Supplemental Digital Content

**Parallel Trends Assumption**

We had conducted multiple analyses to test if the parallel trends assumption - the key underlying assumption of difference-in-differences - is (might be) violated.

First, based on the visual inspection of the level of “absolute” changes (not “percentage” changes listed in Table 3), the two groups were similar in the pre-trends.

Second, a formal test using multiple t-tests found that there were no significant differences in trends between CHCs with and without CHWs prior to the reporting change. The idea is following. We included the interactions of the year dummies (the last post-period serves as the baseline) and the treatment indicator. If the outcome trends between treatment and control group are the same, then β-3, β-2, and β-1 should be insignificant.

Yit = λi + δt + β-3Dit + β−2Dit + β−1Dit + β1Dit + β2Dit + ϵit

Below, the regression results appear to hold true.

--------------------------------------------------------------------------------------

| Robust

other\_enable\_fte | Coef. Std. Err. t P>|t| [95% Conf. Interval]

---------------------+----------------------------------------------------------------

chw#year |

1 2013 | .3153261 .672621 0.47 0.639 -1.004114 1.634766

1 2014 | .8050644 .576313 1.40 0.163 -.3254541 1.935583

1 2015 | .6246908 .5832388 1.07 0.284 -.5194135 1.768795

1 2016 | -.3924651 .4301893 -0.91 0.362 -1.236342 .4514113

1 2017 | -.4472467 .3169622 -1.41 0.158 -1.069012 .174519

1 2018 | 0 (omitted)

|

white\_nh\_pct | -.0265701 .0179227 -1.48 0.138 -.0617279 .0085877

ins\_mdcd\_pct | -.0043671 .0090515 -0.48 0.630 -.0221229 .0133888

female\_pct | .0069408 .0062964 1.10 0.270 -.0054105 .019292

lep\_pct | -.0072132 .021629 -0.33 0.739 -.0496416 .0352152

hiv\_pct | .0285972 .0194707 1.47 0.142 -.0095973 .0667916

sud\_pct | -.0398325 .0453762 -0.88 0.380 -.1288442 .0491792

tot\_visits\_k | .1255307 .02115 5.94 0.000 .084042 .1670194

grant\_bphc\_pct | -.0281931 .0097461 -2.89 0.004 -.0473115 -.0090748

grant\_foundation\_pct | .0029241 .0134603 0.22 0.828 -.0234802 .0293284

rural | .3709046 .3813661 0.97 0.331 -.3771982 1.119007

dsrip\_approved | .7043441 .7038871 1.00 0.317 -.6764286 2.085117

|

year |

2014 | 1.218537 .1572275 7.75 0.000 .9101135 1.526961

2015 | 1.63092 .2362773 6.90 0.000 1.167429 2.094411

2016 | 2.282706 .3334289 6.85 0.000 1.628639 2.936773

2017 | 2.263902 .3448175 6.57 0.000 1.587495 2.94031

2018 | 2.134901 .4184485 5.10 0.000 1.314055 2.955746

|

\_cons | 5.433388 1.649175 3.29 0.001 2.1983 8.668475

---------------------+----------------------------------------------------------------

sigma\_u | 11.929479

sigma\_e | 5.0380482

rho | .84864176 (fraction of variance due to u\_i)

--------------------------------------------------------------------------------------

**Full DD Regression of Use of Other Enabling Services Staff in CHCs**

--------------------------------------------------------------------------------------

| Robust

other\_enable\_fte | Coef. Std. Err. t P>|t| [95% Conf. Interval]

---------------------+----------------------------------------------------------------

chw\_post | -.8717285 .4350263 -2.00 0.045 -1.725093 -.0183637

white\_nh\_pct | -.0265401 .0179177 -1.48 0.139 -.0616881 .008608

female\_pct | .0070364 .006297 1.12 0.264 -.0053161 .0193889

ins\_mdcd\_pct | -.0040328 .0091275 -0.44 0.659 -.0219377 .0138721

lep\_pct | -.0072975 .0216492 -0.34 0.736 -.0497655 .0351704

hiv\_pct | .0284006 .0194599 1.46 0.145 -.0097727 .0665738

sud\_pct | -.0389313 .0453776 -0.86 0.391 -.1279459 .0500833

tot\_visits\_k | .1256409 .0211576 5.94 0.000 .0841373 .1671445

grant\_bphc\_pct | -.0279622 .0097345 -2.87 0.004 -.0470577 -.0088667

grant\_foundation\_pct | .0027596 .013442 0.21 0.837 -.0236088 .029128

rural | .3857139 .3803159 1.01 0.311 -.3603289 1.131757

dsrip\_approved | .7157964 .7032974 1.02 0.309 -.6638197 2.095412

|

year |

2014 | 1.368159 .1461059 9.36 0.000 1.081552 1.654766

2015 | 1.721694 .2234897 7.70 0.000 1.283287 2.1601

2016 | 2.329541 .326427 7.14 0.000 1.689208 2.969873

2017 | 2.291841 .3359295 6.82 0.000 1.632868 2.950813

2018 | 2.304497 .3980814 5.79 0.000 1.523605 3.08539

|

\_cons | 5.487542 1.604395 3.42 0.001 2.340297 8.634787

---------------------+----------------------------------------------------------------

sigma\_u | 11.966553

sigma\_e | 5.0375247

rho | .84946374 (fraction of variance due to u\_i)

--------------------------------------------------------------------------------------