Beacon Clinician Survey

(The final version of this questionnaire will be a web-based survey, and then formatting will be completely different.

Therefore, please do not pay too much attention to the format).

We appreciate the time you are taking to complete information will help us better understand how ne						the	
Instruc	ctions	5					
When completing the questionnaire, you can leave answer. Remember that your responses are strictly questionnaire has been designed to gather information you use, and your quality of working life. Please to	y confi ation a try to a	identia bout th	and wine work all of the	ill be cl you do ne ques	losely go, the te	guarded	. This
To answer the questions, check the appropriate bo		ne scar ever		tt varies		Alv	vays
KeyHIE has a negative impact on patient care.		\square_2	×	\square_4	\square_5	\square_6	
Some questions will require answers similar to the require different responses. Please try to be as acc			-	other q	uestior	ns will	

Section A. About your job	
1. Do you personally provide patient care?	
O Yes	
O No (Thank you, no further questions)	
2. Where do you currently work? (For respondents who have multiple jobs: pleat your time during the last 6 months)	se answer the question for the location where you have spent most of
□₁ Hospital ED	□₂ Hospital inpatient unit
□ ₃ Physician's office	□₄Rehab Facility
□ ₅ Nursing Home (SNF)	□ ₆ Home-Health Agency
□ ₇ Case Management Organization	□ ₈ Pharmacy

□₉ EMS or Other Emergency Response \square_{10} Other (specify) 3. Please check your <u>current</u> job position: (For respondents who have multiple jobs: please answer the question for the job position that you have spent most of your time in the last 6 months) □₁ Primary-Care Physician □₂Specialist/Sub-specialist Physician □₃ED Physician □₄Pharmacist □₅Nurse Practitioner or Physician's Assistant □₆ED Nurse or Physician's Assistant □₇Primary Care Nurse Practitioner or Physician's Assistant □₈First Responder □, Case Manager, Care Coordinator, social worker or discharge planner □₁₀Therapist □₁₂Medical Assistant or Clerk □₁₁Technician \square_{13} Other (specify) years months 4. How long have you been in your current position? 5. Does your organization use (please check all that apply): □₁ Electronic Health Records (EHR) □₂ e-Mail with patients □₃ e-Prescribing □₄ Patient Health Record (PHR) □₅ Health Information Exchange (such as KeyHIE) 6. With what proportion of your patients do you communicate by e-mail? \Box_1 None □2 1 - 10% □3 11-25% □4 26-50% \square_5 More than 50%

Section B. About organizational readiness for change...

Please indicate your agreement or disagreement with the following statements, considering your main organization:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
a) Among my colleagues, I am usually one of the first to find out about a new diagnostic test, treatment or care process					\square_5
b) After we make changes to improve quality, we evaluate their effectiveness			\square_3	4	\square_5
c) Our procedures and systems are good at preventing errors from occurring					
d) We are innovative			\square_3		\square_5

Section C. About the *Implementation* of Regional Health Information Exchange (KeyHIE) in the Beacon Communities?...

 What do you think about the information you received at 	bout KeyHIE implementation?
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a. Insufficient		\square_2	\square_3	\square_4		\square_6	\square_7	Sufficient
b. Vague	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	\square_7	Precise
c. Useless		\square_2	\square_3	\square_4	□ ₅	\square_6	\square_7	Useful

Section D. About Regional Health Info	rmation Exchange	(KeyHIE)
	A few	A C

	Never (SKIP to D1b)	A few times a year or less, almost never	Once a month or less, rarely	A few times a month, sometimes	Once a week, rather often	A few times a week, nearly all the time	Every day	
D1a How often do you use KeyHIE?		\square_2	\square_3	\square_4		\square_6		
D1bWhy do you not use KeyHIE (Please check a	ll that ap	ply)?			1111			
a. I was never informed about KeyHIE								
b. I do not think that then information is very us	eful for n	ne						
c. KeyHIE is too complicated to use								
d. I do not have enough time to use KeyHIE						\Box_1		
e. KeyHIE does not fit into my workflow								
f. Other (text box)								
SKIP to END of SURVEY (Section E)					Ē			
D2. How long have you used KeyHIE? Years Months								
D3. Did you receive training on the use of KeyHI	E?		□₁Yes		No (go to	Questio	n D4)	
		Po	or F	Fair G	$\alpha \alpha $	Very good	Excellent	
D3a. Overall, how would you rate the training yo received?	u]		3		□ ₅	
The next questions are about use of regional ho	ealth info	ormation	exchang	ge (KeyH	IE) and	its usefu	lness	
 D4. When your own paper or electronic records do how do you find what you need? (Please cheed) Telephone other physicians or facilities. Request other physician or facility paper records. Link to a Health Information Exchange Link directly into another physician or face. Proceed with whatever information the part of the control of the part of the	k all that ecords/fa	apply) axes		·	ı need ab	out a pati	ient,	
D5. For what percent of patients do you check Ke		1	C 1.1	,•	1	1.	%	
D6. Of the patients you check KeyHIE, for what proof for?		-		-		oking	%	
D7. For what percent of those patients that you lo information?	cate in K	eyHIE do	you find	l <u>useful</u> p	atient		0/0	

	slike very much and n't want to use												Like	•	nuch and ger to use
		\square_3	\square_4	\square_5		\beth_6		\square_7			l ₈		□ ₉		
_D9	O. How much of a ba	arrier is each of	the follo	owing to th	e use	of K	KeyH	IE?							
						N	ot a b	arrie	er	Min	or ba	ırrier	N	1 ajor	barrier
a)	Computer skills (ye	ours, your colle	agues, o	or your staf	f)			1			\square_2				13
b)	Computer technica	l support						1			\Box_2				13
c)	Lack of time to lea	rn about KeyHl	Œ					1			\square_2]3
d)	Start-up financial c	costs						1			\square_2				13
e)	Ongoing financial	costs						1			\square_2				13
f)	Training and produ	ectivity loss						1			\square_2]3
g)	Physician skepticis	sm						1			\square_2				13
h)	h) Staff skepticism							1			\Box_2]3
i)	i) Having to use many different information systems					\Box_1				\Box_2					13
j)	Patient privacy or i	information sec	urity co	ncerns				1			\square_2				13
k)	Fitting KeyHIE int	o your regular v	work					1			\square_2]3
m)	Organizational con	nmitment and su	upport					1			\Box_2]3
Pl	lease rate the follow	ring characteris	stics of I	KeyHIE.											
10	. Learning to operate	the system		Difficult		\square_2	\square_3	\square_4		\square_6	\square_7	\square_8	□ 9	\square_{10}	Easy
11	. Exploring new feat	ures by trial and	error	Difficult		\square_2							□ 9		Easy
	. Remembering name mmands	es and use of		Difficult		\square_2	\square_3	\square_4		\square_6	\square_7	\square_8	□ 9		Easy
13	. Help messages on s	creen		Unhelpful									□ 9		Helpful
14	. Supplemental refere	ence/training ma	terials	Confusing	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	\square_7	\square_8	\square_9	\square_{10}	Clear
	Experienced and inceds are taken into con		rs'	Never		\square_2	\square_3	\square_4		\square_6		\square_8	D ₉		Always
16	. Correcting your mis	stakes		Difficult	\square_1	\square_2		\square_4					D 9		Easy

D8. Please check the box that best reflects your <u>acceptance</u> of KeyHIE:

The following questions ask specifically about KeyHIE.	Based on your experience, please indicate whether
the following statements about KeyHIE are true.	

	Never			It varies			Alway s
17. <i>KeyHIE</i> is reliable .	\square_1		\square_3	\square_4		\square_6	\square_7
18. <i>KeyHIE</i> has a negative impact on patient care.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	
19. <i>KeyHIE</i> reduces patient care errors.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	\square_7
20. <i>KeyHIE</i> is easy to use.	\square_1		\square_3	\square_4	□ ₅	\square_6	
21. <i>KeyHIE</i> improves the quality of patient care.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	
22. System response time on <i>KeyHIE</i> is slow.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	\square_7
23. When I have a problem with <i>KeyHIE</i> , I just ask someone for help.		\square_2	\square_3	\square_4	\square_5	\square_6	
24. I feel that I can benefit from refresher classes on KeyHIE.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6	\square_7
25. When I need help on <i>KeyHIE</i> , I can find it.	\square_1		\square_3	\square_4		\square_6	
26. Overall, <i>KeyHIE</i> saves me time.	\square_1		\square_3	□₄	\square_5	\square_6	
27. Data I retrieve from <i>KeyHIE</i> does make an impact on my decision-making	\Box_1		\square_3	□4		\Box_6	
28. Overall, I am satisfied with <i>KeyHIE</i> .		\square_2	\square_3	\square_4		\square_6	

29. <u>Currently</u>, the KeyHIE Website for clinicians contains different kinds of information. How <u>important</u> is each kind to you?

	Not Important	Somewhat Important	Very Important	Hardly or never use it	Use it sometimes	Use it very often
a. H&Ps		\square_2		\square_1	\square_2	\square_3
b. Discharge Summaries	\square_1	\square_2	\square_3	\square_1	\square_2	\square_3
c. Lab Results		\square_2	\square_3	\square_1	\square_2	\square_3
d. Radiology Reports		\square_2	\square_3	\square_1	\square_2	\square_3
e. Patient Demographics	\square_1	\square_2	\square_3	\Box_1	\square_2	\square_3
f. Outpatient Notes		\square_2	\square_3		\square_2	\square_3

	Usually Incomplete	It varies	Usually Complete	Do not know
30 What do you think about the completeness of the information in KevHIE?		\square_2		\square_4

	Very Inaccurate	It varies	Very Accurate	Do not know
31 What do you think about the <u>accuracy</u> of the information in KeyHIE?		\square_2	\square_3	\square_4

32 <u>In the near future (within the next two years)</u>, more information will be added to KeyHIE. How important will the following KeyHIE functions be to you?

	Not Important	Somewhat Important	Very Important
a. Problem List		\square_2	
b. Medication List		\square_2	\square_3
c. Allergies			
d. Consult Reports		\square_2	\square_3
e. Secure e-Messaging between clinicians		\square_2	\square_3
f. ED Summaries		\square_2	\square_3
g. EKGs			
h. Pathology Reports		\square_2	\square_3
i. Care Plans		\square_2	\square_3
j. Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs)	\square_1		\square_3
k. Nursing Home Assessments		\square_2	\square_3
1. Post-Discharge Level of Care		\square_2	\square_3
m. Home Health Assessment	\Box_1	\square_2	\square_3

33 In the long term future (2013 and later), more inf	formation may be added to KeyHIE. How important woul
the following types of information be to you?	

	Not Important	Somewhat Important	Very Important		
a. Radiology Images		\square_2	\square_3		
b. Immunization Records	\Box_1	\square_2	\square_3		
c. Reminders for preventive and other interventions (e.g., LDL check)		\square_2	\square_3		
d. Advance Directives		\square_2	\square_3		
e. Patient Preferences (language, religion)		\square_2	\square_3		
f. Family History		\square_2	\square_3		
g. Family and Social Supports		\square_2	\square_3		
h. Insurance information	\square_1	\square_2	\square_3		
i. Medication history		\square_2	\square_3		
j. Other, please specify	Text-box				
34. The KeyHIE Website for patients will also contain different kinds of information and services. How important is that information and services to you, as a clinician?					
important is that information and services to you as a clinician?					
important is that information and services to you, as a clinician?	Not Important	Somewhat Important	Very Important		
a. Secure e-Mail		1			
	Important	Important	Important		
a. Secure e-Mail	Important	Important	Important		
 a. Secure e-Mail b. Patient access to their electronic healthcare records c. The patient being able to enter data in KeyHIE (for example, their 					
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 a. Secure e-Mail b. Patient access to their electronic healthcare records c. The patient being able to enter data in KeyHIE (for example, their medication list) 35. What are the three things you like most about <i>KeyHIE</i>? 					

Section E. About yo	our perceptions of v	vork and	quality	y of v	vork	ing li	fe	•		
1. How satisfied are you provide?	with the care you	Totally dissatisfied		\square_2	\square_3	\square_4		\square_6		Completely satisfied
2. How would you rate t provide?	he quality of care you	Lowest	\square_1	\square_2	\square_3	\square_4		\square_6	\square_7	Highest
The following questions deal with the workload that you experience in your job. Please put an 'X' on each of the following six scales at the point that matches your overall experience of workload.										
						Low				High
3. Mental demand. How (thinking, deciding, calc	5	-	-	-	-	Ь	Ш	Ш	ШШ	ШШШ
4. Physical demand. Ho job (e.g., pushing, pullin	g, turning, controlling,	activating,	etc.)?			_ Ш	Ш	Ш	ШШ	ШШШ
5. Temporal demand. It pace at which the tasks of	-	-	el due to	the ra	ate or		Ш	Ш	ШШ	
6. Effort. How hard do you have to work (mentally and physically) to accomplish your level of performance?					ШШ					
7. Performance. How satisfied are you with your performance at your job?										
8. Frustration level. How insecure, discouraged, irritated, stressed and annoyed versus secure, gratified, content, relaxed and complacent do you feel about your job?										
9. All in all, how satisfied Not at all satisfied	ed would you say you ar Not too satisfie			what sa	oticfic	d		V	ery satis	rfied
		u	Some		atisiici	u		v		STICU
10. How likely is it that you will actively look for a new job in the next year?										
Not at all likely	Somewhat likely		o in the	Quite					Ext	remely likely
	\Box_3	\square_4			l ₅			l ₆		\square_7
		Never	A few times a year or less, almost never	Onc mor or le	nth ess,	A few times a month, sometimes	w ra	nce a veek, ather	A few times week nearly all the	a x, y e Every
11. I feel emotionally dr	ained from my work.		\square_2		3	\square_4		\square_5	\square_6	
12. I feel used up at the	end of the workday.	\square_1	\square_2		3	\square_4			\square_6	\square_7
13. I feel fatigued when and have to face another			\square_2		3	\square_4			\square_6	
14. Working all day is re	eally a strain for me.	\square_1	\square_2		3	\square_4		\square_5	\square_6	\square_7
15 I feel burned out from	m my work	П	П.	П		П.		П.	П	П_

Section F. About you
1. What is your gender? □₁ Male □₂ Female
What is the highest level of education you have completed? High school/GED Some college 2-year college degree (Associate) 4-year college degree (Bachelor, BA, BS, BSN, etc.) Master's degree (MA, MS) Professional degree (MD, PharmD) Doctoral degree (PhD, DNP, etc)
3. How old are you? \Box_1 34 or less \Box_2 35-44 \Box_3 45-54 \Box_4 55+
4. Are you of Hispanic or Latino origin? □₁Yes □₂No
5. What is your racial background? (Check all that apply) □₁ American Indian / Alaska Native □₂ Asian □₃ Native Hawaiian or Other Pacific Islander □₄ Black / African American □₅ White □₆ Other (please specify):
6. What description does best describe the level of your computer skills? Novice user (You just started using computers) Average user (You use word processors, spreadsheets, e-mail, surf the Web, etc.) Advanced user (You can install software, setup configurations, etc.)
Expert user (You can setup operating systems; know some computer programming languages, etc.)
7. How many years of computer experience do you have? years
Please write any comments you may want to share with the research team.

Thank you very much for your participation in this study.

When utilizing this document please cite:

1. Hoonakker, P.L., Alyousef, B., Kianfar, S., Carayon, P. Cartmill, R.S., Hassol, Hundt, A.S., Ladd, I., Yule, C., Chaundy, K., Honicker, M., Younkin, J., & Walker, J. (2013c). Assessment of use, usability, and clinicians' satisfaction with the Keystone Health Information Exchange. Poster presented at the Human Factors and Ergonomics Society (HFES) Symposium on Health Care, Baltimore, MD.