

Oral presentation

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## School based scoliosis screening: an analysis of socio-demographics, compliance, efficacy and a proposed role for physical therapists in a state mandated program

Arsenio Paez\*<sup>1,2</sup>, Denise Lotufo<sup>1</sup> and Mary Ann Wilmarth<sup>1</sup>

Address: <sup>1</sup>Northeastern University, Bouve Institute of Health Professions, School for Professional and Continuing Studies, Boston, MA, USA and <sup>2</sup>63 Reynolds Drive, Fairfield, CT 06824, USA

Email: Arsenio Paez\* - artiep@aol.com

\* Corresponding author

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### Objective

School scoliosis screening programs are mandated across the United States, but their efficacy remains controversial [1-3]. This study investigates data from the Massachusetts program, examining its efficacy and follow up attained after a positive screen.

### Study design

This retrospective cohort study analyzes data for 272,337 students in grades 5–9 from 1989 to 2005 in Massachusetts. Regression and data analyses determined the incidence of scoliosis over the life of the program, its predictive value, specificity and the rate of follow up attained after screening.

### Results

The incidence of scoliosis was 0.55%, or 1489 students from 1989 to 2005. The program's positive predictive value was low, at .50%, or 1 confirmed diagnosis per 200 students screened. Children in lower socioeconomic strata were more likely to be identified for possible scoliosis than other students. Girls were identified and diagnosed with scoliosis increasingly over time. Compared to other programs, fewer students per thousand were positively screened for scoliosis in MA, though follow up evaluation was incomplete for 72% of those students.

### Conclusion

Sociodemographic factors may influence the identification of students at risk. Methodological issues significantly influence the program's efficacy and ability to meet its goals, including bringing those identified to follow up care.

### References

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