

**Supplementary Table 1. App Coding Rules**

| <b>BCT</b>  | <b>Rule</b>   |
|---|---|
| 8.4 Habit reversal/8.2 behaviour substitution and/or 7.1 Prompts/cues | To be substitution (8.2) it would need to know that you are sitting/being inactive and only prompt you then. To add habit reversal (8.4) behavioural substitution would need to be present and then also it would have to happen repeatedly (i.e. every time it happens). To be 8.2 and 8.4, it must say you have to replace something with something else (i.e. stand up and move rather than sitting down). |
| 1.1 Goal-setting (behaviour) or 7.1 Prompts/cues                      | The app would have to say your goal is to X or you need to have X number of breaks.   |
| 2.3 Self-monitoring of behaviour and 2.2 Feedback for behaviour       | If it is showing you or telling you how you did it is feedback.   |
| 9.1 Credible source   | Code 9.1 when it is associated with a specific person/organization. Do not code 9.1 for general statements (e.g., “research says..” “according to doctors...”).   |
| 8.4 Habit reversal  | Need to prompt you to count as 8.4  |
| 3.1 Social support (unspecified)                                      | Code for social support that is delivered via the app (e.g., little creatures/friends giving encouragement) (in addition to social support that is foster via interaction with other app users).  |
| 6.2 Social comparison   | Code when the user can also see “friends” activity on the app (i.e. not the user just sharing their own activity)   |
| Outcome BCTs  | Calories are considered as an “outcome”.  |
| General rule  | Make sure that it is associated with the behaviour (i.e. sitting), if it is not specific do not code it. However, if other pieces of the description suggest that is related to the behaviour, then include (and highlight the other pieces)  |

**Supplementary Table 2. ‘By Description’ Coding Free and Paid Apps**

| <b>App</b>   | <b>Store</b> | <b>BCTs</b>  |
|--|--------------|--|
| <b>Free (n=36)</b>                                 |              |  |
| App 1: Stand up! The Work Break Timer <sup>®</sup> | iTunes       | 2.2 Feedback on behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 2: Got a Minute for Your Health? <sup>®</sup>  | iTunes       | 5.1 Information about health consequences<br>7.2 Prompts/cues  |
| App 3: Sitting <sup>®</sup>                        | iTunes       | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 4: OfficeHealth <sup>®</sup>                   | iTunes       | 2.4 Self-monitoring of outcome(s) of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues  |
| App 5: Move Your App <sup>®</sup>                  | iTunes       | 2.2 Feedback on behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 6: Healthful <sup>®</sup>                      | iTunes       | 5.1 Information about health consequences<br>7.1 Prompts/cues  |
| App 7: Get Moving <sup>®</sup>                     | iTunes       | 2.2 Feedback on behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 8: Stand Up Tracker <sup>®a</sup>              | iTunes       | 1.1 Goal setting (behaviour)<br>2.3 Self-monitoring of behaviour<br>2.4 Self-monitoring of outcome(s) of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source |
| App 9: Standland <sup>®</sup>                      | iTunes       | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>3.1 Social support (unspecified)<br>5.1 Information about health consequences<br>10.3 Non-specific reward                                 |
| App 10: Rise & Recharge <sup>®</sup>               | iTunes       | 1.1 Goal setting (behaviour)<br>2.3 Self-monitoring of behaviour<br>5.1 Information on health consequences<br>7.1 Prompts/cues<br>9.1 Credible source<br>10.3 Non-specific reward                          |
| App 11: Healthy Break <sup>®</sup>                 | iTunes       | None   |
| App 12: Sitting Timer <sup>®</sup>                 | Google Play  | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>5.1 Information on health consequences  |

|                                       |             |   |
|---------------------------------------|-------------|---|
|                                       |             | 7.1 Prompts/cues  |
| App 13: MoveUp!®                      | Google Play | 7.1 Prompts/cues  |
| App 14: Move-Up®                      | Google Play | 2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues |
| App 15: Movn Activity®                | Google Play | 2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues |
| App 16: Twenty: Stand Up®             | Google Play | 5.1 Information about health consequences<br>7.1 Prompts/cues                                     |
| App 17: Stand up®                     | Google Play | 2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues |
| App 18: Stand up®                     | Google Play | 7.1 Prompts/cues  |
| App 19: Take a Stand®                 | Google Play | 2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues |
| App 20: Stand up®                     | Google Play | 5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source              |
| App 21: Stand App® <sup>b</sup>       | Google Play | 5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source              |
| App 22: Move it!®                     | Google Play | 7.1 Prompts/cues  |
| App 23: Actifit®                      | Google Play | 2.3 Self-monitoring of behaviour<br>6.2 Social comparison   |
| App 24: Sedentary work® <sup>c</sup>  | Google Play | 7.1 Prompts/cues  |
| App 25: Activatr®                     | Google Play | 2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues |
| App 26: Fitness IQ®                   | Google Play | 2.3 Self-monitoring of behaviour  |
| App 27: StandUp®                      | Google Play | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour                                     |
| App 28: Office exercise® <sup>d</sup> | Google Play | 5.1 Information on health consequences<br>7.1 Prompts/cues  |
| App 29: ActiMate®                     | Google Play | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>7.1 Prompts/cues                 |
| App 30: Up by Jawbone®                | Google Play | None  |

|   |             |   |
|---|-------------|---|
| App 31: Movnowplus <sup>®</sup>                   | Google Play | 7.1 Prompts/cues  |
| App 32: Office wellness <sup>®</sup>              | Google Play | 5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 33: PING <sup>®</sup>                         | Google Play | 7.1 Prompts/cues  |
| App 34: Bally total fitness <sup>®</sup>          | Google Play | 7.1 Prompts/cues  |
| App 35: Help the couch potato <sup>®</sup>        | Google Play | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>7.1 Prompts/cues   |
| App 36: Work and stand up <sup>®</sup>            | Google Play | 7.1 Prompts/cues<br>9.1 Credible source   |
| <b>Paid (n=14)</b>                                |             |   |
| App 1: Move More <sup>®</sup>                     | iTunes      | 2.2 Feedback on behaviour<br>2.3 Self-monitoring of behaviour<br>5.1 Information about health consequences<br>6.2 Social comparison<br>7.1 Prompts/cues   |
| App 2: Stop Sitting <sup>®</sup>                  | iTunes      | 5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 3: Get Moving <sup>®</sup>                    | iTunes      | 2.2 Feedback on behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues  |
| App 4: Stand App <sup>®b</sup>                    | iTunes      | 5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source  |
| App 5: Stand Alarm <sup>®</sup>                   | iTunes      | 5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 6: TAYB <sup>®</sup>                          | iTunes      | 5.1 Information about health consequences<br>7.1 Prompts/cues   |
| App 7: Desk Job <sup>®</sup>                      | iTunes      | 5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source  |
| App 8: Stand Up Reminder PRO <sup>®a</sup>        | iTunes      | 1.1 Goal setting behaviour<br>2.3 Self-monitoring behaviour<br>2.4 Self-monitoring of outcome(s) of behaviour<br>5.1 Information about health consequences<br>7.1 Prompts/cues<br>9.1 Credible source |
| App 9: Step counter & Smart Reminder <sup>®</sup> | iTunes      | 7.1 Prompts/cues  |
| App 10: Stand up <sup>®</sup>                     | iTunes      | 7.1 Prompts/cues  |

|  |             |   |
|--|-------------|---|
| App 11: Hourly Fitness <sup>®</sup>                  | iTunes      | 5.1 Information about health consequences                     |
| App 12: Wear Stand-Up <sup>®</sup>                   | Google Play | 7.1 Prompts/cues  |
| App 13: Sedentary work PRO <sup>®c</sup>             | Google Play | 7.1 Prompts/cues  |
| App 14: Office Exercises & Stretch PRO <sup>®d</sup> | Google Play | 5.1 Information about health consequences<br>7.1 Prompts/cues |

**The apps that have a lettered asterisk are the paid apps which also had a free version. The matching letters indicate the matching free to paid version of the apps.**