Printing (PDF)

This article is about PDF printing specifically. To learn the many other ways to print, export, or save `surveytable` tables, see `vignette("Printing")`.

Basic printing

If a tabulation function is called from the top level, it should print out its table(s) on its own.

As usual, first, let's start up the package and pick a survey to analyze:

```
library(surveytable)
set_survey(namcs2019sv)
```

Table 1: Survey info {NAMCS 2019 PUF}

Variables	Observations	Design
33	8,250	Stratified 1 - level Cluster Sampling design (with replacement) With (398) clusters. namcs2019sv = survey::svydesign(ids = ~CPSUM, strata = ~CSTRATM, weights = ~PATWT , data = namcs2019sv_df)

Now, when a tabulation function is called from the top level, it prints. You don't need to do anything extra.

```
tab("AGER")
```

Table 2: Patient age recode {NAMCS 2019 PUF}

Level	n	Number	SE	LL	UL	Percent	SE	LL	UL
Under 15 years	887	117,916,772	14,097,315	93,228,928	149,142,177	11.4	1.3	8.9	14.2
15-24 years	542	64,855,698	7,018,359	52,386,950	80,292,164	6.3	0.6	5.1	7.5
25-44 years	1,435	170,270,604	13,965,978	144,924,545	200,049,472	16.4	1.1	14.3	18.8
45-64 years	2,283	309,505,956	23,289,827	266,994,092	358,786,727	29.9	1.4	27.2	32.6
65-74 years	1,661	206,865,982	14,365,993	180,480,708	237,108,637	20.0	1.2	17.6	22.5
75 years and over	1,442	167,069,344	15,179,082	139,746,193	199,734,713	16.1	1.3	13.7	18.8

N = 8250.

If a tabulation function is called not from the top level, such as from within a loop or another function, you do need to call `print()` explicitly for it to print. For example:

```r
for (vr in c("AGER", "SEX")) {
  print( tab_subset(vr, "MAJOR", "Preventive care") )
}
```

Table 3: Patient age recode (Major reason for this visit = Preventive care) {NAMCS 2019 PUF}

Level	n	Number	SE	LL	UL	Percent	SE	LL	UL
Under 15 years	300	50,700,892	8,555,609	36,351,714	70,714,146	22.7	3.5	16.1	30.4
15-24 years	121	18,196,389	2,888,616	13,246,305	24,996,296	8.1	1.2	5.9	10.9
25-44 years	370	50,573,223	6,834,740	38,749,084	66,005,455	22.6	2.5	17.8	28.0
45-64 years	355	53,804,610	9,477,599	37,982,129	76,218,371	24.1	3.2	17.9	31.1
65-74 years	225	27,985,400	4,668,693	20,072,754	39,017,198	12.5	1.8	9.2	16.5
75 years and over	197	22,363,158	3,804,827	15,925,231	31,403,678	10.0	1.7	6.9	13.8

N = 1568.

Table 4: Patient sex (Major reason for this visit = Preventive care) {NAMCS 2019 PUF}

Level	n	Number	SE	LL	UL	Percent	SE	LL	UL
Female	1,014	139,091,345	11,844,812	117,664,165	164,420,512	62.2	2.9	56.2	68.0
Male	554	84,532,326	10,593,549	66,039,112	108,204,272	37.8	2.9	32.0	43.8

N = 1568.

Create HTML or PDF tables

Using a Quarto document, you can create tables in many different formats, such as HTML or PDF. Here is a straightforward example of what a Quarto document might look like:

```
---
title: "My tables"
author: "Me"
format: pdf
---

# Welcome

As usual, first, let's start up the package and pick a survey to analyze:

```{r, results='asis'}
library(surveytable)
set_survey(namcs2019sv, output = 'auto')
```

Tables

Take a look at this table:
```

```{r, results='asis'}
tab("AGER")
```

Note the `format` setting, which specifies that this document will create PDF tables. Also note that you do have to add the `results='asis'` argument to the code chunks that print tables.

Print using various table-making packages

Use the `output` argument of `set_opts()` to select a table-making package. By default (`output = "auto"`), `surveytable` automatically selects a package depending on whether the output is to the screen (`huxtable`), HTML (`gt`), or PDF (`kableExtra`). You can also explicitly select one of these packages.

Changing the table-making package has a couple of uses:

- It allows you to generate tables in the way that you prefer.
- It allows you to print those tables to a variety of destinations, including the screen, HTML files, or PDF files.

kableExtra

```
set_opts(output = "kableExtra")
```

We have not implemented screen printing with `kableExtra` yet. Try one of the other packages.

Here is PDF:

```{r, results='asis'}
tab("AGER")
```

Table 5: Patient age recode {NAMCS 2019 PUF}

Level	n	Number	SE	LL	UL	Percent	SE	LL	UL
Under 15 years	887	117,916,772	14,097,315	93,228,928	149,142,177	11.4	1.3	8.9	14.2
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65-74 years	1,661	206,865,982	14,365,993	180,480,708	237,108,637	20.0	1.2	17.6	22.5
75 years and over	1,442	167,069,344	15,179,082	139,746,193	199,734,713	16.1	1.3	13.7	18.8

N = 8250.

auto

`auto` is the default option. It automatically selects one of the above packages depending on whether the output is to the screen (`huxtable`), HTML (`gt`), or PDF (`kableExtra`).

```
set_opts(output = "auto")
#> * Printing with huxtable for screen, gt for HTML, or kableExtra for PDF.
```

PDF output (this should use `kableExtra`):

```
```{r, results='asis'}
tab("AGER")
```
```

Table 6: Patient age recode {NAMCS 2019 PUF}

Level	n	Number	SE	LL	UL	Percent	SE	LL	UL
Under 15 years	887	117,916,772	14,097,315	93,228,928	149,142,177	11.4	1.3	8.9	14.2
15-24 years	542	64,855,698	7,018,359	52,386,950	80,292,164	6.3	0.6	5.1	7.5
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75 years and over	1,442	167,069,344	15,179,082	139,746,193	199,734,713	16.1	1.3	13.7	18.8

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More

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