Public Health Nurses:
Ready for uniform data collection using electronic health data?

Erin D. Maughan, PhD, MS, RN, APHN-BC
Martha Dewey Bergren, DNS RN NCSN FNASN FASHA FAAN
Kathleen Johnson, DNP, RN-BC, NCSN

November 16, 2014 (APHA)

Presenter Disclosures

<Erin D. Maughan & Martha Bergren>

(1) **The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

"No relationships to disclose"

Objectives

- Analyze data sharing role of public health nurses (schools)

- Identify challenges to adoption of electronic data collection and sharing among public health nurses

- Formulate one action towards moving public health nurses toward increased data sharing

Electronic Documentation Systems

- Reduce cost
- Improve accountability, communication, value, efficiency
- Prevent errors
- Expand access

School Nursing: Johnson & Bergren, 2011; Johnson & Guthrie, 2012

100% Students Counted

100% School Nurses Participating

Step Up & Be Counted!

A Joint NASN & NASSNC Initiative

<u>Purpose</u>

- Determine current use and skills of nurses working in the public domain; along with willingness to change related to EHRs and use of technology
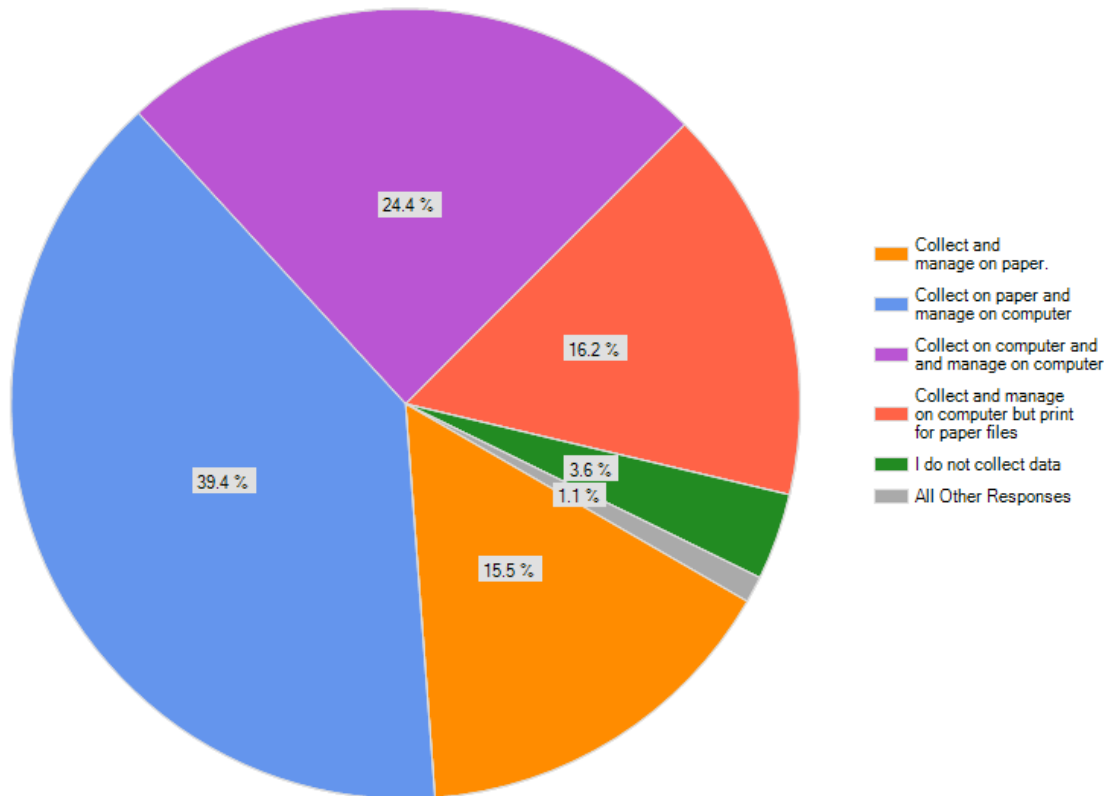
Method

- Biennial online survey to school nurses

- Convenient, national sample

- Analyzed by employer (education, public health, health care system) and age
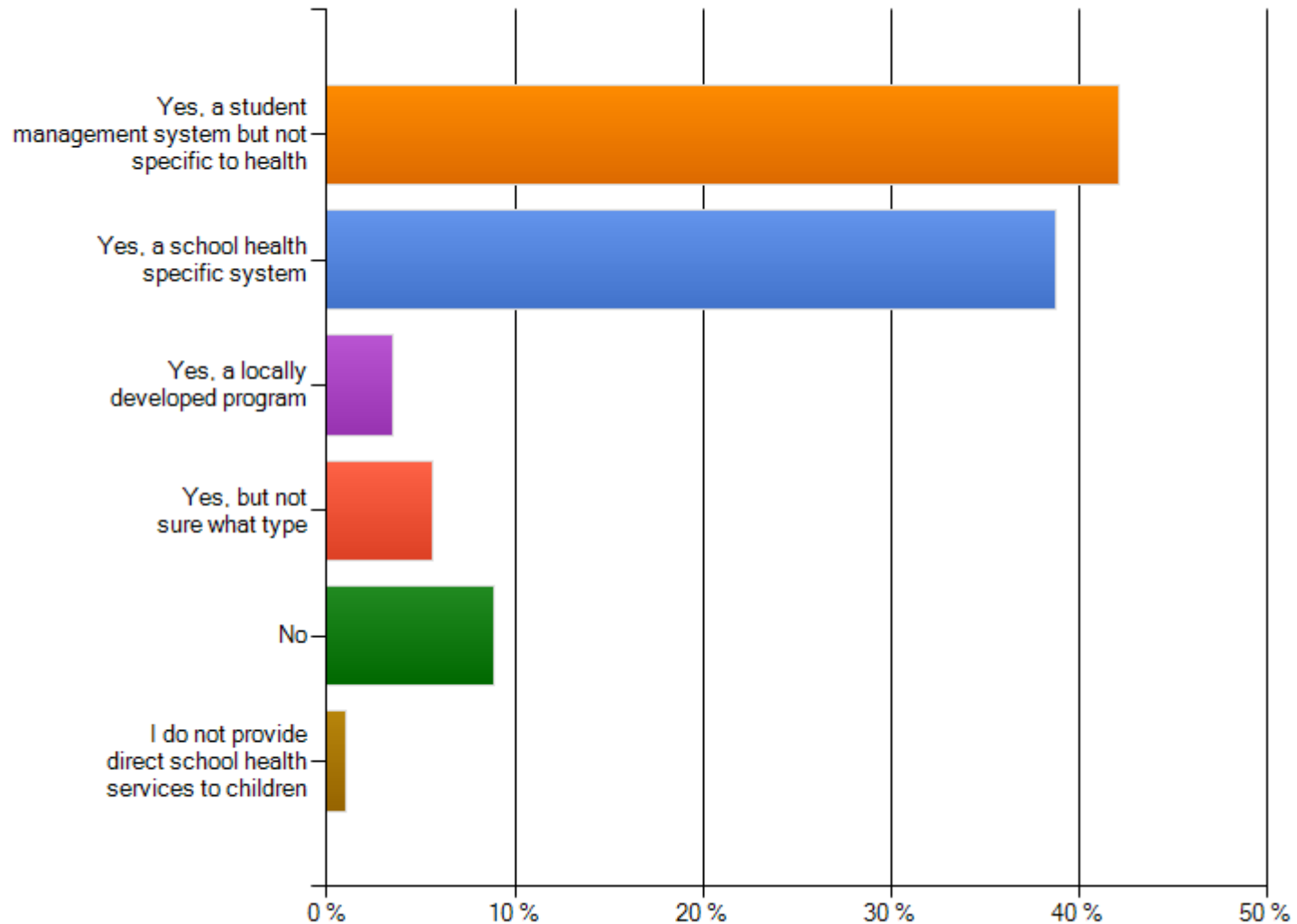
Results

- N=6841 participated (44.1% 41-50 years)

How do you typically collect and manage the data?

24.4 %
16.2 %
39.4 %
3.6 %
1.1 %
15.5 %

Collect and manage on paper.

Collect on paper and manage on computer

Collect on computer and and manage on computer

Collect and manage on computer but print for paper files

I do not collect data

All Other Responses

National Association of School Nurses

Does your district/school use an electronic student management system?

Important Components of EHR

	Absolutely needed	Needed	Would be nice	Definitely not needed
HIPAA/FERPA compliant	81.2% (5,357)	11.7% (771)	5.2% (343)	1.9% (125)
Separate charting for each person (RN, LPN, aide, etc)	56.9% (3,729)	20.3% (1,332)	12.6% (826)	10.2% (672)
Information specific to student health only available to appropriate persons	80.9% (5,416)	15.7% (1,051)	2.5% (165)	0.9% (61)
Interoperability (ability to share data with other school or health systems)	38.4% (2,520)	31.3% (2,053)	23.4% (1,537)	6.8% (445)
Ability to develop Individualized Health Plans within system	54.3% (3,634)	29.6% (1,984)	15.3% (1,021)	0.8% (56)
Documenting Individualized Health Plans	58.0% (3,883)	29.0% (1,945)	12.4% (827)	0.6% (41)
Documenting of immunizations	80.0% (5,373)	13.8% (929)	4.2% (283)	2.0% (131)

Source: NASN 2013 School Nurse Survey

Current Practice

- **Data Management**: 86.8% top 5 activity
  - only 20.1% wish it was

- **Research:** 90.8% would like to
  - (9.9% currently)

Source: NASN 2013 School Nurse Survey

Training Needs

- Not ranked in the top 5
  - #18 Technology (ipads, tablets, apps) (14.1%)
  - #20 Data collection/electronic health records (13.2%)

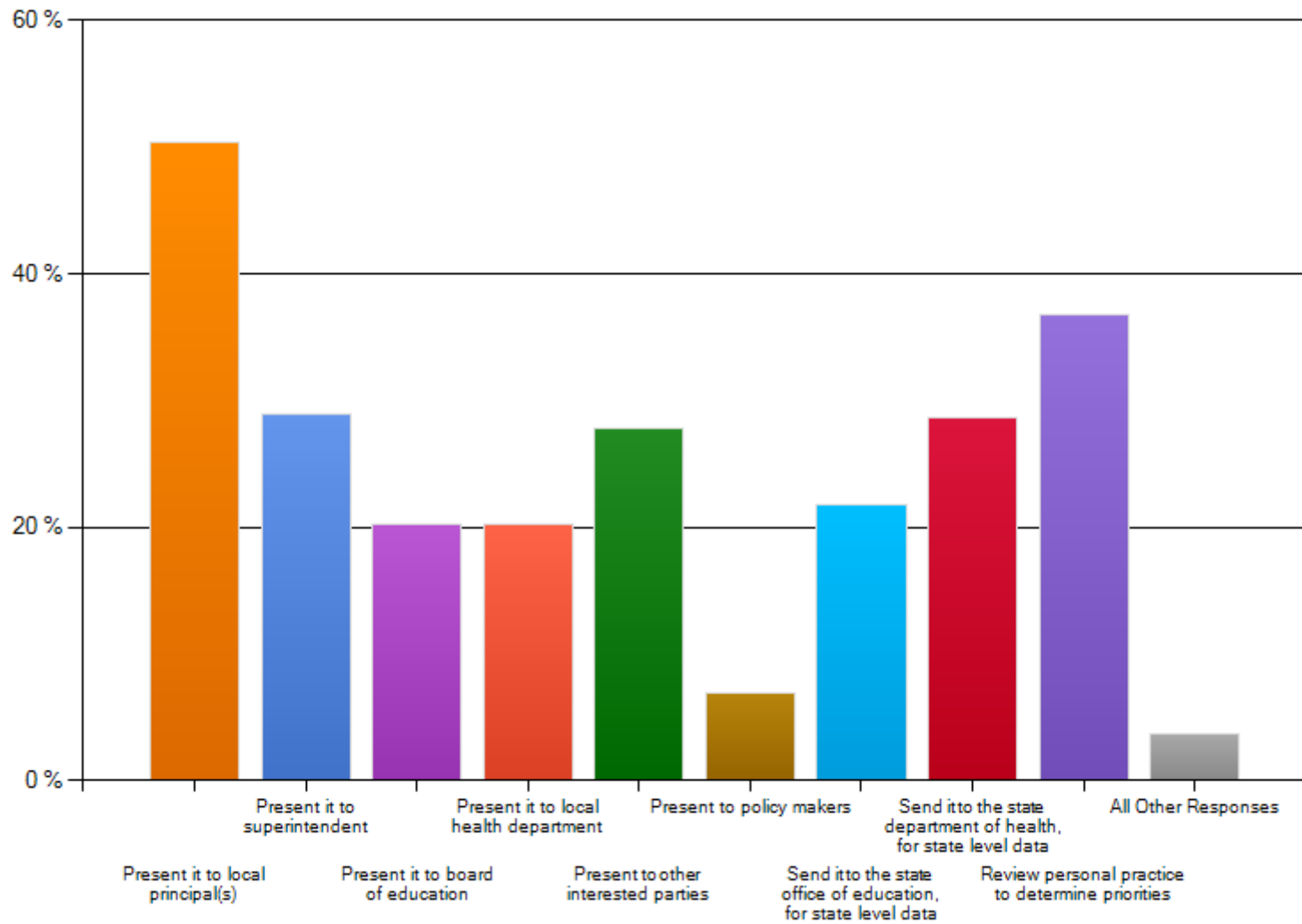- 27.2% want local expert technology resource nurse (ranked 4th)
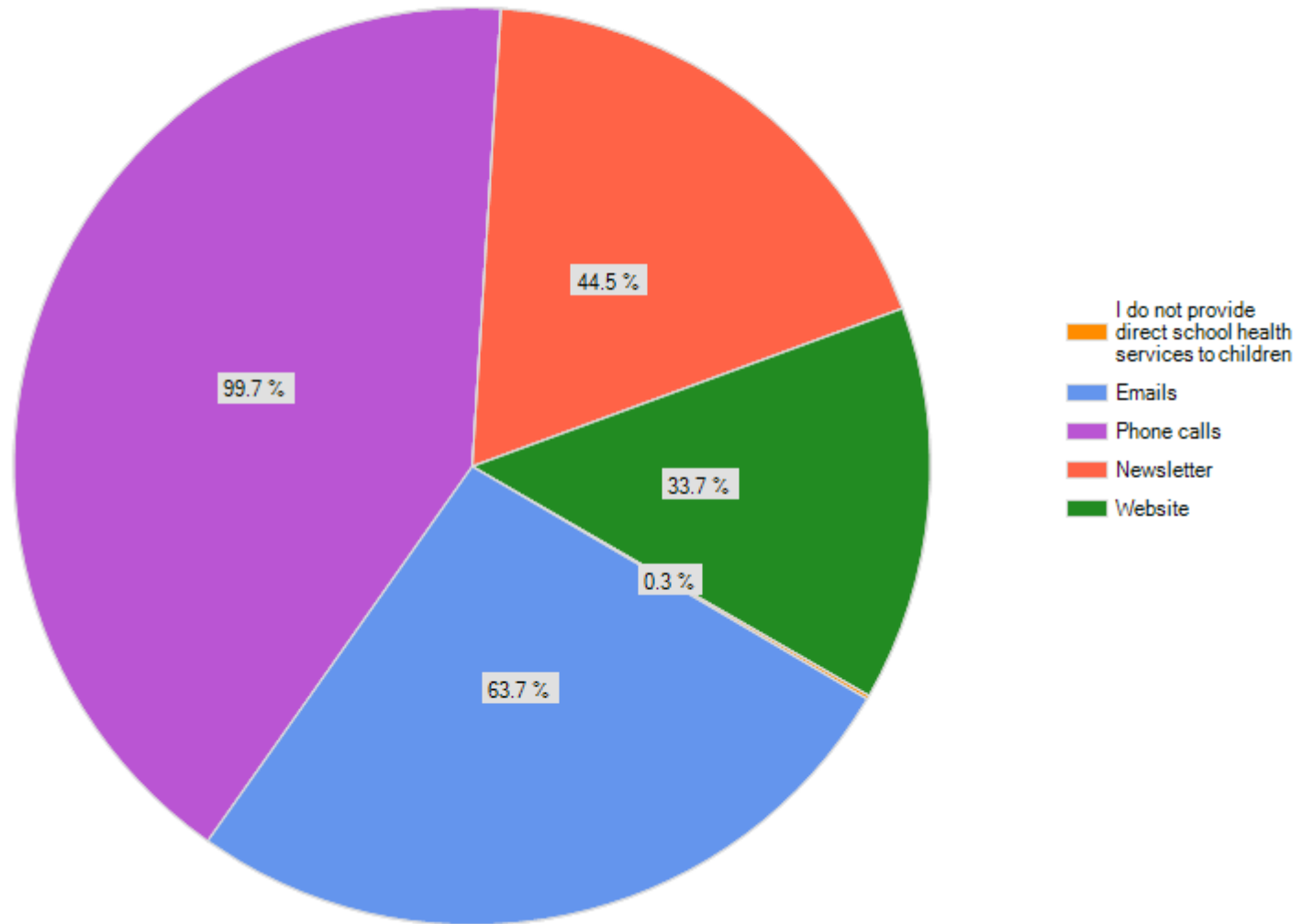
Qualitative Remarks

- Many expressed willingness to change, but faced challenges: lack of proper technology and training.

- Some reported having to initiate software training.

- Many expressed apprehension in asking for training or needed reports from vendors.

Once the data is collected, how do you use it? (Check all that apply)

How do you communicate with parents/guardians? (Check all that apply)

Legend:
- I do not provide direct school health services to children
- Emails
- Phone calls
- Newsletter
- Website

99.7 %
44.5 %
33.7 %
0.3 %
63.7 %

Source: NASN 2013 School Nurse Survey

National Association of School Nurses

Discussion

- Follow up study for further understanding of needs, and readiness to use EHRs

- Ensure public and school health included in EHR discussions (interoperability)

- Investigate technology to communicate with parents

Conclusion

- **Role:** School Nurses are a source of rich data for school and community

- **Challenges:** Lack of understanding, need for training

- **Action:** Further training on advocating for health specific EHR, using technology, and using the data

"One machine can do the work of fifty ordinary men. No machine can do the work of one extraordinary man."

-Elbert Hubbard

(http://ebookfriendly.com/best-technology-quotes/)

National Association of School Nurses

<u>References</u>

- Johnson, K. H., & Bergren, M. D. (2011). Meaningful use of school health data. *The Journal of School Nursing*, *27* 102-110. doi:10.1177/1059840510391095

- Johnson, K. H., & Guthrie, S. (2012). Harnessing the power of student health data: Selecting, using, and implementing electronic school health documentation systems. *NASN School Nurse*, *27*(1), 27-33.