#### **Appendix**

#### CHWs to Increase Cancer Screening: 3 Community Guide Systematic Reviews Okasako-Schmucker et al.

Appendix Tables.

**Appendix Table 1.** Intervention Characteristics of Included Studies.

**Appendix Table 2.** Changes in Cancer Screening Use Stratified by Intervention Settings and Characteristics.

Appendix Table 3. Changes in Cancer Screening Use Stratified by CHW Work Characteristics.

**Appendix Table 4.** Changes in Cancer Screening Use Stratified by Study Participant Characteristics.

Appendix Table 1. Intervention Characteristics of Included Studies.

	Number of	
Characteristics	Studies	Citations
	Reporting	
Location		
United States <sup>a</sup>	71	32-46, 48-54, 56-58, 61-106
Australia	1	59
Belgium	1	55
Canada <sup>a</sup>	2	47, 97
Hong Kong, China	1	107
United Kingdom	1	60
Urbanicity		
Urban	43	32, 36-38, 42, 44, 45, 47, 49, 50, 53, 56, 60, 65, 66, 68, 70, 74-82.
		84, 87-93, 95, 97-99, 101-103, 106, 107
Rural	15	33, 39, 40, 46, 48, 52, 55, 59, 71, 72, 83, 85, 86, 94, 100
Mixed	3	41, 54, 61
Not reported	15	34, 35, 43, 51, 57, 58, 62-64, 67, 69, 73, 96, 104, 105
Cancer Screening Type	_	
Breast cancer screening with	39	32, 34-39, 42, 43, 47-49, 52-57, 60, 62-64, 71, 75, 76, 78, 80, 83,
mammography		85, 87-93, 95, 104, 106
Cervical cancer screening	33	36, 38, 39, 41, 46, 47, 49, 51, 52, 56, 59, 68, 72, 73, 77, 78, 81,
with Pap smear		83, 84, 86, 87, 93-100, 103, 104, 106, 107
Colorectal cancer screening		
Overall	24	33, 36, 39, 40, 44, 45, 49, 50, 53, 58, 61, 62, 65-67, 69, 70, 74, 79
		82, 101, 102, 104, 105
Colonoscopy	6	39, 50, 61, 62, 70, 104
FOBT/FIT	14	39, 40, 44, 45, 49, 58, 61, 62, 66, 70, 101, 102, 104, 105
Sigmoidoscopy	3	61, 62, 104
Colonoscopy or	4	45, 49, 66, 101
sigmoidoscopy		
Implementation environment		
Clinics	7	33, 50, 53, 57, 65, 70, 90
Community	54	32, 35-38, 40-42, 45-49, 51, 52, 54, 56, 60-64, 66-69, 71-73, 75-
Community and clinic	15	80, 82-84, 91-101, 103-107
,		34, 39, 43, 44, 55, 58, 59, 74, 81, 85-89, 102
Intervention delivery methods		
Face-to-face only	34	32, 34, 35, 38, 40-42, 45, 48, 51, 57, 59-63, 68, 71, 72, 76, 78, 81
· · · · · · · · · · · · · · · · · · ·		83, 84, 87, 91, 92, 94-96, 98, 103, 105, 106
Remote only	7	37, 53, 55, 64, 65, 70, 102
Combination	35	33, 36, 39, 43, 44, 46, 47, 49, 50, 52, 54, 56, 58, 66, 67, 69, 73-75
		77, 79, 80, 82, 85, 86, 88-90, 93, 97, 99-101, 104, 107
Strategies addressed		
Increasing demand for	49	32-34, 36, 38, 41-46, 48, 51, 52, 54-67, 69, 72, 74, 76, 78, 81-84,
services only	.,	86, 87, 91-96, 99, 101, 102, 105
Increasing access to services	1	106
only	•	

Increasing demand for and	26	35, 37, 39, 40, 47, 49, 50, 53, 68, 70, 71, 73, 75, 77, 79, 80, 85,
access to services		88-90, 97, 98, 100, 103, 104, 107
Intervention Components		
Increasing demand for		
services		
Group education	40	35, 36, 38, 40, 42, 45, 47-49, 51, 56, 59, 61, 62, 66-69, 71-74, 76-
		84, 87, 89, 92, 96, 98, 101, 103, 105, 107
One-on-one education	44	32-37, 39, 41, 43, 44, 46, 48-50, 52, 54-58, 60, 63-65, 69, 75, 82,
		85-91, 93-95, 97-102, 104
Client reminder	9	39, 44, 47, 53, 66, 70, 88, 89, 100
Small media	6	67, 73, 86, 88, 90, 103
Increasing access to services		
Reduce administrative	13	39, 40, 47, 49, 50, 53, 75, 79, 88, 89, 98, 104, 107
barriers		
Assist with appointment	25	35, 37, 39, 47, 49, 50, 68, 70, 71, 73, 75, 77, 79, 80, 85, 88-90, 97,
scheduling		98, 100, 103, 104, 106, 107
Provide transportation	9	35, 47, 73, 88-90, 97, 98, 103
Provide translation	4	47, 73, 97, 103
Provide child care	1	39
Number of components		
1 component	39	32-34, 38, 41-43, 45, 46, 51, 52, 54, 55, 57-65, 72, 74, 76, 78, 81,
C CONTRACTOR		83, 84, 91-96, 99, 102, 105, 106
2 components	20	36, 37, 40, 44, 48, 53, 56, 66-71, 77, 80, 82, 85-87, 101
3 components	6	50, 75, 79, 100, 104, 107
4+ components	11	35, 39, 47, 49, 73, 88-90, 97, 98, 103

<sup>&</sup>lt;sup>a</sup>One study evaluated interventions in the US and Canada

FIT, fecal immunochemical test; FOBT, fecal occult blood test.

Appendix Table 2. Changes in Cancer Screening Use Stratified by Intervention Settings and Characteristics.

Stratification Factor	Citations	Median (IQI)
Location United States (91 effect sizes)	32-45, 48, 49, 51-54, 56, 58, 61-66, 68-89, 91-96, 98- 106	12.0 percentage points (5.3 to 21.8)
Non-United States (6 effect sizes)	47, 55, 60, 107	13.7 percentage points (1.8 to 28.9)
Urbanicity		
Urban (55 effect sizes)	32, 36-38, 42, 44, 45, 47, 49, 53, 56, 60, 65, 66, 68, 70, 74-82, 84, 87-93, 95, 97-99, 101-103, 106, 107	12.8 percentage points (5.4 to 23.4)
Rural (19 effect sizes) Mixed (4 effect sizes)	33, 39, 40, 48, 52, 55, 71, 72, 83, 85, 86, 94, 100 41, 54, 61	11.0 percentage points (5.7 to 19.4) 11.9 percentage points (Range: -17.9 to 13.0)
Location environment		
Community (73 effect sizes)	32, 35-38, 40-42, 45, 47-49, 51, 52, 54, 56, 60-64, 66, 68, 69, 71-73, 75-80, 82-84, 91-101, 103-107	11.0 percentage points (4.7 to 21.0)
Clinic (6 effect sizes) Community & Clinic (19 effect sizes)	33, 53, 65, 70, 90 34, 39, 43, 44, 55, 58, 74, 81, 85-89, 102	21.0 percentage points (5.3 to 30.8) 12.7 percentage points (9.1 to 21.0)
Strategies addressed		
Increasing demand for services only (63 effect sizes)	32-34, 36, 38, 41-45, 48, 51, 52, 54-56, 58, 60-66, 69, 72, 74, 76, 78, 81-84, 86, 87, 91-96, 99, 101, 102, 105	10.5 percentage points (5.0 to 15.0)
Increasing access to services only (2 effect sizes) Increasing demand for and access to services (33 effect sizes)	106 35, 37, 39, 40, 47, 49, 53, 68, 70, 71, 73, 75, 77, 79, 80, 85, 88-90, 97, 98, 100, 103, 104, 107	28.7 percentage points (Range: 12.9 to 44.5) 18.2 percentage points (6.4 to 27.5)
Strategies addressed		
Increasing demand for services Group education <sup>a</sup> (53 effect sizes)	35, 36, 38, 40, 42, 45, 47-49, 51, 56, 61, 62, 66, 68, 69, 71-74, 76-84, 87, 89, 96, 98, 101, 103, 105, 107	13.0 percentage points (6.4 to 26.0)
One-on-one education <sup>a</sup> (57 effect sizes)	32-34, 36, 37, 39, 41, 43, 44, 48, 49, 52, 54-56, 58, 60, 64, 65, 69, 75, 82, 85-91, 93-95, 97-102, 104	9.2 percentage points (2.4 to 17.6)

Client reminder <sup>a</sup> (13 effect sizes)	39, 44, 47, 53, 66, 70, 88, 89, 100	18.8 percentage points (11.7 to 23.0)
Small media <sup>a</sup> (5 effect sizes)	73, 86, 88, 90, 103	50.1 percentage points (13.1 to 58.7)
Increasing access to services		,
Reduce administrative barriers <sup>a</sup> (20 effect	39, 40, 47, 49, 53, 75, 79, 88, 89, 98, 104, 107	18.5 percentage points (3.4 to 25.0)
sizes)	35, 37, 39, 47, 49, 68, 70, 71, 73, 75, 77, 79, 80, 85, 88-	17.0
Assist with appointment scheduling <sup>a</sup> (32 effect sizes)	90, 97, 98, 100, 103, 104, 106, 107	17.0 percentage points (6.1 to 29.4)
Provide transportation <sup>a</sup> (10 effect sizes)	35, 47, 73, 88-90, 97, 98, 103	26.8 percentage points (17.9 to 58.6)
Flovide transportation (10 effect sizes)		20.8 percentage points (17.9 to 38.0)
Provide translation <sup>a</sup> (5 effect sizes)	47, 73, 97, 103	30.2 percentage points (20.8 to 58.7)
Provide child care <sup>a</sup> (3 effect sizes)	39	22.6 percentage points (Range: 16.2 to
		25.2)
Number of components	32-34, 38, 41-43, 45, 51, 52, 54, 55, 58, 60-65, 72, 74,	10.5
1 component (50 effect sizes)	76, 78, 81, 83, 84, 91-96, 99, 102, 105, 106	10.6 percentage points (5.2 to 15.0)
2 components (25 effect sizes)	36, 37, 40, 44, 48, 53, 56, 66, 68-71, 77, 80, 82, 85-87,	12.1 percentage points (5.7 to 19.9)
2 components (23 circet sizes)	101	12.1 percentage points (2.7 to 15.5)
3 components (8 effect sizes)	75, 79, 100, 104, 107	11.9 percentage points (0.3 to 43.3)
4+ components (15 effect sizes)	35, 39, 47, 49, 73, 88-90, 97, 98, 103	22.6 percentage points (16.2 to 30.2)
Intervention delivery methods	24 25 20 40 42 45 40 51 60 62 60 71 72 76 70	
Face-to-face only (44 effect sizes)	34, 35, 38, 40-42, 45, 48, 51, 60-63, 68, 71, 72, 76, 78, 81, 83, 84, 87, 91, 92, 94-96, 98, 103, 105, 106	11.0 percentage points (5.9 to 17.6)
Domoto only (0 offect sizes)	37, 53, 55, 64, 65, 70, 102	9.2 percentage points (7.4 to 22.9)
Remote only (9 effect sizes) Combination (45 effect sizes)	33, 36, 39, 43, 44, 47, 49, 52, 54, 56, 58, 66, 69, 73-75,	12.7 percentage points (7.4 to 22.9)
Combination (45 cheet sizes)	77, 79, 80, 82, 85, 86, 88-90, 93, 97, 99-101, 104, 107	12.7 percentage points (3.3 to 23.0)
Intervention intensity:		
One-time contact with participants (19 effect	34, 35, 41, 47, 58, 60, 63, 71, 72, 74, 88, 96, 97, 99, 105,	12.8 percentage points (10.7 to 30.2)
sizes)	106	
Two contacts with participants (31 effect sizes)	32, 33, 40, 43-45, 51, 52, 55, 61, 64, 65, 68, 79, 80, 83,	11.0 percentage points (4.9 to 19.4)
	1 84 93 94 98 100 103 104	
More than two contacts with participants (26	84, 93, 94, 98, 100, 103, 104 36, 38, 42, 49, 53, 54, 56, 62, 66, 69, 70, 75-78, 82, 85,	10.2 parcentage points (4.0 to 21.2)
More than two contacts with participants (36 effect sizes)	84, 93, 94, 98, 100, 103, 104 36, 38, 42, 49, 53, 54, 56, 62, 66, 69, 70, 75-78, 82, 85, 86, 89-91, 95, 101, 107	10.2 percentage points (4.0 to 21.3)

<6 months (28 effect sizes)	33, 35, 42, 45, 52, 61, 64-66, 68, 76-80, 82, 84, 90, 95,	13.0 percentage points (7.4 to 23.0)
	97, 99-101, 107	
Between 6 and 12 months (9 effect sizes)	36, 37, 51, 56, 58, 85, 86	15.2 percentage points (4.0 to 45.7)
≥12 months (14 effect sizes)	34, 38, 49, 54, 81, 83, 87-89	16.1 percentage points (9.0 to 21.3)
Length of follow-up <sup>b</sup>		
<6 months (35 effect sizes)	33, 34, 36, 37, 40, 42, 49, 56, 66, 68, 72, 77-82, 85-87,	12.1 percentage points (6.4 to 27.0)
, , ,	90, 92, 94, 99, 101, 105, 107	
≥6 months (45 effect sizes)	32, 35, 41, 43-45, 47, 48, 51-54, 58, 61-65, 69-71, 73-	10.7 percentage points (5.3 to 19.1)
	76, 84, 93, 95-98, 100, 102, 103	remarks from (e.e. or executive)

<sup>&</sup>lt;sup>a</sup>Some studies had multiple components. <sup>b</sup>End of intervention to last follow-up. IQI, interquartile interval.

Appendix Table 3. Changes in Cancer Screening Use Stratified by CHW Work Characteristics.

Stratification Factor	Citations	Median (IQI)
Core roles performed <sup>111</sup>		
Cultural mediation among individuals,	32-41, 43-45, 47-49, 52, 56, 58, 61-64, 66, 68, 69, 71-80,	11.9 percentage points (5.4 to 20.2)
communities, and health and social service	82, 83, 85-91, 93-104, 107	
systems (81 effect sizes)		
Providing culturally appropriate education and	32-45, 47-49, 51, 52, 55, 56, 58, 60-66, 68, 69, 71-105,	11.8 percentage points (5.3 to 21.8)
information (92 effect sizes)	107	
Care coordination, case management, and	34-37, 39, 47, 49, 51-54, 58, 65, 66, 68, 70, 71, 73-77,	12.8 percentage points (4.9 to 23.8)
system navigation (51 effect sizes)	80, 85, 88-90, 93, 95, 97-100, 103, 104, 106, 107	
Providing coaching and social support (80	32-41, 43, 44, 47-49, 52, 54, 56, 61-66, 68-72, 75-80, 82,	11.0 percentage points (5.0 to 20.6)
effect sizes)	83, 85-95, 97, 98, 100, 102-105, 107	
Advocating for individuals and communities (1	80	15.8 percentage points
effect sizes)		
Building individual and community capacity	32-45, 47-49, 51, 52, 54-56, 58, 61-66, 68-80, 82-92, 94-	12.3 percentage points (5.7 to 22.6)
(89 effect sizes)	103, 105-107	
Providing direct services (0 effect sizes)		Not applicable
Implementing individual and community	104	0.3 percentage points (Range: 0.0 to
assessments (3 effect sizes)		0.5)
Conducting outreach (54 effect sizes)	32-35, 39, 41-45, 47-49, 52, 54, 56, 60, 66, 71, 72, 77-	11.0 percentage points (5.0 to 18.5)
-	82, 85, 86, 89, 91, 93-95, 97, 98, 100, 101, 104, 106	
Participating in evaluation and research (3	104	0.3 percentage points (Range: 0.0 to
effect sizes)		0.5)
Number of core roles performed		
1 (2 effect sizes)	53, 55	21.5 percentage points (Range: 18.8 to
		13.3)
2 (5 effect sizes)	60, 81, 84	9.2 percentage points (0.8 to 15.0)
3 (9 effect sizes)	42, 51, 70, 92, 96, 105, 106	16.5 percentage points (6.1 to 40.8)
4 (25 effect sizes)	38, 40, 45, 54, 58, 61-65, 69, 73, 74, 83, 87, 99, 101, 102	13.0 percentage points (8.0 to 21.8)
5 (31 effect sizes)	32, 33, 36, 37, 41, 43, 44, 48, 56, 68, 72, 75, 76, 78, 79,	10.7 percentage points (5.7 to 17.1)
	82, 86, 88, 90, 91, 93, 94, 103, 107	
6 (22 effect sizes)	34, 35, 39, 47, 49, 52, 66, 71, 77, 85, 89, 95, 97, 98, 100	15.7 percentage points (5.0 to 22.8)

7 (4 effect sizes)	80, 104	0.4 percentage points (Range: 0.0 to 15.8)
Level of involvement in intervention delivery Implemented everything (52 effect sizes)	33, 35, 39, 41, 43, 45, 47, 49, 52, 54, 61, 62, 66, 70-73, 75, 76, 78, 79, 82-86, 88, 89, 91, 95, 96, 99-101, 103, 104, 107	10.6 percentage points (5.1 to 17.9)
Implemented majority of components (34 effect sizes)	32, 34, 36-38, 40, 43, 48, 53, 55, 56, 60, 63, 65, 68, 69, 74, 77, 80, 90, 92-94, 97, 98, 102	11.0 percentage points (4.4 to 23.4)
Implemented minority of components (12 effect sizes)	42, 44, 51, 58, 64, 81, 87, 105, 106	19.5 percentage points (11.8 to 36.6)
Formal training provided Yes (86 effect sizes)	32-36, 38, 39, 41, 43-45, 47-49, 52-56, 58, 60-66, 68-73, 75-80, 82, 83, 85, 86, 88-96, 98-105, 107	11.0 percentage points (5.0 to 18.4)
Not reported (12 effect sizes)	37, 40, 42, 51, 74, 81, 84, 87, 97, 106	24.5 percentage points (13.4 to 42.2)
Supervision of CHW performance Yes (42 effect sizes)	33, 35, 36, 38, 39, 47, 52, 53, 55, 63, 65, 69, 71, 75, 76, 78, 79, 82-91, 94, 95, 102	13.6 percentage points (6.2 to 21.3)
Not reported (56 effect sizes)	32, 34, 37, 40-45, 48, 49, 51, 54, 56, 58, 60-62, 64, 66, 68, 70, 72-74, 77, 79-81, 92, 93, 96-101, 103-107	11.3 percentage points (4.9 to 25.9)
CHWs matched to the community Yes (94 effect sizes) Not reported (4 effect sizes)	33-45, 47-49, 51-56, 58, 60-66, 68, 69, 71-86, 88-107 32, 70, 87	12.0 percentage points (5.3 to 22.5) 12.6 percentage points (Range: 0.8 to 21.0)
Reimbursement for CHWs Yes (28 effect sizes)	35, 36, 38, 45, 49, 54, 62, 64, 66, 68, 77, 79, 80, 82, 85, 90, 91, 101, 105	11.6 percentage points (4.0 to 21.4)
Not reported (70 effect sizes)	32-34, 37, 39-44, 47, 48, 51-53, 55, 56, 58, 60, 61, 63, 65, 69-76, 78, 81, 83, 84, 86-89, 92-100, 102-104, 106, 107	12.1 percentage points (5.7 to 22.2)

CHW, community health worker; IQI, interquartile interval.

Appendix Table 4. Changes in Cancer Screening Use Stratified by Study Participant Characteristics.

Stratification Factor	Citations	Median (IQI)
Race and ethnicity, U.S. only (62 studies)		
Recruited age and gender appropriate study	34, 53, 64, 86, 94, 105	14.0 percentage points (4.8 to 22.9)
participants without race or ethnicity		
requirement (6 effect sizes)		
≥50% minority population (16 effect sizes)	34, 37, 39, 40, 65, 85, 87, 102, 105	15.7 percentage points (7.7 to 23.1)
100% American Indian Alaskan Native (1	58	12.5 percentage points
effect size)		
100% Asian American (23 effect sizes)	38, 45, 51, 56, 66, 68, 73, 74, 77, 79-82, 97-99, 103	12.1 percentage points (6.1 to 45.3)
100% Black or African American (25 effect	32, 42, 48, 54, 61, 69, 75, 90, 91, 95	
sizes)		7.8 percentage points (2.2 to 14.0)
100% Hawaii/Pacific Islander (3 effect sizes)	35, 76, 96	16.5 percentage points (Range: 8.9 to
		72.3)
100% Hispanic or Latino (33 effect sizes)	36, 41, 43, 44, 49, 52, 72, 78, 83, 84, 92, 100, 106	8.6 percentage points (1.4 to 14.0)
Income		
≥50% with annual household income less than	36-38, 42, 43, 48, 49, 52, 53, 61, 72, 75, 76, 78, 79, 82,	9.1 percentage points (5.0 to 18.8)
\$40,000 (55 effect sizes)	94, 95, 101, 102, 105	
Focused on low-income communities (8 effect	47, 65, 83, 87, 90, 106	19.6 percentage points (14.1 to 23.4)
sizes)		
Employment status		
≥50% employed (35 effect sizes)	36, 49, 51, 54, 56, 61, 63, 72, 73, 81, 84, 86, 95	9.8 percentage points (0.3 to 27.0)
<50% employed (28 effect sizes)	38, 42, 43, 66, 68, 76-80, 82, 83, 87, 90, 94, 101, 102	11.6 percentage points (7.8 to 18.0)
Education		
$\geq$ 50% with less than high school education (25	36-39, 42, 43, 48, 73, 75, 76, 79, 83-85, 87, 94, 95, 100,	11.0 percentage points (5.7 to 17.4)
effect sizes)	102, 103, 105	
≥50% with high school education or more (39	51, 61, 63, 66, 69, 86, 91	7.8 percentage points (0.9 to 25.2)
effect sizes)		
Insurance status	24 20 47 55 60 00 02	
100% insured (12 effect sizes)	34, 39, 47, 55, 60, 88, 92	13.6 percentage points (3.7 to 21.5)
≥50% insured (45 effect sizes)	32, 33, 36-38, 40, 42, 45, 48, 52-54, 66, 70, 71, 74-76,	9.1 percentage points (5.3 to 17.3)
	79-83, 85, 86, 90, 94, 96, 101, 103	
<50% insured (25 effect sizes)	43, 49, 51, 56, 65, 72, 78, 84, 89, 100, 106	12.7 percentage points (2.0 to 35.1)

Established source of care 100% with established source of care (21 effect	34, 43, 44, 47, 53, 60, 64, 65, 70, 85, 86, 88, 89, 100, 102	12.7 percentage points (7.9 to 20.8)
sizes) ≥50% with established source of care (30 effect	38, 51, 66, 71, 78, 79, 81-83, 87, 90, 101, 106	11.9 percentage points (6.1 to 25.8)
sizes) <50% with established source of care (8 effect	56, 72, 95	11.7 percentage points (6.7 to 45.3)
sizes)		
Baseline screening rate 0% (37 effect sizes)	33, 34, 37, 41, 43, 44, 47, 51-53, 55, 56, 58, 60, 64, 65, 72-74, 76, 79, 85, 86, 90, 93, 94, 96, 100, 103, 107	12.7 percentage points (7.2 to 30.8)
<50% (48 effect sizes)	35, 38, 39, 48, 49, 61, 66, 70, 77, 78, 83, 87, 89, 91, 95, 97-99, 101, 102, 106	9.6 percentage points (6.2 to 19.9)
≥50% (30 effect sizes)	32, 36, 38, 42, 49, 54, 68, 69, 71, 75, 80-83, 87, 88, 95	5.8 percentage points (0.7 to 12.8)

IQI, interquartile interval.