

**S2 Table. Significance tests of transition distributions in PCCRI corpus.**  $P$  values comparing the transition distributions of 3<sup>rd</sup>-order CODYMs for the 117 PCCRI conversations analyzed, stratified by patient and clinician (shown in S4 Fig and S5 Fig), of observed patient *vs.* observed clinician (using Mann Whitney U tests), and of observed patient *vs.* null patient models and observed clinician *vs.* null clinician models (by comparing to empirically derived probability distributions, as described in the text).

| <b>Transition</b>     | <b>Patient <i>vs.</i> Clinician</b> | <b>Patient <i>vs.</i> Null</b> | <b>Clinician <i>vs.</i> Null</b> |
|-----------------------|-------------------------------------|--------------------------------|----------------------------------|
| SSS <sup>S</sup> →SSS | 0.234                               | < 0.001                        | 0.199                            |
| SSS <sup>L</sup> →SSL | < 0.001                             | 0.002                          | < 0.001                          |
| LSS <sup>S</sup> →SSS | < 0.001                             | 0.017                          | < 0.001                          |
| LSS <sup>L</sup> →SSL | 0.038                               | < 0.001                        | 0.010                            |
| SLS <sup>S</sup> →LSS | < 0.001                             | < 0.001                        | 0.241                            |
| SLS <sup>L</sup> →LSL | < 0.001                             | < 0.001                        | < 0.001                          |
| LLS <sup>S</sup> →LSS | 0.171                               | < 0.001                        | < 0.001                          |
| LLS <sup>L</sup> →LSL | < 0.001                             | 0.003                          | 0.084                            |
| SSL <sup>S</sup> →SLS | < 0.001                             | 0.404                          | 0.023                            |
| SSL <sup>L</sup> →SLL | 0.341                               | < 0.001                        | < 0.001                          |
| LSL <sup>S</sup> →SLS | < 0.001                             | < 0.001                        | < 0.001                          |
| LSL <sup>L</sup> →SLL | < 0.001                             | 0.005                          | 0.010                            |
| SLL <sup>S</sup> →LLS | 0.474                               | 0.428                          | 0.133                            |
| SLL <sup>L</sup> →LLL | < 0.001                             | 0.001                          | < 0.001                          |
| LLL <sup>S</sup> →LLS | < 0.001                             | < 0.001                        | < 0.001                          |
| LLL <sup>L</sup> →LLL | 0.464                               | 0.173                          | 0.011                            |