

Development of a Measure of State-Level Supports for School Nursing Services Delivery

Wendy A. Doremus, DNP, APRN, NP-BC, PHNA-BC

Supplemental Table 1. SSHIM Pilot Questionnaire with Results.

INSTRUCTIONS: *Please respond to the following questions regarding the completion of the State School Health Infrastructure Measure (SSHIM) by placing an X next to "YES" or "NO":*

(Quantitative results in **bold**; qualitative responses in quotes)

1. Were instructions for completing the measure clearly written and understandable?
(n = 4) Yes **(n = 0) No**
2. Were the questions easy to understand?
(n = 3) Yes - "with tweaking we discussed" **(n = 1) No**
3. Did you know how to indicate responses?
(n = 4) Yes **(n = 0) No**
4. Were the response choices offered on the measure appropriate?
(n = 4) Yes **(n = 0) No**
5. Did the measure indicators require data or documentation that were readily available or could be captured without undue burden?
(n = 2) Yes **(n = 2) No**
6. Were you able to complete the measure in the expected amount of time, without undue burden?
(n = 4) Yes **(n = 0) No**
7. Could this measure be used for quality improvement to achieve the goal of high-quality, efficient school health services for the school-age child population in this U.S. state?
(n = 4) Yes - "ensure systems in place" **(n = 0) No**
8. Could this measure be used for accountability to achieve the goal of high-quality, efficient school health services for the school-age child population in this U.S. state?
(n = 3) Yes **(n = 1) No** "To ensure high quality, not sure about accountability" after 'achieve'

9. Would the benefits of completing the measure outweigh potential unintended negative consequences to individuals or populations?

(n = 4) Yes (n = 0) No

10. Please respond to the following question regarding the completion of State School Health Infrastructure Measure (SSHIM), in your own words:

What suggestions, if any, do you have regarding the addition or deletion of questions, the clarification of instructions, improvements in the process of completing the measure, or the content or format of the measure?

“Intro for intent and goals – how to use results to improve student health and learning outcomes. How it can create local advocate for state level solutions”

Supplemental Table 2. Content Expert (CE) Survey Item Content Validity (I-CVI) Scores.

CE Survey Question #	# Relevant (Rating 3 or 4)	# Not relevant (Rating 1 or 2)	I-CVI	Interpretation
5	18	0	1.00	Appropriate
6	16	1	0.94	Appropriate
8	17	1	0.94	Appropriate
9	17	1	0.94	Appropriate
10	16	2	0.89	Appropriate
11	15	3	0.83	Appropriate
12	17	1	0.94	Appropriate
13	15	3	0.83	Appropriate
14	16	2	0.89	Appropriate
15	15	2	0.88	Appropriate
16	15	3	0.83	Appropriate
17	17	1	0.94	Appropriate
18	14	4	0.78	Needs revision
19	13	5	0.72	Needs revision
20	18	0	1.00	Appropriate
21	18	0	1.00	Appropriate
22	18	0	1.00	Appropriate
23	18	0	1.00	Appropriate
24	18	0	1.00	Appropriate
25	16	2	0.89	Appropriate
26	13	5	0.72	Needs revision
27	14	4	0.78	Needs revision
28	15	3	0.83	Appropriate
29	17	1	0.94	Appropriate
30	15	3	0.83	Appropriate
31	17	1	0.94	Appropriate
32	18	0	1.00	Appropriate
33	13	5	0.72	Needs revision
34	14	4	0.78	Needs revision
35	15	3	0.83	Appropriate
36	18	0	1.00	Appropriate
37	16	2	0.89	Appropriate
38	12	5	0.71	Needs revision
39	16	1	0.94	Appropriate
40	15	3	0.83	Appropriate
41	17	1	0.94	Appropriate
42	17	1	0.94	Appropriate
43	16	2	0.89	Appropriate
44	16	2	0.89	Appropriate
45	14	3	0.82	Appropriate
46	15	2	0.88	Appropriate
47	16	2	0.89	Appropriate

Key: Interpretation of I-CVI Scores

I-CVI > 0.79: Item is appropriate

I-CVI > 0.70 and < 0.79: Item needs revision

I-CVI < 0.70: Item should be eliminated (Polit & Beck, 2017)

Supplemental Table 3. SSHIM Pilot Test (T1) and Retest (T2) Indicator Scores.

Indicator Item # and Abbreviated State Infrastructure Descriptor	T1 12/3/18	T2 12/20/18	Difference
I.A.1 Evidence-based policies	2	2	0
I.B.1 School Nurse website	2	2	0
I.B.2 School Health Services manual	3	3	0
II.A.1 School nurse credentials	3	3	0
II.A.2 School nurse supervision	0	0	0
II.B.1 School nurse orientation program	0	0	0
II.B.2 School nurse orientation content	0	0	0
II.C.1 School nurse professional development	1	2	(+)1
II.C.2 CEUs for professional development	1	2	(+)1
III.A.1 School health records	0	3	(+)3
III.A.2 School health screenings	0	1	(+)1
III.A.3 Population healthcare	2	3	(+)1
IV.A.1 School nurse acuity	2	3	(+)1
IV.A.2 Special needs care	0	0	0
V.A.1 State school nurse consultant	2	2	0
V.A.2 Whole school, community, child model	1	2	(+)1
V.A.3 School health advisory council	1	1	0
V.A.4 Cross sector collaboration	3	2	(-)1
VI.A.1 School health records confidentiality	2	2	0
VI.A.2 School health data collection	1	2	(+)1
VI.A.3 School health data utilization	2	3	(+)1
VII.A.1 Resource allocation	0	0	0
VII.A.2 School nurse compensation	3	3	0
VII.A.3 Medicaid reimbursement	0	0	0
TOTAL SCORE	31	43	10/24 differences

Supplemental Table 4. Intraclass Correlation Coefficient for SSHIM Pilot Tests T1 and T2.

	Intraclass Correlation Coefficient	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measure	0.728	0.418	0.878	7.663	23	23	.000

