

# MULTILABEL - A useful addition to the FORMAT procedure

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# Overview

- MULTILABEL - what does it do?
- Who cares - how does it help me?
- Limitations
- Conclusion

# Current Emphasis

- **MULTILABEL - what does it do?**
- Who cares - how does it help me?
- Limitations
- Conclusion

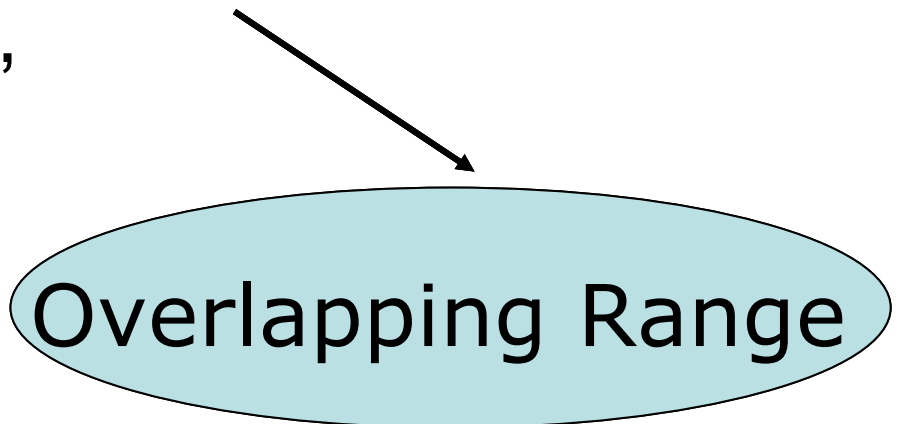
# MULTILABEL - what does it do?

- PROC FORMAT couldn't do **THIS** before

Value THIS

0 - 1 = "Under 2"

0 - 2 = "Under 3"



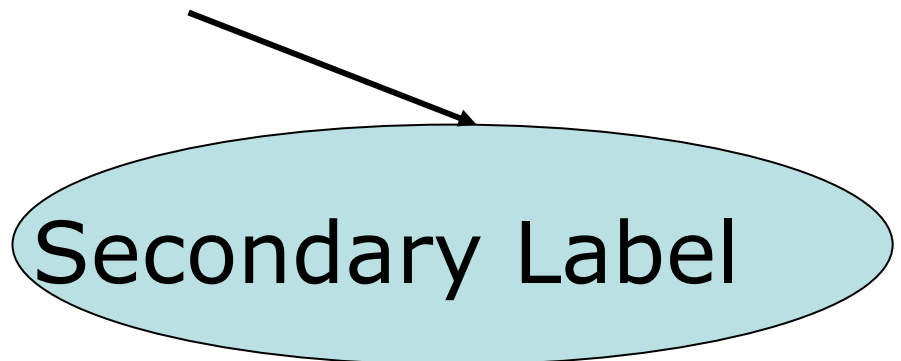
# MULTILABEL - what does it do?

– Couldn't do **THAT** either

Value THAT

1 = "One"

1 = "Again One"



# MULTILABEL - what does it do?

– Now it can do THIS and THAT

Value THIS (MULTILABEL)

0 - 1 = “Under 2”

0 - 2 = “Under 3”

# Current Emphasis

- MULTILABEL - what does it do?
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# Who Cares - How does it ...

Number and Percent of Subjects with Weight Loss

<b>Age Group</b>	<b>Placebo</b>	<b>Block Buster 100 mg</b>
Under 25	x (x.x)	x (x.x)
Under 50	x (x.x)	x (x.x)
Under 75	x (x.x)	x (x.x)
Under 100	x (x.x)	x (x.x)
100 and Above	x (x.x)	x (x.x)



Overlapping Ranges

# Who Cares - How does it ...

<u>Patient</u>	<u>Rxgroup</u>	<u>Age</u>	
1	2	69	
2	1	82	
3	2	99	Under 100
5	2	55	Under 75
<b>6</b>	<b>1</b>	<b>45</b>	Under 50

# Who Cares - How does it ...

- PROCS need Patient #6 duplicated
- Kludge - Multiple output statements

# Who Cares - How does it ...

- if age < 50 then output;
- if age < 75 then output;
- if age < 100 then output;
  
- <more output statements>

# Who Cares - How does it ...

Value agefmt (**MULTILABEL**)

low - 24 = "Under 25"

low - 49 = "Under 50"

low - 74 = "Under 75"

low - 99 = "Under 100"

100 - high = "100 and Above"

;

# Who Cares - How does it ...

- Use a MULTILABEL enabled PROC
- MEANS, SUMMARY and TABULATE
- PROC MEANS example

# Who Cares - How does it ...

## Clinically Significant Weight Loss

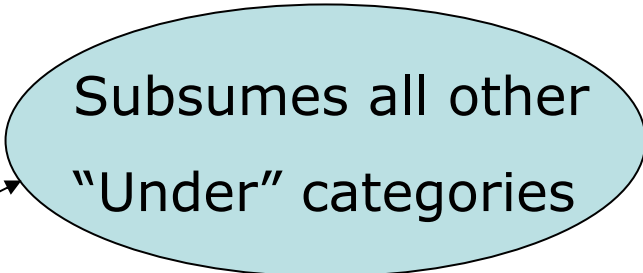
<u>Patient</u>	<u>Wt loss</u>	<u>Age</u>	<u>Rxgroup</u>
1	1	69	2
2	1	82	1
3	1	99	2
4	1	73	1
5	1	55	2
6	1	45	1

# Who Cares - How does it ...

```
proc means noprint data = demowgt completetypes ;  
  class age / MLF preloadfmt ;  
  class rxgroup ;  
  var weightloss ;  
  output out = sumweight ( drop=_type__freq_ )  
    n = N_by_RX ;  
  types age*rxgroup ;  
  format age agefmt. ;  
run ;
```

# Who Cares - How does it ...

Age	Rxgroup	N_by_RX
100 and above	1	0
100 and above	2	0
Under 100	1	5
Under 100	2	5
Under 25	1	1
Under 25	2	1
Under 50	1	2
Under 50	2	1
Under 75	1	3
Under 75	2	4



Subsumes all other  
"Under" categories

# Who Cares - How does it ...

- Application for Secondary label
- “Any Dose” Column

# Who Cares - How does it ...

<b>Placebo</b>	<b>Block Buster 100 mg</b>	<b>Block Buster 200 mg</b>	<b>Block Buster Any Dose</b>	<b>Comparator</b>
N=xxx	N=xxx	N=xxx	N=xxx	N=xxx

# Who Cares - How does it ...

Patient	Drug
1	1
2	2
3	3
4	4

Block Buster 100 mg

Block Buster Any Dose

Secondary Labels

# Who Cares - How does it ...

Value drugfmt (multilabel)

1 = "Placebo"

2 = "Block Buster 100 mg"

2 = "Block Buster Any Dose"

3 = "Block Buster 200 mg"

3 = "Block Buster Any Dose"

4 = "Comparator"

;



Secondary Labels

# Who Cares - How does it ...

- Informat to order columns

Invalue order

"Placebo" = 1

"Block Buster 100 mg" = 2

"Block Buster 200 mg" = 3

"Block Buster Any Dose" = 4

"Comparator" = 5

;

# Who Cares - How does it ...

```
proc means noprint data = rxgroups completetypes ;  
  class drug / MLF preloadfmt ;  
  var drug ;  
  output out = Overall_N ( drop=_type__freq_ )  
    n = N_by_RX ;  
  types drug ;  
  format drug drugfmt. ;  
run ;
```

# Who Cares - How does it ...

<b>Placebo</b>	<b>Block Buster 100 mg</b>	<b>Block Buster 200 mg</b>	<b>Block Buster Any Dose</b>	<b>Comparator</b>
N=26	N=14	N=37	N=51	N=85



Dynamic Any Dose Column

# Current Emphasis

- MULTILABEL - what does it do?
- Who cares - how does it help me?
- **Limitations**
- Conclusion

# Limitations

- Few PROCs - robust testing?
- Multiple MULTILABEL cannot be combined in a single PROC.  
(fixed in SAS 9.x)

# Current Emphasis

- MULTILABEL - what does it do?
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# Conclusion

- A useful addition to PROC FORMAT
- Applications to tables that go into the CTD (Common Technical Document)
- Should be extended to more PROCs

# Contact Information

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