

Personal Financial Burden, Health Insurance, and Job Support among Colorectal Cancer Patients

November 2014 SOC Didactic Session

thank you

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“I mean, you know, I could probably lose my job. I don’t think I could—I—I could probably fight it but we only get 12 weeks, um, short-term sick leave—medical leave and so I had spent half of the six months fighting to keep my job and I’d—I’d go into debt. Seriously into debt because I—I support myself.”

“..one lady said, you know, “I can’t afford to do it.” She said, “I can’t afford to take the time off.” ...You can’t give up your job for six months. You know, I was able to do it...So it was okay. But it’s like if that’s what you’re going rely on to breathe, you know, live, eat, you know, survive—”

“you were talking about being unemployed for six months. That was—that was a tough one because, um, I’m an au pair so it was like I lost my job.”

“Sometimes I think it would be easier if the cancer were to come back and...you know...succumb my life”

Financial toxicity

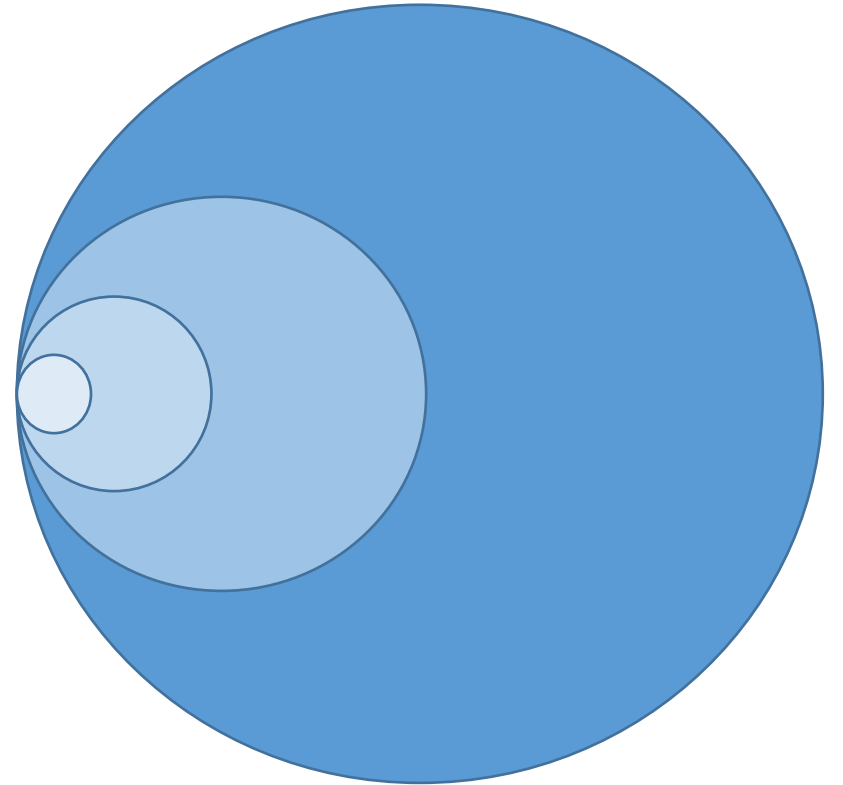


Objectives

- Describe survey methodology
- Discuss composite measure of personal financial burden
- Introduce concept of job support
- Seek feedback on framing the story and policy implications

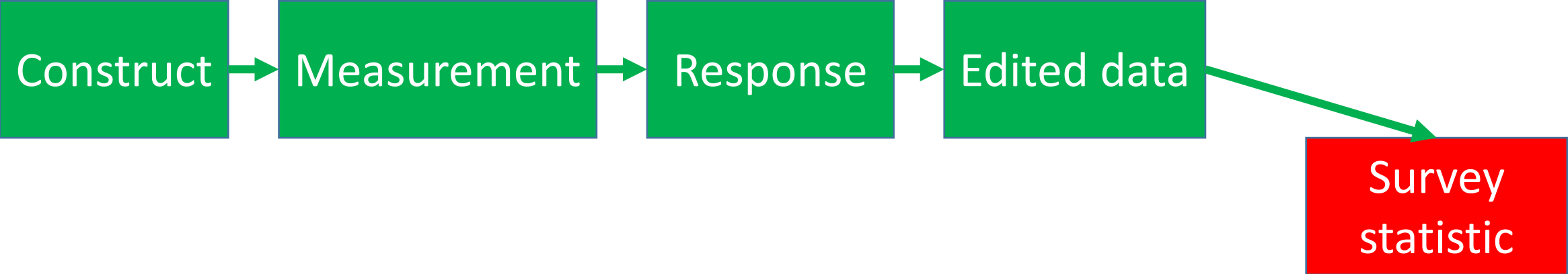
Basic issues in survey methodology

- Survey design is a function of cost vs. accuracy
- 2 fundamental design tasks in parallel
 - Representation—Do R's represent the population of interest?
 - Measurement—Do the Qs measure what we think they measure?
- Survey errors are generally due to issues in measurement or representation



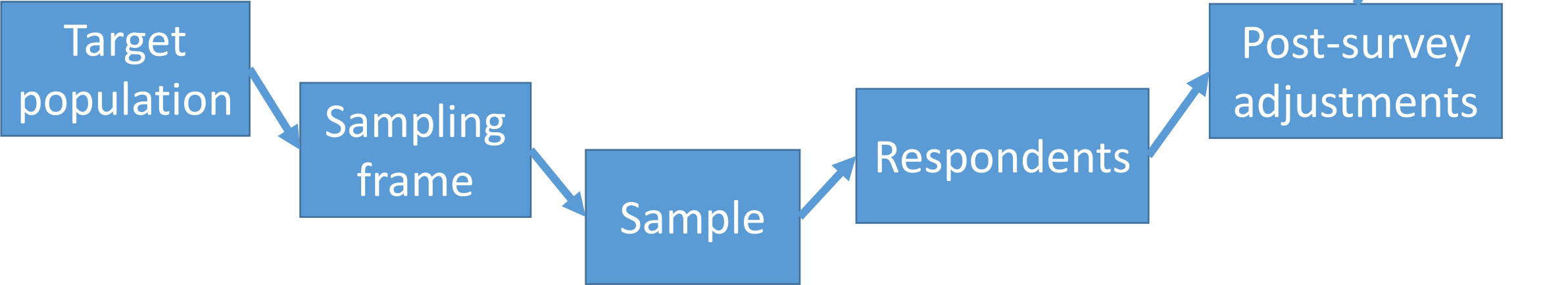
With thanks to Frederick Conrad, ISR

Measurement

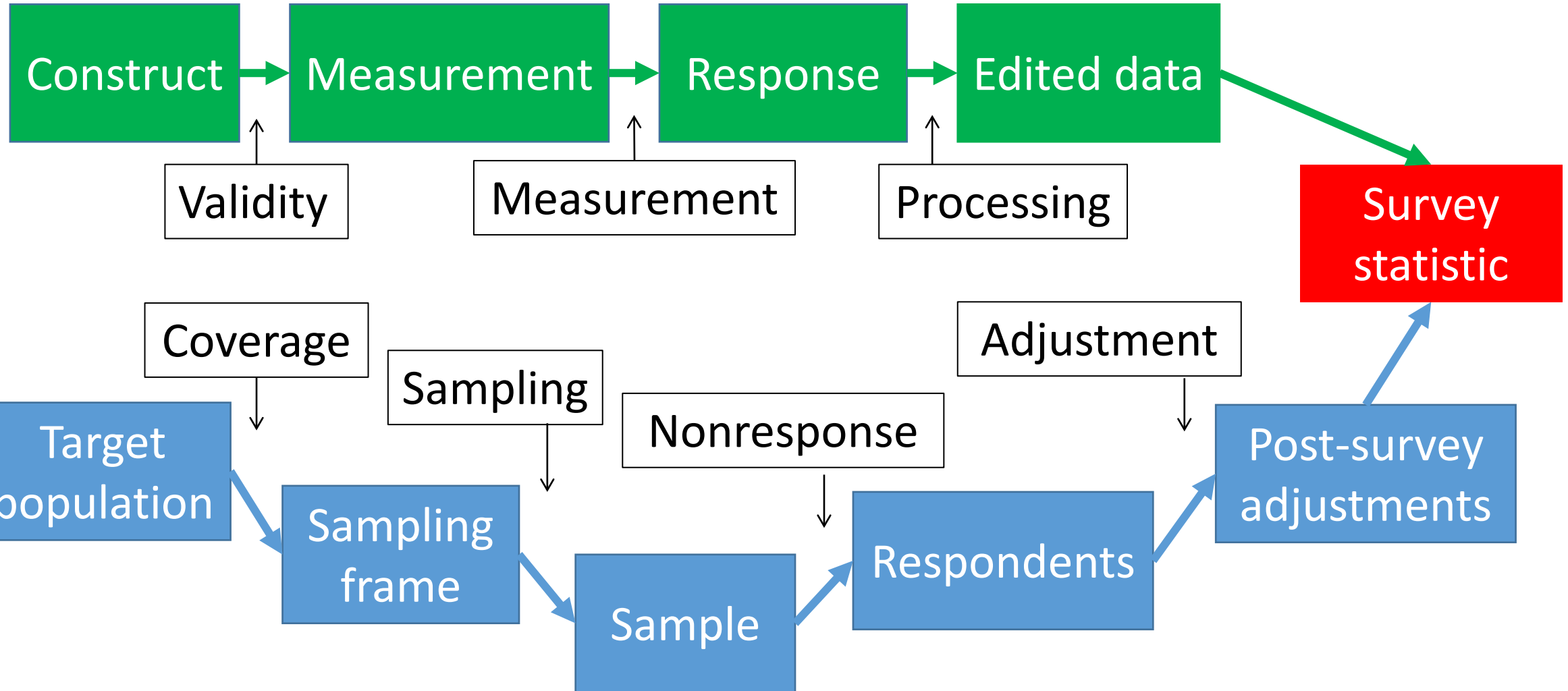




Representation



Opportunities for error



Selecting a mode

FTF, mail, phone, web-based

- Cost vs. accuracy (both)
- Sampling frame (representation)
- Response rate (representation)
- Reported vs. true values (measurement)
- Primacy effect (measurement)
- Recency effect (measurement)

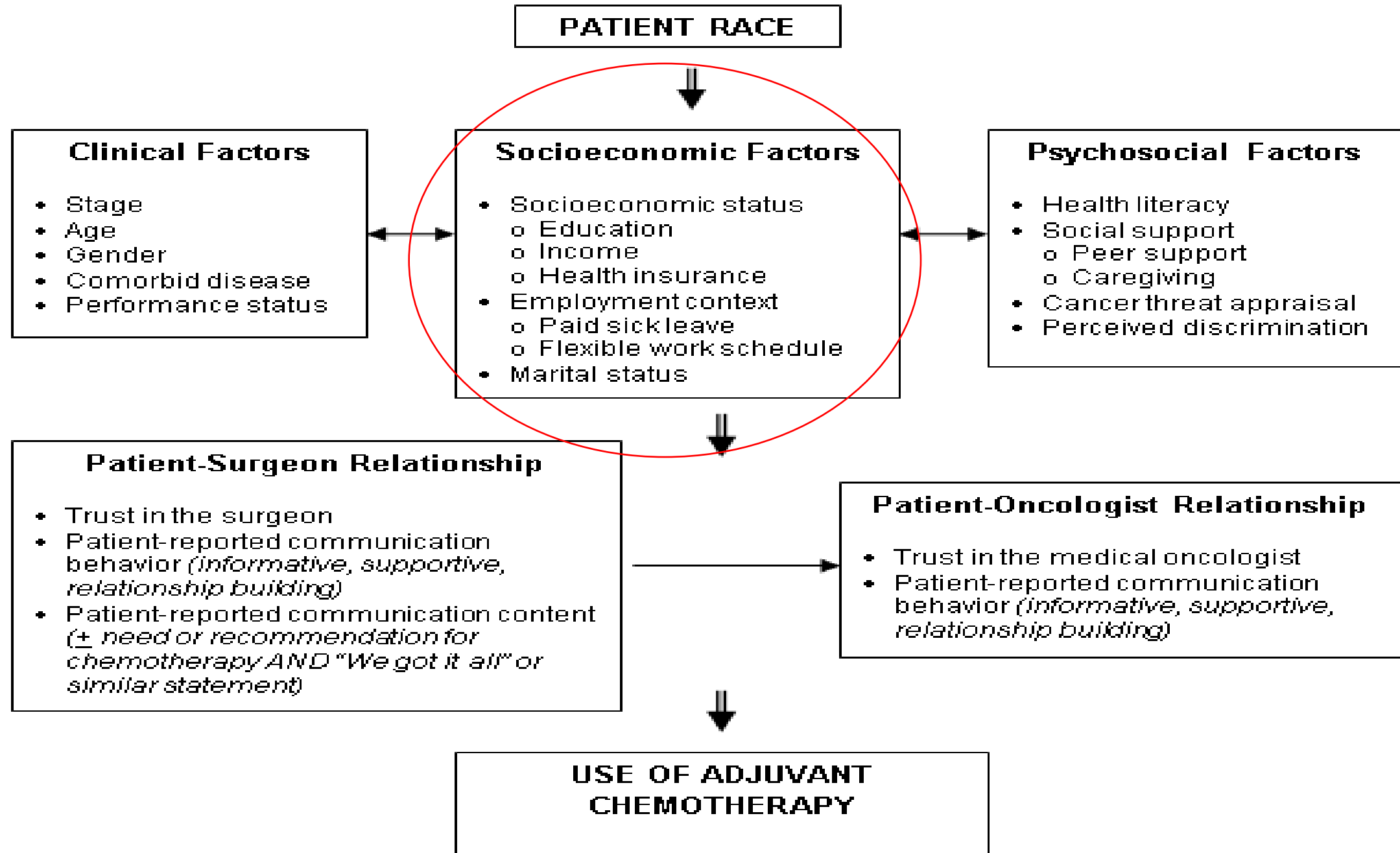


Pt-provider Influences on CRC Care

Survey design/deployment

- Domains doc based on conceptual model
- Measurement
 - Used previously validated instruments where possible
 - Cognitive interviews with pilot patients and revised per responses
 - RCA, time limits to reduce recall bias
 - Used redundant Qs and double-entered data to reduce processing errors
- Representation
 - Population based: GA and tri-county Detroit SEER catchment areas
 - Rapid case ascertainment
 - Mixed mode

Figure 1. An adapted behavioral model for the use of chemotherapy for CRC.



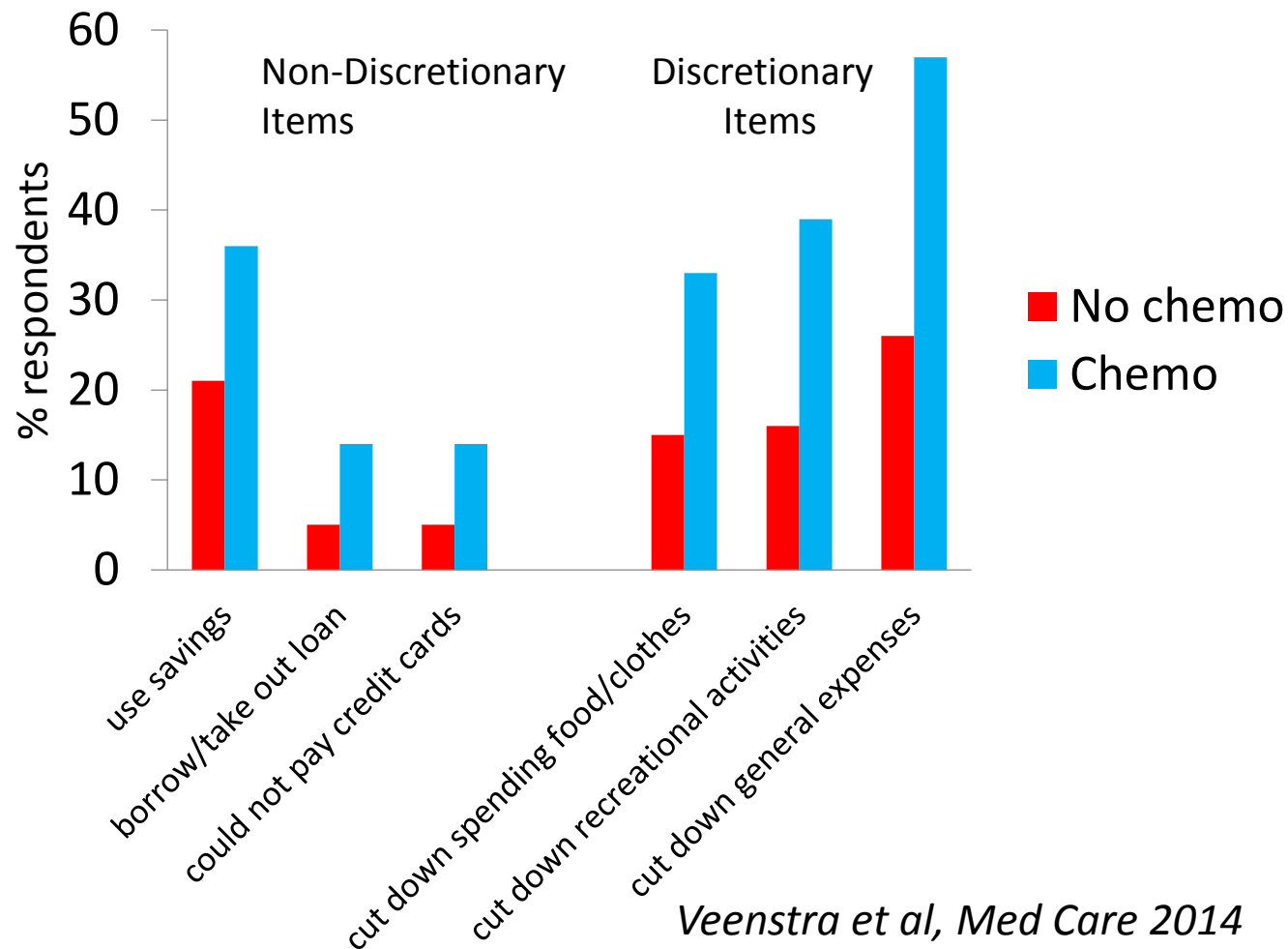
Current socio-demographics

	Employed (n=567)	All (n=1358)
Age (years)	55 (\pm 10.8)	63.55
Sex Male	58.3%	53.6%
Race White	68.7%	68.8%
Black	24.9%	25.4%
Education < h.s.	8.9%	15.9%
High School	19.5%	24.8%
>High School	71.6%	59.3%
Income \leq 20K	9.8%	22.3%
20-49K	29.2%	32.9%
50-89K	33%	26.7%
\geq 90K	28%	18.0%
No insurance	10%	9%

Personal financial burden

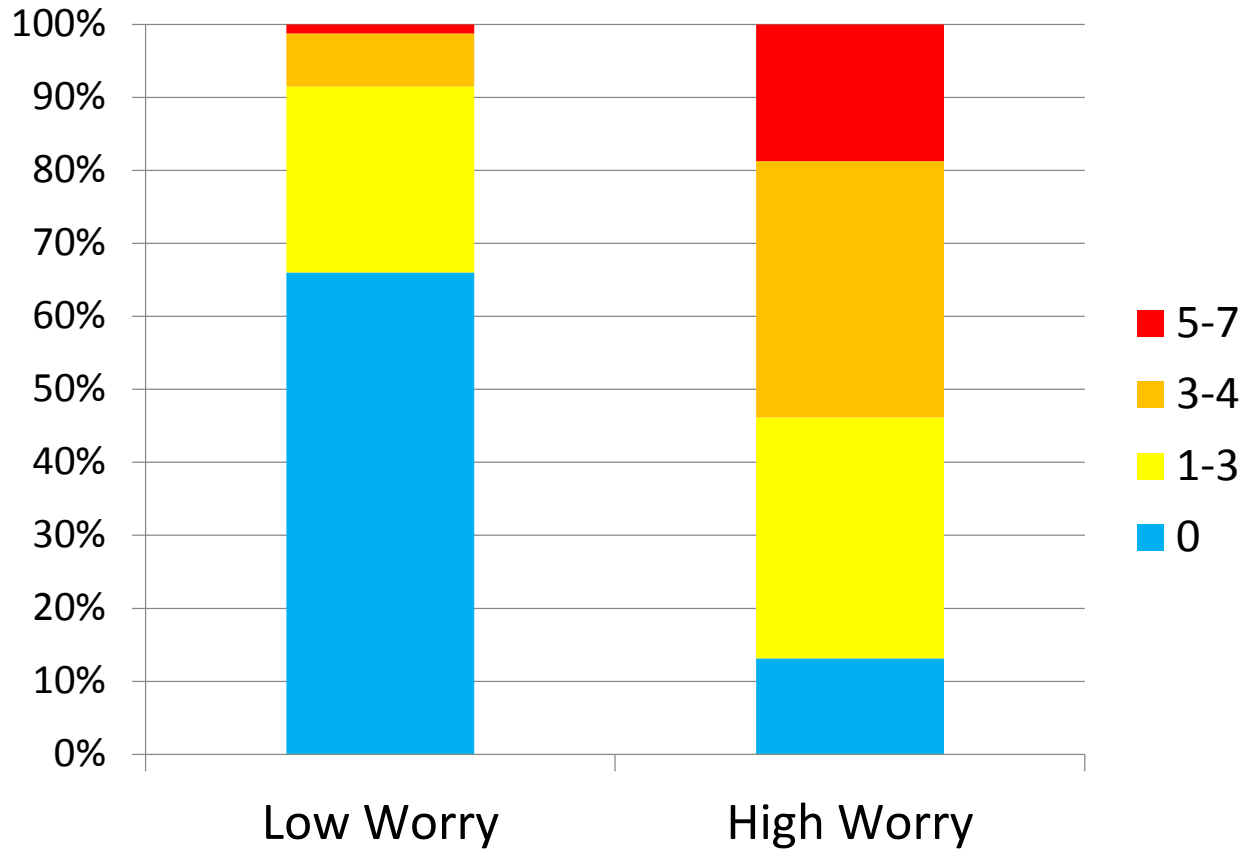
Personal financial burden: A composite score

- Patient-reported measure of financial burden
- 7 binary Qs adapted from National Consumer Bankruptcy Project
- Factor analysis, dropped one for new total=6
- Validated with global impact score and with financial worry score
- 70% concordance btw worry & burden scores (PCC=0.625, P<0.001)

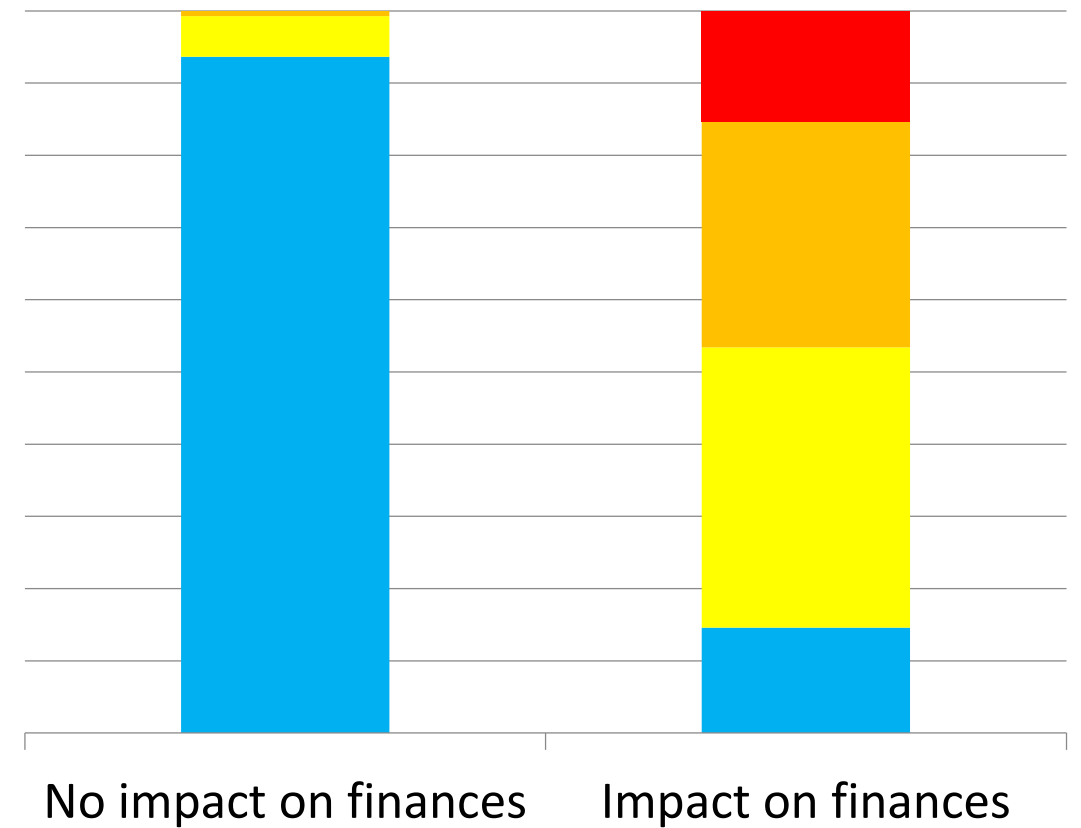


Internal validation

“How much do you worry about financial problems that have resulted from your colorectal cancer and its treatment?”



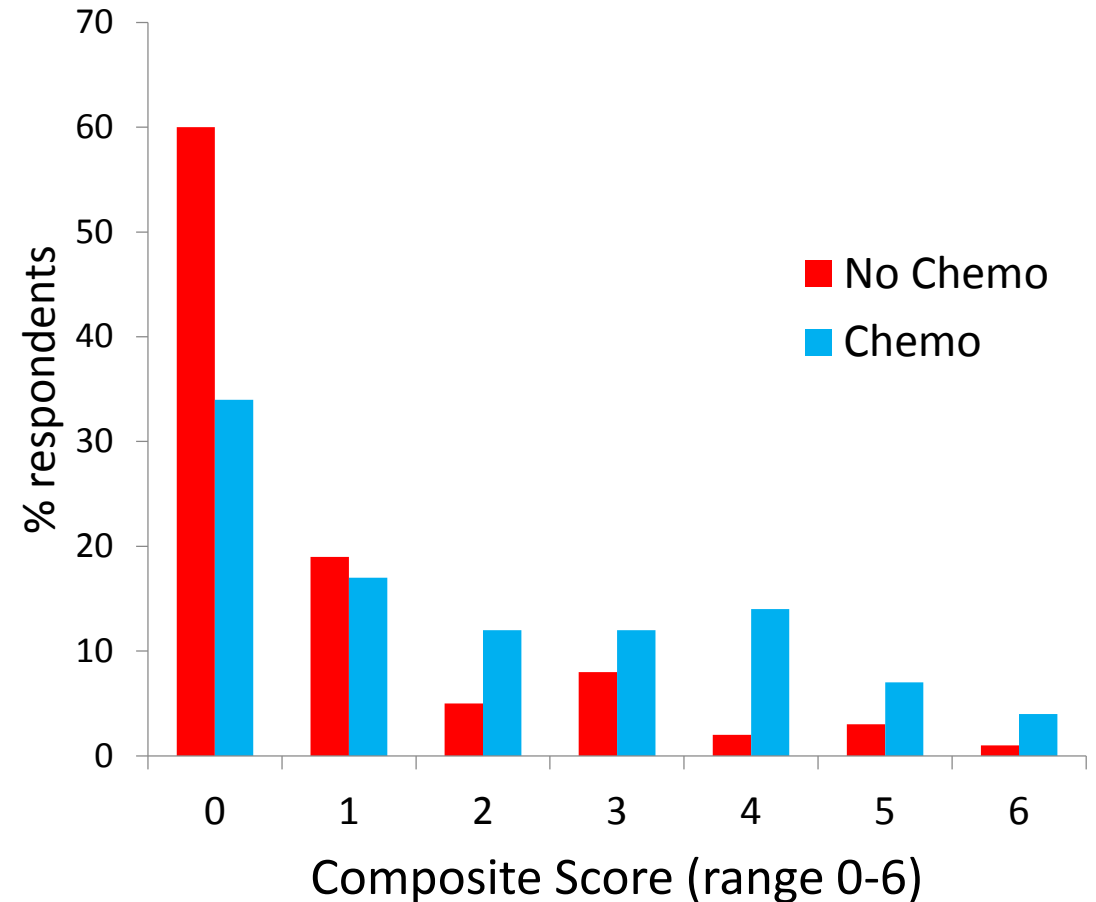
“My illness has had no effect in my finances”



Interim analysis

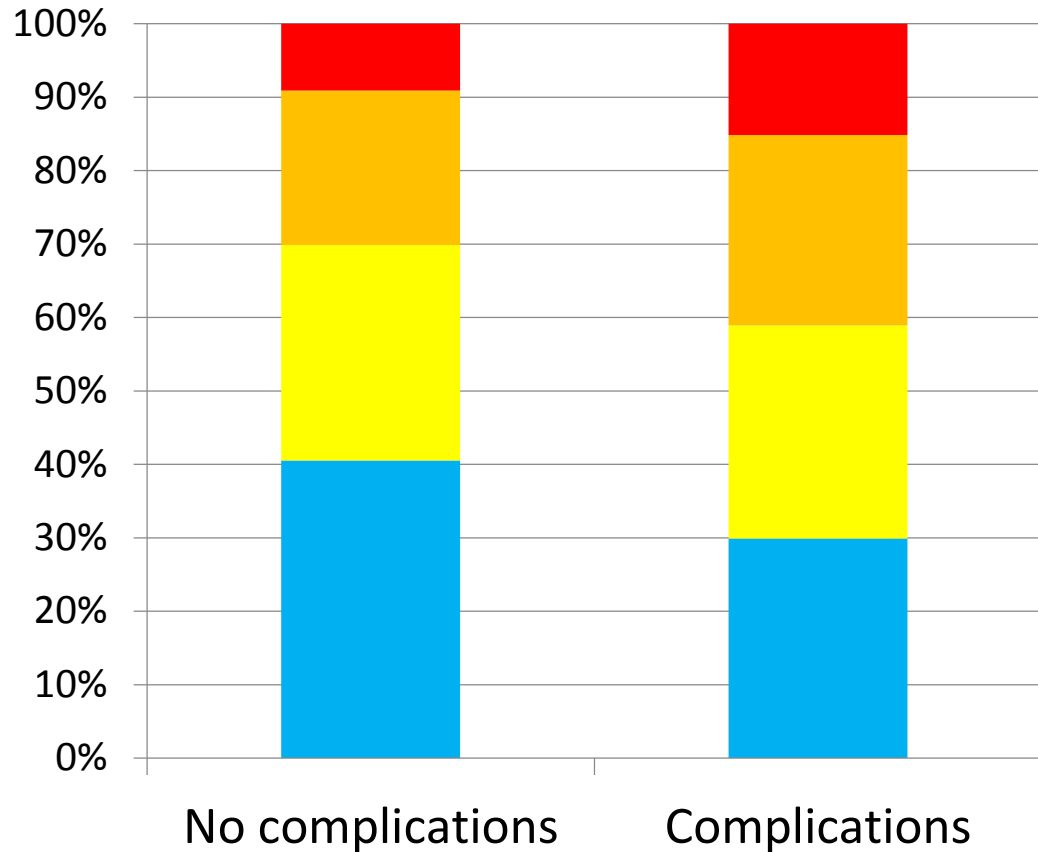
Distribution of personal financial burden by chemo use

- Working to disabled
 - 25% < age 50
 - 14% age 50–64
- Rs with annual income \$20-\$49K reported highest financial burden.
- Young, working poor most vulnerable to financial burden

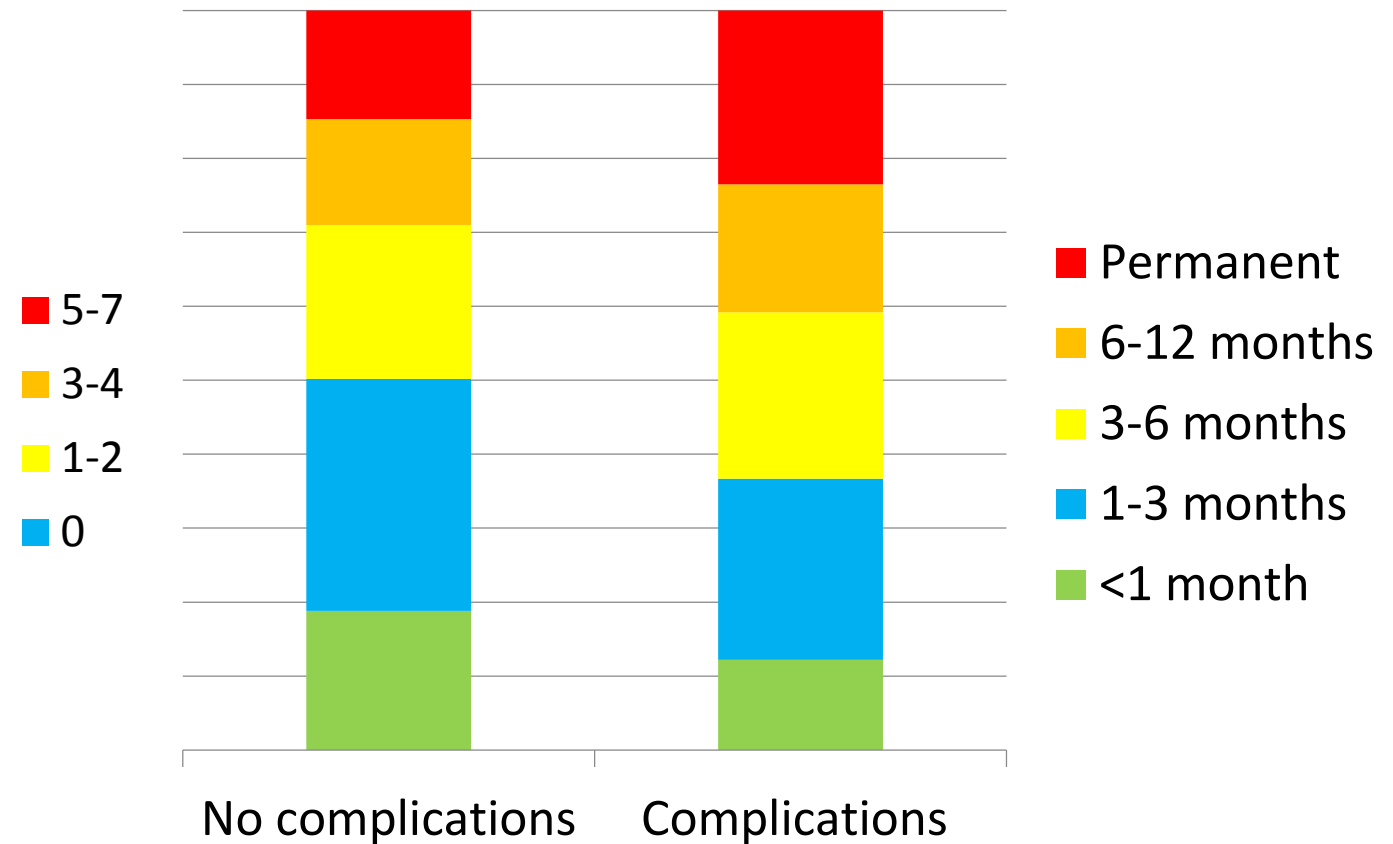


Complications of surgery and impact on finances/work

Financial burden score



Work missed due to CRC and treatment



Employer based health
insurance & job support

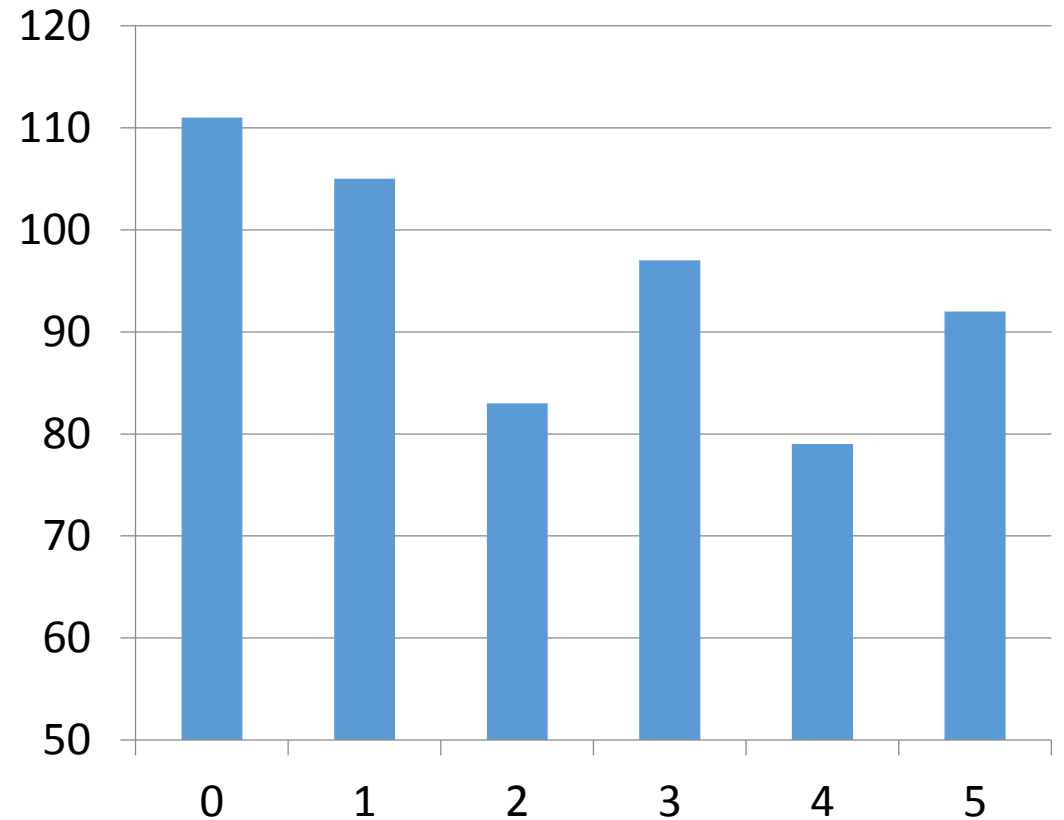
Insurance

	At Diagnosis		At Survey	
	Employed (n=567)	All (n=1358)	Employed	All
No insurance	10.4%	9.1%	7.9%	5.9%
Employer based health insurance	53.8%	31.9%	48.3%	29.2%
Self purchased insurance	8.5%	12.5%	10.6%	13.5%
Spouse's insurance	17.6%	14.4%	17.5%	14.6%
Medicaid or state provided	4.4%	9.6%	9.5%	14.7%
Medicare	13.2%	44.7%	16.2%	48.2%

Job support

	N= 567
Paid sick leave	293 (52%)
Extended sick leave	263 (46%)
Unpaid time off	260 (46%)
Disability benefits	237 (42%)
Flexible work schedule	285 (50%)

Job Support by Number of Benefits



Impact on work

	N (%)
I arranged to work fewer hours.	211 (41)
I changed jobs.	14 (2.8)
I used sick leave.	293 (21.7)
I used unpaid time off.	138 (27.2)
I quit my job.	36 (7.1)
I lost my job.	64 (12.6)
I had trouble doing my job well.	134 (27)
I kept my job mainly to keep my health insurance.	88 (17.8)

- 63% stopped work during treatment
- 15% Lost +/- or quit job
- 27% Now disabled
- 9% Now retired
- 43% (244/567) no longer working

- 18% No impact on job
- 18% Job lock

How does insurance relate to the impact of CRC treatment on finances and work?

	Any Insurance (n=1178)	No insurance (n=118)	P-value
Mean financial worry, 1-5 (S.D.)	2.78 (1.57)	4.09 (1.37)	< 0.001
Mean financial burden, 1-6 (S.D.)	1.70 (1.85)	2.67 (2.19)	< 0.001
Work during treatment	56.4%	16.0%	< 0.001
Change jobs	2.7%	4.1%	.569
Quit job	6.0%	16.3%	< 0.007
Lost job	9.6%	37.7%	< 0.001
Disabled	21.8%	48.3%	<.001
Stopped working (any reason)	34.2%	44.8%	.109
Job lock	19.8	0	<.001

How does job support relate to the impact of CRC treatment on finances and work?

	With Support (n=456)	No Support (n=128)	P-value
Mean financial worry (S.D.)	3.18 (1.55)	3.78 (1.54)	< 0.001
Mean financial burden (S.D.)	2.46 (2.04)	2.38 (2.00)	0.710
Work during treatment	58.8%	25.2%	< 0.001
Change jobs	3.1%	1.2%	.336
Quit job	4.5%	19.3%	< 0.001
Lost job	8.6%	31.8%	< 0.001
Disabled	24.3%	35.1%	.0208
Stopped working (any reason)	13.4%	34.2%	<.001
Job lock	67.3%	49.2%	<.001

Summary

- All cancer patients are at risk for financial toxicity
- CRC treatment is high risk for non-fatal adverse outcomes, which amplify the risk of financial toxicity
- Younger working poor are particularly vulnerable
- Insurance and job support mitigate the risk of financial toxicity

Thank you



Recommended reading

