Assessment of Local Health Department use of Immunization Information Systems

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NACCHO
National Association of County & City Health Officials

Background and Objective

- NACCHO, with funding and support from the CDC, conducted an assessment to identify and explore local health department (LHD) use of Immunization Information Systems (IISs), also known as immunization registries.

- The purpose of the assessment was to collect information to support and promote the role of IISs within LHD immunization programs.
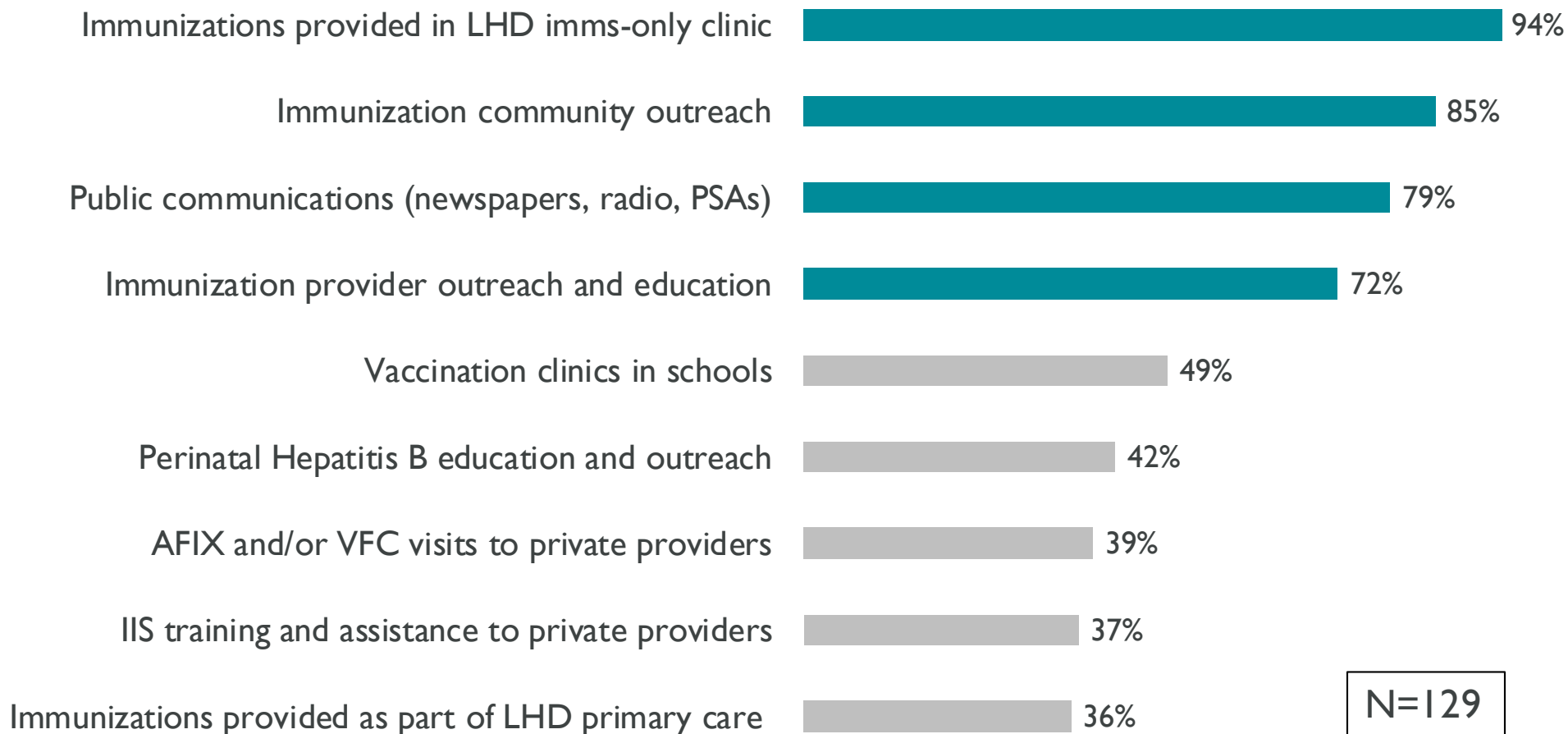
Survey Sample

- The survey was piloted with NACCHO workgroup members. LHDs that participated in the pilot were excluded from the sample.

- A sample of 300 LHDs were selected based on self-reported IIS use in the 2013 NACCHO Profile Survey* and jurisdiction population size.

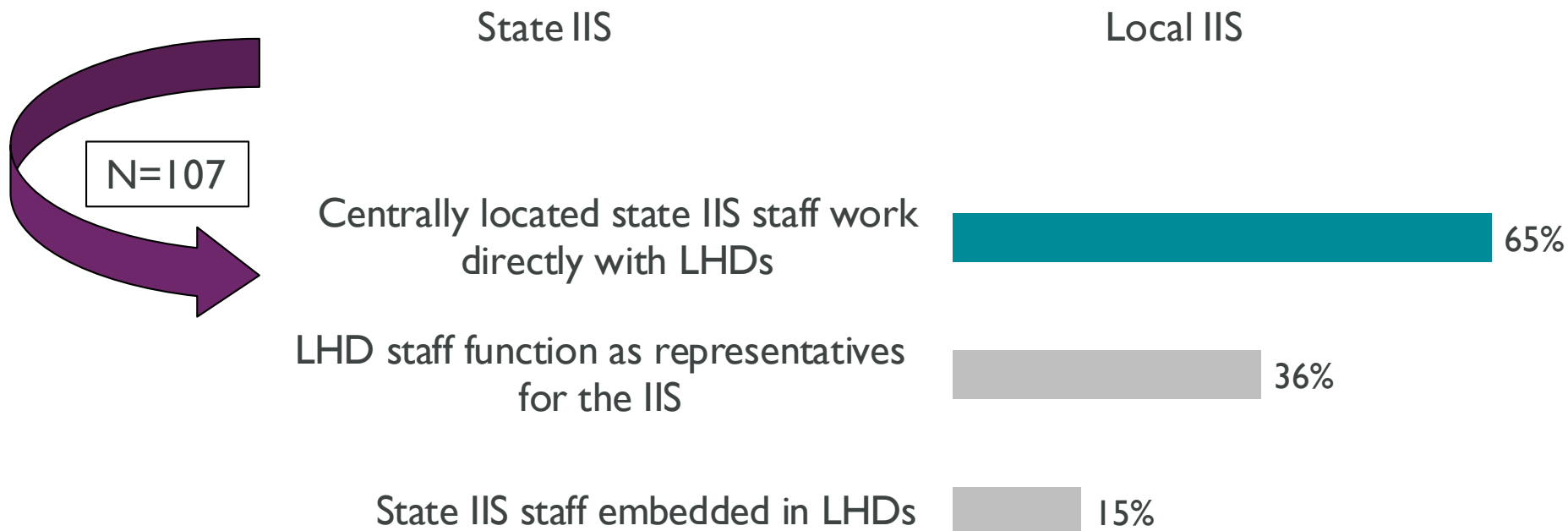| Population size	Use an IIS		
	Yes	No	IIS status not reported
<50,000	74	23	29
50,000-499,999	65	22	20
500,000+	44	12	11
Total	183	57	60

Survey Methods

- **129/300 LHDs (40%)** completed the survey.

- Surveys were distributed via email to the designated primary contact of LHDs within the survey sample.

- Survey fielded: October 8-November 4, 2015.

- Participants received 2 reminder emails and 1 reminder call to complete the survey.

- Data analysis was completed in STATA.

Immunization Activities Conducted by LHDs

Activity	Percentage
Immunizations provided in LHD imms-only clinic	94%
Immunization community outreach	85%
Public communications (newspapers, radio, PSAs)	79%
Immunization provider outreach and education	72%
Vaccination clinics in schools	49%
Perinatal Hepatitis B education and outreach	42%
AFIX and/or VFC visits to private providers	39%
IIS training and assistance to private providers	37%
Immunizations provided as part of LHD primary care	36%

N=129

IIS Management and Staff

86%	16%	4% **None of the above**

State IIS ← → Local IIS

N=107

Centrally located state IIS staff work directly with LHDs	65%
LHD staff function as representatives for the IIS	36%
State IIS staff embedded in LHDs	15%

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IIS Reporting and Mandates by LHDs

Most LHDs report to a State IIS

State IIS ████████████████████████ 94%

Local, county, or regional IIS ██ 6%

N=118
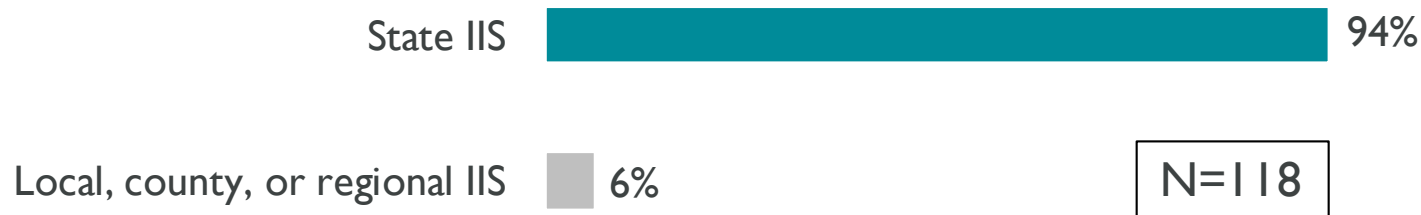
Reporting is often mandated by legislation within the jurisdiction/ state

LHDs only ████████████ 50%

LHDs and private providers ███████ 28%

No mandate ██████ 22%

N=116
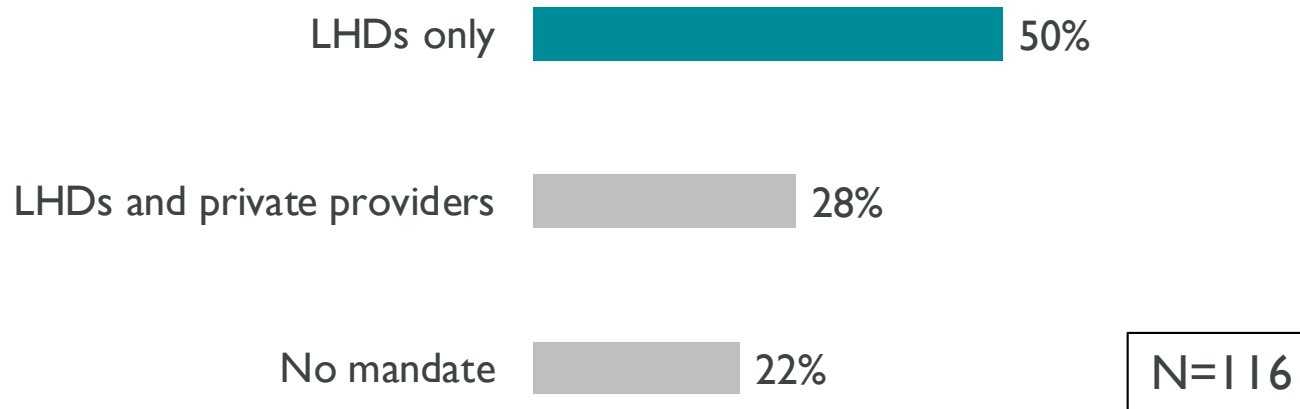
Method of IIS Data Reporting

Method	Percentage
Direct entry into the IIS	80%
EMR flat file	12%
HL7 real-time uni-directional	7%
HL7 real-time bi-directional	5%
HL7 batch file	5%
Billing flat file	5%

N=106
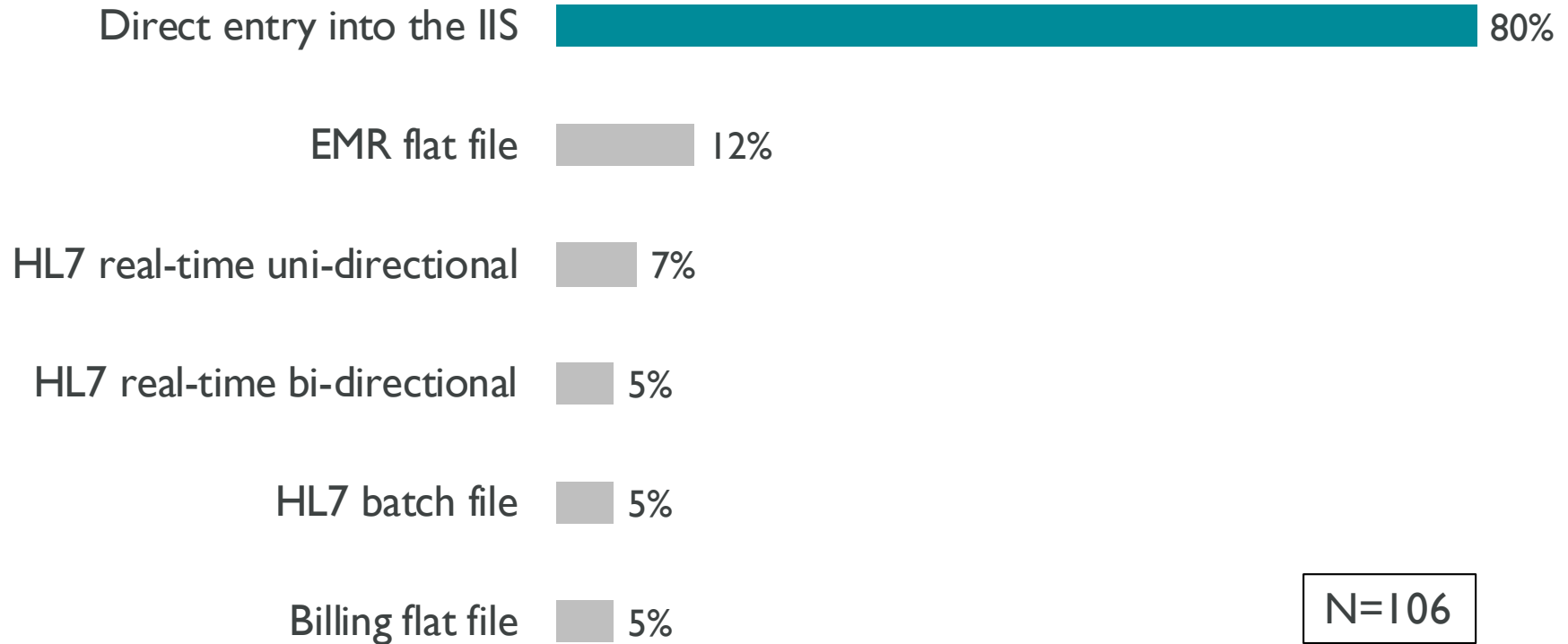
Use of IIS in Programmatic or Clinical Functions

State IIS — 87%

Local, county, or regional IIS — 11%

Neither — 5%

N=118
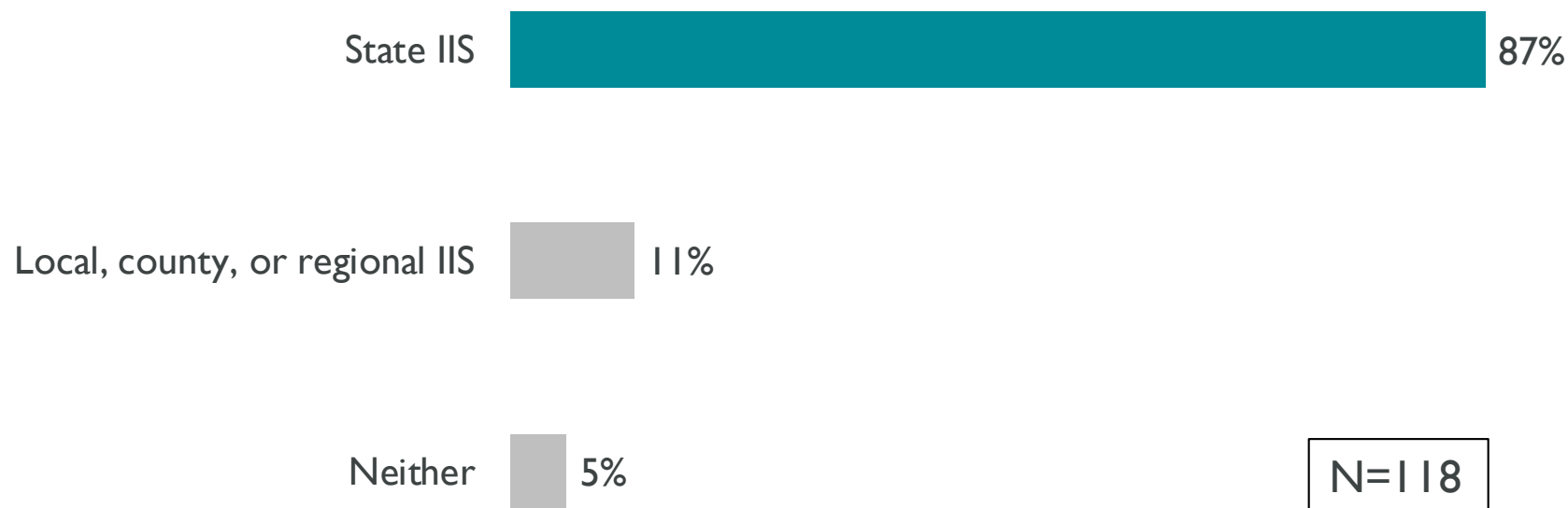
IIS Functions and Use by LHDs

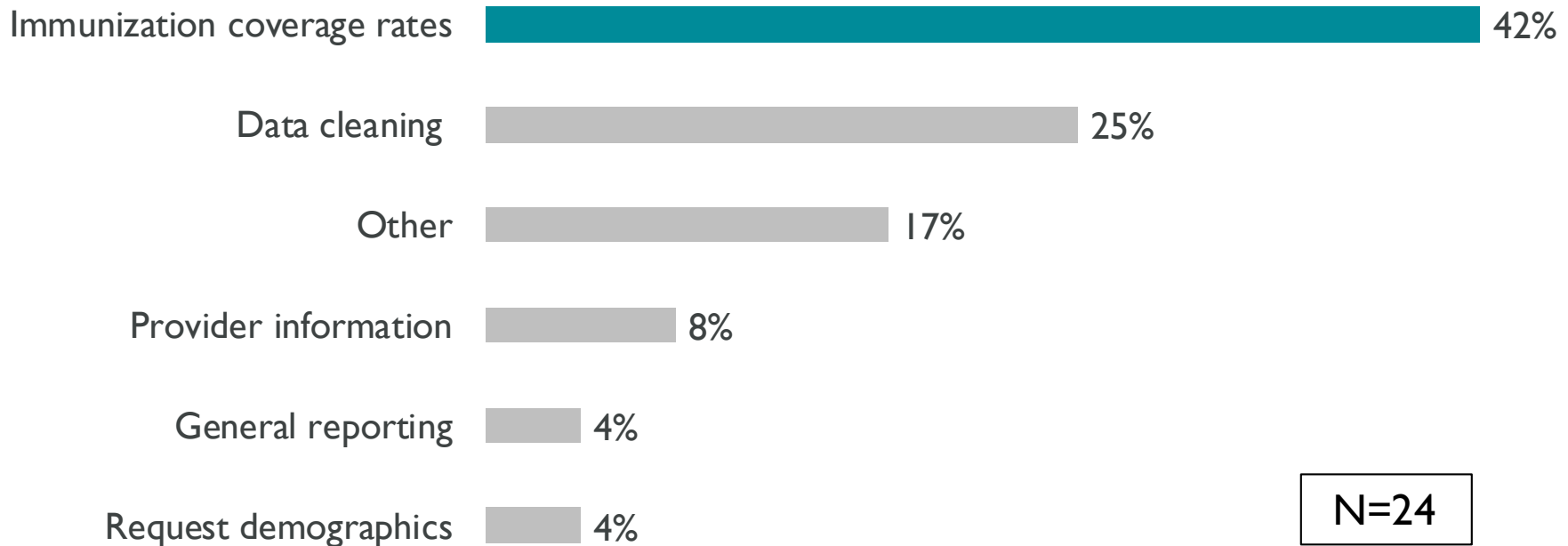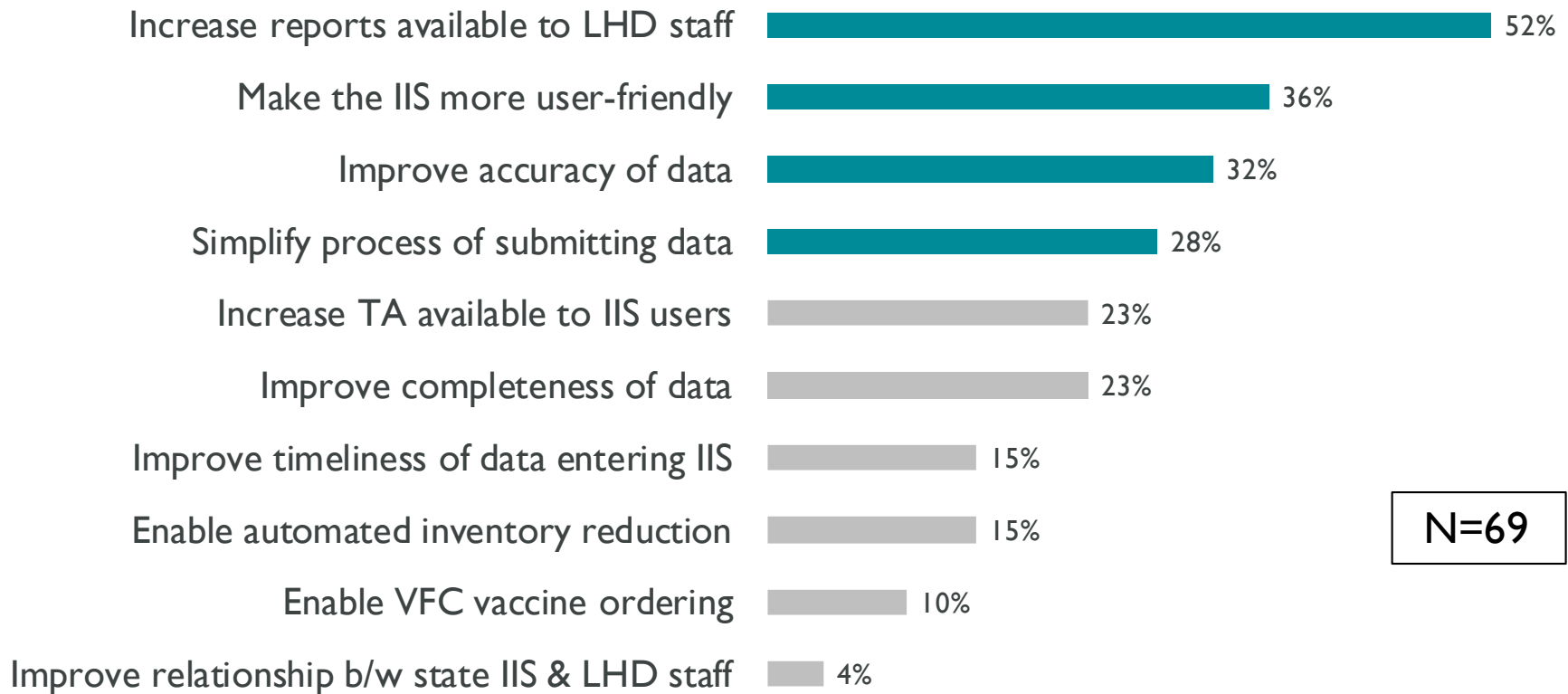|	Function			Use		
	Yes	**No**	**Unsure**	**Yes**	**No**	**Unsure**
Look-up patient history	97%		3%	97%		
Look-up patient forecast	95%		5%	92%	4%	4%
Order VFC, 317, or state-funded vaccines	83%	12%	5%	83%	14%	3%
Manage clinic vaccine inventory	83%	12%	5%	78%	19%	3%
Conduct LHD clinic reminder/recall	72%	18%	10%	56%	39%	5%
Assess LHD clinic immunization coverage	70%	13%	17%	60%	31%	9%
Assess geographic immunization coverage	56%	22%	22%	43%	47%	10%
Conduct geographic reminder/recall	55%	24%	21%	39%	55%	6%

N=104-109

Special Data Requests by LHDs

- Only 22% of LHDs made special data requests for IIS data in the past 6 months.

- Data requests:

Category	Percentage
Immunization coverage rates	42%
Data cleaning	25%
Other	17%
Provider information	8%
General reporting	4%
Request demographics	4%

N=24

The Wish List: IIS Improvements

- 60% of LHDs indicated improvements could be made to the IIS.

Improvement	Percentage
Increase reports available to LHD staff	52%
Make the IIS more user-friendly	36%
Improve accuracy of data	32%
Simplify process of submitting data	28%
Increase TA available to IIS users	23%
Improve completeness of data	23%
Improve timeliness of data entering IIS	15%
Enable automated inventory reduction	15%
Enable VFC vaccine ordering	10%
Improve relationship b/w state IIS & LHD staff	4%

N=69

Key Points from Open Responses

- Many LHDs find their IIS useful.

- While most LHDs use state IISs, many have duplicative "registry" systems within their LHD.

- Increasing provider reporting to IISs is a priority.

- Data quality/available functions vary widely between systems.
  - Report functionality and usability (coverage rate assessments, doses administered, reminder/recall) are important features.

Key Points from Open Responses

- Duplication/data cleaning remains an issue.

- Data sharing and bi-directional flow of information is important to LHDs→ improve IIS compatibility with EHRs.

- LHDs want access to high-quality, timely data to help inform their programmatic work.

- Facilitating school use of IIS and capitalizing on immunization data from schools is important.

Next Steps

- Dissemination of results
- Continuation of member engagement through NACCHO immunization workgroup
- Promotion of benefits of IIS to LHDs

Questions?

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