

Supplementary Table S1. Change in Clinician Screening and Treatment Behaviors Pre- to Post-Program Implementation by Substance Use Treatment Center (SUTC).

Clinician Behaviors	Pre-Implementation N	Pre Yes (%)	Post-Implementation N	Post Yes (%)	p-Value
<u>Ask</u>					
<i>All SUTCs</i>	259	66.25	194	77.84	0.0036
SUTC 1	11	45.45	3	100.00	0.2088
SUTC 2	65	43.08	50	70.00	0.0040
SUTC 3	6	100.00	4	100.00	NA
SUTC 4	23	91.30	19	89.47	1.0000
SUTC 5	30	83.33	14	100.00	0.1607
SUTC 6	25	76.00	22	81.82	0.7298
SUTC 7	11	63.64	13	92.31	0.1421
SUTC 8	9	88.89	7	100.00	1.0000
SUTC 9	3	100.00	2	100.00	NA
SUTC 10	3	66.67	4	100.00	0.4286
SUTC 11	3	66.67	2	100.00	1.0000
SUTC 12	8	100.00	1	100.00	NA
SUTC 13	50	52.00	40	52.50	0.9624
SUTC 14	3	100.00	5	80.00	1.0000
SUTC 15	9	66.67	8	87.50	0.5765
<u>Advise</u>					
<i>All SUTCs</i>	223	60.54	181	71.82	0.0176
SUTC 1	9	44.44	3	100.00	0.2045
SUTC 2	59	49.15	49	61.22	0.2096
SUTC 3	6	66.67	4	100.00	0.4667
SUTC 4	19	68.42	14	71.43	1.0000
SUTC 5	26	76.92	14	78.57	1.0000
SUTC 6	24	58.33	20	80.00	0.1244
SUTC 7	11	72.73	12	100.00	0.0932
SUTC 8	8	50.00	7	71.43	0.6084
SUTC 9	3	100.00	2	100.00	NA
SUTC 10	3	66.67	4	100.00	0.4286
SUTC 11	3	100.00	2	100.00	NA
SUTC 12	7	85.71	1	100.00	1.0000
SUTC 13	34	41.18	36	50.00	0.4589
SUTC 14	3	100.00	5	80.00	0.4076
SUTC 15	8	100.00	8	100.00	NA
<u>Assess</u>					
<i>All SUTCs</i>	224	70.98	184	78.80	0.0712
SUTC 1	9	55.56	3	100.00	0.4909
SUTC 2	59	49.15	48	72.92	0.0126
SUTC 3	6	83.33	4	100.00	1.0000
SUTC 4	20	95.00	17	94.12	1.0000
SUTC 5	26	96.15	13	92.31	1.0000
SUTC 6	24	83.33	21	76.19	0.7129
SUTC 7	11	63.64	13	84.62	0.3572
SUTC 8	8	87.50	7	100.00	1.0000
SUTC 9	3	100.00	2	100.00	NA
SUTC 10	3	100.00	4	100.00	NA
SUTC 11	3	33.00	2	100.00	0.4000
SUTC 12	7	100.00	1	100.00	NA

SUTC 13	34	50.00	36	61.11	0.3496
SUTC 14	3	100.00	5	60.00	0.4643
SUTC 15	8	100.00	8	87.50	1.0000
<u>Assist</u>					
<i>All SUTCs</i>	222	45.95	181	69.61	<0.0001
SUTC 1	9	33.33	3	100.00	0.1818
SUTC 2	60	30.00	49	65.31	0.0002
SUTC 3	6	83.33	4	100.00	1.0000
SUTC 4	19	42.11	14	57.14	0.3930
SUTC 5	26	84.62	14	85.71	1.0000
SUTC 6	23	56.52	20	85.00	0.0425
SUTC 7	11	36.36	13	69.23	0.1074
SUTC 8	7	57.14	7	71.43	1.0000
SUTC 9	3	100.00	2	100.00	NA
SUTC 10	3	0.00	4	75.00	0.1429
SUTC 11	3	66.67	2	100.00	1.0000
SUTC 12	7	57.14	1	100.00	1.0000
SUTC 13	34	29.41	35	51.43	0.0626
SUTC 14	3	100.00	5	60.00	0.4643
SUTC 15	8	37.50	8	87.50	0.1189
<u>Arrange</u>					
<i>All SUTCs</i>	222	35.14	182	59.89	<0.0001
SUTC 1	9	22.22	3	66.67	0.2364
SUTC 2	59	23.73	50	52.00	0.0023
SUTC 3	6	50.00	4	75.00	0.5714
SUTC 4	19	36.84	14	71.43	0.0799
SUTC 5	26	65.38	14	57.14	0.6070
SUTC 6	24	41.67	20	70.00	0.0755
SUTC 7	11	45.45	13	61.54	0.4307
SUTC 8	7	0.00	7	57.14	0.0699
SUTC 9	3	100.00	2	100.00	NA
SUTC 10	3	66.67	4	75.00	1.0000
SUTC 11	3	33.33	2	100.00	0.4000
SUTC 12	7	71.43	1	100.00	1.0000
SUTC 13	34	11.76	36	44.44	0.0025
SUTC 14	3	100.00	5	80.00	1.0000
SUTC 15	8	25.00	7	85.71	0.0406

Note. Chi-square tests/Fisher exact tests were conducted, as appropriate, to examine pre- to post-implementation changes in the 5 A's.

Supplementary Table S2. Adjusted Model of Organizational Demographics as Moderators of Clinician Screening and Treatment Behaviors Pre- to Post-Program Implementation.

Clinician Behaviors	Number of total annual patient visits				
	Effect	Estimate	SE	<i>p</i>	
Ask	Time (ref: pre-implementation)	1.079	0.324	0.001	
	Number of total annual patient visits	0.219	0.486	0.652	
	Time*Number of total annual patient visits	-0.707	0.467	0.130	
	ORIC overall	1.766	1.916	0.357	
	Number of unique annual patient visits	0.663	0.733	0.366	
	Number of full-time employees	-1.978	0.700	0.005	
Advise	Time (ref: pre-implementation)	0.780	0.309	0.012	
	Number of total annual patient visits	-0.211	0.465	0.651	
	Time*Number of total annual patient visits	-0.329	0.457	0.471	

	ORIC overall	3.437	1.650	0.038
	Number of unique annual patient visits	0.292	0.716	0.684
	Number of full-time employees	-0.763	0.611	0.212
Assess	Time (ref: pre-implementation)	0.823	0.335	0.015
	Number of total annual patient visits	0.462	0.602	0.443
	Time*Number of total annual patient visits	-0.601	0.506	0.236
	ORIC overall	-0.004	2.275	0.999
	Number of unique annual patient visits	0.336	0.919	0.715
	Number of full-time employees	-1.529	0.842	0.070
Assist	Time (ref: pre-implementation)	1.515	0.314	<0.001
	Number of total annual patient visits	-0.260	0.354	0.463
	Time*Number of total annual patient visits	-0.694	0.450	0.124
	ORIC overall	2.393	1.287	0.064
	Number of unique annual patient visits	-0.022	0.579	0.970
	Number of full-time employees	-1.098	0.502	0.029
Arrange	Time (ref: pre-implementation)	1.468	0.304	<0.001
	Number of total annual patient visits	0.116	0.321	0.719
	Time*Number of total annual patient visits	-0.555	0.438	0.206
	ORIC overall	3.974	1.272	0.002
	Number of unique annual patient visits	0.069	0.589	0.906
	Number of full-time employees	-0.605	0.507	0.233
Number of unique annual patient visits				
	Effect	Estimate	SE	p
Ask	Time (ref: pre-implementation)	2.097	1.100	0.057
	Number of unique annual patient visits	0.967	0.761	0.204
	Time*Number of unique annual patient visits	-1.449	1.126	0.199
	ORIC overall	1.967	1.939	0.311
	Number of total annual patient visits	-0.040	0.455	0.929
	Number of full-time employees	-2.005	0.704	0.005
Advise	Time (ref: pre-implementation)	0.924	0.631	0.144
	Number of unique annual patient visits	0.413	0.738	0.576
	Time*Number of unique annual patient visits	-0.340	0.677	0.616
	ORIC overall	3.503	1.650	0.034
	Number of total annual patient visits	-0.347	0.427	0.417
	Number of full-time employees	-0.782	0.609	0.200
Assess	Time (ref: pre-implementation)	0.434	0.760	0.569
	Number of unique annual patient visits	0.329	0.947	0.728
	Time*Number of unique annual patient visits	0.148	0.804	0.854
	ORIC overall	0.074	2.294	0.974
	Number of total annual patient visits	0.227	0.573	0.692
	Number of full-time employees	-1.566	0.848	0.065
Assist	Time (ref: pre-implementation)	0.926	0.580	0.111
	Number of unique annual patient visits	-0.063	0.590	0.915
	Time*Number of unique annual patient visits	0.309	0.628	0.622
	ORIC overall	2.549	1.259	0.044
	Number of total annual patient visits	-0.553	0.294	0.061
	Number of full-time employees	-1.173	0.487	0.017
Arrange	Time (ref: pre-implementation)	0.479	0.480	0.319
	Number of unique annual patient visits	-0.219	0.603	0.717
	Time*Number of unique annual patient visits	0.914	0.541	0.092
	ORIC overall	4.036	1.256	0.001
	Number of total annual patient visits	-0.158	0.248	0.524

		Number of full-time employees	-0.663	0.493	0.179
		Number of full-time employees			
	Effect	Estimate	SE	p	
Ask	Time (ref: pre-implementation)	1.740	1.090	0.111	
	Number of full-time employees	-1.794	0.716	0.013	
	Time*Number of full-time employees	-1.058	1.116	0.344	
	ORIC overall	2.015	1.929	0.297	
	Number of total annual patient visits	-0.037	0.452	0.935	
	Number of unique annual patient visits	0.714	0.727	0.326	
Advise	Time (ref: pre-implementation)	0.672	0.570	0.239	
	Number of full-time employees	-0.776	0.645	0.229	
	Time*Number of full-time employees	-0.050	0.622	0.936	
	ORIC overall	3.535	1.652	0.033	
	Number of total annual patient visits	-0.345	0.426	0.418	
	Number of unique annual patient visits	0.326	0.713	0.648	
Assess	Time (ref: pre-implementation)	0.169	0.785	0.830	
	Number of full-time employees	-1.715	0.904	0.058	
	Time*Number of full-time employees	0.439	0.827	0.596	
	ORIC overall	0.044	2.279	0.985	
	Number of total annual patient visits	0.223	0.571	0.696	
	Number of unique annual patient visits	0.365	0.923	0.693	
Assist	Time (ref: pre-implementation)	0.585	0.533	0.273	
	Number of full-time employees	-1.421	0.534	0.008	
	Time*Number of full-time employees	0.725	0.586	0.217	
	ORIC overall	2.393	1.259	0.058	
	Number of unique annual patient visits	0.017	0.568	0.976	
	Number of total annual patient visits	-0.566	0.295	0.056	
Arrange	Time (ref: pre-implementation)	0.703	0.485	0.148	
	Number of full-time employees	-0.946	0.552	0.087	
	Time*Number of full-time employees	0.634	0.546	0.246	
	ORIC overall	3.828	1.281	0.003	
	Number of unique annual patient visits	0.122	0.588	0.835	
	Number of total annual patient visits	-0.164	0.250	0.512	

Note. Generalized linear mixed models were conducted to examine the moderation effect of organizational demographics on clinician screening and treatment behaviors from pre- and post-program implementation. ORIC=Organizational Readiness for Implementing Change. *=multiplication operator to indicate the interaction term. Ref=reference group in analyses. The number of total annual patient visits, number of total unique patient visits, and number of full-time employees were median-split.

Supplementary Table S3. Adjusted Model of Organizational Readiness for Change Subscales as Moderators of Clinician Screening and Treatment Behaviors Pre- to Post-Program Implementation.

Clinician Behaviors	Effect	ORIC Change Efficacy		
		Estimate	SE	p
Ask	Time (ref: pre-implementation)	0.815	0.239	0.001
	ORIC subscale	0.023	0.949	0.981
	ORIC subscale*time	1.638	0.728	0.025
	Number of total annual patient visits	0.156	0.459	0.734
	Number of unique annual patient visits	0.643	0.802	0.423
	Number of full-time employees	-2.156	0.756	0.005
	Advise	Time (ref: pre-implementation)	0.639	0.230
ORIC subscale		1.924	0.894	0.032
ORIC subscale*time		0.272	0.702	0.698

	Number of total annual patient visits	0.119	0.398	0.766
	Number of unique annual patient visits	0.707	0.771	0.360
	Number of full-time employees	-1.255	0.657	0.057
Assess	Time (ref: pre-implementation)	0.569	0.252	0.024
	ORIC subscale	0.695	1.135	0.541
	ORIC subscale*time	0.440	0.784	0.574
	Number of total annual patient visits	0.298	0.534	0.577
	Number of unique annual patient visits	0.774	0.968	0.424
	Number of full-time employees	-1.816	0.875	0.039
Assist	Time (ref: pre-implementation)	1.190	0.227	<0.001
	ORIC subscale	0.102	0.711	0.886
	ORIC subscale*time	0.705	0.722	0.329
	Number of total annual patient visits	-0.379	0.317	0.233
	Number of unique annual patient visits	-0.365	0.641	0.570
	Number of full-time employees	-1.050	0.557	0.060
Arrange	Time (ref: pre-implementation)	1.260	0.229	<0.001
	ORIC subscale	2.287	0.843	0.007
	ORIC subscale*time	-1.292	0.808	0.110
	Number of total annual patient visits	0.268	0.303	0.377
	Number of unique annual patient visits	0.087	0.637	0.891
	Number of full-time employees	-0.870	0.567	0.126
Clinician Behaviors		ORIC Change Commitment		
	Effect	Estimate	SE	p
Ask	Time (ref: pre-implementation)	0.719	0.245	0.004
	ORIC subscale	2.918	0.650	<0.001
	ORIC subscale*time	-0.115	0.707	0.871
	Number of total annual patient visits	-1.069	0.328	0.001
	Number of unique annual patient visits	2.477	0.714	0.001
	Number of full-time employees	-3.080	0.656	<0.001
Advise	Time (ref: pre-implementation)	0.677	0.236	0.004
	ORIC subscale	2.124	0.603	<0.001
	ORIC subscale*time	0.564	0.656	0.391
	Number of total annual patient visits	-1.018	0.314	0.001
	Number of unique annual patient visits	0.905	0.623	0.147
	Number of full-time employees	-1.096	0.506	0.031
Assess	Time (ref: pre-implementation)	0.491	0.261	0.060
	ORIC subscale	1.720	1.203	0.154
	ORIC subscale*time	-0.581	0.717	0.418
	Number of total annual patient visits	-0.302	0.646	0.640
	Number of unique annual patient visits	1.412	1.067	0.187
	Number of full-time employees	-2.029	0.845	0.017
Assist	Time (ref: pre-implementation)	1.158	0.226	<0.001
	ORIC subscale	1.257	0.581	0.031
	ORIC subscale*time	-0.347	0.617	0.574
	Number of total annual patient visits	-0.813	0.305	0.008
	Number of unique annual patient visits	0.197	0.597	0.742
	Number of full-time employees	-1.324	0.503	0.009
Arrange	Time (ref: pre-implementation)	1.177	0.220	<0.001
	ORIC subscale	1.761	0.586	0.003
	ORIC subscale*time	-0.698	0.594	0.241
	Number of total annual patient visits	-0.525	0.288	0.069
	Number of unique annual patient visits	0.140	0.561	0.803

		Number of full-time employees	-0.717	0.459	0.119
Clinician Behaviors	Effect	ORIC Task Knowledge			
		Estimate	SE	p	
Ask	Time (ref: pre-implementation)	0.802	0.244	0.001	
	ORIC subscale	-1.021	0.349	0.004	
	ORIC subscale*time	-0.658	0.605	0.278	
	Number of total annual patient visits	0.108	0.227	0.635	
	Number of unique annual patient visits	0.414	0.534	0.438	
	Number of full-time employees	-2.261	0.614	<0.001	
Advise	Time (ref: pre-implementation)	0.689	0.234	0.004	
	ORIC subscale	-0.087	0.520	0.868	
	ORIC subscale*time	-1.096	0.563	0.052	
	Number of total annual patient visits	-0.024	0.378	0.949	
	Number of unique annual patient visits	-0.662	0.590	0.263	
	Number of full-time employees	-0.400	0.581	0.492	
Assess	Time (ref: pre-implementation)	0.509	0.258	0.049	
	ORIC subscale	-1.515	0.476	0.002	
	ORIC subscale*time	0.350	0.616	0.570	
	Number of total annual patient visits	0.222	0.373	0.553	
	Number of unique annual patient visits	0.273	0.652	0.676	
	Number of full-time employees	-1.960	0.729	0.008	
Assist	Time (ref: pre-implementation)	1.178	0.225	<0.001	
	ORIC subscale	-0.231	0.325	0.477	
	ORIC subscale*time	-0.474	0.509	0.353	
	Number of total annual patient visits	-0.377	0.223	0.092	
	Number of unique annual patient visits	-0.642	0.474	0.176	
	Number of full-time employees	-0.962	0.476	0.044	
Arrange	Time (ref: pre-implementation)	1.187	0.223	<0.001	
	ORIC subscale	-0.319	0.422	0.450	
	ORIC subscale*time	-0.112	0.499	0.822	
	Number of total annual patient visits	0.071	0.302	0.815	
	Number of unique annual patient visits	-0.944	0.473	0.047	
	Number of full-time employees	-0.282	0.466	0.545	
Clinician Behaviors	Effect	ORIC Resource Availability			
		Estimate	SE	p	
Ask	Time (ref: pre-implementation)	0.791	0.239	0.001	
	ORIC subscale	0.645	0.538	0.232	
	ORIC subscale*time	-1.666	0.710	0.019	
	Number of total annual patient visits	-0.018	0.470	0.970	
	Number of unique annual patient visits	0.051	0.830	0.951	
	Number of full-time employees	-1.694	0.836	0.043	
Advise	Time (ref: pre-implementation)	0.656	0.231	0.005	
	ORIC subscale	0.400	0.518	0.441	
	ORIC subscale*time	-1.033	0.648	0.112	
	Number of total annual patient visits	-0.116	0.460	0.801	
	Number of unique annual patient visits	-0.745	0.718	0.299	
	Number of full-time employees	-0.271	0.699	0.698	
Assess	Time (ref: pre-implementation)	0.585	0.259	0.024	
	ORIC subscale	0.758	0.615	0.218	
	ORIC subscale*time	-1.923	0.747	0.010	
	Number of total annual patient visits	0.142	0.555	0.799	
	Number of unique annual patient visits	-0.054	0.929	0.954	

	Number of full-time employees	-1.208	0.926	0.193
Assist	Time (ref: pre-implementation)	1.188	0.226	<0.001
	ORIC subscale	0.899	0.391	0.022
	ORIC subscale*time	-0.963	0.573	0.093
	Number of total annual patient visits	-0.478	0.265	0.072
	Number of unique annual patient visits	-1.059	0.531	0.047
	Number of full-time employees	-0.586	0.497	0.239
Arrange	Time (ref: pre-implementation)	1.208	0.223	<0.001
	ORIC subscale	0.652	0.413	0.115
	ORIC subscale*time	-0.366	0.544	0.502
	Number of total annual patient visits	0.056	0.313	0.859
	Number of unique annual patient visits	-1.224	0.557	0.029
	Number of full-time employees	-0.011	0.539	0.984
Clinician Behaviors		ORIC Change Valence		
	Effect	Estimate	SE	p
Ask	Time (ref: pre-implementation)	0.698	0.236	0.003
	ORIC subscale	6.488	3.282	0.049
	ORIC subscale*time	-2.930	2.452	0.233
	Number of total annual patient visits	-0.250	0.461	0.588
	Number of unique annual patient visits	0.673	0.690	0.330
	Number of full-time employees	-2.025	0.735	0.006
Advise	Time (ref: pre-implementation)	0.648	0.232	0.005
	ORIC subscale	3.686	3.783	0.331
	ORIC subscale*time	1.029	2.416	0.670
	Number of total annual patient visits	-0.258	0.464	0.578
	Number of unique annual patient visits	-0.512	0.647	0.430
	Number of full-time employees	-0.324	0.644	0.616
Assess	Time (ref: pre-implementation)	0.474	0.256	0.065
	ORIC subscale	6.724	4.181	0.109
	ORIC subscale*time	-3.745	2.611	0.152
	Number of total annual patient visits	-0.046	0.552	0.934
	Number of unique annual patient visits	0.554	0.798	0.488
	Number of full-time employees	-1.528	0.816	0.062
Assist	Time (ref: pre-implementation)	1.153	0.225	<0.001
	ORIC subscale	4.395	1.911	0.022
	ORIC subscale*time	-2.190	2.454	0.373
	Number of total annual patient visits	-0.706	0.274	0.010
	Number of unique annual patient visits	-0.503	0.488	0.303
	Number of full-time employees	-0.897	0.488	0.067
Arrange	Time (ref: pre-implementation)	1.202	0.223	<0.001
	ORIC subscale	1.571	2.838	0.580
	ORIC subscale*time	-0.367	2.469	0.882
	Number of total annual patient visits	0.040	0.358	0.911
	Number of unique annual patient visits	-0.880	0.520	0.092
	Number of full-time employees	-0.248	0.515	0.630

Note. Generalized linear mixed models were conducted to examine the moderation effect of organizational readiness for change on clinician screening and treatment behaviors from pre- and post-program implementation.

ORIC=Organizational Readiness for Implementing Change. *=multiplication operator to indicate the interaction term
Ref=reference group in analyses. The number of total annual patient visits, number of total unique patient visits, and number of full-time employees were median-split.