CCF Partners Insurance Survey Analysis Plan

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1. Demographics of Sample – Describe who completed the module

Collect fields:

1.1. Gender (categorical) - factor, percentages Q360

1.2. Age (numeric) – mean, SD Q320

1.3. NIH race (categorical) – factor, percentages Q680

1.4. Ethnicity (categorical) – factor, percentages Q640

1.5. Jewish Y.N – factor, percentages Q26690

1.6. CD vs UC vs. IC – factor, percentages Q120

1.7. Type of Insurance – factor, percentages (Ins 1)

1.8. Schooling level – ordinal, percentages Q600

Analyze with *desctable* package in R

2. Health Characteristics – Describe subjects’ health

Collect fields:

2.1. Age at Dx – mean, SD Q1080

2.2. Ever hospitalized for IBD - factor, percentages Q1120, Q 1160

2.3. Ever surgery for IBD - factor, percentages Q1240, Q1280

2.4. Current pouch - factor, percentages Q1320

2.5. Current ostomy - factor, percentages Q1360

2.6 Activity Last 6m - factor, percentages Q10010 ordinal

2.7. Told IBS - factor, percentages Q10200

2.8. Ever cancer - factor, percentages Q19000

2.9. Comorb - factor, percentages Q890/Q900

2.10. Smoking ever Q920

2.11. Smoking current Q1000

Analyze with *desctable* package in R

3. Healthcare – Describe subjects’ health care

Collect fields:

3.1. State Q560 factor

3.2. Insurer (Ins2)

3.3. Have PCP Q720 factor

3.4 # PCP visits Q760 integer

3.5. Have GI Q800 factor

3.6. # GI visits Q840 integer

3.7. GI setting Q880 categorical factor

3.8. IBD specialist (Ins 50)

Analyze with *desctable* package in R

4. Aim 1: What patient-level factors affect health insurance satisfaction?

- disease activity

- disease complications

- meds (biologic)

- steroids

- Work (Ins 47)

- Not work (Ins 48 – categorical)

- Income (Ins 49) -ordinal

- Zipcode (Ins 51): rural

- zipcode: distance to hospital

- Height Q400 & derivatives

- Weight Q520 and units

- calculated BMI

5. Aim 2: what state-level factors affect health insurance satisfaction?

(NCQA, Kaiser data)

6. Aim 3: What insurance-level factors affect health insurance satisfaction?

6.1. State Q560

6.2. Insurance type – Commercial, Medicaid, Medicare, ACA, VA (Ins 1)

6.3. Type of Medicare if present (Ins 1b)

6.4. Insurer (factor) (Ins 2)

6.5. If primary holder, spouse, parent (Ins 5)

6.6. Number covered (Ins 6)

6.7. Number of Insurance switches (Ins 3, then 4)

6.8. Premium (Ins 7)

6.9. Deductible (Ins 8)

6.10. Months to meet Deductible (Ins 9, 10)

6.11. Coinsurance percentage (11)

6.12. Coinsurance amount (Ins 12)

6.13. Copay amount (Ins 13)

7. Aim 4: Comprehensive model of health insurance satisfaction

- include factors from Aims 1-3

- estimate predicted satisfaction for each insurance group, and each insurance

- identify top performing InsCos, and those that outperform expectations for IBD patients

- to what extent does disease activity, disease duration affect satisfaction?

8. Aim 5. Compare Health Ins Satisfaction for IBD patients vs. all insured patients

Use NCQA data vs. Partners data

Is satisfaction lower in IBD patients with chronic disease vs. all comers?  
Does this vary by state (choropleths)?

9. Aim 6: Is there difficulty getting health insurance coverage for non-biologic medications?

Outcome var: InsQ37

Predictors: patient factors, which meds, state, instype, insfam, Insco

10. Aim 7: Is there difficulty getting health insurance coverage for biologics?

Outcome var: InsQ27(anti-TNF), with parallel analysis for InsQ24, InsQ29 (Entyvio), InsQ31 (stelara)

Predictors: patient factors, which med, state, instype, insfam, Insco

11. Aim 8: Is there gaps in biologic coverage, and are these associated with subsequent ABA (anti-biologic antibody) development?

Outcome var: Gaps occur InsQ38, parallel analysis with InsQ40 (number of gaps)

Predictors: patient factors, which meds, state, instype, insfam, InsCo

Outcome var: ABA occur InsQ43

Predictors: patient factors, which meds, state, instype, insfam, Insco, length of gap, use of IMM