

Making Changes in Data Easier for the Statistician to See

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In a recent study, some new long-term FOLLOWUP data arrived that meant survival analysis had to be updated. The dataset that held the last day the patient either was known to survive, or if the patient died what that date of death was, was also updated. The structure of the dataset is detailed below:

Variable	Type	Label
CNO	Char10	Label Center ID
PATNO	Char8	Patient Number
DEATH	Num	Patient Died?
SURVDT	Num	Last date alive or death date

A listing showing old result and new result for each patient was requested. Joining the old and the new dataset by patient, and renaming the variables DEATH to DEATH_NEW and SURVDT to SURVDT_NEW on the new dataset allowed for variables to be in one dataset and presentation of the comparisons was easy:

```
proc report data=all0 nowindows headline split='|';
  by &treat;
  title5 "#byval(&treat)";
  columns cnopatno
         (!R"\brdrb\brdrs\brdrw10 " Death'(death death_new)) dummy
         (!R"\brdrb\brdrs\brdrw10 " Last date alive or death'(SURVDT SURVDT_NEW));
  define cnopatno /group order=internal 'Patient|ID' style={just=center};
  define dummy /display style={just=center cellwidth=0.05in} ' ';
  define death /display 'Original' style={just=center};
  define death_new /display 'Update' style={just=center};
  define SURVDT /display 'Original' style={just=center};
  define SURVDT_NEW /display 'Update' style={just=center};
  quit;
run;
```

Since most of the data was the same, in order to show the differences it was decided to highlight any changes using the following code immediately below the DEFINE statements but before the QUIT statement with the following code:

```
compute death_new;
  if death^=death_new then do;
    call define('_c2_', 'style', 'style={background=CXFFFF66}');
    call define('_c3_', 'style', 'style={background=CXFFFF66}');
  end;
endcomp;
compute SURVDT;
  if SURVDT^=SURVDT_NEW then do;
    call define('_c5_', 'style', 'style={background=CXFFFF66}');
    call define('_c6_', 'style', 'style={background=CXFFFF66}');
  end;
endcomp;
```

The following excerpt of output demonstrates the use of this technique.

Patient ID	Death		Last date alive or death	
	Original	Update	Original	Update
001-001	YES	YES	30NOV2003	30NOV2003
001-002	NO	NO	12JAN2005	20OCT2004
001-004	YES	YES	13JUN2004	13JUN2004

For this table the highlight used was yellow however any color could have been used. A chart giving the RGB Hex Triplet Color codes is given over the page, courtesy of "Doug" on the web.

