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Appendix Table 1. Clinic Size, Visit Volume, Smoker Demographics, Percentages Assessed for Quitting, Interest, Readiness, eReferral, and Service Acceptance

Clinic	Adult panel	Clinician count	Smoker visits	% Women	% African American	% Other minority	% Hispanic	% Medicare	% Medicaid	% Uninsured	Mean age	% Assessed	% Ready to quit	% WTQL eReferred	% Accepted WTQL services
1	4,043	2	953	52.5	1.3	0.6	0.7	37.7	21.4	3.5	52.6	88.8	21.8	8.0	3.8
2	9,295	5	1,056	54.1	2.0	0.7	1.9	23.6	14.9	4.4	49.1	93.8	19.3	6.0	2.2
3	2,902	4	636	51.3	0.3	0.0	0.9	41.5	10.2	4.9	54.5	97.2	25.0	5.3	2.2
4	5,295	3	597	53.1	2.7	1.3	1.0	22.3	15.1	2.7	47.2	92.0	20.8	11.2	2.9
5	10,842	22	1,860	58.0	23.0	4.2	3.0	29.2	24.1	5.1	47.3	73.0	11.4	3.0	0.9
6	14,073	25	1,000	62.2	6.1	4.7	2.9	22.9	14.1	6.9	48.7	93.5	19.5	5.3	1.3
7	9,662	5	441	45.4	12.5	1.1	3.4	37.9	11.6	4.3	53.6	88.4	21.8	7.9	2.0
8	8,589	5	581	55.9	13.9	3.8	2.9	36.0	19.8	5.2	51.1	92.8	17.9	7.2	1.9
9	—[a]	—	240	47.1	16.3	3.8	5.4	11.7	26.7	8.8	39.7	90.0	35.8	10.0	3.3
10	9,992	6	605	59.5	15.0	3.1	3.8	35.0	16.2	3.1	52.6	84.8	19.7	5.0	1.0
11	10,099	11	1,013	55.2	14.1	2.0	2.8	24.9	19.0	4.1	50.6	94.9	19.2	5.4	2.3
12	6,960	4	733	55.0	1.2	0.3	1.6	26.5	9.4	6.8	52.5	94.8	27.0	5.3	1.4
13	6,450	3	521	55.7	2.5	1.0	2.1	22.5	9.2	2.5	48.3	92.3	31.5	5.6	2.7
14	14,235	6	1,260	58.7	7.9	2.4	1.3	14.7	13.4	6.1	44.9	93.0	22.4	7.9	1.7
15	5,315	3	477	52.4	1.0	0.4	2.3	16.6	10.3	4.6	49.8	88.9	18.9	4.4	1.7
16	4,724	3	395	55.7	0.8	1.3	0.5	15.2	13.7	5.3	46.6	89.9	24.3	5.6	0.8
17	5,344	3	426	68.3	17.8	1.6	6.1	15.0	21.6	4.7	43.5	82.4	11.5	3.1	0.9
18	17,437	12	1,117	54.3	12.9	3.0	1.9	25.3	15.8	4.1	48.3	84.4	21.4	8.3	2.8
19	5,060	3	451	52.8	24.8	4.9	4.4	20.6	33.0	2.4	44.8	89.1	35.9	10.0	3.6
20	20,791	23	889	47.2	8.0	2.8	2.7	30.9	12.0	1.9	53.2	85.4	28.2	4.7	1.5
21	8,623	6	367	94.8	14.4	0.8	1.4	32.2	17.7	1.9	50.7	75.5	30.2	5.2	2.7
22	10,459	15	976	62.5	10.5	2.8	1.4	38.7	16.0	1.4	49.8	79.5	35.5	6.6	1.7
23	13,066	30	535	44.5	19.3	3.7	2.6	35.1	13.5	5.0	49.6	82.2	19.1	4.1	1.1
24	4,002	3	630	60.6	2.4	1.1	1.0	17.0	11.6	3.3	48.0	94.6	18.3	6.2	3.0
25	2,734	1	252	51.6	3.6	0.8	1.6	21.8	19.8	5.6	48.8	94.4	31.0	13.9	4.0
26	6,925	6	520	59.8	19.8	3.1	4.2	16.0	27.1	3.7	43.5	78.3	19.0	4.4	1.4
27	15,256	8	1,419	56.2	1.0	0.8	2.1	17.9	14.4	5.0	47.3	92.0	27.8	7.8	2.0
28	6,234	14	928	54.0	1.4	1.4	0.8	19.6	15.4	4.8	47.6	90.6	15.1	8.7	2.5
29	—[b]	1	58	72.4	1.7	0.0	0.0	46.6	5.2	0.0	60.7	58.6	10.3	10.3	3.5
30	8,780	21	1,949	58.0	37.6	5.1	10.3	21.1	40.0	13.3	45.6	83.5	19.6	4.5	0.9

[a]This is a clinic that serves patients new to the system who have not yet selected a primary care provider at another clinic; it does not have a stable panel of patients or primary care providers.
[b]Data on adult panel size were not provided for this small clinic, which has closed.

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WTQL, Wisconsin Tobacco Quitline; eReferral=electronic referral.

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APPENDIX TEXT

This section describes the specific cascade of steps involved in the use of the electronic health record (EHR)-enabled tobacco intervention resource and the logic behind alerting. Note that below we have not used proprietary language that is specific to the EHR vendor. The steps are as follows:

1) Previously recorded tobacco use status for the patient is displayed in the vital sign assessment section of the EHR. MAs/LPNs or others conducting rooming activities are instructed to verify this tobacco use status. If it needs to be updated, staff click a link to go to the tobacco use history part of the social history to enter the current tobacco use status.

2) The vital sign section of the EHR presents a yes/no field for "Ready to Quit?" that MAs/LPNs (roomers) are directed to complete at every visit with a patient who uses any form of tobacco other than exclusive use of ENDS. The readiness to quit field is not prepopulated based on previous response as tobacco use status is.

3) If "Ready to Quit?" is not documented (yes or no), when the roomer tries to move to another section in the EHR, a pop-up appears that prompts readiness to quit assessment and requires that an "ok" box be clicked and readiness documented.

4) Documentation of positive readiness to quit in the vital sign alert section presents a tobacco cessation alert with an option for recording the patient's interest in quitline referral (or lack thereof). This alert will appear in a list of practice recommendations pertinent to the encounter only for patients age 18 or older who smoke or use smokeless

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tobacco, and who have an address in Wisconsin. The alert is suppressed for 90 days after a response is last documented in this alert for the patient.

5) Opening an order set associated with the tobacco cessation alert presents a tobacco cessation hyperlink that cues the roomer to confirm the patient's interest in quitline referral and to record the best time for the quitline to call the patient.

6) The roomer's pending the order set stages it for the patient's physician to review and sign. Once signed in the EHR, it is transmitted to the quitline via HL7v2 (a form of HIPAA-compliant transmission to the quitline), which activates quitline calls.

7) The quitline then sends the referral results (feedback) to the healthcare system's EHR, reporting the outcomes of referral (contact and service delivery); this is returned to the referring provider's EHR inbox in a results folder, and is appended to the patient's chart as the result of a consultation order, for all members of a patient's care team to see. The result notes if/when the patient was contacted, what the call disposition was (e.g., unreached, enrolled in one-call program), any medications dispensed (e.g., 21 mg patches, 2 weeks), and a target quit date (if set).

8) Healthcare system staff then call the patient to see if s/he desires more medication; if so, nicotine replacement is added to the patient's medication list.