### Background

- Canadian medical students differ significantly from the general population:
  - More likely to come from urban and high income areas
  - More likely to have well-educated, professional parents
- This skew may influence access to care in under-serviced regions of Canada
- Rural physicians are 4 to 5 times more likely to come from rural backgrounds
- To serve the health care needs of patients from many geographic and socioeconomic backgrounds, it has been suggested that medical students should reflect this diversity
- Evidence shows that rural applicants are just as likely as urban applicants to be offered admission once applications are in. Thus, some students may be perceiving barriers to medical education that are causing them to self-select out of applying to medicine
- Few studies have looked at barriers or enabling factors experienced by students, particularly in smaller communities, prior to their application to medical school

### Objectives

1. To identify perceptions of medical education among high school students from rural and under-serviced areas
2. To identify factors which may encourage or discourage high school students from considering a career in medicine

### Methods

#### Study Population:

- High school students selected to attend the Southwestern Ontario Medical Education Network MedQUEST program
- MedQUEST is a 5-day camp for high school students interested in health care
- Programs were located in Leamington, Sarnia, Mount Elgin, Seaforth, Chippewa First Nations and Chatham.

#### Questionnaire:

- An anonymous survey, consisting of predominantly closed answer questions, targeted:
  - Demographics and socioeconomic status
  - Knowledge about health professions
  - Perceived barriers to attending medical school
- Socioeconomic status assessed using:
  - Highest education level completed by each guardian
  - Occupation of each guardian
  - Employment status of each guardian (i.e. part-time, full-time or unemployed)

### Results

**Respondent Demographics:**

- 106 respondents from the five MedQUEST locations
  - Female: 77% (n=82)
  - Male: 22.6% (n=24)
- 76% (n=81) were interested in becoming a physician
- Not significantly affected by having a parent with a health care occupation

**Parent Demographics:**

- 77% (n=82) had at least one parent who had completed university
- 14% (n=15) had at least one parent who did not graduate high school
- 26% (n=27) had at least one parent who worked in a health field

**Encouragement:**

- Of those interested in going to medical school, students reported being most encouraged by their family (84.0%), teachers (51.9%) and friends (49.4%)

**Discouragement:**

- 36.3% (n=13) had been discouraged from going to medical school by family, teachers and friends
- The most common reasons cited for discouragement by others included:
  - “Poor lifestyle” (n=8)
  - “Takes too long” (n=8)
  - “Expense” (n=4)

**Perceived Barriers:**

- The most common self-perceived barriers to attending medical school included:
  - Competitiveness of applicants (n=54)
  - Low grades (n=40)
  - Affordability (n=31)

**Financial Considerations:**

- Perception of cost of medical school tuition ranged from $5000 - $50,000 per year
- 45% (n=48) responded within a reasonably correct range of cost
- 29% (n=31) were unsure about tuition cost

### Conclusion

- Perceptions about medical school are shaped in high school, perhaps even earlier
- Family, friends and teachers are the main sources of guidance for these students
- May significantly affect whether students view medicine as a career that is available to them
- Misconceptions regarding cost of a medical education are common
- Affordability was a frequently cited self-perceived barrier and is associated with parental education level
- It is important to identify and eliminate barriers that cause students to believe medical school is out of their reach
- These results are relevant to future endeavors that aim to ensure access to care in rural and under-serviced communities, like those represented by the MedQUEST locations

### Future Work

- Repeat survey at subsequent MedQUEST programs to increase power
- Administer follow-up survey at the completion of the MedQUEST program to determine how perceptions may have changed after exposure to medical students
- Extend study to a larger cohort of students (not just those attending MedQUEST)

### References