

Appendix

Table 1: baseline characteristics of caregivers and infants followed and not followed up at 12 months

	Measure and Level	Intervention arm		Standard of care arm		Overall	
		Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up
Total	N (%)	261 (92.9%)	20 (7.1%)	253 (86.4%)	40 (13.7%)	514 (90.0%)	60 (10.5%)
Infant's characteristics							
Age (years)	Median (IQR)	1.03 (0.47, 1.49)	1.10 (0.78, 1.40)	1.00 (0.68, 1.43)	1.06 (0.57, 1.62)	1.00 (0.61, 1.47)	1.08 (0.63, 1.56)
Age	0-<6m	70 (26.8%)	4 (20.0%)	37 (14.6%)	7 (17.5%)	107 (20.8%)	11 (18.3%)
	6-<12m	57 (21.8%)	4 (20.0%)	90 (35.6%)	10 (25.0%)	147 (28.6%)	14 (23.3%)
	12-24m	134 (51.3%)	12 (60.0%)	126 (49.8%)	23 (57.5%)	260 (50.6%)	35 (58.3%)
Sex	N (%)						
	Male	134 (51.3%)	7 (35.0%)	121 (47.8%)	21 (52.5%)	255 (49.6%)	28 (46.7%)
	Female	127 (48.7%)	13 (65.0%)	132 (52.2%)	19 (47.5%)	259 (50.4%)	32 (53.3%)
HIV status as reported at baseline	N (%)						
	Infected	9 (3.5%)	3 (15.0%)	4 (1.6%)	2 (5.0%)	13 (2.5%)	5 (8.3%)
	Uninfected	164 (62.8%)	8 (40.0%)	190 (75.1%)	27 (67.5%)	354 (68.9%)	35 (58.3%)
	Prefer not to say	2 (0.8%)	0	0	0	0	0
	Unknown	88 (32.9%)	9 (45.0%)	59 (23.3%)	11 (27.5%)	147 (28.6%)	20 (33.3%)
Birth weight (kg)	Mean (95% CI)	3.00 (2.91, 3.09)	2.86 (2.72, 3.01)	2.95 (2.87, 3.03)	2.80 (2.59, 3.01)	2.97 (2.91, 3.04)	2.82 (2.68, 2.97)
Weight-for-age z-score	Mean (95% CI)	-0.84 (-1.09, -0.59)	-1.23 (-2.36, -0.10)	-0.84 (-1.01, -0.68)	-0.93 (-1.31, -0.55)	-0.84 (-0.99, -0.69)	-1.03 (-1.50, -0.56)
Underweight (z-score <-2)	Yes	40 (15.3%)	4 (20.0%)	36 (14.2%)	7 (17.5%)	76 (14.8%)	11 (18.3%)
	No	221 (84.7%)	16 (80.0%)	217 (85.8%)	33 (82.5%)	438 (85.2%)	49 (81.7%)
Length-for-age z-score	Mean (95% CI)	-1.54 (-1.86, -1.22)	-1.86 (-2.44, -1.28)	-1.48 (-1.76, -1.21)	-1.35 (-1.79, -0.92)	-1.51 (-1.72, -1.30)	-1.52 (-1.90, -1.15)
Stunted (z-score <-2)	Yes	99 (38.2%)	8 (40.0%)	82 (32.5%)	18 (45.0%)	181 (35.4%)	26 (43.3%)

		Intervention arm		Standard of care arm		Overall	
	Measure and Level	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up
	No	160 (61.8%)	12 (60.0%)	170 (67.5%)	22 (55.0%)	330 (64.6%)	34 (56.7%)
Body mass index (BMI) z-score		0.14 (-0.11, 0.38)	-0.17 (-1.82, 1.47)	0.07 (-0.17, 0.32)	-0.16 (-0.40, 0.09)	0.10 (-0.08, 0.28)	-0.16 (-0.74, 0.41)
Low BMI z-score	Yes	14 (5.4%)	1 (5.0%)	15 (6.0%)	2 (5.0%)	29 (5.7%)	3 (5.0%)
	No	245 (94.6%)	19 (95.0%)	237 (94.1%)	38 (95.0%)	482 (94.3%)	57 (95.0%)
Mid-upper arm circumference z-score		-0.17 (-0.47, 0.13)	-0.44 (-0.86, -0.03)	-0.43 (-0.62, -0.24)	-0.33 (-0.68, 0.01)	-0.30 (-0.49, -0.12)	-0.37 (-0.64, -0.09)
Low MUAC z-score <-2	Yes	13 (6.0%)	1 (6.3%)	14 (6.3%)	1 (2.7%)	27 (6.1%)	2 (3.8%)
	No	203 (94.0%)	15 (93.8%)	210 (93.8%)	36 (97.3%)	413 (93.9%)	51 (96.2%)
Mullen scales (T-scores)	Mean (95% CI)						
	Expressive language	52.5 (49.9, 55.1)	51.2 (45.8, 56.6)	53.5 (51.6, 55.4)	50.6 (45.2, 56.0)	53.0 (51.4, 54.6)	50.8 (46.8, 54.8)
	Fine Motor	51.5 (48.2, 54.8)	46.8 (42.8, 50.7)	50.4 (47.6, 53.1)	49.1 (44.2, 54.0)	50.9 (48.7, 53.1)	48.3 (44.9, 51.8)
	Gross Motor	50.7 (48.4, 53.0)	42.9 (38.2, 47.6)	51.1 (49.3, 52.9)	48.9 (44.3, 53.5)	50.9 (49.4, 52.4)	46.9 (43.1, 50.6)
	Receptive language	47.7 (44.5, 50.9)	46.7 (42.1, 51.2)	47.5 (44.8, 50.3)	47.9 (42.8, 52.9)	47.6 (45.5, 51.2)	47.5 (43.8, 51.2)
	Visual reception	54.0 (49.9, 58.2)	46.9 (40.4, 53.3)	53.2 (50.7, 55.6)	49.3 (46.2, 52.3)	53.6 (51.2, 56.1)	48.5 (45.5, 51.4)
	Early learning composite score	103.1 (97.0, 109.2)	96.1 (87.6, 104.5)	102.5 (98.3, 106.8)	98.8 (92.1, 105.5)	102.8 (99.1, 106.6)	97.9 (92.6, 103.1)
Caregiver's Characteristic							
Caregiver type	N (%)						
	Mother	252 (96.6%)	20 (100.0%)	250 (98.8%)	40 (100.0%)	502 (97.7%)	60 (100.0%)
	Other	9 (3.5%)	0 (0.0%)	3 (1.2%)	0 (0.0%)	12 (2.3%)	0 (0.0%)
Age (years)	Median (IQR)	32 (28, 36)	26 (23.5, 33.5)	32 (27, 36)	29 (24.5, 35)	32 (28, 36)	28.5 (24, 34)

		Intervention arm		Standard of care arm		Overall	
	Measure and Level	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up
Marital status	N (%)						
	Married	210 (80.8%)	17 (85.0%)	194 (76.7%)	34 (85.0%)	404 (78.8%)	51 (85.0%)
	Divorced/separated	30 (11.5%)	2 (10.0%)	37 (14.6%)	5 (12.5%)	67 (13.1%)	7 (11.7%)
	Widowed	15 (5.8%)	1 (5.0%)	14 (5.5%)	1 (2.5%)	29 (5.7%)	2 (3.3%)
	Never married	5 (1.9%)	0 (0.0%)	8 (3.2%)	0 (0.0%)	13 (2.5%)	0 (0.0%)
Education	N (%)						
	Secondary or above	142 (54.4%)	119 (45.6%)	129 (51.0%)	124 (49.0%)	271 (52.7%)	33 (55.0%)
Employment	N (%)						
	Employed	81 (31.0%)	9 (45.0%)	108 (42.7%)	12 (30.0%)	189 (36.8%)	21 (35.0%)
SES	N (%)						
	Lowest	98 (37.6%)	6 (30.0%)	86 (34.0%)	2 (5.0%)	184 (35.8%)	8 (13.3%)
	Middle	92 (35.3%)	8 (40.0%)	78 (30.8%)	13 (32.5%)	170 (33.1%)	21 (35.0%)
	Highest	71 (27.2%)	6 (30.0%)	89 (35.2%)	25 (62.5%)	160 (31.1%)	31 (51.7%)
Parental stress score (PSI-SF)	N (%)						
Parental distress subscale n=505	Not stressed (<90 th percentile)	177 (69.1%)	11 (57.9%)	162 (64.8%)	30 (75.0%)	339 (67.0%)	41 (69.5%)
	Stressed (>=90 th percentile)	79 (30.9%)	8 (42.1%)	88 (35.2%)	10 (25.0%)	167 (33.0%)	18 (30.5%)
Parental child interaction dysfunction subscale n=505	Not stressed (<90 th percentile)	156 (60.9%)	13 (65.0%)	153 (61.5%)	29 (72.5%)	309 (61.2%)	42 (70.0%)
	Stressed (>=90 th percentile)	100 (39.1%)	7 (35.0%)	96 (38.6%)	11 (27.5%)	196 (38.8%)	18 (30.0%)
Difficult child subscale n=504	Not stressed (<90 th percentile)	225 (87.9%)	16 (80.0%)	210 (84.7%)	30 (76.9%)	435 (86.3%)	46 (78.0%)
	Stressed (>=90 th percentile)	31 (12.1%)	4 (20.0%)	38 (15.3%)	9 (23.1%)	69 (13.7%)	13 (22.0%)
PSI-SF total score n=504	Not stressed (<90 th percentile)	167 (65.8%)	13 (65.0%)	158 (63.2%)	27 (67.5%)	325 (64.5%)	40 (66.7%)

		Intervention arm		Standard of care arm		Overall	
	Measure and Level	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up	Interviewed at follow-up	Lost to follow-up
	percentile)						
	Stressed (>=90 th percentile)	87 (34.3%)	7 (35.0%)	92 (36.8%)	13 (32.5%)	179 (35.5%)	20 (33.3%)
Maternal mental health(EPDS)*	N (%)						
	Not depressed (score 0-11)	122 (48.4%)	10 (50.0%)	123 (49.2%)	23 (57.5%)	245 (48.8%)	33 (55.0%)
	Depressed (score>=12)	130 (51.6%)	10 (50.0%)	127 (50.8%)	17 (42.5%)	257 (51.2%)	27 (45.0%)
Common mental disorders (SSQ-8)	N (%)						
	No CMD (score 0-5)	155 (59.6%)	13 (65.0%)	151 (60.0%)	24 (60.0%)	306 (60.0%)	37 (61.7%)
	CMD (score 6-8)	105 (40.4%)	7 (35.0%)	102 (40.3%)	16 (40.0%)	207 (40.0%)	23 (38.3%)
Household food security (HFIAS)	N (%)						
	Little to no hunger	108 (41.4%)	8 (40.0%)	108 (42.7%)	18 (45.0%)	216 (42.0%)	26 (43.3%)
	Moderate to severe hunger	153 (58.6%)	12 (60.0%)	145 (57.3%)	22 (55.0%)	298 (58.0%)	34 (56.7%)
Medical adherence rating scale	N (%)						
	Not adherent	6 (2.4%)	2 (10.0%)	4 (1.6%)	1 (2.6%)	10 (2.0%)	3 (5.1%)
	Adherent	245 (97.6%)	18 90.0%	246 (98.4%)	38 (97.4%)	491 (98.0%)	56 (94.9%)