

Development of the Inner City Attitudinal Assessment Tool (ICAAT) to Assess Health Care Learners

*M McKinney¹; KE Smith²; KA Dong³; O Babenko⁴;
 S Ross⁴; MA Kelly⁵; G Salvalaggio^{3,4}*



¹University of Alberta Faculty of Medicine and Dentistry; ²Alberta Health Services; ³Inner City Health and Wellness Program; ⁴University of Alberta Department of Family Medicine; ⁵University of Calgary Cummings School of Medicine

Objective

To develop and provide validity evidence for a generalizable tool to assess health care learner attitudes towards inner city populations.

Background

Learners in health care professions

- Often feel uncomfortable and underprepared for professional interactions with inner city populations (1)
- May hold biases which affect the therapeutic relationship (2,3)
- Are taught a fragmented approach to addressing marginalizing risk factors

Over the course of medical training there is both a degradation of attitudes towards specific marginalized populations and greater reluctance to work in these settings (4,5). Targeted educational programs in inner city health may improve learner attitudes and future health care delivery to this population (6).

A recent scoping review identified several tools examining attitudes toward subsets of the inner city population, but no generalizable tool was identified.

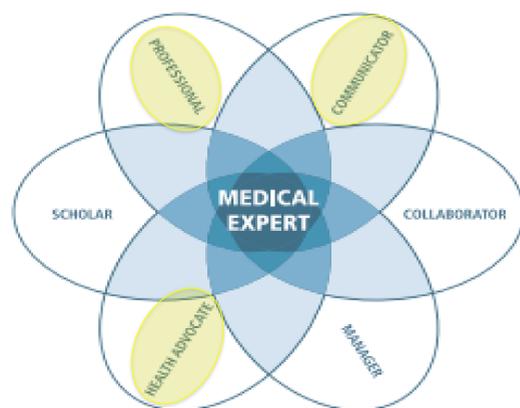


Figure 1: CanMeds roles addressed by attitude assessment. (7)

Methods

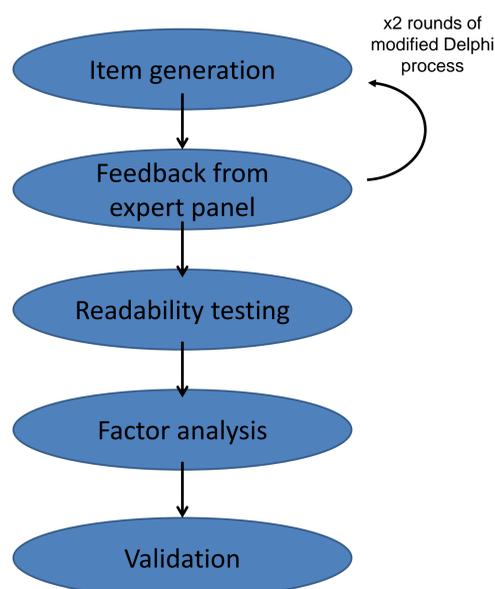


Figure 2: Overview of Methodology.

The research protocol is based on that of Burns et al. (8).

Step 1: Item Generation

- Items from tools identified in the scoping review were combined and thematically categorized
- Items were modified and supplemented by the study team

Step 2: Modified Delphi process

- Multidisciplinary panel of inner city health experts from multiple sites across Canada
- Iteratively refined domains and items over two rounds by,
 - scoring items for importance
 - editing for content and wording

Step 3: Readability Testing

- A focus group of students in Medicine and Nursing provided feedback on comprehension and perceived context

Step 4: Factor Analysis

- Pilot testing with pre-clinical Medicine and Nursing students from the University of Alberta and University of Calgary (36 items)
- A short form of the Malrowe-Crowne social desirability scale was included (13 items)

Step 5: Validation

- Repeated testing with different samples will confirm the validity of the tool

Results

213 students: 68% Medicine, 71% female, 71% <25yo, 92% year 1 or 2

Factor analysis demonstrated a 3 factor model explaining 51% of the variance using 24 of the tested items:

Attitude	Example items
Attitude	I find it difficult to view things from the perspective of a patient from the inner city. (Attitude)
Perceived Competency	I feel capable of communicating effectively with a patient from the inner city. (Competency)
Professional Responsibility	It is my professional responsibility to provide care to underserved populations. (Professional Responsibility)

Factor loading did not suggest significant social desirability bias inherent in the items.

Conclusions

- The 24-item ICAAT assesses health care learner attitudes regarding inner city populations across three attitude domains.
- Once validated, the ICAAT can be used to evaluate learner attitudes and refine curricula in inner city health, with the goal of improving learner attitudes and future provision of health care.

References

1. Wieland, M.L., et al., *Resident physicians' knowledge of underserved patients: a multi-institutional survey*. Mayo Clinic proceedings, 2010. 85(8): p. 728-733.
2. Morrison, A., B. Roman, and N. Borges, *Psychiatry and emergency medicine: medical student and physician attitudes toward homeless persons*. Academic Psychiatry, 2012. 36(3): p. 211-215.
3. Boyle, M.J., et al., *Attitudes of undergraduate health science students towards patients with intellectual disability, substance abuse, and acute mental illness: a cross-sectional study*. BMC Medical Education, 2010. 10: p. 71.
4. Masson, N. and H. Lester, *The attitudes of medical students towards homeless people: does medical school make a difference?* Medical education, 2003. 37(10): p. 869-872.
5. Wayne, S., et al., *The association between intolerance of ambiguity and decline in medical students' attitudes toward the underserved*. Academic Medicine, 2011. 86(7): p. 877-882.
6. Jarris, Y.S., et al., *A preclinical medical student curriculum to introduce health disparities and cultivate culturally responsive care*. Journal of the National Medical Association, 2012. 104(9-10): p. 404-411.
7. Frank, J.R., et al. Draft CanMEDS 2015 Milestones Guide – September 2014. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 September.
8. Burns, K.E., et al.; ACCADEMY Group. *A guide for the design and conduct of self-administered surveys of clinicians*. CMAJ. 2008 Jul 29;179(3):245-52.

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Validation with Undergraduate Learner Cohorts: UAlberta Faculty of Medicine and Dentistry, UAlberta Faculty of Nursing, and UCalgary Cumming School of Medicine