

Test Render

Corey Scholes

2025-09-08

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Load Packages

```
if(!require("pacman")) install.packages("pacman")
pacman::p_load(
  "gtsummary",
  "flextable",
  "epoxy",
  "renv",
  "knitr",
  "rsconnect",
  "quarto",
  "tibble",
  "gargle",
  "googledrive",
  "googlesheets4",
  "tidyverse",
  install = TRUE,
  update = FALSE
)
```

Authorisations

Pre-authorise access to registry datasets.

```
options(
  gargle_oauth_cache = ".secrets",
  gargle_oauth_email = TRUE
)

drive_auth(cache = ".secrets", email = TRUE)
```

Create Test Data

Function first

```
create_test <- function(n_rows = 50, seed = NULL) {
  if (!is.null(seed)) {
    set.seed(seed)
  }

  tibble(
    id = 1:n_rows,
    name = sample(c("Alice", "Bob", "Charlie", "Diana", "Eve", "Frank", "Grace", "Henry"), n_rows, replace = TRUE),
    age = sample(18:65, n_rows, replace = TRUE),
    score = round(runif(n_rows, min = 0, max = 100), 1),
    category = sample(c("A", "B", "C", "D"), n_rows, replace = TRUE) |> factor(),
    date = seq(as.Date("2024-01-01"), by = "day", length.out = n_rows),
    is_active = sample(c(TRUE, FALSE), n_rows, replace = TRUE),
    salary = round(rnorm(n_rows, mean = 60000, sd = 15000), 2),
    department = sample(c("Sales", "Marketing", "IT", "HR", "Finance"), n_rows, replace = TRUE),
    rating = sample(1:5, n_rows, replace = TRUE) |> ordered()
  )
}
```

Function call

```
TestDF <- create_test(seed = 2068)
```

Write externally

Write reoperations to external table

```
SheetID <- "https://docs.google.com/spreadsheets/d/1e7431oSrK9tItiSZb4wCWPI7nqGqawH8pNgnqgHPNkU/view"
```

```
# Authenticate for sheets using the same token
gs4_auth(token = drive_token())

# Do the write operation silently
if (nrow(TestDF) > 0) {
  invisible(
    googlesheets4::range_write(
```

```

ss = SheetID,
data = TestDF,
sheet = "TestTab",
range = "A1:J",
col_names = TRUE
)
}

```

```

if (nrow(TestDF) == 0) {
  epoxy::epoxy_html("There are no reoperations to report.")
} else {
  epoxy::epoxy_html('Reoperations were written to an <a href="{{SheetID}}">external file</a> for fun
}

```

Table layout

Test table layout across docx and pdf formats

#Dont insert chunk names into table chunks - quarto bug makes it wig out when there is a named chunk

```

TableRep1RC1 <- TestDF |>
  dplyr::select(
    id,
    name,
    age,
    score,
    category,
    date,
    is_active,
    salary,
    department,
    rating
  ) |>
  tbl_summary(
    by = "department"
  #   label = list(
  #     #SurgeonA ~ "Surgeon",
  #     AgeAtInitialExam ~ "Age at Initial Consultation (Years)",
  #     Sex = "Male",
  #     BilateralStatus ~ "Bilateral Presentation",
  #     IndexSide ~ "Dominant Side",
  #     SymptomDuration ~ "Symptom Duration (Weeks)",
  #     SymptomDurationCat ~ "Symptom Duration Category",
  #     TreatmentStatus ~ "Treatment Record Active",
  #     RegistryStatus ~ "Patient Record Active"
  #   ),
  #   type = list(
  #     AgeAtInitialExam ~ "continuous",
  #     SymptomDuration ~ "continuous",

```

```

#   Sex ~ "dichotomous",
#   TreatmentStatus ~ "dichotomous",
#   RegistryStatus ~ "dichotomous"
# ),
# value = list(
#   Sex = "Male",
#   IndexSide = "Dominant",
#   TreatmentStatus = "Ongoing",
#   RegistryStatus = "Open"
# ),
# statistic = list(
#   all_categorical() ~ "{p} ({n})"
# ),
# missing = "no"
) |> gtsummary::add_stat_label(
  location = "column"
# ) |> add_overall() |> modify_table_styling(
#   columns = label,
#   rows = label == "Symptom Duration Category",
#   footnote = "Dichotomised below or equal to 0.5 years or greater than 0.5 years"
# ) |> modify_table_styling(
#   columns = label,
#   rows = label == "Treatment Record Active",
#   footnote = "Treatment record remains active - no change to follow up"
# ) |> modify_table_styling(
#   columns = label,
#   rows = label == "Patient Record Active",
#   footnote = "Patient record remains open - no change to consent or mortality status"
# )

gtsummary::as_flex_table(TableRep1RC1) |> flextable::set_table_properties(
  layout = "autofit",
  width = 1,
  align = "center",
  opts_word = list(
    split = TRUE,
    repeat_headers = TRUE
  )
) |> flextable::fontsize(size = 13, part = "body") |>
flextable::fit_to_width(max_width = 8)

```

Table 1: Summary of PRULO Report 1 (Rotator Cuff) Case - Patient Characteristics

Characteristic	Statistic	Finance N = 10	HR N = 8	IT N = 11	Marketing N = 13	Sales N = 8
id	Median (Q1, Q3)	31 (23, 43)	31 (19, 43)	26 (17, 39)	22 (8, 36)	14 (9, 25)
name						
Alice	n (%)	2 (20%)	0 (0%)	1 (9.1%)	0 (0%)	0 (0%)
Bob	n (%)	3 (30%)	1 (13%)	1 (9.1%)	1 (7.7%)	1 (13%)

Characteristic	Statistic	Finance N = 10	HR N = 8	IT N = 11	Marketing N = 13	Sales N = 8
Charlie	n (%)	2 (20%)	0 (0%)	4 (36%)	0 (0%)	2 (25%)
Diana	n (%)	0 (0%)	4 (50%)	2 (18%)	2 (15%)	2 (25%)
Eve	n (%)	2 (20%)	2 (25%)	0 (0%)	2 (15%)	2 (25%)
Frank	n (%)	0 (0%)	0 (0%)	0 (0%)	3 (23%)	0 (0%)
Grace	n (%)	0 (0%)	1 (13%)	2 (18%)	2 (15%)	0 (0%)
Henry	n (%)	1 (10%)	0 (0%)	1 (9.1%)	3 (23%)	1 (13%)
age	Median (Q1, Q3)	38 (26, 50)	52 (42, 59)	34 (24, 39)	34 (29, 56)	41 (27, 43)
score	Median (Q1, Q3)	38 (22, 61)	43 (22, 75)	37 (19, 86)	68 (41, 77)	72 (43, 85)
category						
A	n (%)	4 (40%)	3 (38%)	1 (9.1%)	2 (15%)	1 (13%)
B	n (%)	2 (20%)	4 (50%)	4 (36%)	3 (23%)	3 (38%)
C	n (%)	4 (40%)	1 (13%)	1 (9.1%)	3 (23%)	3 (38%)
D	n (%)	0 (0%)	0 (0%)	5 (45%)	5 (38%)	1 (13%)
date	Median (Q1, Q3)	2024-01-30 (2024-01-23, 2024-02-12)	2024-01-31 (NA, NA)	2024-01-26 (2024-01-17, 2024-02-08)	2024-01-22 (2024-01-08, 2024-02-05)	2024-01-13 (NA, NA)
is_active	n (%)	7 (70%)	2 (25%)	7 (64%)	7 (54%)	5 (63%)
salary	Median (Q1, Q3)	60,717 (55,297, 64,368)	55,481 (44,225, 72,130)	60,257 (56,444, 73,526)	64,861 (61,666, 67,402)	58,771 (46,720, 69,478)
rating						
1	n (%)	2 (20%)	3 (38%)	2 (18%)	6 (46%)	3 (38%)
2	n (%)	1 (10%)	1 (13%)	4 (36%)	1 (7.7%)	1 (13%)
3	n (%)	2 (20%)	1 (13%)	1 (9.1%)	0 (0%)	1 (13%)
4	n (%)	3 (30%)	1 (13%)	3 (27%)	4 (31%)	1 (13%)
5	n (%)	2 (20%)	2 (25%)	1 (9.1%)	2 (15%)	2 (25%)

Text rendering

```
message_text <- if_else(
  nrow(TestDF |> filter(is.na(department)) |> arrange(category)) < 1,
  "There are no cases to flag for discrepancies.",
  "Discrepancies identified have been added to external table."
)

if (knitr::is_html_output()) {
  epoxy::epoxy_html(message_text)
} else {
  cat(message_text, "\n")
}
```

There are no cases to flag for discrepancies.