The Evolving Landscape of American Medical Education 100 years after the Flexner Report: Perspectives on Spatial Trends Past, Present, and Future

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**METHODS**

Spatial Statistics Results

- **Nearest Neighbor**: An index value based on the average distance from each point to its nearest neighboring point. If the index < 1, the pattern exhibits clustering. If the index is >1, the trend is toward dispersion.

- **Directional Distribution (1st St. Deviation Ellipse)**: An ellipse that encompasses the the 1st standard deviation of the distance between a set of points and the mean center of the points. It is used to identify the spatial trend of point data.

**RESULTS**

- **The slight northeast–southwest rotation of the directional distribution ellipses is similar across all decennial periods (see the three examples above)**. The length and width tended to increase over time as new medical schools were founded in the western and southern U.S.

- **The average nearest neighbor analysis indicates that medical schools were significantly clustered at the time of Flexner’s survey, but the clustering decreased up until the 1960s**. Since then, the trend has reversed with more clustering of medical schools now and it appears in the future.

- **Multi-distance spatial cluster analysis (not presented in this poster) for each decennial period extending to 2010** showed significant clustering of medical schools at all distances.

- **UNANSWERED QUESTIONS**

  - What is the best method to account for branch campuses, especially those that may not offer a complete medical education at each location?

  - Do branch campuses result in higher levels of clustering?

  - What are the contributions of osteopathic medical schools to the spatial trends presented in this poster? How have they influenced the spatial landscape?

  - Does the evolving landscape of medical education reflect the underlying needs of the population? How does it impact rural?

**DATA SOURCES & REFERENCES**


