## Safety Net Medical Home Scale (SNMHS) with Exact Questions and Scoring Algorithm<sup>\*</sup>

Development of a Safety Net Medical Home Scale for Health Centers Jonathan M. Birnberg MD, Melinda L. Drum PhD, Elbert S. Huang MD MPH, Lawrence Casalino MD PhD, Sarah Lewis MSPH, Anusha Vable MPH, Hui Tang MS, Michael Quinn PhD, Deborah Burnet MD MA, Thomas Summerfelt PhD, Marshall H. Chin MD MPH. Journal of General Internal Medicine (Accepted June 7, 2011)

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Questions	Points per Response
Domain 1: Access and Communication	
In addition to regular office hours, please indicate when the following types of patient visits can be scheduled at your clinic (select all that apply): sick visits / urgent care (Q15a)	
Before 8:30 am	0.333
After 6 pm	0.333
During the weekend	0.333
None of these Hours	0
In addition to regular office hours, please indicate when the following types of patient visits can be scheduled at your clinic (select all that apply): regular or well visits <sup>†</sup> (Q15b)	
	0.666
Before 8:30 am After 6 pm	0.666
During the weekend	0.666
None of these Hours	0.000
How often do you think your patients experience the following at your clinic: patients' appointments are scheduled with their personal clinician versus another clinician <sup>†</sup> (Q16a)	0
Usually (75 – 100% of the time)	2
Often $(50 - 74\%)$ of the time)	1.5
Sometimes (25 – 49% of the time)	1
Rarely (1 – 24% of the time)	0.5
Never	0
How often do you think your patients experience the following at your clinic: patients are able to receive a same or next-day appointment	
when they request one <sup>†</sup> (Q16b)	
Usually $(75 - 100\% \text{ of the time})$	2
Often $(50 - 74\% \text{ of the time})$	1.5
Sometimes $(25 - 49\% \text{ of the time})$	1
Rarely (1 – 24% of the time)	0.5
Never           How often do you think your patients experience the following at your clinic: patients can get telephone advice on clinical issues on weekends or after regular office hours <sup>†</sup> (Q16d)	0
Usually (75 – 100% of the time)	2
Often $(50 - 74\%)$ of the time)	1.5
Sometimes (25 – 49% of the time)	1.5
Rarely $(1 - 24\%)$ of the time)	-
Never	0.5
How often do you think your patients experience the following at your clinic: patients can get telephone advice on clinical issues during office hours (Q16c)	0
Usually (75 – 100% of the time)	1
Often (50 – 74% of the time)	0.75
Sometimes (25 – 49% of the time)	0.5
Rarely (1 – 24% of the time)	0.25
Never	0

	How often do you think your patients experience the following at your	
	clinic: patients can email providers about clinical issues (Q16e)	
	Usually $(75 - 100\% \text{ of the time})$	1
	Often (50 – 74% of the time)	0.75
	Sometimes (25 – 49% of the time)	0.5
	Rarely (1 – 24% of the time)	0.25
	Never	0
	Language Questions <sup>‡</sup>	-
	How often, if ever, are the following services available at your clinic	
	«Clinic»for communicating with patients who do not speak English:	
	bilingual clinical staff who provide translation (Q26a)	
	Usually (75 – 100% of the time)	1
	Often (50 – 74% of the time)	0.75
	Sometimes (25 – 49% of the time)	0.5
	Rarely (1 – 24% of the time)	0.25
	Never	0
	How often, if ever, are the following services available at your clinic «Clinic»for communicating with patients who do not speak English: bilingual non-clinical staff (e.g. front desk staff) who translate for	
	patients (Q26b)	
	Usually (75 – 100% of the time)	0.5
	Often (50 – 74% of the time)	0.375
	Sometimes (25 – 49% of the time)	0.25
	Rarely (1 – 24% of the time)	0.125
	Never	0
	How often, if ever, are the following services available at your clinic «Clinic»for communicating with patients who do not speak English: trained interpreters available onsite within the clinic (Q26c)	
	Usually (75 – 100% of the time)	1
	Often (50 – 74% of the time)	0.75
	Sometimes (25 – 49% of the time)	0.5
	Rarely (1 – 24% of the time)	0.25
	Never	0
	How often, if ever, are the following services available at your clinic «Clinic»for communicating with patients who do not speak English:	
	telephone lines to access off-site interpreters (Q26d) <sup>§</sup>	0.5
	Usually $(75 - 100\% \text{ of the time})$	0.5
	Often $(50 - 74\% \text{ of the time})$	0.375
	Sometimes $(25 - 49\% \text{ of the time})$	0.25
	Rarely (1 – 24% of the time)	0.125
	Never	0
	Sum of all itama	0.40
Searc	Sum of all items Multiply sum of all items by (100/12)	<u>0-12</u> 0-100
Score		0-100

With the patient medical records system you currently have, how easy	
would it be for the staff in your clinic«Clinic» to generate the following information about the majority of your patients: list of patients by	
diagnosis (e.g., diabetes or hypertension) <sup>†</sup> (Q12a)	
Easy (<24 hours)	2
Somewhat difficult (< 1 week)	1.333
Difficult (1 week)	0.666
Cannot generate	0
With the patient medical records system you currently have, how easy would it be for the staff in your clinic«Clinic» to generate the following information about the majority of your patients: list of patients who are	
due or overdue for tests or preventive care (e.g., flu vaccine due) <sup>†</sup> (12d)	
Easy (<24 hours)	2
Somewhat difficult (< 1 week)	1.333
Difficult (1 week)	0.666
Cannot generate	0
With the patient medical records system you currently have, how easy would it be for the staff in your clinic«Clinic» to generate the following information about the majority of your patients: list of panel of patients by provider <sup>†</sup> (Q12f)	
Easy (<24 hours)	2
Somewhat difficult (< 1 week)	1333
Difficult (1 week)	0.666
Cannot generate	0
Do you currently use any of the following technologies at your clinic: electronic list of all medications taken by a patient (including those prescribed by other doctors) (11e)	
Yes, routinely	1
Yes, occasionally	0.5
No	0
Ability to generate a list of patients by health risk (e.g., smokers) (Q12b)	
Easy (<24 hours)	1
Somewhat difficult (< 1 week)	0.666
Difficult (1 week)	0.333
Cannot generate	0
With the patient medical records system you currently have, how easy would it be for the staff in «Clinic» to generate the following information about the majority of your patients: list of patients by lab	
result (e.g., HbA1C>9.0) (Q12c)	
Easy (<24 hours)	1
Somewhat difficult (< 1 week)	0.666
Difficult (1 week)	0.333
Cannot generate	0

	With the patient medical records system you currently have, how easy would it be for the staff in «Clinic» to generate the following information about the majority of your patients: list of all patients taking a specific medication (e.g., all patients on ACE inhibitors, or on a specific nonsteroidal anti-inflammatory medication) (12e)	
	Easy (<24 hours)	1
	Somewhat difficult (< 1 week)	0.666
	Difficult (1 week)	0.333
	Cannot generate	0
	Sum of all items	0-10
Score	Multiply sum of all items by (100/10)	0-100

3: Care Management	
Do you currently use any of the following technologies at your clinic:	
electronic prescribing of medication (Q11d)	
Yes, used routinely	1
Yes, used occasionally	0.5
No	0
Do you currently use any of the following technologies at your clinic: electronic alerts or prompts about a potential problem with drug dose or drug interaction (Q11f)	
Yes, used routinely	1
Yes, used occasionally	0.5
No	0
How often, if ever, are the following tasks performed at your clinic: patients are sent reminder notices when it is time for regular preventive or follow-up care (e.g., flu vaccine or HbA1C for diabetic patients). <sup>†</sup> (Q13a)	
Usually (75 – 100% of the time)	2
	1.5
	1
	0.5
	0
How often, if ever, are the following tasks performed at your clinic: provider receives an alert/prompt at point of care for appropriate care services needed by patients (e.g., pap smear or immunizations due) (Q13b) <sup>†</sup>	
Usually (75 – 100% of the time)	2
	1.5
	1
Rarely $(1 - 24\%)$ of the time)	0.5
Never	0
Please indicate which members of your staff routinely perform the following tasks as part of their regular jobs at your clinic ( <i>Select All That Apply</i> ): . Call patients to check on medications, symptoms, or	-
	0.25
	0.25
	0.25
Non-clinical staff	0.25
· · · · · · · · · · · · · · · · · · ·	Do you currently use any of the following technologies at your clinic:         electronic prescribing of medication (Q11d)         Yes, used routinely         Yes, used occasionally         No         Do you currently use any of the following technologies at your clinic:         electronic alerts or prompts about a potential problem with drug dose or drug interaction (Q11f)         Yes, used routinely         Yes, used occasionally         No         How often, if ever, are the following tasks performed at your clinic:         patients are sent reminder notices when it is time for regular preventive or follow-up care (e.g., flu vaccine or HbA1C for diabetic patients). <sup>1</sup> (Q13a)         Usually (75 – 100% of the time)         Often (50 – 74% of the time)         Sometimes (25 – 49% of the time)         Rarely (1 – 24% of the time)         Never         How often, if ever, are the following tasks performed at your clinic: provider receives an alert/prompt at point of care for appropriate care services needed by patients (e.g., pap smear or immunizations due) (Q13b) <sup>†</sup> Usually (75 – 100% of the time)         Often (50 – 74% of the time)         Sometimes (25 – 49% of the time)         Rarely (1 – 24% of the time)         Sometimes (25 – 49% of the time)         Rarely (1 – 24% of the time)         Rarely (1 – 24% of the time)         Rare

Score	Multiply sum of all items by (100/10)	0-100
	Sum of all items	0-10
	Non-clinical staff	0.25
	Other clinical staff	0.25
	Nurses	0.25
	Advanced practice providers	0.25
	Please indicate which members of your staff routinely perform the following tasks as part of their regular jobs at your clinic ( <i>Select All That Apply</i> ): Coordinate care with providers outside of your clinic (e.g. scheduling subspecialty visits) (Q17d)	
	Non-clinical staff	0.25
	Other clinical staff	0.25
	Nurses	0.25
	<i>That Apply):</i> Educate patients about managing their own care (Q17c) Advanced practice providers	0.25
	Please indicate which members of your staff routinely perform the following tasks as part of their regular jobs at your clinic ( <i>Select All</i>	
	Non-clinical staff	0.25
	Other clinical staff	0.25
	Advanced practice providers Nurses	0.25
	following tasks as part of their regular jobs at your clinic ( <i>Select All That Apply</i> ): execute standing orders for medication refills or ordering tests (Q17b)	0.25
[	Please indicate which members of your staff routinely perform the	

Domain 4: Test and Referral Tracking	
How often, if ever, are the following tasks performed at your clinic: all laboratory tests ordered are tracked until results reach clinicians	
(Q13d) <sup>†</sup>	
Usually (75 – 100% of the time)	2
Often (50 – 74% of the time)	1.5
Sometimes (25 – 49% of the time)	1
Rarely (1 – 24% of the time)	0.5
Never	0
When patients are referred to specialists or subspecialists outside your, how often does each of the following occur: your clinic tracks specialist/subspecialist referrals until the consultation report returns to the referring provider (Q21c) <sup>†</sup>	
Usually (75 – 100% of the time)	2
Often (50 – 74% of the time)	1.5
Sometimes (25 – 49% of the time)	1
Rarely (1 – 24% of the time)	0.5
Never	0
Do you currently use any of the following technologies at your clinic: electronic access to patients' laboratory test results (Q11c)	
Yes, used routinely	1
Yes, used occasionally	0.5
No	0

	How often, if ever, are the following tasks performed at your clinic: provider receives an alert or prompt to provide patients with test results (Q13c)	
	Usually (75 – 100% of the time)	1
	Often (50 – 74% of the time)	0.75
	Sometimes (25 – 49% of the time)	0.5
	Rarely (1 – 24% of the time)	0.25
	Never	0
	Sum of all items	0-6
Score	Multiply sum of all items by (100/6)	0-100

Domain 5: Quality Improvement	
Which, if any, of the following performance data are collected and reported at your clinic: clinical outcomes (e.g., percent of diabetic patients with good glycemic control) (Q5a) $^{\dagger}$	
At the provider level	1
At the group level	1
Not collected or reported	0
Which, if any, of the following performance data are collected and reported at your clinic: surveys of patient satisfaction and experiences with care (Q5b) $^{\dagger}$	
At the provider level	1
At the group level	1
Not collected or reported	0
Do your quality improvement activities include the following: setting goals based on measurement results⊺(Q2a)	
Yes	0.333
No	0
Don't know	0
Not applicable	0
Do your quality improvement activities include the following: taking action to improve performance of individual physicians (Q2b)	
Yes	0.333
No	0
Don't know	0
Not applicable	0
Do your quality improvement activities include the following: taking action to improve performance of the clinic as a whole (Q2d)	
Yes	0.333
No	0
Don't know	0
Not applicable	0
Does your clinic have enough of the following to support Quality Improvement (QI) activities: dedicated staff to lead QI activities (Q4a)	
Do not have	0
Yes, but need more	0.5
Yes, and have enough	1

	Deep your plinic have anough of the following to support Quality	
	Does your clinic have enough of the following to support Quality	
	Improvement (QI) activities: information systems to provide timely data	
	and feedback to staff on QI activities (Q4b)	
	Do not have	0
	Yes, but need more	0.5
	Yes, and have enough	1
	Does your clinic have enough of the following to support Quality	
	Improvement (QI) activities: financial support for QI activities (Q4c)	
	Do not have	0
	Yes, but need more	0.5
	Yes, and have enough	1
	Does your clinic have enough of the following to support Quality	
	Improvement (QI) activities: opportunities for staff training in QI (Q4d)	
	Do not have	0
	Yes, but need more	0.5
	Yes, and have enough	1
	Does your clinic have enough of the following to support Quality	
	Improvement (QI) activities: Opportunities for staff recognition for QI	
	activities (Q4e)	
	Do not have	0
	Yes, but need more	0.5
	Yes, and have enough	1
	Sum of all items	0-10
Score	Multiply sum of all items by (100/10)	0-100

Domain 6: External Coordination	
How difficult is it for your providers to do each of the following for patients with different types of coverage at your clinic: obtain timely appointments for <u>office visits</u> with specialists or subspecialists outside your clinic for uninsured patients? (20ai) <sup>†</sup>	
Easy	2
Somewhat difficulty	1
Very difficult	0
How difficult is it for your providers to do each of the following for patients with different types of coverage at your clinic: obtain timely appointments for <u>office visits</u> with specialists or subspecialists outside your clinic for Medicare patients? (Q20aii)	
Easy	1
Somewhat difficulty	0.5
Very difficult	0
How difficult is it for your providers to do each of the following for patients with different types of coverage at your clinic: obtain timely appointments for <u>office visits</u> with specialists or subspecialists outside your clinic for Medicaid fee-for-service patients? (Q20aiii) <sup>†</sup>	
Easy	1
Somewhat difficulty	0.5
Very difficult	0

How difficult is it for your providers to do each of the following for	
patients with different types of coverage at your clinic: obtain timely	
appointments for <u>office visits</u> with specialists or subspecialists outside	
your clinic for Medicaid managed care patients? (Q20aiv) <sup>†¶</sup>	
Easy	1
Somewhat difficulty	0.5
Very difficult	0
How difficult is it for your providers to do each of the following for patients with different types of coverage at your clinic: obtain timely appointments for <u>office visits</u> with specialists or subspecialists outside your clinic for other privately insured patients? (Q20av)	
Easy	1
Somewhat difficulty	0.5
Very difficult	0
When patients are referred to specialists or subspecialists outside your clinic, how often does each of the following occur: the report from the specialist/subspecialist is received by the clinic within 30 days (Q21b)	
 Usually (75 – 100% of the time)	1
Often (50 – 74% of the time)	0.75
Sometimes (25 – 49% of the time)	0.5
Rarely $(1 - 24\% \text{ of the time})$	0.25
Never	0
Thinking about the hospital to which your patients are most commonly	•
admitted, if a patient is admitted to the hospital or emergency department how often does the following happen: hospital notifies your clinic that a patient has been admitted (Q22a)	
Usually (75 – 100% of the time)	1
Often (50 – 74% of the time)	0.75
Sometimes (25 – 49% of the time)	0.5
Rarely (1 – 24% of the time)	0.25
Never	0
Thinking about the hospital to which your patients are most commonly admitted, if a patient is admitted to the hospital or emergency department how often does the following happen: emergency department notifies your clinic that your patient has had an Emergency Room visit (Q22b)	
 Usually (75 – 100% of the time)	1
Often (50 – 74% of the time)	0.75
Sometimes (25 – 49% of the time)	0.5
Rarely (1 – 24% of the time)	0.25
Never	0
Thinking about the hospital to which your patients are most commonly admitted, if a patient is admitted to the hospital or emergency department how often does the following happen: your clinic receives a discharge summary or report from the hospital to which your patients are usually admitted (Q22c)	•
Usually (75 – 100% of the time)	1
Often $(50 - 74\%)$ of the time)	0.75
Sometimes $(25 - 49\%)$ of the time)	
Rarely $(1 - 24\%)$ of the time)	0.5 0.25

Total Score	Average of all domains scores (Add up domain scores, divide by 6)	0-100
Score		0-100
Score	Sum of all items Multiply sum of all items by (100/12)	0-12
	More than 30 days	0
	15 – 30 days	0.25
	5 – 15 days	0.5
	2 – 4 days	0.75
	Less than 48 hrs	1
	If providers at your clinic receive a discharge summary or report from the hospital, how long does it usually take to arrive? (Q23)	

<sup>\*</sup> A clinic's data were included in a domain score if the clinic responded to more than 50% of the items in the domain and more than 50% of the core items in that domain. In addition, to be included in the total PCMH score, clinics had to have more than 50% of items answered for all domains and more than 50% of core items present for all domains. For surveys that had missing items but had fewer than 50% missing items in a domain (n=9), we imputed the missing values based on the average score of the rest of the domain items. Sixty-one (94%) clinics had total scores calculated.

<sup>†</sup> Core items, which are differentially weighted by rescaling them to have potential range 0 to 2.

<sup>‡</sup> Allotted points for whichever question (Q26a-d) has highest frequency. <sup>§</sup>If the number of patients with limited English proficiency is < 20%, points are allocated 1, 0.75, 0.5, 0.25, and 0 for responses 75 – 100% of the time, 50 – 74% of the time, 25 – 49% of the time, 1 – 24% of the time, and Never, respectively. If clinic does not serve Medicaid Fee-For-Service Patients, double value of

Q20aiv

<sup>¶</sup> If clinic does not serve Medicaid Managed Care Patients, double value of Q20aiii