

# Using past visit information to enhance analysis of National Ambulatory Medical Care Survey (NAMCS) data

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**b. Has the patient been seen in this clinic before?**

1  Yes, established patient – **How many past visits in the last 12 months?**  
*Exclude this visit.*

1  None  
 2  1-2  
 3  3-5  
 4  6+  
 5  Unknown

2  No, new patient

Since 2001, item on the number of visits to this physician/clinic within the last 12 months (excluding the sampled visit) has been on the NAMCS and NHAMCS-OPD patient record form.

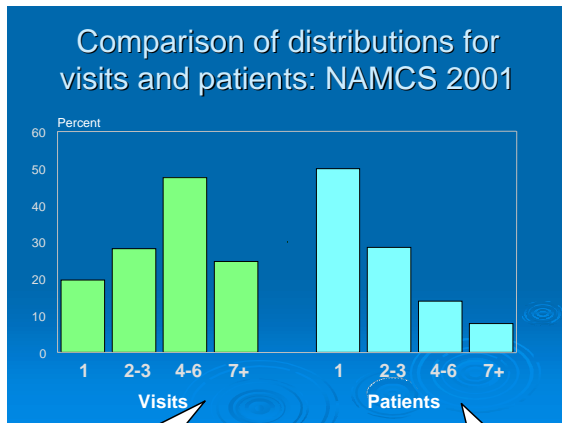
**Basic idea: Re-weight the sampled records by decreasing the visit weight by the number of visits within the year to the same provider. The result provides an estimate of the number of patients rather than the number of visits. A patient is defined as the relationship between a person and his/her doctor. If a person has multiple doctors then the person is counted as multiple patients.**

**Assumptions: That the visit characteristics for the sampled visit are the same as that for the preceding visits in that year.**

Item categories	Past visits	Annual visits	Interval midpoint	Viz ratio
New	0	1	1	1
0	0	1	1	1
1-2	1-2	2-3	2.5	.4
3-5	3-5	4-6	5	.2
6+	6+	7+	8	.125

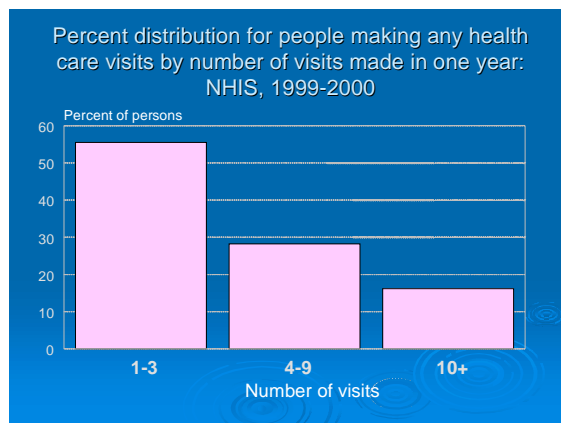
Patient weight = Visit weight \* Viz ratio

- ☛ Visit weight → 880,487,000 visits ± 33,373,000
- ☛ Patient weight → 322,739,000 patients ± 13,073,000



Using the visit weight

Using the patient weight



**Summary:**

- Past visits items provides depth to analysis of ambulatory care utilization.
- Visit records may be re-weighted to provide patient-level estimates.
- Re-weighted distribution more closely resembles population-based estimates.
- No change in sampling variance estimation procedure other than using the new weight.
- Caveats-
  - Assumption of similar characteristics is not applicable to all analytical variables.
  - Still is not equivalent to person-level estimates.

**SAS format statement for the past visits item**

```
Proc format;
  VALUE PASTVISF
  0='Blank'
  1='None'
  2='1-2'
  3='3-5'
  4='6 or more'
  5='Unknown'
  8='Not applicable'; /* These are the new patients */
```

**Re-weighting code for providing patient-level weights**

```
if pastvis=8 then vr=1;
else if pastvis=1 then vr=1;
else if pastvis=2 then vr=.4;
else if pastvis=3 then vr=.2;
else if pastvis=4 then vr=.125;
else vr=.;
vrpatwt=patwt*vr; /* new patient weight */
```

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