Canadians' polarized constructs of need: Qualitative analysis of responses to a population-based discrete-choice experiment

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Objectives & Design

- Objective: To explore and understand how Canadians **identify "the neediest individual"** when given quantitative information about individuals' relative **baseline health, ability to benefit,** and **health care resources required to exhaust benefit**.
  - Descriptive question: What **algorithms** do people use when applying these 3 criteria to judge need?
  - Interpretive questions: What do these 3 criteria **mean** to people? What is their relation (or not) to the **meaning of need**, for them?
- This was an **exploratory,** descriptive interpretive study
  - To capture the **range** of peoples' approaches to the need dilemmas presented in the discrete choice experiment
  - Adapted coding techniques from grounded theory (open, focused stages)

Methods

- Short **text answers** to survey question:
  - n=53 discrete choice experiment (DCE) participants
  - Free text box in response to:
    "Please explain why you believe this individual has the [LEAST/GREATEST] need"

- Debriefing **interviews**
  - n=22 DCE participants
  - ~30 minutes, after participating in the DCE, and before leaving the lab
  - Topics covered:
    - General understanding of DCE exercise, any difficulties
    - What need, and health care need mean to you in general
    - For each of two scenarios, why you chose the individual with greatest need, least need
    - How important each of the three criteria (BH, ATB, RREB) are to you for assessing need
    - What else you would like to have known to assess need

Synthetic variables

- The given variables were Baseline Health (BH), Ability to Benefit (ATB), and Resources Required to Exhaust Benefit (RREB)

- Participants sometimes **synthesized these into new variables**:

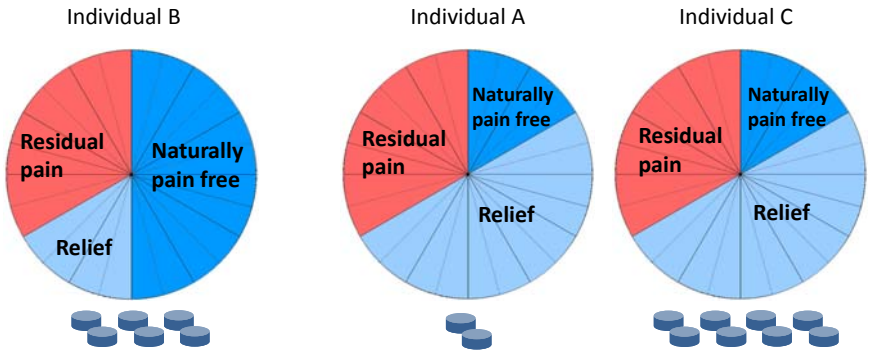
  - **Total Health**
    - BH+ATB: Total hours pain free possible, per day, with treatment

  - **Efficiency, Marginal**
    - ATB / RREB: Hours of additional pain relief achieved per pill

  - **Efficiency, Over 24 Hours**
    - (BH + ATB) / RREB: Hours of pain relief over 24 hours per pill

  - **Dosage**
    - RREB / ATB: Pills required per additional hour of pain relief

Scenario 3, at a glance

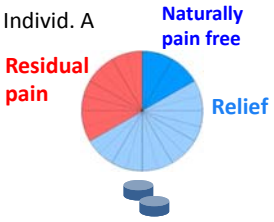


"LEAST Need"
interviews: 19 (86%)

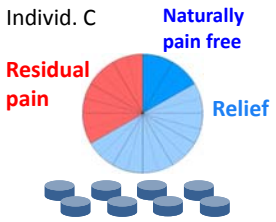
"GREATEST Need"
interviews: 10 (46%)

"GREATEST Need"
interviews: 10 (46%)

Interviews (N=22)	n = 10	n = 10
	Individ. A	Individ. C
Baseline health (BH)	Same	Same
Ability to benefit (ATB)	Same	Same
Resources required (RREB)	Lowest	Highest
Marginal efficiency (ATB/RREB)	Highest	Lowest
24-hour efficiency ((BH+ATB)/RREB)	Highest	Lower, but not lowest
Dosage per hour (RREB/ATB)	Lowest	Higher, but not highest



The most ***Tractable*** *case has highest need*



The ***most Intractable*** *case has highest need*

Scenario 3: Why "A" has greatest need

- Least **resources required** (RREB)
  - *"…this person only requires 2 pills" (#4)*
- Highest marginal **efficiency** or **effectiveness** (ATB/RREB)
  - *"So I mean for the least amount of resources he would get just as much pain relief and also taking into comparison that he only has 4 hours pain each day."(#2)*
- **Helping more people** with limited resources
  - *"So maybe, like, the other 6 pills can be used for another 3 people who have the same case as A." (#14)*

Scenario 3: Why "C" has greatest need

- Most **resources required** (RREB)
  - *"So individual C needs them more because they would need more pills for the same amount of pain relief." (#10)*
- Higher **dosage** (RREB/ATB)
  - *"So this person, person A needs one pill every 6 hours, but this person obviously needs a lot more." (#19)*
- Lowest **marginal efficiency** (ATB/RREB)
  - *"I would look at the amount of pills that are required to obtain the maximum amount of hours of pain relief and then I would figure out a ratio. Like how many pills give each patient the most amount of hours." (#6)*
- (nb: **no one** in this group mentioned being troubled by **resource scarcity** or possible unavailability of pills for others)

Beyond "Scenario 3"

"Need-as-tractability" group: On resources and need

- Most said they considered **resources only** in relation to **ability to benefit**
- The ratio most commonly represented **efficiency** or **effectiveness** (RREB/ATB); sometimes **dosage** (ATB/RREB)
  - *" I looked at the last two kind of together, I didn't isolate the two" (#4)*
  - "**Dosage**" shouldn't matter
    - *"Because it's just, it's medication you know, I don't think the dose is a major factor in this I mean what matters is how you feel right." (#11)*
- Some **rejected RREB** as a criterion relevant to need, on its own
    - *"…yeah, it didn't really factor in at all. I didn't really look at it, well I did look at it but, it didn't weigh in much compared to the pain." (#17)*
- Decreasing **marginal value of pain relief**? (one participant)
  - *"Like when you are really in a critical condition then an extra hour could be a huge difference to your life, whereas you have 16 hours already you know, an extra hour would not make that much difference." (#21)*

"Need-as-Intractability" group: On resources and need

- **Semantics** or **principles**? The more resources 'required', the more 'needed'
  - *"…this person obviously needs a lot more." (#19)*
- **Some do consider efficiency**: lower efficiency means greater need
  - *"But then the only way I could calculate who was in greatest need was per pill" (#20)*
- One suggested **extremely low RREB** might reverse their assessment:
  - *"because they only require like very, very few resources to obtain the maximum amount that might be, that might put the patient ahead of another patient." (#6)*

Baseline Health

- **Baseline health is the primary** consideration for both groups; remaining factors are considered if BH is equal
  - *"I always go with the hours each day free with pain with no treatment. " (#21)*
  - *"So automatically if they had less hours pain free I put them ahead of, like, B who had 12 hours. (#13)*
  - In pain "**all day**" (with "no relief"), or very large discrepancies, may be qualitatively important
    - *" …let's say there was one person who had zero hours of pain free and the other two had like 8 hours. So the one with zero would be my greatest need because if they are literally going through the entire day in pain then they need the medication more than the other two (#21)*

Resources Required

- **Resources** required to exhaust benefit (RREB), itself, tends to be a **low priority** consideration
  - A few (& only in the '**tractability**' group) emphasized that **RREB per se is irrelevant** to need
    " Yeah, I don't think the number of pills really matters too much, maybe in some contexts but not a major deal." (#11)
- RREB gets its relevance from its **relationship to ATB** (or BH+ATB) – constructed one of two ways
  - ATB/RREB
    - Ideas about high **efficiency** (esp. assuming resource constraints), **low efficiency** (needing 'more'), **or effectiveness** of the pills themselves
  - RREB/ATB
    - Ideas about **dosage**, **severity** of pain or health condition

Criteria beyond BH, ATB, & RREB?

- Choices might change if individuals were 'real' or identifiable
  "Well it's tough, right, cause like numbers and stories on paper are one thing but then when you actually have a face and a story then it's hard." (#4)
  "…if I had been able to talk to them and knew them then it would have been much more difficult." (#4)
  [Was it hard for you to make those decisions?] Ah, no, I guess if they were people, but they're not people. (#15)
- **Underlying health condition**
  - A person in pain is needier than a person with a non-painful condition (#13)
- Social, economic, behavioural **circumstances**
  - A person with a family to support is needier than an individual (#20)
  - A person who 'uses their body' for their job may be needier (#15)
  - A person whose behaviour led to their health problem is less needy than someone who "abides by rules" (concerning diet etc.) (#20)
- **Access**
  - The inability to afford care [or pills] means a person "needs" it (#19, #22)

Summary of Key Findings

- BH as the primary consideration
  - Variant: Total health = BH + ATB
- RREB as the last, and sometimes no, consideration
  - Some dismiss resource requirements as **irrelevant** to determining "need"
- RREB in relation to ATB
  - **ATB/RREB** as "**dosage**" - an indicator of severity or underlying condition
  - **RREB/ATB** as "**efficiency**" or "**effectiveness**" – used variously to assign greater or lesser need

Summary of Key Findings (cont'd)

- The polarized choices between the easy, efficient, less costly cases (tractable) vs. the difficult, inefficient, costly (intractable) cases as in 'greatest need' may indicate…

Differing values or ethical principles

- Utilitarian vs. contractarian vs. obligation to respond?

Or…

Differing willingness to assume **resource scarcity**

- Members of the 'tractability' group defended their choice as economically prudent under scarcity, if not ethically desirable

Or…

Differing **need *constructs*** – not just *criteria*

- To be '**needy**' may or may not be conflated with being '**entitled** to scarce resources''…
- …so one group may be talking about **need** as an individual state, the other about **entitlement** as a claim on collective resources

Thank You

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