How Competitive is the Canadian Radiology Residency Match?

Application and Matching Trends from 1991-2014

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Conflicts of Interest

• None of the authors have any disclosures
Background

• Historically, radiology has been considered one of the most competitive specialties in the CaRMS match

• In recent years, there has been widespread speculation that applications are decreasing
Purpose

• To evaluate application trends in Canadian diagnostic radiology residency programs

• To assess the relative competitiveness of radiology as a specialty
Methods – Data Collection

- CaRMS R-1 Main Residency Match Reports 1991-2014
  - CMG only
  - R-1 first iteration
Methods – Data Extraction

1) Supply and demand model of competitiveness within radiology
   - # of radiology residency positions → Ratio
   - Total applicants to radiology
   - Total applicants to all specialties → Ratio
   - 1st choice applicants to radiology

2) Relative competitiveness across all specialties
Methods - Data Analysis

- Time trend analysis plotted each data point over time
- Pearson correlation coefficients and p-values calculated for each time trend analysis
Results

• CaRMS runs radiology match from 1991-present
• Limited data availability from 1991-1995 → excluded from time trend analysis
• Snapshot of recent 2014 match:
  - 16 radiology programs
  - 85 CMG positions
  - 3-10 spots per program
Results

- Strong increase in number of positions offered ($r=0.91, p<0.001$)
- Moderate increase in applicants ($r=0.49, p=0.03$)
Results

• Significant trend of decreasing competitiveness (increasing supply-demand ratio) \( (r=0.76, p<0.001) \)
Results

• Moderate decrease over time ($r=-0.36$, $p=0.13$)
Results

Competitiveness Across All Specialties
(Positions per 1st Choice Applicant)

- Ten Year Historical Average
- 2014

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Summary

- Number of radiology positions has increased while number of applicants has not grown commensurately.
- Significant trend of decreasing competitiveness from 1996-2014.
- 2014 saw a record low percentage of medical school graduates applying to radiology as 1st choice.
Discussion

• Unknown cause(s) for decreasing competitiveness

• ? Job market, reimbursement or work environment concerns
THANK YOU!

Questions?