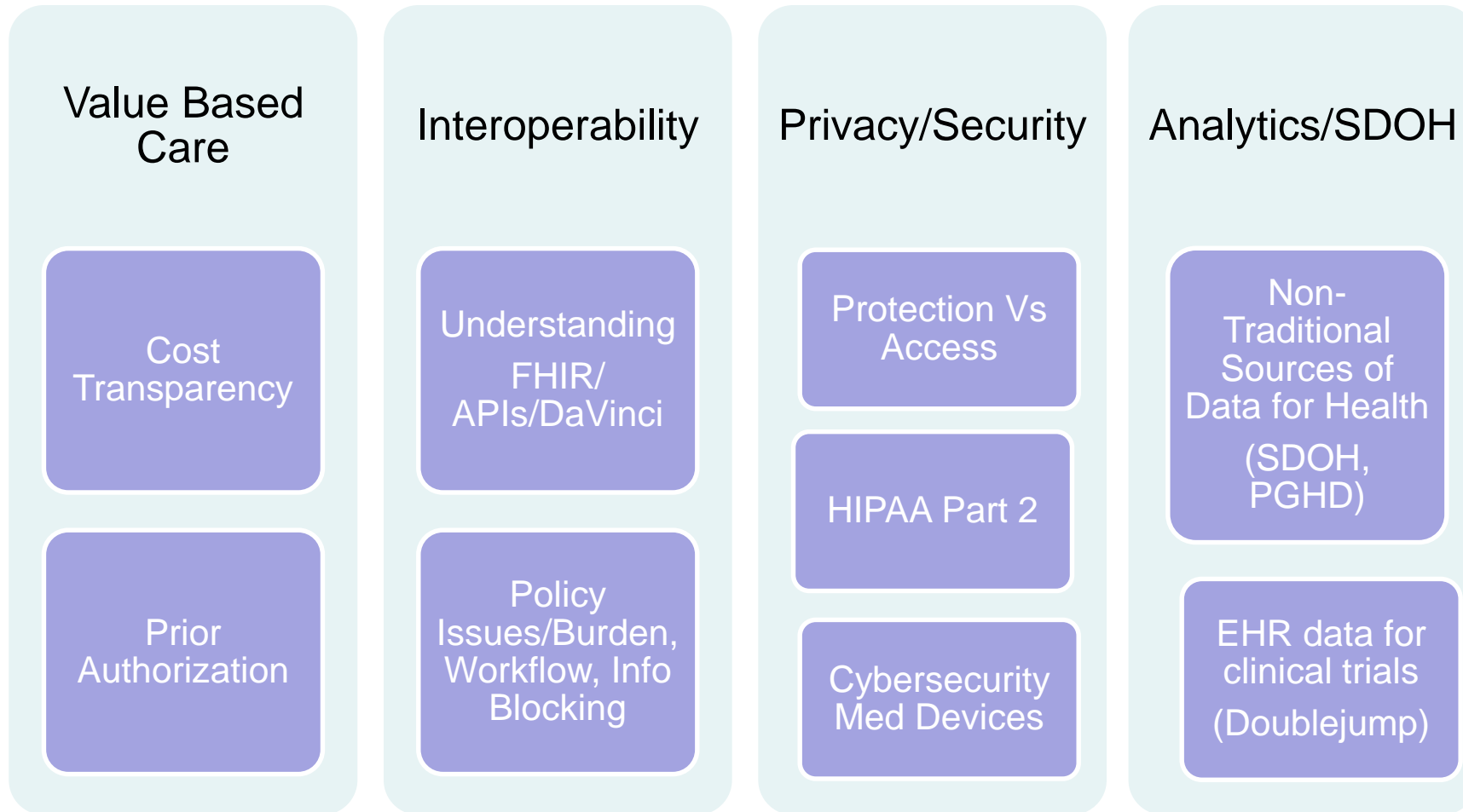
Telemedicine
Review new delivery methods for remote medical evaluation and treatment.

A doctor and a patient looking at a tablet together.

Value-Based Care
Discover how patient-centered care is changing healthcare.

A smiling elderly woman and a doctor in a white coat looking at a tablet.

Current Areas of Focus



eHealth Resource Center

www.ehidc.org/resources

- eHealth Resource Center available with best practices & findings identifying and disseminating best practices
- Online Resource Center: Over 600 new pieces of content, 125 best practices added this year



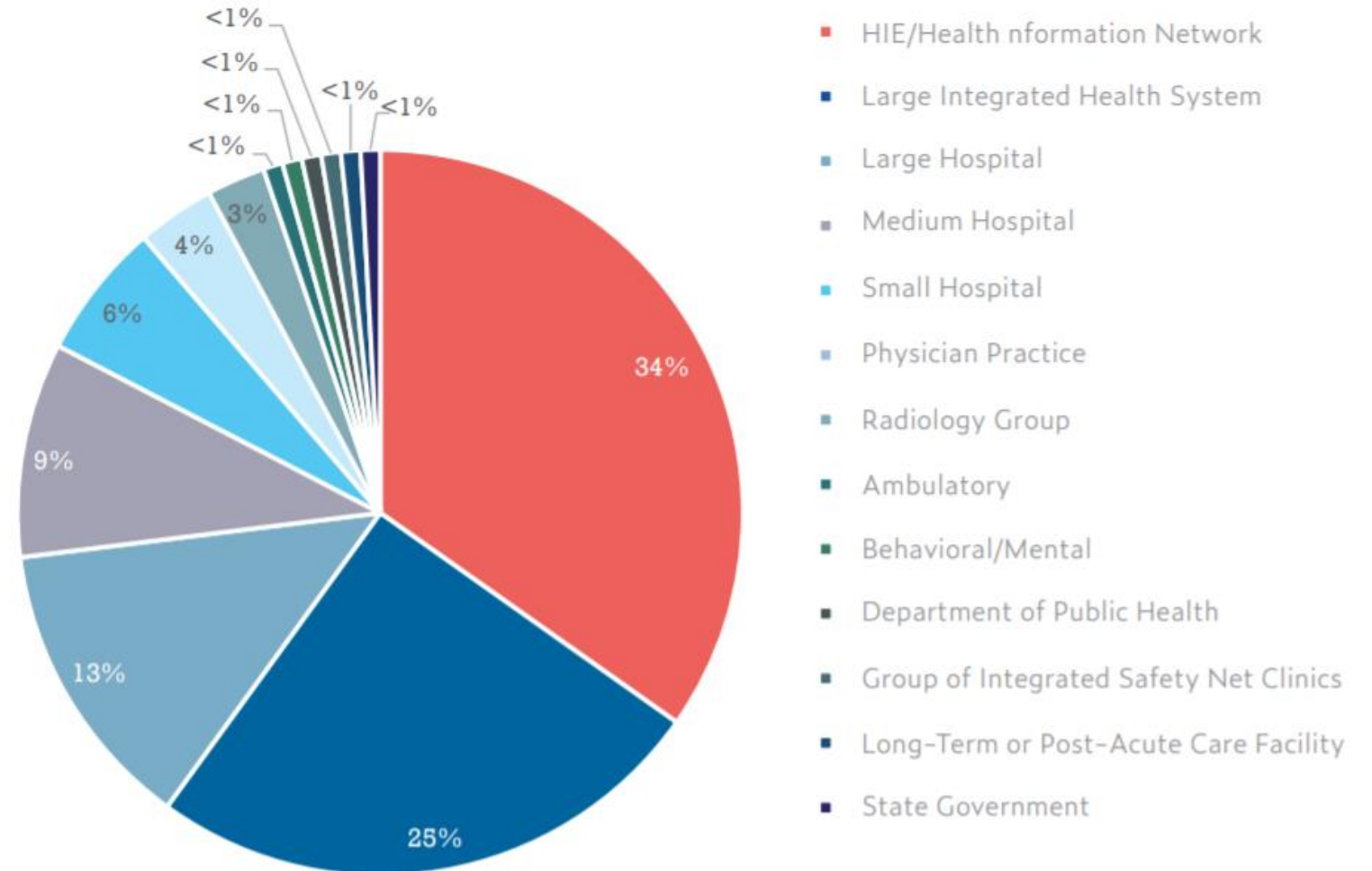
Methodology

- eHealth Initiative (eHI), surveyed leaders at provider and HIE organizations.
- Non-scientific survey providing a snapshot of industry perspectives on the state of patient matching.
- 118 respondents
- The survey consisted of nearly 20 multiple choice questions.
- Launched on July 19 and closed September 13, 2019.
- Announcement of the survey was communicated through emails and phone calls to a list of contacts who are in leadership positions at HIEs and provider organizations.



Respondent Demographics

- 64% providers (75 people)
- 34% HIEs (40 people)
- 2% other entities (3 people)



Role in their Organization

Respondents were asked how they would classify their role within their organization:

- C-Suite: 36% (42)
- Upper/middle manager 31% (36)
- Director 26% (31)
- Other: 7% (9)



Key Findings

Healthcare provider and HIE executives point to data entry errors as the leading cause of their organization's duplicate medical records.

While lack of funding and staff are the biggest barriers to improving patient matching rates at HIEs, lack of prioritization and technology are the greatest obstacles for providers.

A large majority of HIEs and providers have dedicated employees to resolve potential duplicates and mismatches. These flagged records are often addressed on a daily or weekly basis.

There is a high average of support among HIE and healthcare providers for the federal government to mandate a nationwide patient matching strategy and to provide funding for a national patient identifier\

Healthcare provider and HIE executives see data standardization and biometrics as the most promising innovations to impact patient matching efforts nationally.



Poor Patient Matching



Contributors of Poor Patient Matching

DATA ENTRY ERRORS



POOR ALGORITHMS



LACK OF INTEGRATION



BIGGEST BARRIERS TO IMPROVING PATIENT MATCHING RATES

LACK OF PRIORITIZATION



LACK OF TECHNOLOGY



LACK OF DATA GOVERNANCE



Measuring and Addressing Duplicates



Answer Key	Overall		HIEs		Providers	
Less than 3 percent	29%	33	27%	11	29%	21
3-10 percent	32%	37	23%	9	36%	27
More than 10 but less than 25	11%	13	5%	2	15%	11
25-50 percent	1%	2	0%	0	3%	2
More than 50 percent	8%	9	10%	4	5%	4
Not sure	19%	23	35%	14	12%	9
Totals	100%	117	100%	40	100%	74

What percentage of all stored records at their organization are duplicates?



Are there dedicated employees or contractors to resolve potential duplicates and mismatches?

YES

Overall

80%

HIEs

85%

Providers

76%

NO

Overall

20%

HIEs

15%

Providers

24%



Answer Key	Overall		HIEs		Providers	
Zero	1%	1	3%	1	0%	0
1-3	46%	43	76%	26	28%	16
4-6	14%	13	9%	3	16%	9
7-10	7%	7	0%	0	13%	7
11-13	9%	8	0%	0	14%	8
14-16	4%	4	3%	1	5%	3
17-20	3%	3	0%	0	5%	3
21-25	0%	0	0%	0	0%	0
Over 25	3%	3	0%	0	5%	3
Not sure	13%	12	9%	3	14%	8

HOW MANY EMPLOYEES AND/OR CONTRACTORS ARE EMPLOYED TO ADDRESS POTENTIAL MISMATCHES?



Tackling Duplicates	Overall		HIEs		Providers	
Daily	54%	51	47%	16	56%	32
Weekly	25%	23	29%	10	23%	13
Bi-weekly	1%	1	0%	0	2%	1
Monthly	9%	8	9%	3	8%	4
Less often than monthly	2%	2	3%	1	1%	1
Not sure	7%	7	6%	2	9%	5
Other	2%	2	6%	2	1%	1

HOW OFTEN DO THESE EMPLOYEES AND/OR CONTRACTORS ADDRESS POTENTIAL MISMATCHES?



Quality Assurance and Patient Safety



HAS YOUR ORGANIZATION INCURRED AN ADVERSE EVENT DUE TO A PATIENT MATCHING ISSUE IN LAST TWO YEARS?

Yes



No

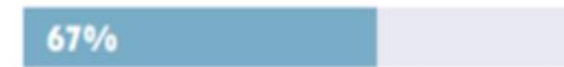


Not Sure



DO YOU HAVE A QUALITY ASSURANCE STEP DURING OR POST-PATIENT REGISTRATION THAT IDENTIFIES DISCREPANCIES AND DEMOGRAPHIC AND INSURANCE ERRORS?

Yes



No



Not Sure



Hospital and provider groups were asked about adverse events related to poor patient matching. Providers were also asked about quality assurance protocols surrounding patient registration.



Answer Key	Overall		HIEs		Providers	
We have not considered the use of patient matching quality metrics	11%	13	5%	2	14%	10
We have started planning for the future capture of quality metrics	21%	25	21%	8	23%	17
Quality metrics are in place with data definitions for each metric	24%	28	18%	7	28%	21
We are using metrics to actively improve	15%	17	28%	11	7%	5
We are refining our metrics and are including feedback loops to the systems and organizations, internal and external, involved in patient identity management	14%	16	15%	6	12%	9
Not sure	15%	17	13%	5	16%	12
Totals	100%	116	100%	39	100%	74

WHAT ROLE DOES PATIENT MATCHING QUALITY METRICS PLAY IN YOUR ORGANIZATION?





Patient Matching and EHRs



# of Systems	Overall		HIEs		Providers	
Zero	1%	1	3%	1	0%	0
1-5	44%	52	30%	12	52%	39
6-10	18%	21	5%	2	24%	18
11-20	19%	22	20%	8	18%	13
21-30	2%	3	5%	2	1%	1
31 or more	15%	18	37%	15	4%	3
Not sure	1%	1	0%	0	1%	1
Totals	100%	118	100%	40	100%	75

HOW MANY EHR AND INFORMATION SYSTEMS CURRENTLY EXIST IN YOUR IT ENVIRONMENT?

SOME RESPONDENTS DID NOT ANSWER THIS QUESTION



Answer Key	Overall		HIEs		Providers	
Less than 3 percent	20%	24	23%	9	20%	15
3-10 percent	24%	28	25%	10	24%	18
More than 10 but less than 25	14%	16	10%	4	15%	11
25-50 percent	10%	12	3%	1	13%	10
More than 50 percent	4%	5	8%	3	3%	2
Not sure	28%	33	33%	13	25%	19
Totals	100%	118	100%	40	100%	75

ON AVERAGE, WHAT PERCENTAGE OF YOUR MPI'S TOTAL PATIENT POPULATION IS YOUR 'POTENTIAL MATCH BACKLOG?'



Government's Role



SHOULD A NATIONWIDE PATIENT MATCHING STRATEGY BE IMPLEMENTED?



31%

Agree Completely

39%

Agree Somewhat

4%

Disagree Completely

11%

Disagree Somewhat

Attitudes surrounding national patient identifiers



Answer	Overall		HIEs		Providers	
Disagree completely	5%	6	10%	4	3%	2
Disagree somewhat	9%	11	10%	4	8%	6
Neither agree nor disagree	14%	16	5%	2	19%	14
Agree somewhat	31%	36	28%	11	33%	25
Agree completely	39%	47	47%	19	34%	26
Not sure	2%	2	0%	0	3%	2

SHOULD FEDERAL FUNDING BE MADE AVAILABLE TO CREATE A U.S. PATIENT IDENTIFIER?

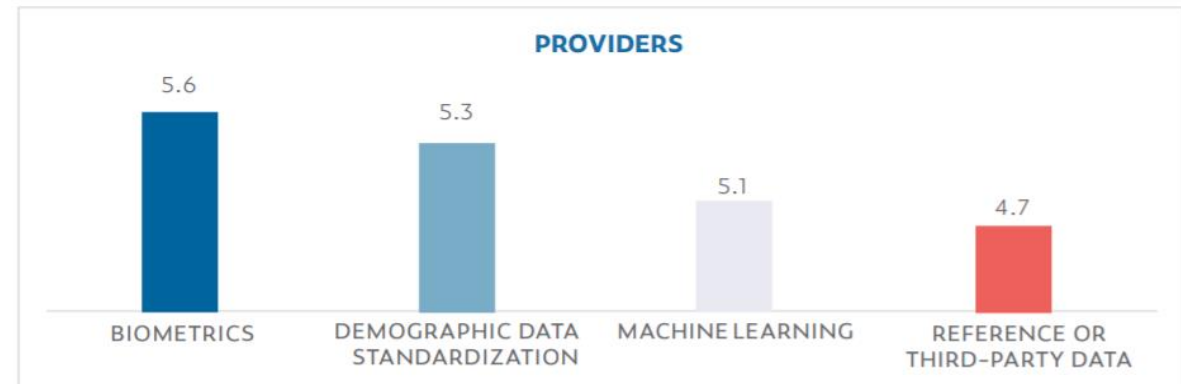
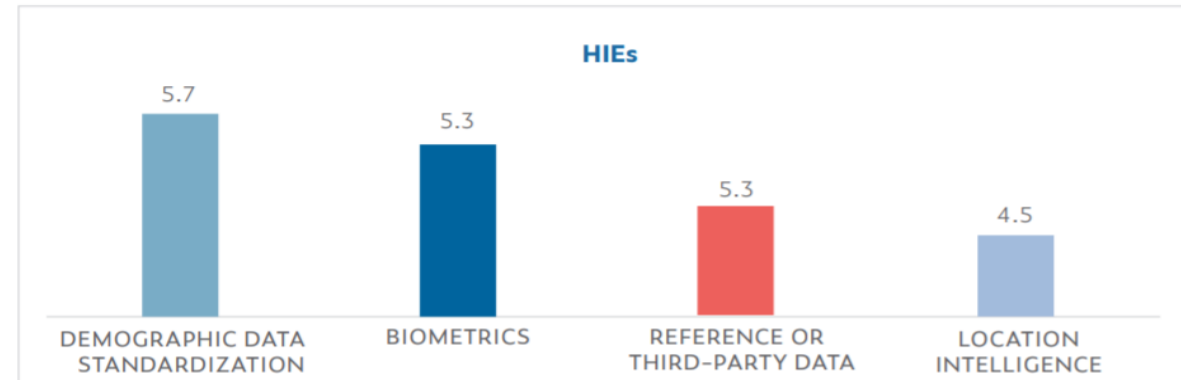
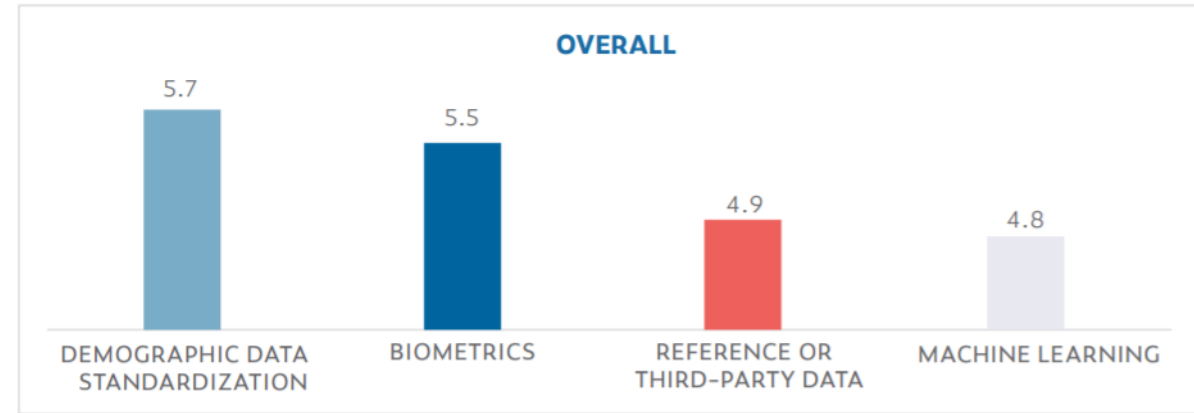


Future Trends



INNOVATIONS MOST LIKELY TO IMPACT PATIENT MATCHING EFFORTS

- On a 1-8 scale (8 being most important), provider and HIE leaders were asked to rate various innovations that they believed would impact patient matching efforts the most. Overall, demographic data standardization (5.7) and biometrics (5.5) ranked highest, followed by third-party data (4.9) and machine learning (4.8).





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Better Care. Better Health.



Patient Matching: Data Standardization and National Strategy

Shaun Grannis MD, MS, FAAFP, FACMI, FAMIA

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Professor of Family Medicine, IU School of Medicine

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Matching Recommendations

PATIENT IDENTIFICATION AND MATCHING FINAL REPORT

February 7, 2014

Prepared for the Office of the National Coordinator



Data Standardization

We identified testable approaches to data standardization:

- Last name: we applied the CAQH Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule version 2.1.0
- Telephone: we used the International Telecommunication Union (ITU) E.123 standardization.
- Address: we applied the USPS Postal address formatting
- Social security number: applied standardization using the formatting and numbering scheme provided by the Social Security Administration (SSA).
- Date of birth: Formatted in individual fields (MM, DD, YYYY).

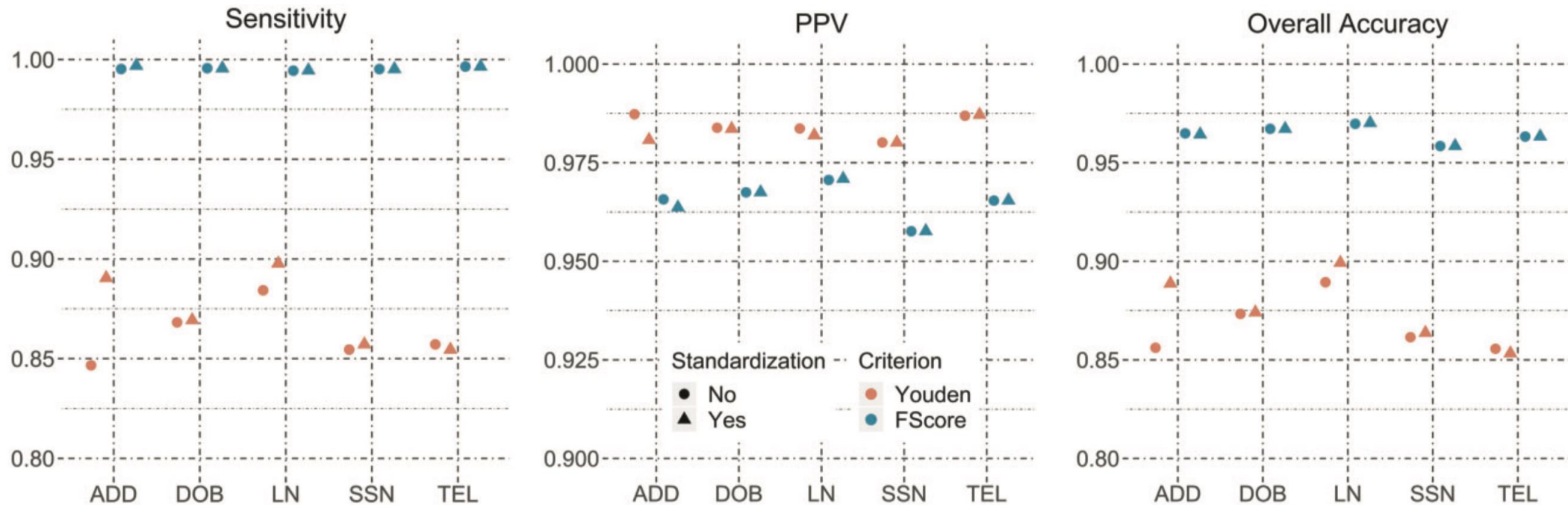


Exemplar Data Sets

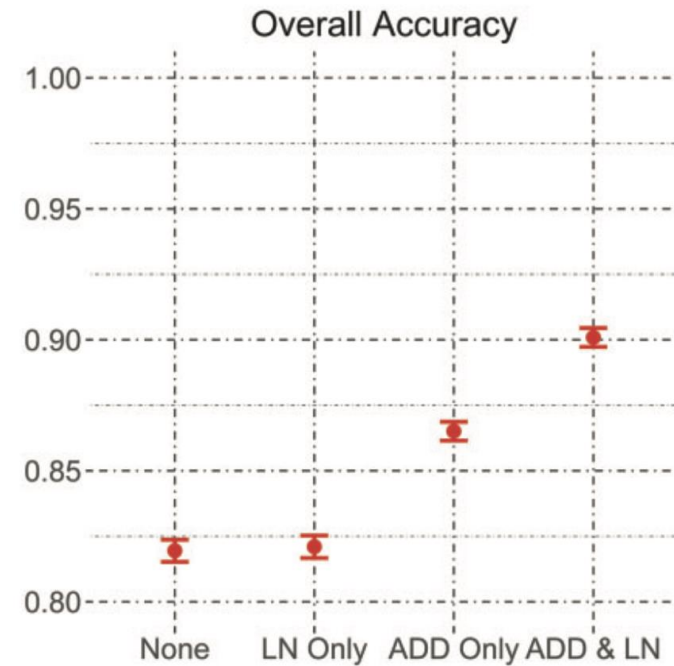
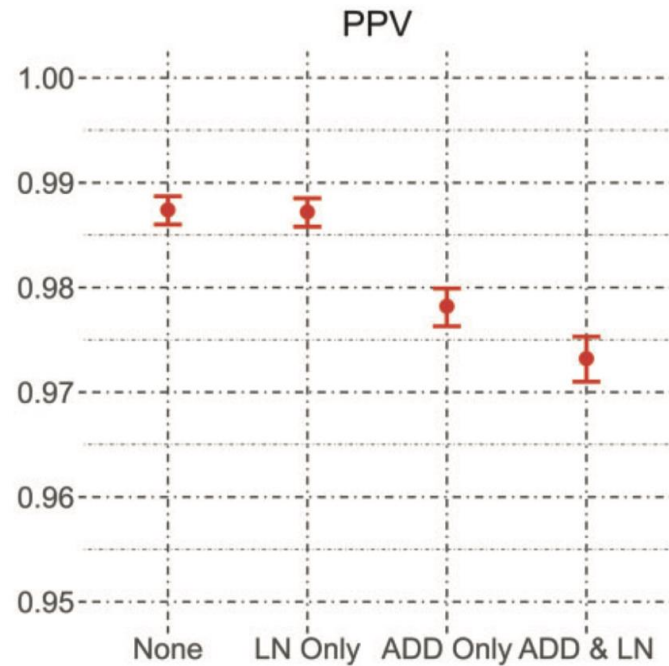
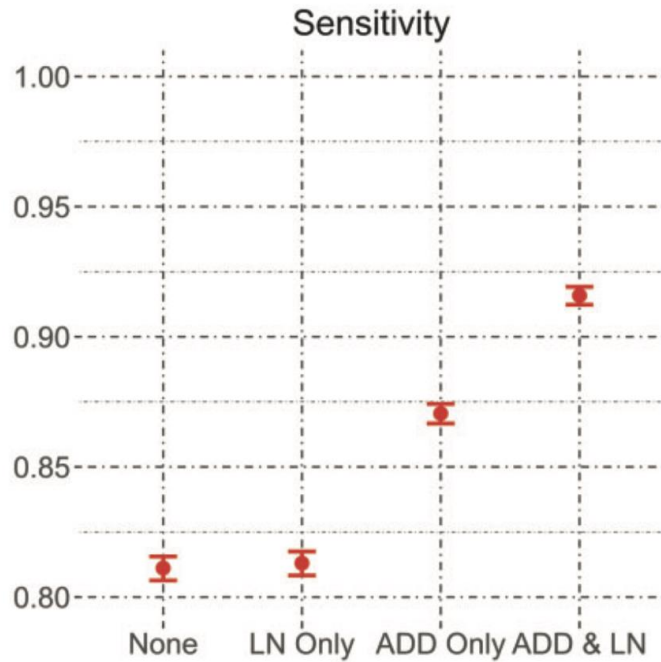
- Newborn Screening linkage
- Public Health registry deduplication
- Clinical to SSDMF linkage
- Hospital-to-Hospital linkage



Results – HIE linkage, single field



Results – HIE linkage, combined field



National Policy

DIVISION A—DEPARTMENTS OF LABOR, HEALTH AND HUMAN
SERVICES, AND EDUCATION, AND RELATED AGENCIES
APPROPRIATIONS ACT, 2020



(ONC)

Patient Matching.—The general provision limiting funds for actions related to promulgation or adoption of a standard providing for the assignment of a unique health identifier does not prohibit efforts to address the growing problems faced by health systems with patient matching. The agreement encourages HHS to continue to provide technical assistance to private-sector-led initiatives to develop a coordinated national strategy that will promote patient safety by accurately identifying patients to their health information. Additionally, the agreement directs ONC, in coordination with other appropriate Federal agencies, to provide a report to the Committees one year after enactment of this Act studying the current technological and operational methods that improve identification of patients. The report shall evaluate the effectiveness of current methods and recommend actions that increase the likelihood of an accurate match of patients to their health care data. Such recommendations may or may not include a standard for a unique patient health identifier. The report shall include the risks and benefits to privacy and security of patient information.





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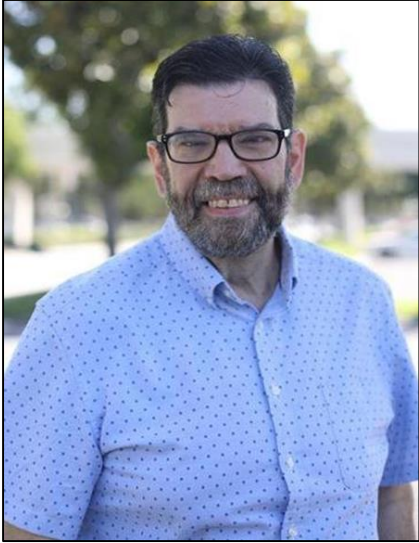
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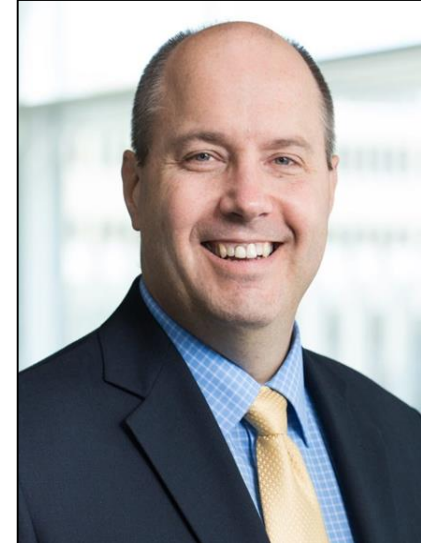
Discussion



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