Printing (LaTeX)

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

```
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 LaTeX tables

To create HTML or LaTeX tables from an R Markdown notebook or a Quarto document, add the `results='asis'` argument to your code chunk, like so:

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

The above should produce the following:

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
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.

Print using various printing packages

You can change the package that `surveytable` uses for printing. `surveytable` comes with code for using one of these packages: `huxtable` (default), `gt`, and `kableExtra`. In addition, you can supply custom code

to use another printing package.

Changing the printing package has a couple of uses:

- Use `as_object()` to generate an object from your favorite printing package, further edit this object using that printing package, and then finally print it, so the table looks exactly the way you want it to look.
- Print to destinations other than the screen, such as HTML or LaTeX.

kableExtra

By default, `surveytable` prints using `huxtable`. However, at this point, we have only implemented LaTeX printing with `kableExtra`. This is the reason that, in a LaTeX document, you do need to switch to `kableExtra` output:

```
set_opts(output = "kableExtra")
#> * Printing with kableextra.
```

Once you do that, produce LaTeX tables like so:

```
```{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
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
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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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