**Automating trial reports**



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1. **Agenda**
2. Demonstrate commands
3. Ask for feedback
4. **Introduction**

This is an example of what can be achieved with some user written commands I have made and putdox. There are other ways to get your output into a word document, but this works reasonably well with a complex, customisable table format.

1. **Trial Summary**

Writing details, that are not dynamic, such as this in a Word document and then adding it to your tables may save time with putdocx.

**4. Data summary examples**

**Table 1 - First example**

| **Variable** | **N** | **mean (sd)** | **Range** |
| --- | --- | --- | --- |
| Age | 1000 | 44.8 (10.1) | 18.7 - 80.0 |
| BMI | 897 | 25.0 (2.1) | 17.4 - 31.7 |
| Quality of life | 905 | 50.0 (15.2) | 6.1 - 99.6 |

**Table 2 - Second example**

|  | **Overall** | | | **Group1** | | | **Group2** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **N** | **mean (sd)** | **Range** | **N** | **mean (sd)** | **Range** | **N** | **mean (sd)** | **Range** |
| Age | 1000 | 44.8 (10.1) | 18.7 - 80.0 | 494 | 44.6 (10.1) | 18.7 - 80.0 | 506 | 44.9 (10.1) | 19.6 - 77.7 |
| BMI | 897 | 25.0 (2.1) | 17.4 - 31.7 | 441 | 24.9 (2.1) | 17.4 - 31.7 | 456 | 25.0 (2.0) | 18.9 - 30.4 |
| Quality of life | 905 | 50.0 (15.2) | 6.1 - 99.6 | 444 | 49.5 (15.1) | 7.7 - 87.7 | 461 | 50.4 (15.3) | 6.1 - 99.6 |

**5. Baseline table examples**

**Table 1 - First example**

| **Baseline Characteristics** | | **Randomised (N = 1000)** |
| --- | --- | --- |
| Age - mean (sd) | | 44.8 (10.1) |
| BMI - mean (sd) (N = 897) | | 25.0 (2.1) |
| Quality of life - mean (sd) (N = 905) | | 50.0 (15.2) |
| Female - n (%) | | 519 (51.9) |
| Current smoker - n (%) (N = 900) | | 73 (8.1) |
| Drinks alcohol - n (%) (N = 912) | | 624 (68.4) |
| Site - n (%) | South London And Maudsley | 601 (60.1) |
| Central And North West London | 307 (30.7) |
| South West London And St George’s | 92 (9.2) |
| Ethnicity - n (%) (N = 889) | Other | 45 (5.1) |
| Mixed | 131 (14.7) |
| Asian or Asian British | 201 (22.6) |
| Black or Black British | 231 (26.0) |
| White or White British | 281 (31.6) |
| Sons - n (%) | 0 | 361 (36.1) |
| 1 | 353 (35.3) |
| 2 | 203 (20.3) |
| 3 | 83 (8.3) |
| Daughters - n (%) | 0 | 372 (37.2) |
| 1 | 364 (36.4) |
| 2 | 180 (18.0) |
| 3 | 84 (8.4) |

**Table 2 - Second example**

| **Baseline Characteristics** | | **Group 0** | | **Group 1** | |
| --- | --- | --- | --- | --- | --- |
|  | | **N** | **Summary** | **N** | **Summary** |
| Age - mean (sd) | | 494 | 44.6 (10.1) | 506 | 44.9 (10.1) |
| BMI - mean (sd) | | 441 | 24.9 (2.1) | 456 | 25.0 (2.0) |
| Quality of life - mean (sd) | | 444 | 49.5 (15.1) | 461 | 50.4 (15.3) |
| Female - n (%) | | 494 | 261 (52.8) | 506 | 258 (51.0) |
| Drinks alcohol - n (%) | | 452 | 303 (67.0) | 460 | 321 (69.8) |
| Current smoker - n (%) | | 446 | 36 (8.1) | 454 | 37 (8.1) |
| Site - n (%) | South London And Maudsley | 494 | 295 (59.7) | 506 | 306 (60.5) |
| Central And North West London | 494 | 152 (30.8) | 506 | 155 (30.6) |
| South West London And St George’s | 494 | 47 (9.5) | 506 | 45 (8.9) |
| Ethnicity - n (%) | Other | 435 | 26 (6.0) | 454 | 19 (4.2) |
| Mixed | 435 | 70 (16.1) | 454 | 61 (13.4) |
| Asian or Asian British | 435 | 100 (23.0) | 454 | 101 (22.2) |
| Black or Black British | 435 | 103 (23.7) | 454 | 128 (28.2) |
| White or White British | 435 | 136 (31.3) | 454 | 145 (31.9) |
| **No. of children** | | | | |  |
| Sons - n (%) | 0 | 494 | 189 (38.3) | 506 | 172 (34.0) |
| 1 | 494 | 173 (35.0) | 506 | 180 (35.6) |
| 2 | 494 | 91 (18.4) | 506 | 112 (22.1) |
| 3 | 494 | 41 (8.3) | 506 | 42 (8.3) |
| Daughters - n (%) | 0 | 494 | 198 (40.1) | 506 | 174 (34.4) |
| 1 | 494 | 168 (34.0) | 506 | 196 (38.7) |
| 2 | 494 | 86 (17.4) | 506 | 94 (18.6) |
| 3 | 494 | 42 (8.5) | 506 | 42 (8.3) |

**Table 3 - Some data from a spreadsheet**

| **Pt** | **Related to intervention (Y/N)** | **Details** |
| --- | --- | --- |
| 1 | Y | Sometimes the trial team will supply some information in a spreadsheet that you need to incorporate into your report |
| 2 | N | You could simple copy the excel data into work |
| 3 | Y | But if you want to complicate things you can import the spreadsheet into Stata, then use putdocx to export into word |
| 4 | N | Isn't automation fun |

**6. Conclusions**

* post\_table commands can be used to generate complex tables as stata datasets.
* Some table producible with post\_table could be produced more easily with other commands, I believe that for certain formats that we use when reporting trials it is the best command.
* The command is highly flexible and can accommodate a lot of different tables
* For best results all variables should be labelled and value labels should be used.
* Putdocx can then be used to make word tables, or export excel can output these as spreadsheets.
* Putdocx has several limitations
  + You cannot custom set table column widths
  + It is a bit of a pain to write extended text.
  + You can use words style options but not a saved style from another document
  + It is therefore difficult to work with styles, and automatic contents pages, from existing documents
  + Can’t set headers and footers
  + The list goes on