

# Patient Typologies for Cost-Related Non-Adherence to Prescription Medications

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# Disclosures & Acknowledgements

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# Cost-Related Non-Adherence (CRNA)

- CRNA = when persons skip doses, split pills, or do not fill their prescription drugs due to cost reasons
- 1 in 10 Canadians experienced CRNA in past year (Law et al., 2012)
- Little is known about CRNA in Canada beyond this simple prevalence data
- (No known qualitative investigation of CRNA specifically)

# Research Design

- Qualitative component of multi-method study
- Objective: Provide an in-depth understanding of CNRA and relationship with factors influencing adherence
- Overall grounded theory approach
- Framework analysis for this portion of qualitative work

# Framework Analysis

- Uses inductive thematic analysis to create major categories and sub-categories
- Followed by coding each case (individual) across the major categories
- Allows for comparing data across cases and within cases

# Sampling and Sample

- Semi-structured, in-depth interviews with adults who have engaged in CRNA
- Variety of recruitment locations/methods
- Purposeful sampling based on factors associated with CRNA (e.g. income, diseases with high cost drugs)
- Sample size: 39 interviews in BC & ON
  - Vancouver n=15
  - Toronto n=15
  - Prince George n=5
  - Hamilton n=4

# Study Participants

- Sample size: 39 → 35 persons
- 4 persons did not or were not currently experiencing CRNA
  - 2 persons not having trouble paying for drugs
  - 1 person experiences significant financial duress because of high drug costs + high deductible + delayed reimbursement
  - 1 person self-administers more than prescribed and cannot get always afford second (fraudulent) prescription

# Study Participants (2)

<b>Sex</b>	<b>n = 35</b>
Female	19
Male	16
<b>Age Groupings</b>	
19-24 years	1
25-34	8
35-44	5
45-54	12
55-64	4
65+	5
<b>Low Income?</b>	
Yes	26
No	9



# Study Participants (3)

<b>Drug Insurance</b>	<b>n = 35</b>
None	11
Private only	9
Public only	10
Private + Public	5
<b># of Drugs Experiencing CRNA in present</b>	
0	5
1	16
2	4
$\geq 3$	10

# CRNA Typology Components

- Two components related to cost, two related to individual's adherence:
  1. Burden of drug cost on budget
  2. Insurance design feature driving drug cost
  3. Importance of drug effects from individual's perspective
  4. Individual's overall financial flexibility (low income or not)

# Using Components for Classifying

- Shift unit of analysis from individual to prescription medication
  - Present CRNA > past CRNA
  - Multiple CRNA in present, chose “most important drug” based on combination of:
    1. Burden of drug cost on budget
    2. Importance of drug effects from individual’s perspective

<b>Burden of Drug Cost on Budget</b>	<b>n = 35</b>
Very High (infringes on essentials)	13
High (infringes on important)	5
Moderate (infringes on pleasure)	14
Low (does not infringe very much)	3
<b>Insurance Design Feature Driving Cost</b>	
No insurance entirely	14
No insurance for specific drug	8
Deductible too high	6
Co-pay too high	4
Cap too low relative to expenses	2
No direct billing	1
<b>Importance of Drug from Individual's Perspective</b>	
Non-negotiable with high QOL	5
Negotiable with high QOL	20
Negotiable with low QOL	10

# “Expected” Patterns

- People who experience CRNA because they are of low income and most drug costs burdensome
- People who are prescribed a drug with low quality of life effects and not wanting to pay (much) for such a drug

# “Unexpected” Patterns

- CRNA with non-negotiable drugs with high quality of life effects (life saving [insulin] or high key QOL [pain, anti-depressants])
  - 4/5 drug cost very high (infringes on essentials)
  - 2 not filling at all—1 helped by doctor, other in bad shape
  - 2 skip/split—both situations have low tolerance for irregular dosing
  - 1 suboptimal drug substitution

## “Unexpected” Patterns (2)

- CRNA yet not low income individual
  - 8/9 for negotiable drug with high quality of life
  - 2 had many competing demands for finances makes cost burden too high
  - 2 had recent change in coverage and still processing cost implications and decision making
  - 3 high or very high drug costs—often multiple health needs + insurance restrictions

# Discussion

- CRNA much more nuanced than previously described
  - Multiple varied CRNA/non-CRNA in same individual
  - CRNA varies over time
  - Medication key unit of analysis
- Cost-sharing heavy burden under a variety of conditions
  - CRNA is not just a low income issue
  - Catastrophic drug coverage not sufficient to avoid CRNA, regardless of income level



# Policy Implications

- CRNA minimization will require multifaceted policy intervention & design or overhauling current drug insurance approaches
- Little (but some) evidence of moral hazard behaviour
- Are cost sharing features worth:
  - The policy effort?
  - The financial, health, and quality of life burdens on (sick) individuals

Questions?

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