Appendix for

“Providing Feedback Following Leadership WalkRounds is Associated with Better Patient Safety Culture, Higher Employee Engagement, and Lower Burnout”

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**Part I:** *Table 1. Number of HCW reporting exposure to WR and WR with feedback*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| WR with feedback | Yes | WR  No | Not Sure | Total |
| Yes | 3,270 | 224 | 556 | 4,050 |
| No | 1,135 | 2,286 | 2,148 | 5,569 |
| Not Sure | 1,054 | 456 | 4,571 | 6,081 |
| Total | 5,459 | 2,966 | 7,275 | 15,700 |

Note: WR and WR with feedback variables had missing values for 1,097 (6.53%) participants.

**Part II: Comparing WR exposure to WR with feedback exposure**

To examine associations between work-setting level WR and WR with feedback and the dependent measures, a series of bivariate pearson correlations were run. Specifically, the percentage of individuals in a work setting who reported WR exposure and WR with feedback was correlated with the dependent measures. To examine the relative strength of these correlations, or in other words, whether associations between WR with feedback and our dependent measures were stronger than the associations between WR exposure and the dependent measures, a series of dependent correlations were run.

Both WR variables were significantly correlated in expected directions with every safety culture domain, and nearly every resilience and engagement domain (work-life climate and workload were the exceptions; see Appendix Table 2). Difference in dependent correlations tests revealed that WR with feedback correlations were significantly stronger than WR exposure correlations for 6 of these domains (*Improvement readiness, Local leadership, Safety climate, Advancement, Growth opportunities, and Participation in decision making*), and marginally stronger for 2 domains (*Teamwork climate and Burnout climate).*

**Part III:** *Table 2. Two-tailed correlations between safety culture, resilience and engagement domains, and the percentages of HCW in units reporting WRs (column 1), WRs with feedback (column 2), and the difference in these dependent correlations (column 3)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) % of respondents reporting walkrounds occur in their work setting  *r*  p-value | | (2) % of respondents reporting walkrounds feedback in their work setting  *r*  p-value | | (3) Difference in dependant correlations  z-score  p-value | |
| Safety Culture *N=795* | |  |  |  | |
| Improvement readiness | .227\*\*\*  <.001 | | .308\*\*\*  <.001 | -3.178\*\*  .001 | |
| Local Leadership | .190\*\*\*  <.001 | | .278\*\*\*  <.001 | -3.418\*\*\*  <.001 | |
| Teamwork  Climate | .115\*\*  .001 | | .160\*\*\*  <.001 | -1.709†  .088 | |
| Safety Climate | .199\*\*\*  <.001 | | .275\*\*\*  <.001 | -2.953\*\*  .003 | |
| Resilience *N=795* |  | |  |  | |
| Personal Burnout | -.161\*\*\*  <.001 | | -.194\*\*\*  <.001 | 1.262  .207 | |
| Burnout Climate | -.097\*\*\*  .006 | | -.147\*\*\*  <.001 | 1.894†  .058 | |
| Work-Life  Climate | -.032  .365 | | .014  .689 | -1.728  .084 | |
| Engagement *N=760* |  | |  |  | |
| Advancement | .186\*\*\*  <.001 | | .251\*\*\*  <.001 | -2.456\*  .014 | |
| Growth  Opportunities | .189\*\*\*  <.001 | | .284\*\*\*  <.001 | -3.611\*\*\*  <.001 | |
| Job Uncertainty | -.123\*\*  .001 | | -.137\*\*\*  <.000 | .519  .604 | |
| Participation in Decision Making | .227\*\*\*  <.001 | | .310\*\*\*  <.001 | -3.186\*\*  .001 | |
| Workload | .006  .864 | | -.003  .927 | .330  .741 | |

†*p* < .01, \**p* <.05, \*\* *p* <.01, \*\*\* *p* <.001

**Part IV: Individual Scale Scores by Exposure to WR Feedback**

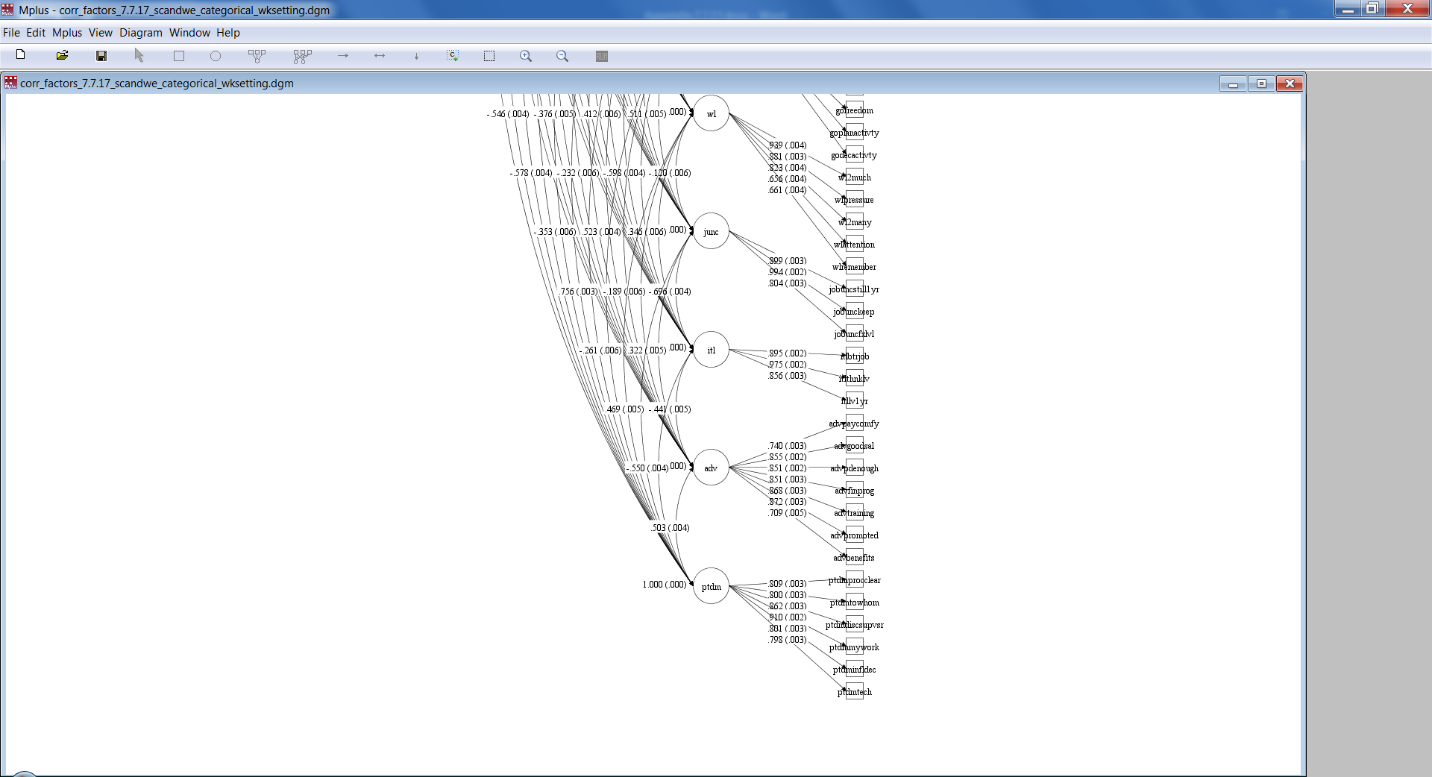
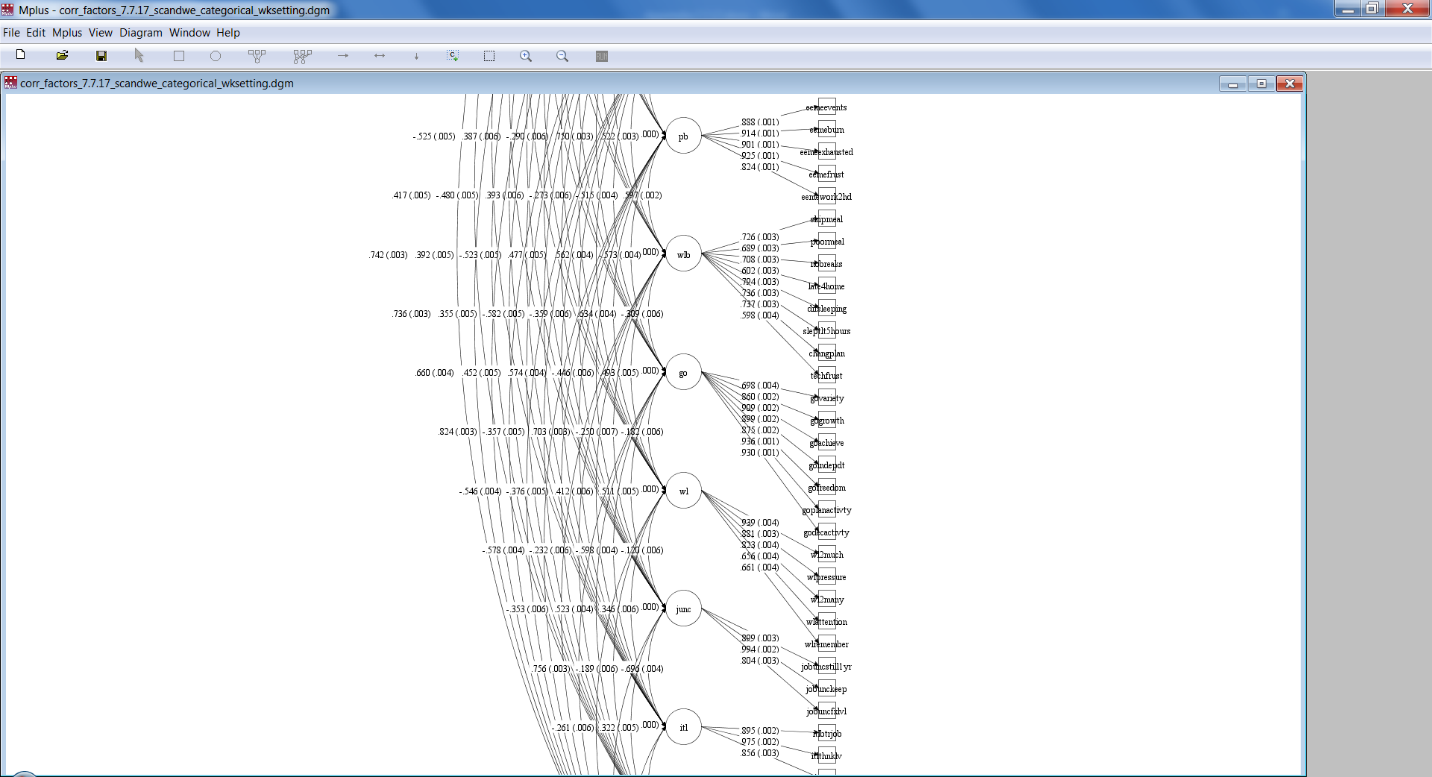
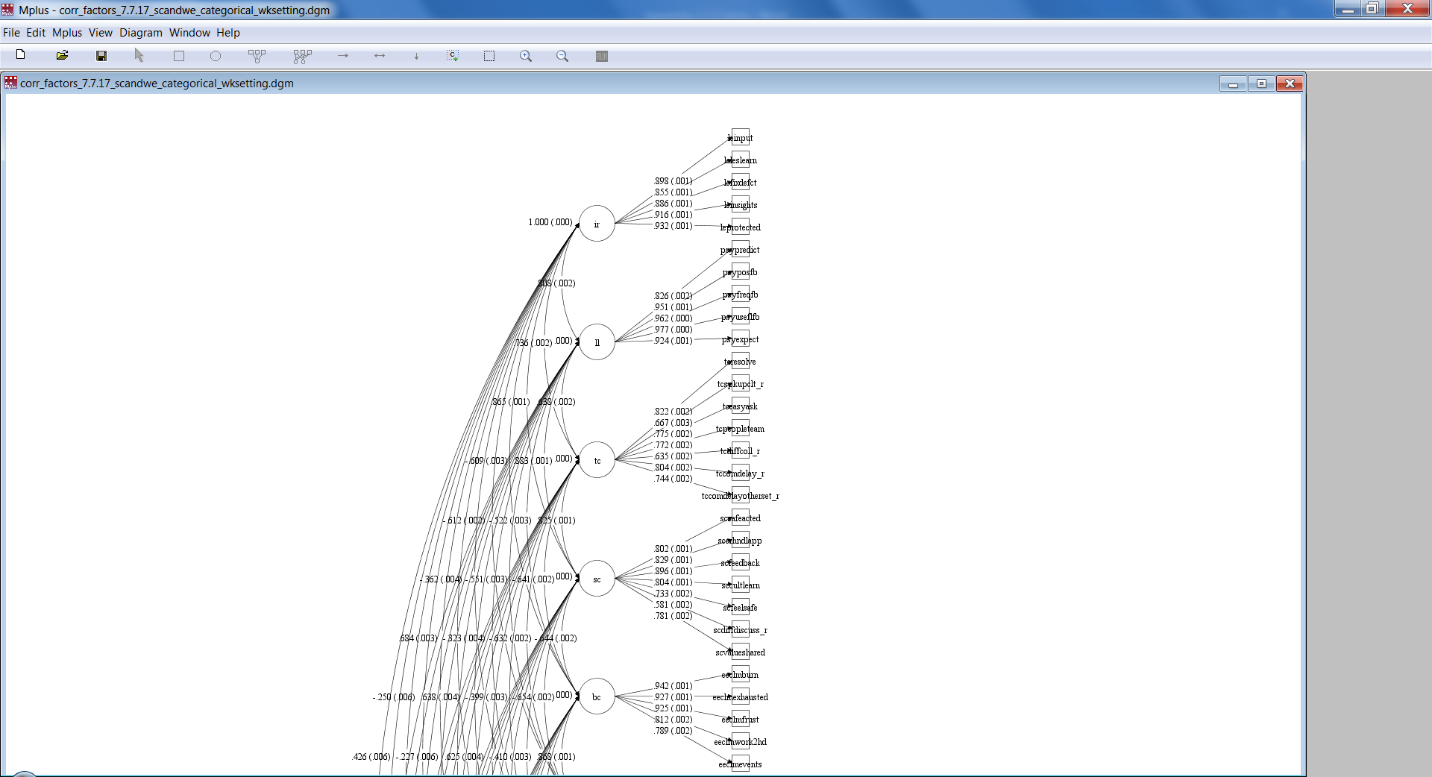
Comparison of the individual respondents who reported “yes” vs. “no” to the item “*Did you receive feedback about patient safety risks that were reduced as a result of WalkRounds*?” are shown in Figure 1 of the Appendix. Every one of the safety culture domains and every one of the engagement domains were significantly different as a function of receiving WR feedback.

There were 4405 respondents who reported exposure to WR and answered the WR feedback item as either “yes” or “no.” An independent samples t-test comparing revealed that those who were exposed to WR with FB scored significantly better than those reported being exposed to WR without FB on all 12 domains, *p* < .001.

**Part V:** *Figure 1: Associations between Leadership WR Feedback Exposure (“Yes” vs. “No”) and Safety Culture, Resilience and Engagement Domains*

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**Part VI:** SCORE Survey CFA



Accounting for clustering at

the work setting-level

N = 121,300

|  |  |
| --- | --- |
|  | SCORE Model  SC & WE together |
| RMSEA | .039 |
| *RMSEA Threshold* | *< .06 is acceptable* |
| CFI | .944 |
| *CFI Threshold* | *>.90 is acceptable* |
| TLI | .941 |
| *TLI Threshold* | *>.90 is acceptable* |

Mplus input code for SCORE CFA

Variable:

Names are

hosp unit\_coded leinput leleslearn lefixdefct

leinsights leprotected leobserve

lepausrefl levalude psypredict psyposfb

psyfreqfb psyuseflfb psyexpect psypausreflect

psymngfb eeclmevents eeclmburn eeclmexhausted

eeclmfrust eeclmwork2hd eemeevents

eemeburn eemeexhausted eemefrust eemework2hd

eememisswork eemeactrestrict

tcresolve tcspkupclt tceasyask tcpeopleteam

tcdiffcoll tccomdelay tccomdelayotherset

scsafeacted scerhndlapp scfeedback sccultlearn

scfeelsafe scdiffdiscuss scvalueshared

gogrowth goachieve gofreedom goplanactivty

godecactivty goindepdt govariety wkl2much

wklpressure wkl2many wklattention wklremember

ptdmprocclear ptdmtowhom ptdmdiscsupvsr

ptdmmywork ptdminfldec ptdmtech advpaycomfy

advgoodsal advpdenough advfinprog advtraining

advpromoted advbenefits wlbskipmeal wlbpoormeal

wlbnobreaks wlblate4home wlbdifsleeping

wlbsleptlthours wlbchangplan wlbtechfrust

jobuncstill1yr jobunckeep jobuncfxlvl itlbtrjob

itlthnklv itllv1yr diffcoll personal;

Usevariables are

leinput leleslearn lefixdefct leinsights leprotected

psypredict psyposfb psyfreqfb psyuseflfb psyexpect

eeclmevents eeclmburn eeclmexhausted

eeclmfrust eeclmwork2hd eemeevents eemeburn

eemeexhausted eemefrust eemework2hd

tcresolve tceasyask tcpeopleteam

scsafeacted scerhndlapp scfeedback sccultlearn

scfeelsafe scvalueshared wlbskipmeal

wlbpoormeal wlbnobreaks wlblate4home

wlbdifsleeping wlbsleptlthours wlbchangplan wlbtechfrust

gogrowth goachieve gofreedom goplanactivty

godecactivty goindepdt govariety

advpaycomfy advgoodsal advpdenough advfinprog advtraining

advpromoted advbenefits wkl2much

wklpressure wkl2many wklattention wklremember

itlbtrjob itlthnklv itllv1yr

jobuncstill1yr jobunckeep jobuncfxlvl

ptdmprocclear ptdmtowhom ptdmdiscsupvsr

ptdmmywork ptdminfldec ptdmtech

tcspkupclt\_r tcdiffcoll\_r tccomdelay\_r tccomdelayotherset\_r scdiffdiscuss\_r ;

Missing are . ;

Categorical are leinput leleslearn

lefixdefct leinsights leprotected psypredict psyposfb

psyfreqfb psyuseflfb psyexpect

eeclmevents eeclmburn eeclmexhausted

eeclmfrust eeclmwork2hd eemeevents

eemeburn eemeexhausted eemefrust eemework2hd

tcresolve tcspkupclt\_r tceasyask tcpeopleteam

tcdiffcoll\_r tccomdelay\_r tccomdelayotherset\_r

scsafeacted scerhndlapp scfeedback sccultlearn

scfeelsafe scdiffdiscuss\_r scvalueshared

wlbskipmeal wlbpoormeal wlbnobreaks wlblate4home

wlbdifsleeping wlbsleptlthours wlbchangplan wlbtechfrust

gogrowth goachieve gofreedom goplanactivty

godecactivty goindepdt govariety advpaycomfy

advgoodsal advpdenough advfinprog advtraining

advpromoted advbenefits wkl2much

wklpressure wkl2many wklattention wklremember

itlbtrjob itlthnklv itllv1yr

jobuncstill1yr jobunckeep jobuncfxlvl

ptdmprocclear ptdmtowhom ptdmdiscsupvsr

ptdmmywork ptdminfldec ptdmtech;

Cluster = unit\_coded;

DEFINE:

TCSPKUPCLT\_r = 6 - TCSPKUPCLT;

TCDIFFCOLL\_r = 6 - TCDIFFCOLL;

TCCOMDELAY\_r = 6 - TCCOMDELAY;

tccomdelayotherset\_r = 6 - tccomdelayotherset;

scdiffdiscuss\_r = 6 - scdiffdiscuss;

Analysis:

Estimator = WLSMV;

type = complex;

MODEL:

LE BY leinput\* leleslearn

lefixdefct leinsights leprotected;

LL BY psypredict\* psyposfb

psyfreqfb psyuseflfb psyexpect;

TC BY tcresolve\* tcspkupclt\_r tceasyask tcpeopleteam

tcdiffcoll\_r tccomdelay\_r tccomdelayotherset\_r;

SC BY scsafeacted\* scerhndlapp scfeedback sccultlearn

scfeelsafe scdiffdiscuss\_r scvalueshared;

BC BY eeclmburn\* eeclmexhausted

eeclmfrust eeclmwork2hd eeclmevents;

PB BY eemeevents\*

eemeburn eemeexhausted eemefrust eemework2hd;

WLB BY wlbskipmeal\* wlbpoormeal wlbnobreaks wlblate4home

wlbdifsleeping wlbsleptlthours wlbchangplan wlbtechfrust;

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AD BY advpaycomfy\*

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wklpressure wkl2many wklattention wklremember;

ITL BY itlbtrjob\*

itlthnklv itllv1yr;

JU BY jobuncstill1yr\* jobunckeep jobuncfxlvl;

PDM BY ptdmprocclear\* ptdmtowhom ptdmdiscsupvsr

ptdmmywork ptdminfldec ptdmtech;

LE@1;

LL@1;

TC@1;

SC@1;

BC@1;

PB@1;

WLB@1;

GO@1;

AD@1;

WL@1;

ITL@1;

JU@1;

PDM@1;