

Supplemental materials for:

Willard-Grace R, Knox M, Huang B, Hammer H, Kivlahan C, Grumbach K. Burnout and health care workforce turnover. *Ann Fam Med*. 2019;17(1):36-41.

Supplemental Appendix A. Results of multivariate regression model of “burnout” and co-variates as predictors of turnover for clinicians, adjusted for clustering by clinic (n=244)				
	Adjusted odds ratio	Robust standard error	95% CI	p-value
Burned out	1.57	0.34	1.02 - 2.40	0.04
<u>Covariates:</u>				
Number of half days of clinic per week (ref. 1-2 half days per week)				
3-5 half days per week	0.64	0.25	0.29 - 1.39	0.26
6 or more half days per week	0.89	0.46	0.33 – 2.45	0.83
Tenure (ref. less than 1 year)				
1-5 years	0.79	0.33	0.35 – 1.78	0.57
More than 5 years	0.32	0.14	0.14 - 0.74	0.007
University system (versus county-based)	0.81	0.29	0.41 - 1.62	0.56
3 year interval between survey and roster (versus 2 years)	1.21	0.35	0.69 – 2.13	0.51
Hosmer-Lemeshow chi2 p=0.67				

Supplemental Appendix B. Results of multivariate regression model of “burnout” and covariates as predictors of turnover for staff, adjusted for clustering by clinic (n=468)

	Adjusted odds ratio	Robust standard error	95% CI	p- value
Burned out	1.09	0.28	0.66 – 1.82	0.73
<u>Covariates:</u>				
Full-time position (versus part-time)	0.51	0.18	0.25 – 1.01	0.05
Tenure (ref. less than 1 year)				
1-5 years	0.83	0.21	0.51 – 1.36	0.47
More than 5 years	0.52	0.14	0.30 - 0.89	0.02
University system (versus county-based)	0.61	0.08	0.47 - 0.78	<0.001
3 year interval between survey and roster (versus 2 years)	1.76	0.42	1.10 – 2.82	0.02
Hosmer-Lemeshow chi2 p=0.52				

Supplemental Appendix C. Results of multivariate regression model of “Employee engagement” and co-variates as predictors of turnover for clinicians, adjusted for clustering by clinic (n=242)

	Adjusted odds ratio	Robust standard error	95% CI	p-value
High employee engagement	0.58	0.17	0.33 – 1.04	0.07
<u>Covariates:</u>				
Number of half days of clinic per week (ref. 1-2 half days per week)				
3-5 half days per week	0.65	0.26	0.30 – 1.41	0.28
6 or more half days per week	1.09	0.59	0.38 – 3.13	0.88
Tenure (ref. less than 1 year)				
1-5 years	0.80	0.35	0.35 – 1.87	0.61
More than 5 years	0.34	0.14	0.15 - 0.75	0.01
University system (versus county-based)	0.78	0.30	0.36 – 1.67	0.51
3 year interval between survey and roster (versus 2 years)	1.24	0.29	0.79 – 1.96	0.35
Hosmer-Lemeshow chi2 p=0.06				

Supplemental Appendix D. Results of multivariate regression model of “Employee engagement” and co-variates as predictors of turnover for staff, adjusted for clustering by clinic (n=464)

	Adjusted odds ratio	Robust standard error	95% CI	p-value
High employee engagement	0.99	0.28	0.57 – 1.71	0.96
<u>Covariates:</u>				
Full-time position (versus part-time)	0.48	0.17	0.23 - 0.98	0.04
Tenure (ref. less than 1 year)				
1-5 years	0.83	0.21	0.50 – 1.37	0.46
More than 5 years	0.55	0.15	0.31 - 0.95	0.03
University system (versus county-based)	0.59	0.08	0.45 - 0.76	<.001
3 year interval between survey and roster (versus 2 years)	1.77	0.44	1.08 - 2.90	0.02

Hosmer-Lemeshow chi2 p=0.15