

SUPPLEMENTAL MATERIAL

Data S1.

Further details regarding sensitivity analyses

In sensitivity analyses, we re-estimated all models after 1) excluding women who were either pregnant or missing on pregnancy status at any time during the study period ($n = 38$), given that patterns of within-person change for women pregnant at any point during study period may have been driven by post-partum changes in the outcomes of interest, and 2) excluding women who were born in the U. S. ($n = 69$). While prior research has shown that deportation worry has “spillover effects” on U.S.-born family and community members, immigrant women in the sample may have been most acutely impacted. We find that patterns were overall similar in each of these sensitivity analyses (Tables S6 – S8), although note that in some cases the magnitude and precision of estimated associations are diminished (e.g. for estimates of the slope of within-person change in diastolic blood pressure), particularly after excluding U.S.-born women.

Table S1. Regression coefficients and 95% Confidence Intervals for linear mixed models of self-reported deportation worry on blood pressure trajectories for adult women in the CHAMACOS study using listwise deletion rather than multiple imputation.

	Systolic Blood Pressure (n = 500)		Diastolic Blood Pressure (n = 500)		Mean Arterial Pressure (n = 500)		Pulse Pressure (n = 500)		Body Mass Index (n = 503)		Waist Circumference (n = 505)	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
<i>Deportation Worry (Ref = Not at all worried)</i>												
Moderately worried	3.16	(-0.44, 6.75)	2.20	(-0.06, 4.47)	2.02	(-0.65, 4.69)	1.48	(-0.93, 3.88)	0.97	(-0.45, 2.39)	2.97	(-0.49, 6.44)
A lot of worry	2.06	(-1.03, 5.15)	0.36	(-1.75, 2.47)	0.53	(-1.92, 2.97)	3.04	(0.98, 5.11)	2.52	(1.25, 3.80)	5.63	(2.60, 8.65)
<i>Years Since 2012 Study Wave</i>	-1.85	(-4.26, 0.56)	0.66	(0.20, 1.12)	-0.99	(-2.83, 0.85)	0.08	(-0.47, 0.64)	0.02	(-0.18, 0.22)	-0.95	(-1.50, -0.40)
<i>Deportation Worry*Years</i>												
Moderately worried*Years	2.65	(-0.61, 5.91)	0.34	(-0.29, 0.97)	2.12	(-0.31, 4.55)	0.27	(-0.52, 1.05)	0.01	(-0.19, 0.21)	0.13	(-0.50, 0.76)
A lot of worry*Years	5.28	(2.38, 8.19)	0.62	(0.09, 1.15)	3.86	(1.68, 6.05)	0.24	(-0.48, 0.95)	-0.02	(-0.20, 0.16)	-0.09	(-0.62, 0.43)
<i>Years Since 2012 Study Wave, Squared</i>	0.66	(0.07, 1.25)			0.51	(0.09, 0.94)						
<i>Deportation Worry*Years Squared</i>												
Moderately worried*Years Squared	-0.52	(-1.32, 0.28)			-0.38	(-0.96, 0.21)						
A lot of worry*Years Squared	-1.13	(-1.86, -0.40)			-0.81	(-1.34, -0.28)						

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 12-year visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at the 9-year visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 12-year study wave. Models specified with both subject-specific random-intercepts and subject-specific random slopes.

Table S2. Hazards ratio and 95% Confidence Intervals for the association between deportation worry at 2012 - 2014 and incident hypertension using listwise deletion rather than multiple imputation (n = 371).

	HR	95% CI
<i>Deportation Worry, 2012 - 2014</i>		
<i>(Ref = Not at all worried)</i>		
Moderately worried	2.14	(1.12, 4.09)
A lot of worry	1.87	(0.99, 3.56)

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Hypertension based on self-reported doctor diagnosis or cut-off of \geq 130 systolic blood pressure or \geq 80 diastolic blood pressure. Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 2012-2014 visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at a 2010-2011 study visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 2012-2014 visit.

Table S3. Cross-tabulation of self-reported deportation worry at 2012 - 2014 and 2016 - 2018 visits among adult women in the CHAMACOS study (n = 507).

	<i>Deportation Worry, 2016-2018 Visit</i>			
	Not at all worried	Not much	Moderately worried	A lot of worry
<i>Deportation Worry, 2012 – 2014 Visit, n (%)</i>				
Not at all worried (n = 134)	52 (38.8)	22 (16.4)	40 (29.9)	20 (14.9)
Moderately worried (n = 127)	22 (17.3)	15 (12.1)	57 (44.9)	33 (26.0)
A lot of worry (n = 246)	22 (8.9)	14 (5.7)	65 (26.4)	145 (58.9)

Source: Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Cross-tabulation conducted for 507 mothers who responded to both 2012-2014 and 2016-2018 visit questionnaires. Of 507 who completed the 2016 – 2018 study wave, 96 reported being not at all worried, 51 reported not much worry (a total of 147 or 29% in the combined category of reporting not at all worried or not much worry), 162 reported moderate worry, and 198 reported a lot of worry.

Table S4. Regression coefficients and 95% Confidence Intervals for linear mixed models of self-reported deportation worry on blood pressure trajectories for adult women in the CHAMACOS study who were not on anti-hypertensives at a given study wave or previous study waves (n = 518).

	Systolic Blood Pressure		Diastolic Blood Pressure		Mean Arterial Pressure		Pulse Pressure	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI
	<i>Deportation Worry</i> (Ref = Not at all worried)							
Moderately worried	4.32	(0.69, 7.95)	2.74	(0.35, 5.13)	2.64	(-0.16, 5.44)	1.92	(-0.47, 4.32)
A lot of worry	3.17	(0.15, 6.20)	1.25	(-0.86, 3.35)	1.43	(-1.64, 3.07)	3.18	(1.13, 5.23)
<i>Years Since 2012 Study Wave</i>	-1.83	(-4.33, 0.66)	0.60	(-0.09, 1.30)	-1.07	(-3.07, 0.93)	0.37	(-0.44, 1.18)
<i>Deportation Worry*Years</i>								
Moderately worried*Years	1.62	(-1.67, 4.92)	0.30	(-0.45, 1.05)	1.84	(-0.75, 4.43)	0.04	(-0.85, 0.93)
A lot of worry*Years	4.46	(1.55, 7.37)	0.46	(-0.17, 1.09)	3.67	(1.39, 5.94)	0.11	(-0.67, 0.89)
<i>Years Since 2012 Study Wave, Squared</i>	0.71	(0.04, 1.38)			0.56	(0.04, 1.08)		
<i>Deportation Worry*Years Squared</i>								
Moderately worried*Years Squared	-0.33	(-1.16, 0.51)			-0.34	(-0.98, 0.30)		
A lot of worry*Years Squared	-0.98	(-1.71, -0.24)			-0.81	(-1.37, -0.24)		

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 2012-2014 visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at a visit three years prior to the 2012-2014 visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 2012-2014 visit. Models specified with both subject-specific random-intercepts and subject-specific random slopes.

Table S5. Hazards ratio and 95% Confidence Intervals for the association between deportation worry at 2012 - 2014 and incident hypertension based on pre-2017 guidelines (n = 445).

	HR	95% CI
<i>Deportation Worry, 2012 - 2014</i>		
<i>(Ref = Not at all worried)</i>		
Moderately worried	2.81	(0.97, 8.14)
A lot of worry	3.41	(1.23, 9.45)

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Hypertension based on self-reported doctor diagnosis or cut-off of ≥ 140 mm Hg systolic blood pressure or ≥ 90 mm Hg diastolic blood pressure. Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 2012-2014 visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at a 2010 – 2011 study visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 2012-2014 visit.

Table S6. Regression coefficients and 95% Confidence Intervals for linear mixed models of self-reported deportation worry on blood pressure trajectories for adult women in the CHAMACOS study who were not pregnant/nonmissing pregnancy data throughout the four-year study period (n = 534).

	Systolic Blood Pressure		Diastolic Blood Pressure		Mean Arterial Pressure		Pulse Pressure		Body Mass Index		Waist Circumference	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
<i>Deportation Worry (Ref = Not at all worried)</i>												
Moderately worried	2.77	(-0.95, 6.48)	1.66	(-0.79, 4.12)	1.73	(-1.07, 4.54)	1.23	(-1.15, 3.62)	1.08	(-0.34, 2.50)	3.09	(-0.30, 6.48)
A lot of worry	2.25	(-0.81, 5.32)	0.44	(-1.66, 2.54)	1.00	(-1.38, 3.37)	2.77	(0.68, 4.86)	2.31	(1.09, 3.53)	5.62	(2.68, 8.56)
<i>Years Since 2012-2014 Study Wave</i>	-0.93	(-3.47, 1.61)	0.66	(-0.02, 1.35)	-0.09	(-1.95, 1.76)	0.17	(-0.78, 1.11)	0.01	(-0.18, 0.20)	-0.91	(-1.41, -0.41)
<i>Deportation Worry*Years</i>												
Moderately worried*Years	1.21	(-2.15, 4.56)	0.22	(-0.46, 0.89)	1.20	(-1.16, 3.56)	0.36	(-0.55, 1.27)	-0.03	(-0.22, 0.16)	0.01	(-0.57, 0.59)
A lot of worry*Years	3.91	(1.01, 6.81)	0.49	(-0.05, 1.02)	2.68	(0.50, 4.86)	0.31	(-0.50, 1.12)	-0.06	(-0.22, 0.10)	-0.23	(-0.70, 0.25)
<i>Years Since 2012-2014 Study Wave, Squared</i>	0.44	(-0.31, 1.19)			0.34	(-0.17, 0.86)						
<i>Deportation Worry*Years Squared</i>												
Moderately worried*Years Squared	-0.16	(-1.02, 0.69)			-0.14	(-0.77, 0.49)						
A lot of worry*Years Squared	-0.78	(-1.52, -0.04)			-0.59	(-1.13, -0.04)						

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 2012-2014 visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at a 2010 – 2011 study visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 2012-2014 visit. Models specified with both subject-specific random-intercept and subject-specific random slopes.

Table S7. Regression coefficients and 95% Confidence Intervals for linear mixed models of self-reported deportation worry on blood pressure trajectories for adult immigrant women in the CHAMACOS study (n = 503).

	Systolic Blood Pressure		Diastolic Blood Pressure		Mean Arterial Pressure		Pulse Pressure		Body Mass Index		Waist Circumference	
	β	95% CI	B	95% CI	β	95% CI	β	95% CI	β	95% CI	B	95% CI
<i>Deportation Worry</i>												
<i>(Ref = Not at all worried)</i>												
Moderately worried	2.72	(-0.99, 6.44)	1.21	(-1.30, 3.72)	1.63	(-1.20, 4.46)	1.73	(-0.69, 4.15)	1.07	(-0.23, 2.38)	3.19	(-0.09, 6.47)
A lot of worry	2.20	(-0.92, 5.32)	0.27	(-1.93, 2.48)	0.86	(-1.61, 3.32)	2.95	(0.88, 5.02)	1.85	(0.68, 3.02)	4.64	(1.76, 7.52)
<i>Years Since 2012 Study Wave</i>	-0.23	(-2.77, 2.31)	0.76	(0.08, 1.44)	0.31	(-1.57, 2.19)	0.55	(-0.28, 1.37)	0.03	(-0.15, 0.22)	-0.89	(-1.43, -0.36)
<i>Deportation Worry*Years</i>												
Moderately worried*Years	0.97	(-2.55, 4.49)	0.26	(-0.44, 0.96)	0.92	(-1.56, 3.40)	0.00	(-0.86, 0.86)	-0.01	(-0.19, 0.18)	0.13	(-0.51, 0.77)
A lot of worry*Years	3.35	(0.41, 6.30)	0.37	(-0.22, 0.97)	2.68	(0.50, 4.86)	-0.01	(-0.76, 0.73)	-0.07	(-0.23, 0.08)	-0.17	(-0.69, 0.34)
<i>Years Since 2012 Study Wave, Squared</i>	0.38	(-0.32, 1.09)			0.27	(-0.23, 0.78)						
<i>Deportation Worry*Years Squared</i>												
Moderately worried*Years Squared	-0.18	(-1.07, 0.71)			-0.14	(-0.77, 0.49)						
A lot of worry*Years Squared	-0.75	(-1.49, -0.01)			-0.59	(-1.13, -0.04)						

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Notes: Controls include age, age-squared, nativity/years spent in the U.S., educational attainment, income-to-poverty ratio and marital status at the 2012-2014 visit, a binary indicator of whether or not mothers were in the original versus refreshed cohorts of the study, and prior depressive symptoms (captured at a 2010 - 2011 visit). All models include a (stabilized) inverse probability of attrition weight to account for selective attrition prior to the 2012-2014 visit. Models specified with both subject-specific random-intercept and subject-specific random slopes.

Table S8. Hazards ratio and 95% Confidence Intervals for the association between deportation worry at 2012 - 2014 and incident hypertension; alternative specifications to primary analyses.

	Women never pregnant or missing pregnancy data across the study period (n = 385)		Immigrant women only (n = 367)	
	HR	95% CI	HR	95% CI
<i>Deportation Worry, 2012 - 2014</i>				
<i>(Ref = Not at all worried)</i>				
Moderately worried	2.29	(1.19, 4.39)	2.10	(1.05, 4.18)
A lot of worry	2.12	(1.12, 4.03)	1.99	(1.04, 3.80)

Source: The Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study. Hypertension based on self-reported doctor diagnosis or cut-off of > 130 systolic blood pressure or > 80 diastolic blood pressure.

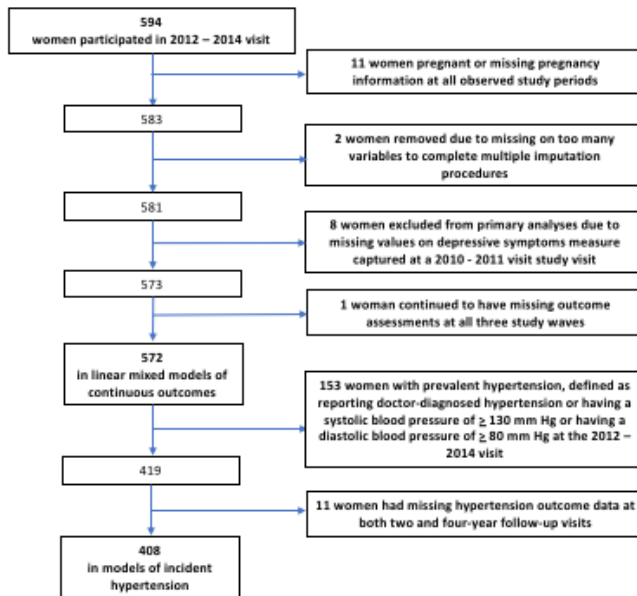


Figure S1. Flowchart tracking exclusion of women from primary analyses of the relationship between deportation worry and cardiovascular disease risk factors and incident hypertension in the Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study.

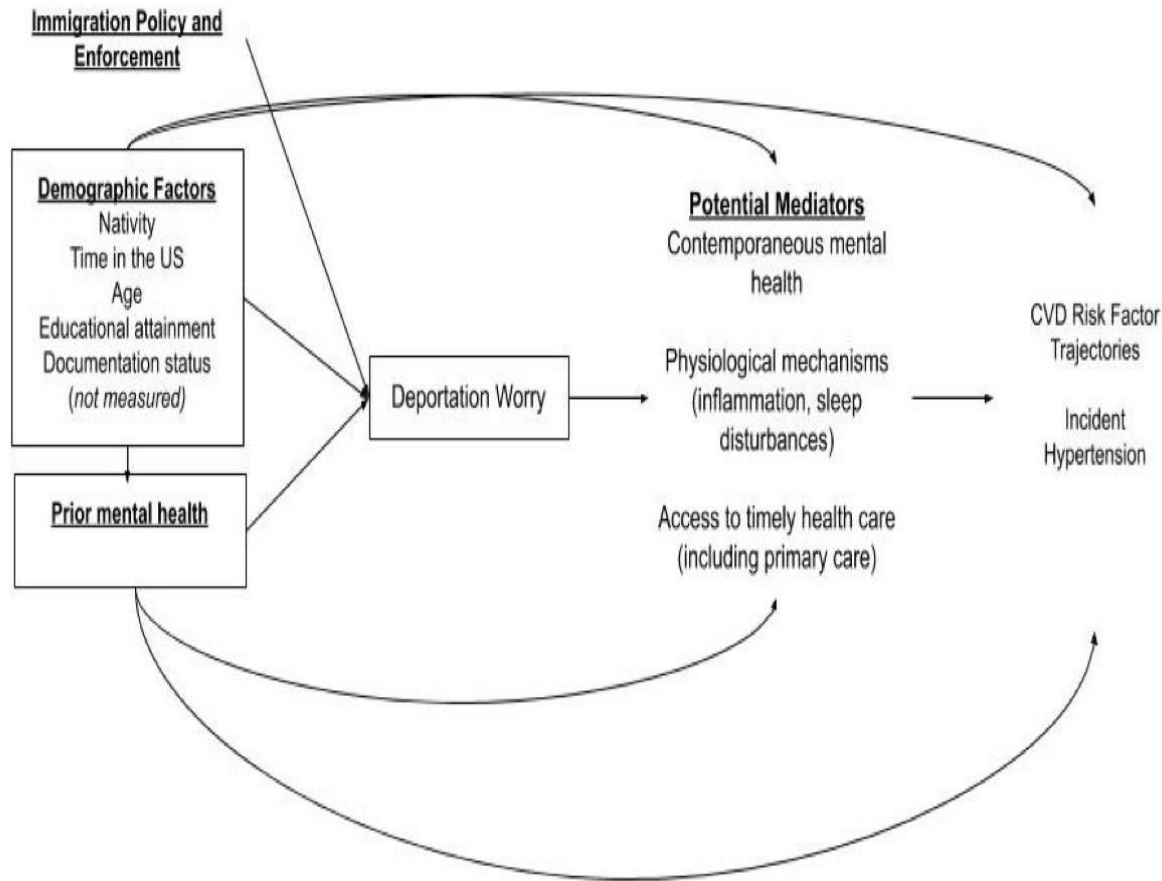
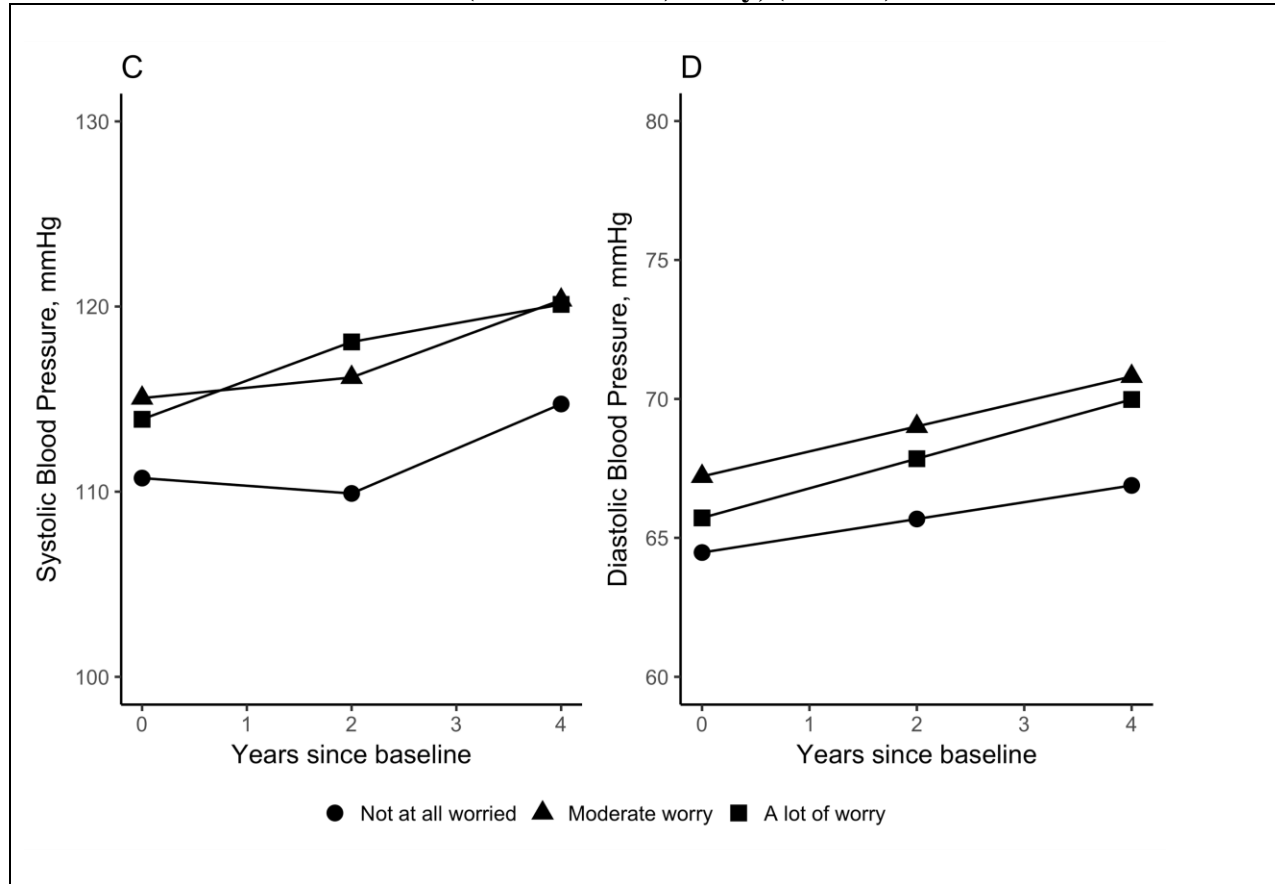


Figure S2. Directed Acyclic Graph (DAG) used to guide analyses. Notes: Boxes around nodes denote variables or sets of variables that have been conditioned on our models. We have depicted potential mediators in order to demonstrate hypothesized mechanisms linking deportation worry and CVD risk factor trajectories/incident hypertension and to show how potential mediators differ from potential confounders. However, the purpose of our analyses is to understand the total (unmediated) relationship between deportation worry and outcomes. We therefore do not condition on mediators or otherwise conduct formal mediation analyses.

Figure S3. Predicted average values of CVD risk factors by deportation worry and years since baseline (2012 – 2014) for Mexican-origin adult women who did not report being on anti-hypertensive medication, Centers for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study, (n = 518).



Predicted values generated from linear mixed models that adjust for socio-demographic characteristics and prior depressive symptoms. An interaction term between deportation worry and a quadratic term for years since the 2012-2014 visit was evaluated based on model fit statistics and included for models of systolic blood pressure and mean arterial pressure only. Follow-up visits took place in 2014 – 2016 and 2016 – 2018, two and four-years after the baseline visit, respectively. Source: Centers for the Health Assessment of Mothers and Children of Salinas study.