# Alliance Peds WCC Content Project - Usability Testing

## 1. Introduction and Overview

Thank you for volunteering to be an Alliance Usability Tester!

This Survey Monkey addresses basic principles of usability as demonstrated in evidence-based research on usability in electronic health records. Usability is the effectiveness, efficiency, and satisfaction with which the intended users can achieve their tasks in the intended context of use (Schumacher and Lowry, 2010). Determining the level of usability involves looking at multiple core principles.

Each page will present a usability principle. Questions presented will address the principle defined on that page. Please be honest in your feedback and ratings.

We appreciate your time, efforts, and expertise!

Thank you,

The Alliance of Chicago Clinical Team

### References:

- [1] Healthcare Information and Management Systems Society (HIMSS) EHR Usability Task Force. (2009). Defining and Testing EMR Usability: Principles and Proposed Methods of EMR Usability Evaluation and Rating. HIMSS. Accessed November 7, 2012, from http://www.himss.org/content/files/himss\_definingandtestingemrusability.pdf.
- [2] Schumacher, R.M., Lowry, S.Z. (2010). NIST Guide to the processes approach for improving the usability of electronic health records. United States Department of Commerce & National Institute of Standards and Technology. Accessed September 20, 2011, from http://www.nist.gov/itl/hit/upload/Guide\_Final\_Publication\_Version.pdf.
- [3] Corrao, N.J., Robinson, A.G., Swiernik, M.A., Naeim, A. (2010). Importance of testing usability when selecting and implementing an electronic health or medical record system. Journal of Oncology Practice, 6(3), 120-124. Accessed September 20, 2011, from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868635/pdf/jop120.pdf.

## 2. Identification

### 1. Name:

# 3. Simplicity

### Simplicity

Does information presented seem uniform and organized, or chaotic? Simplicity refers to having a lack of visual clutter and concise information display. Simplicity is difficult to achieve as the more complex a task becomes, the more important it is to maintain a sense of simplicity. Think of a "less is more" philosophy while assessing this principle.

Questions will be in a Yes-No format or asking for an answer on a 1-5 scale.

- 1 Terrible
- 2 Poor

Alliance Pe	ds WCC Conte	ent Project - Us	ability Testing	
3 - Fair 4 - Good				
5 - Excellent				
2. Is visual c	lutter is kept to a	minimum?		
C Yes				
O No				
C Unsure				
3. Please rat	te the degree of ea	se in moving from	one topic/option to	the next within the
content:				
O 1	O 2	O 3	O 4	O 5
4. With respe	ect to simplicity as	a whole, please ra	ite the content:	
O 1	© 2	© 3	C 4	© 5
E Additions	l commonto on sin	!:-:4·		
5. Additiona	l comments on sin	iplicity:		A
				▼
4. Naturalno	ess			
Naturalness				
			thinking of the user. Form	
		•	automatic sense of "fan	illianty is sought after.
	e asking for an answer	on a 1-5 scale.		
1 - Terrible 2 - Poor				
3 - Fair				
4 - Good 5 - Excellent				
6 Please rat	te how well the act	t of documenting in	the content follow	s a natural workflow
	cific to Well Child	_	the content ionow	3 a natural Workhow
O 1	⊙ 2	О 3	O 4	○ 5
7 Diagra	ha havrusall !fa	ation muonestad in	the contout william	vometition of J-4-
entry:	e now well intorm	auon presented in	ine content minimiz	zes repetition of data
O 1	C 2	<b>О</b> 3	O 4	O 5

		ent Project - Us			
O. Please rate	e now well interac	© 3	Ontent Seem Intuiti	© 5	
9 With respe	oct to naturalnace	as a whole, please	rate the content:		
© 1	© 2	0 3	© 4	O 5	
10 Additions	al comments on n	aturalness			
10. Additiona	ar comments on na	aturamess.		Y	
5. Consister	псу				
Consistency					
This principle ha	as two considerations:	external and internal co	nsistency		
"Internal" consis its screens/layo		II the content uses cond	epts, behaviors, and ap	pearances consistently thro	oughout
"External" consi		ell the content's structur	e and interactions matc	h the user's experience with	h other
Questions will be	e asking for an answer	on a 1-5 scale.			
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent					
11. Please ra	te how well the co	ontent uses simila	r formatting throug	ghout all tabs, in both	the
-	form and the age-	-			
O 1	C 2	O 3	C 4	O 5	
12. Please ra	te how well the c	ontent follows a u	niform process of	data entry and storag	e:
O 1	O 2	O 3	C 4	○ 5	
13. Please ra	te how well the co	ontent uses simila	r formatting to oth	er Alliance forms:	
O 1	○ 2	О з	O 4	○ 5	
14. With resp	ect to consistenc	y as a whole, plea	se rate the form:		
O 1	O 2	О 3	O 4	O 5	

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15. Additional commen	ts on consiste	ncy:			
6. Minimizing Cognit	ive Load				
Minimizing Cognitive Load					
This principle of usability asks provoke many thoughts such concepts should be saved for that the user can save their materials.	as "how do I" or "\ patient care, not or	What does this do. I how to use the co	"? Time and energ	y needed to think a	bout difficult
Questions will be asking for a	n answer on a 1-5 s	scale.			
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent					
16. Please provide you	r ratings for the	*gatekeeper*	form, the "Wel	l Child Care" fo	<b>orm:</b> 5
How well it strives to use minimal steps to enable quick review/charting of WCC information:	C	0	0	0	0
How well decision support is used to provide recommendations:	0	O	0	0	O
The need for interpretation (are "how do I" or "what does this do?" type questions minimized or eliminated?):	0	©	0	0	0

7. Please provide	your ratings f	or the *age-spe	cific* WCC form	s (i.e., WCC 2	2-5 Days, WC
Months, etc.):					
How well it strives to use minimal steps to enable	1 O	2 O	3 O	4 O	5 O
quick review/charting of WCC information:					
How well decision support is used to provide ecommendations:	O	O	O	O	O
The need for interpretation are "how do I" or "what does this do?" type questions minimized or eliminated?):	О	C	О	C	С
8. With respect to	minimizing c	ognitive load as	a whole, please	rate the con	tent:
O 1	C 2	C 3	O 4	O	5
					~
Efficient Intera	ctions				<u>~</u>
Efficient Interactions This principle refers to h	now concisely info				ects include
	now concisely infor	achieve a task and			ects include
Efficient Interactions This principle refers to holinimizing the amount of	now concisely infor	achieve a task and			ects include
Efficient Interactions This principle refers to hominimizing the amount of Questions will be asking Terrible Terrible Poor Terrible General	now concisely infor	achieve a task and			ects include
Efficient Interactions This principle refers to hominimizing the amount of Questions will be asking Terrible Terrible Poor Terrible General	now concisely infor	achieve a task and			ects include
Efficient Interactions This principle refers to hominimizing the amount of the authority of the asking Terrible	now concisely infor	achieve a task and			ects include

### Alliance Peds WCC Content Project - Usability Testing 20. Please rate how well the form minimized steps to complete documentation of: 2 Intake & CC/HPI 0 information 0 0 Patient History & any special healthcare needs Social/Family information & Parent-Child Interaction topics 0 0 0 0 0 **Developmental Milestones** Overall development topics (nutrition, elimination, sleep, behavior, activity) (·) 0 0 (·) 0 Review of Systems 0 Physical Exam 0 0 0 Anticipatory Guidance Assessment & Plan 21. Please rate the distance and frequency in which you have to move your mouse/cursor in order to document in... 2 Intake & CC/HPI 0 0 0 0 information Patient History & any special healthcare needs 0 Social/Family information & Parent-Child Interaction topics 0 0 0 0 0 **Developmental Milestones** Overall development topics (nutrition, elimination, sleep, behavior, activity) 0 0 0 Review of Systems 0 Physical Exam 0 0 0 Anticipatory Guidance Assessment & Plan 22. Please rate how well does the content utilize shortcuts to increase efficiency in documentation: O 2 ○ 3 5

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23. Did you	have to scroll to s	see the forms fully	? Please choose al	l that apply.
Yes, I had to	scroll right.			
Yes, I had to	scroll down.			
No, I didn't h	ave to scroll at all.			
24. With res	pect to efficient i	nteractions as a wl	nole, please rate th	e content:
O 1	© 2	© 3	O 4	C 5
25. Addition	al comments on e	efficient interaction	ns:	
				<b>△</b>
8. Forgiven	ess and Feedb	ack		
Forgiveness ar	nd Feedback			
harm or "getting	g lost". The user shoul		timidated of creating erro	ons and features without a fear of ors while learning the content. The ed.
Questions will	be in a Yes-No format	or asking for an answer	on a 1-5 scale.	
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent				
26. Is recov	ery and rectificat	ion of information	quick and easy if a	n error is made?
Yes				
O No				
O Unsure				
27. Do "go k	oack" functionalit	ties appear intuitiv	e and easy to find?	)
Yes				
O No				
C Unsure				
28. With res	pect to forgivene	ss and feedback as	s a whole, please r	ate the content:
O 1	© 2	О 3	O 4	O 5

		ent Project - Us		
29. Additional	comments on fe	orgiveness and fe	edback:	A V
9. Effective U	se of Langua	ge		
Effective Use of La	nguage			
what is familiar to t		vriting is to absolutely n		anguage should be congruent with it all. All text should be thought
Questions will be in	n a Yes-No format o	r asking for an answer o	n a 1-5 scale.	
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent				
30. Is terminolovisits?	ogy in the conte	ent congruent with	what is used in re	eal-life Well Child Care
C Yes				
C No				
C Unsure				
		onyms used in the		nly understood by users
C Yes				
O No				
C Unsure				
32. Is writing in	n all CAPS minir	nized or eliminate	d?	
C Yes				
C No				
O Unsure				
33. With respec	ct to effective u	se of language as	a whole, please ra	ite the content:
© 1	© 2	O 3	O 4	○ 5

This principle covers three main topics: [1] Appropriate Density [2] Meaningful Use of Color [3] Readability & Scan-ability  ———————————————————————————————————	r information on a lancing out relevarus of this topic.	display and the deg	yed with the amoun	t of real
This principle covers three main topics:  [1] Appropriate Density [2] Meaningful Use of Color [3] Readability & Scan-ability	r information on a lancing out relevar us of this topic. mit messages. The	nce in what is displa	yed with the amoun	t of real
Appropriate Density – The time spent searching for the amount of information displayed increases. Be estate you have for a user interface is the key foo Meaningful Use of Color - Colors are used to trans thoughts/actions without words and should be used Readability & Scan-ability - The ability to scan information means.  Questions will be in a Yes-No format or asking for 1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent  35. Please rate the degree of appropriating *gatekeeper* form. Please refer to you environment if you cannot remember very summary tab	lancing out relevar us of this topic. mit messages. The	nce in what is displa	yed with the amoun	t of real
thoughts/actions without words and should be used Readability & Scan-ability - The ability to scan information means.  Questions will be in a Yes-No format or asking for 1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent  35. Please rate the degree of appropriating a gatekeeper* form. Please refer to you environment if you cannot remember very summary tab	-	ey are one of the fe	w tools that incorpor	ate
information means.  Questions will be in a Yes-No format or asking for  1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent  35. Please rate the degree of appropria *gatekeeper* form. Please refer to you environment if you cannot remember v				
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent  35. Please rate the degree of appropria *gatekeeper* form. Please refer to you environment if you cannot remember v	rmation quickly wh	nile understanding a	at a high level what t	hat
2 - Poor 3 - Fair 4 - Good 5 - Excellent  35. Please rate the degree of appropria *gatekeeper* form. Please refer to you environment if you cannot remember v	an answer on a 1-	5 scale.		
*gatekeeper* form. Please refer to you environment if you cannot remember v	te density for	the following t	ahs of the WCC	
1 Summary tab	-	•		
Summary tab	hat the tabs lo	ook like.		
	2	3	4	5
Pediatric Screening Scores tab		0	0	0
Immunizations tab	O	0	O	0
Bright Futures C Recommendations tab	0	O	O	0

#### Alliance Peds WCC Content Project - Usability Testing 36. Please rate the degree of appropriate density for the following tabs of the WCC \*agespecific\* forms. Please refer to your screenshots provided by Shannon or the Demo environment if you cannot remember what the tabs look like. 1 0 Summary tab 0 0 0 0 0 Intake & CC/HPI tab Hx Screening tab School & ROS tab 0 (·) 0 (·) (·) (adolescents) Physical Exam tab 0 0 0 0 0 Anticipatory Guidance tab 37. Is meaningful use of color consistently used in the Well Child Care content? Yes Nο O Unsure 38. Please rate the readability and scan-ability of the following tabs of the WCC \*gatekeeper\* form. Please refer to your screenshots provided by Shannon or the Demo environment if you cannot remember what the tabs look like. 5 0 0 0 0 0 Summary tab 0 0 Pediatric Screening Scores 0 0 0 0 Immunizations tab 0 0 0 0 0 **Bright Futures** Recommendations tab 39. Please rate the readability and scan-ability of the following tabs of the WCC \*agespecific\* forms. Please refer to your screenshots provided by Shannon or the Demo environment if you cannot remember what the tabs look like. 4 5 0 0 0 0 Summary tab 0 0 0 0 0 Intake & CC/HPI tab Hx Screening tab 0 0 (·) (i) (·) School & ROS tab (adolescents) Physical Exam tab 0 0 (·) 0 Anticipatory Guidance tab 40. With respect to effective information presentation as a whole, please rate the content:

0 1

① 2

○ 3

O 4

5

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41. Additional com	ments on eff	ective informatio	n presentation:		
11. Preservation	of Context				
Preservation of Context					
This principle involves k be kept to a minimum. I down. Similar to reading also refers to how "direct onscreen.	Basically, you do a page out of a	not want to feel like y book, your visual cont	our eyes are constar ext should follow a n	ntly volleying bac atural order. Thi	ck and forth or up and sapect of usability
Questions will be asking	for an answer o	on a 1-5 scale.			
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent					
42. Please rate hov	v well pop-u <sub>l</sub>	p alerts are kept t	o a minimum:		
· 1	○ 2	<b>О</b> 3	C 4	0	5
43. When you make it?	e edits in the	form, please rate	e how soon you	see that edit	as you expect
© 1	○ 2	<b>О</b> 3	C 4	0	5
44. Please rate how following tabs of the by Shannon or the	e WCC *gate	ekeeper* form. Pl	ease refer to yo	ur screensh	ots provided
Summary tab	O	O	O	0	O
Pediatric Screening Scores tab	O	O	O	0	O
Immunizations tab	0	O	O	0	O
Bright Futures Recommendations tab	O	O	0	6	O

15 Dianaa wata bas		-	sability Testin		is found in th
l5. Please rate how following tabs of t	he WCC *age-	specific* forms.	Please refer to	your screens	shots provide
y Shannon or the		_			
Summary tab	1	2	3	4	5
Intake & CC/HPI	0	0	0	0	0
Hx Screening tab	0	O	0	0	0
School & ROS tab (adolescents)	0	O	0	0	0
Physical Exam tab	0	0	0	0	0
Anticipatory Guidance tab	O	0	0	0	0
l6. With respect to	o preservation	of context as a	whole, please ra	te the conte	nt:
O 1	O 2	© 3	O 4	0	5
					<b>V</b>
2. Form Design You will now be asked		about the content's	overall design and co	ncept.	
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent				nents box at the	end of this page.
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent For any answers of "Ur	nsure" or "No", plea	ase elaborate on tha	t answer in the Comn		
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent For any answers of "Ur	nsure" or "No", plea	ase elaborate on tha	t answer in the Comn		
1 - Terrible 2 - Poor 3 - Fair 4 - Good 5 - Excellent For any answers of "Ur	nsure" or "No", plea	ase elaborate on tha	t answer in the Comn		
	nsure" or "No", plea	ase elaborate on tha	t answer in the Comn		

Iliance Peds WC	C Conter	nt Project - U	sability Tes	ting	
49. Do you feel that the 80% of items that you the content?				•	
C Yes					
C No					
O Unsure					
50. Do you feel that th		will help facilitat	te a Patient-Cer	ntered Medical	Home model
at your organization?	?				
C Yes					
O No					
O Unsure					
51. Do you feel that the EPSDT guidelines?	ne content v	will help facilita	te reporting an	d audits for sta	te-specific
C Yes					
O No					
O Unsure					
52. You will now be a	skad abaut	t how wall this a	ontont achiev	e the goals of	the project
On a scale of 1-5, plea				is the goals of	tile projecti
	1	2	3	4	5
Improving the speed, accuracy, and efficiency of accessing, reviewing, and charting WCC information					
Providing a standard data set for easier data review during the visit, as well as ease of data reporting					
Offering a streamlined design template					
Basing the content on Bright Futures recommendations					
Incorporating best-practice AND evidence-based guidelines to enhance clinical decision support of Well Child Care	П	П			П

	nce Peds WCC Content Project - Usability Testing
53.	Please rate your comfort level in navigating through the forms with minimal training:
0	1 - I did not feel comfortable at all and repeatedly asked questions to help me understand the form.
0	2 - I had a few specific questions about the navigation.
0	3 - I had a few questions but was able to figure it out after playing around and using the form.
0	4 - I felt fully comfortable and did not have any questions.
3.	Training Needs
Whe	will now be asked questions specific to the types of training opportunities that should be offered for this content. en answering these questions, think about the degree of *change* you will experience from your existing content new WCC content.
	What type(s) of training do you think is REQUIRED for Alliance providers, prior to ing this content out to the Alliance User Community? Please choose all that apply.
	"What is Bright Futures?" webinar
	FAQ Document
	Webinar Training on the Content
	In-Person Classroom Training
	Simulation Training, where your schedule is blocked to allow for use of an exam room, to mimic a WCC visit with a fake patient
	Other (please specify)
	_
eq	Do you think that every single provider at your Health Center MUST go through some uired training prior to using the WCC content with real, live patients?  Yes No
eq	uired training prior to using the WCC content with real, live patients?  Yes
req o o	uired training prior to using the WCC content with real, live patients?  Yes  No

# Alliance Peds WCC Content Project - Usability Testing

	What types of training opportunities should the Alliance offer to help make this rollout cessful at your Health Center? Please choose all that apply.
	"What is Bright Futures?" webinar
	FAQ Document
Cen	Train-the-Trainer Training (where we train a resource at your Health Center, so that this resource can then provide training to your Health ter staff)
	Webinar Training on the Content
	In-Person Classroom Training
	Simulation Training Support (where your schedule is blocked to allow for use of an exam room, to mimic a WCC visit with a fake patient)
	Go-Live Support (where someone is at your clinic available for real-time assistance)
conf	Optimization Training Post-Go-Live (where we assess your providers' competency for the content after you have had a chance to use the ent & offer tips/tricks)
	Reporting Tips/Tricks Webinar
	Reporting Tips/Tricks In-Person Training
	Other (please specify)
57.	Comments:
14.	Additional Comments
58.	How long did it take you to complete this survey?

59. Any additional comments about the content?	Alliance Peds WCC Content Project - Usability Testing						
						<u>v</u>	