

Appendix Table A1. Comparison of Respondents and Non-Respondents (2008 AHA IT Supplement Survey)

	Population	Respondents	Non-Respondents	P-value
Total Beds				
0-99	2249 (49%)	1278 (46%)	971 (52%)	<.001
100-399	1935 (41%)	1206 (43%)	728 (40%)	<.001
400+	448 (10%)	310 (11%)	138 (8%)	<.001
Ownership				
Public	1115 (24%)	675 (24%)	439 (24%)	<.001
Private, Non-Profit	2759 (60%)	1772 (64%)	987 (54%)	<.001
Private, For-Profit	758 (16%)	347 (12%)	411 (22%)	<.001
Member of a System				
Yes	2506 (54%)	1489 (53%)	1017 (55%)	0.173
No	2126 (46%)	1305 (47%)	820 (45%)	0.173
Member of a Network				
Yes	1432 (33%)	999 (36%)	433 (24%)	<.001
No	3200 (67%)	1,795 (64%)	1,404 (76%)	<.001
Location				
Urban	2606 (56%)	1586 (57%)	1020 (56%)	0.406
Non-Urban	2025 (44%)	1208 (43%)	817 (44%)	0.406
Teaching				
Major or Minor	784 (17%)	525 (19%)	259 (14%)	<.001
Non-Teaching	3,839 (83%)	2269 (81%)	1578 (86%)	<.001

Appendix Table A2. Stage 1 Meaningful Use Criteria and Associated AHA IT Supplement Survey Measures

Stage 1 MU Category	Stage 1 MU Criteria	2008 IT Supplement Question: Does your hospital have a computerized system that allows for:	2008 IT Supplement Response Required to Meet MU Criteria
Patient Gender, Race, Ethnicity, and Date-of-Birth	More than 50% of all unique patients seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) have demographics recorded as structured data	Patient Demographics	Full Implementation in at least one Unit
Patient Problem Lists	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) have at least one entry or an indication that no problems are known for the patient recorded as structured data	Patient Problem Lists	Full Implementation in at least one Unit
Patient Medication Lists	More than 80% of all unique patents admitted to the eligible hospital have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data	Patient Medication Lists	Full Implementation in at least one Unit
CPOE	More than 30% of unique patients with at least one medication in their medication list seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) have at least one medication order entered using CPOE	CPOE for Medications	Full Implementation in at least one Unit
Electronic Copy of Discharge Instructions	More than 50% of all patients of the EP or the inpatient or emergency departments of the eligible hospital or CAH (POS 21 or 23) who request an electronic copy of their health information are provided it	Discharge Summaries	Full Implementation in at least one Unit
Clinical Decision Support	Implement one clinical decision support rule	CDS for guidelines, reminders, allergies, drug interactions, lab interactions, or dosing support	Full Implementation in at least one Unit
Implement drug-drug and drug-allergy interaction checks	The EP/eligible hospital/CAH has enabled this functionality for the entire EHR reporting period	Drug-drug and drug-allergy interaction checking	Full Implementation in at least one Unit

Appendix Table A3. Average Homogeneity, Adoption Rate, and Rank by Function Category: Differences by Hospital Size

	Average Rank			Differences in Average Rank		
	Large (n=306)	Medium (n=1211)	Small (n=1281)	Large v. Small	Large v. Medium	Medium v. Small
Clinical Documentation	14	12	12	2	2	0
Results	5	6	8	-3	-1	-2
CPOE	23	25	23	0	-2	2
Barcode	19	16	17	2	3	-1
Decision Support	15	16	15	0	-1	1
	Average Adoption Rate			Percent Differences in Average Adoption Rate		
	Large	Medium	Small	Large v. Small	Large v. Medium	Medium v. Small
Clinical Documentation	0.67	0.64	0.43	55.81	4.69	48.83
Results	0.89	0.81	0.54	64.81	9.88	50
CPOE	0.48	0.29	0.23	108.69	65.55	26.09
Barcode	0.56	0.52	0.32	75	7.69	62.5
Decision Support	0.54	0.54	0.35	54.29	0	54.3
All	0.66	0.57	0.38	73.68	15.79	50
	Average Homogeneity			Percent Differences in Average Homogeneity		
	Large	Medium	Small	Large v. Small	Large v. Medium	Medium v. Small
Clinical Documentation	0.38	0.41	0.47	-23.68	-7.90	-14.63
Results	0.46	0.46	0.54	-17.39	0	-17.39
CPOE	0.42	0.41	0.42	0.00	0.24	-0.24
Barcode	0.21	0.25	0.32	-0.52	-19.05	-28
Decision Support	0.38	0.43	0.47	-23.68	-13.16	-9.30
All	0.34	0.38	0.50	-27.80	-5.59	-23.52

Appendix Table A4. Detailed Homogeneity and Adoption Rate by Size

Small			Medium			Large		
Function	Adoption Rate	Homogeneity	Function	Adoption Rate	Homogeneity	Function	Adoption Rate	Homogeneity
Patient Demographics	0.763	0.703	Radiology Reports	0.949	0.740	Radiology Reports	0.981	0.743
Radiology Reports	0.728	0.740	Lab Reports	0.944	0.615	Radiology Images	0.971	0.593
Lab Reports	0.721	0.766	Patient Demographics	0.925	0.592	Patient Demographics	0.968	0.584
Radiology Images	0.677	0.517	Radiology Images	0.891	0.409	Lab Reports	0.968	0.455
Drug-Drug Interaction Alerts	0.490	0.569	Diagnostic Test Results	0.747	0.359	Diagnostic Test Results	0.897	0.457
Drug Allergy Alerts	0.490	0.570	Medication Lists	0.745	0.468	Drug Allergy Alerts	0.781	0.465
Medication Lists	0.479	0.552	Consultant Reports	0.721	0.362	Diagnostic Test Images	0.777	0.297
Discharge Summaries	0.477	0.551	Discharge Summaries	0.720	0.408	Drug-Drug Interaction Alerts	0.777	0.417
Laboratory specimens barcode	0.454	0.380	Drug Allergy Alerts	0.711	0.463	Medication Lists	0.774	0.434
Nursing Assessments	0.435	0.549	Drug-Drug Interaction Alerts	0.711	0.455	Consultant Reports	0.761	0.204
Diagnostic Test Results	0.424	0.471	Nursing Assessments	0.696	0.415	Nursing Assessments	0.716	0.354
Consultant Reports	0.422	0.454	Laboratory specimens barcode	0.667	0.178	Discharge Summaries	0.703	0.332
Drug-Lab Interaction Alerts	0.382	0.505	Patient ID barcode	0.614	0.264	Laboratory specimens barcode	0.665	0.206
Patient ID barcode	0.360	0.389	Diagnostic Test Images	0.576	0.274	Drug-Lab Interaction Alerts	0.655	0.303
Drug Dosing Support	0.343	0.472	Drug-Lab Interaction Alerts	0.566	0.406	Patient ID barcode	0.642	0.211
Advanced Directives	0.340	0.457	Advanced Directives	0.550	0.324	Drug Dosing Support	0.632	0.331
Problem Lists	0.322	0.508	Problem Lists	0.538	0.364	Advanced Directives	0.581	0.298
Radiology Tests CPOE	0.280	0.392	Drug Dosing Support	0.528	0.418	Problem Lists	0.542	0.330
Diagnostic Test Images	0.322	0.404	Tracking pharmaceuticals barcode	0.417	0.273	Clinical Reminders	0.529	0.382
Laboratory Tests CPOE	0.272	0.388	Clinical Reminders	0.406	0.429	Nursing Orders CPOE	0.510	0.388

Tracking pharmaceuticals barcode	0.243	0.388	Pharmaceutical administration barcode	0.385	0.290	Laboratory Tests CPOE	0.500	0.393
Nursing Orders CPOE	0.237	0.480	Nursing Orders CPOE	0.318	0.403	Radiology Tests CPOE	0.500	0.417
Clinical Reminders	0.228	0.510	Clinical Guidelines	0.313	0.429	Tracking pharmaceuticals barcode	0.474	0.214
Medications CPOE	0.225	0.459	Radiology Tests CPOE	0.312	0.379	Medications CPOE	0.471	0.432
Pharmaceutical administration barcode	0.229	0.407	Laboratory Tests CPOE	0.309	0.372	Pharmaceutical administration barcode	0.452	0.195
Physician Notes	0.216	0.433	Physician Notes	0.299	0.327	Consultation Requests CPOE	0.442	0.455
Clinical Guidelines	0.168	0.532	Medications CPOE	0.277	0.432	Clinical Guidelines	0.439	0.407
Consultation Requests CPOE	0.163	0.553	Consultation Requests CPOE	0.249	0.481	Physician Notes	0.416	0.320
SCALE	0.385	0.494	SCALE	0.574	0.379	SCALE	0.662	0.344
N	1281		N	1206		N	310	

Appendix Table A5. Detailed Homogeneity and Adoption Rate by Hospital Location

Rural			Urban		
Function	Adoption Rate	Homogeneity	Function	Adoption Rate	Homogeneity
Patient Demographics	0.858	0.770	Patient Demographics	0.952	0.726
Radiology Reports	0.749	0.771	Radiology Reports	0.924	0.764
Lab Reports	0.744	0.789	Lab Reports	0.915	0.687
Radiology Images	0.703	0.545	Radiology Images	0.871	0.508
Drug Allergy Alerts	0.533	0.602	Diagnostic Test Results	0.736	0.451
Drug-Drug Interaction Alerts	0.533	0.599	Medication Lists	0.713	0.521
Discharge Summaries	0.516	0.551	Consultant Reports	0.686	0.386
Medication Lists	0.508	0.552	Drug-Drug Interaction Alerts	0.679	0.488
Laboratory specimens barcode	0.498	0.413	Drug Allergy Alerts	0.678	0.498
Nursing Assessments	0.475	0.552	Discharge Summaries	0.672	0.453
Consultant Reports	0.451	0.473	Nursing Assessments	0.656	0.462
Diagnostic Test Results	0.449	0.487	Laboratory specimens barcode	0.618	0.237
Drug-Lab Interaction Alerts	0.426	0.524	Diagnostic Test Images	0.585	0.337
Patient ID barcode	0.411	0.417	Patient ID barcode	0.564	0.306
Advanced Directives	0.385	0.478	Drug-Lab Interaction Alerts	0.539	0.421
Drug Dosing Support	0.381	0.498	Advanced Directives	0.511	0.359
Problem Lists	0.360	0.496	Drug Dosing Support	0.510	0.427
Diagnostic Test Images	0.335	0.418	Problem Lists	0.498	0.414
Tracking pharmaceuticals barcode	0.268	0.410	Clinical Reminders	0.400	0.445
Radiology Tests CPOE	0.259	0.398	Tracking pharmaceuticals barcode	0.397	0.292
Clinical Reminders	0.257	0.519	Pharmaceutical administration barcode	0.368	0.305
Pharmaceutical administration barcode	0.254	0.411	Radiology Tests CPOE	0.362	0.386
Laboratory Tests CPOE	0.253	0.384	Nursing Orders CPOE	0.362	0.421
Physician Notes	0.234	0.438	Laboratory Tests CPOE	0.357	0.393
Nursing Orders CPOE	0.224	0.488	Medications CPOE	0.325	0.439
Medications CPOE	0.207	0.476	Clinical Guidelines	0.312	0.453
Clinical Guidelines	0.195	0.541	Physician Notes	0.304	0.354
Consultation Requests CPOE	0.154	0.566	Consultation Requests CPOE	0.290	0.498
SCALE	0.415	0.507	SCALE	0.564	0.415
N	1208		N	1586	

Appendix Table A6. Detailed Homogeneity and Adoption Rate by Teaching Status

Non-Teaching			Teaching (Major and Minor)		
Function	Adoption Rate	Homogeneity	Function	Adoption Rate	Homogeneity
Patient Demographics	0.831	0.712	Radiology Reports	0.983	0.679
Radiology Reports	0.817	0.772	Lab Reports	0.968	0.453
Lab Reports	0.812	0.770	Radiology Images	0.960	0.321
Radiology Images	0.761	0.544	Patient Demographics	0.958	0.553
Medication Lists	0.593	0.562	Diagnostic Test Results	0.850	0.411
Drug Allergy Alerts	0.586	0.556	Medication Lists	0.758	0.458
Discharge Summaries	0.585	0.560	Drug Allergy Alerts	0.747	0.468
Diagnostic Test Results	0.580	0.537	Drug-Drug Interaction Alerts	0.745	0.447
Nursing Assessments	0.557	0.480	Diagnostic Test Images	0.718	0.260
Consultant Reports	0.551	0.543	Discharge Summaries	0.712	0.346
Laboratory specimens barcode	0.547	0.464	Nursing Assessments	0.693	0.352
Patient ID barcode	0.543	0.346	Laboratory specimens barcode	0.663	0.195
Drug-Lab Interaction Alerts	0.474	0.399	Patient ID barcode	0.600	0.215
Advanced Directives	0.469	0.498	Drug-Lab Interaction Alerts	0.581	0.346
Drug Dosing Support	0.433	0.448	Drug Dosing Support	0.581	0.373
Diagnostic Test Images	0.424	0.479	Advanced Directives	0.558	0.282
Problem Lists	0.421	0.400	Problem Lists	0.547	0.326
Tracking pharmaceuticals barcode	0.413	0.485	Clinical Reminders	0.488	0.406
Clinical Reminders	0.324	0.385	Laboratory Tests CPOE	0.455	0.392
Pharmaceutical administration barcode	0.304	0.498	Radiology Tests CPOE	0.451	0.415
Radiology Tests CPOE	0.301	0.388	Nursing Orders CPOE	0.451	0.389
Laboratory Tests CPOE	0.287	0.387	Medications CPOE	0.417	0.428
Nursing Orders CPOE	0.279	0.389	Tracking pharmaceuticals barcode	0.417	0.221
Physician Notes	0.268	0.469	Pharmaceutical administration barcode	0.394	0.245
Medications CPOE	0.251	0.404	Clinical Guidelines	0.389	0.423
Clinical Guidelines	0.241	0.462	Consultation Requests CPOE	0.375	0.473
Consultation Requests CPOE	0.232	0.508	Physician Notes	0.371	0.332
SCALE	0.670	0.485	SCALE	0.983	0.354
N	2269			525	