

# **Analysis of Health Disparities and Comorbidities among**Special Olympics Athletes



Amy Harris MPH, Special Olympics International, aharris@specialolympics.org; Darcie Mersereau MPH, Special Olympics International; Stan Shepherd, MB ChB, HealthOne Global; Qiuqing (Daisy) Tai, Graduate Student UC San Diego

Note: This research was supported by HealthOne Global and through a Cooperative Agreement with the U.S. Centers for Disease Control and Prevention.

### **Objectives**

- Discuss the rationale behind, and nature of, the Special Olympics Healthy Athletes® program.
- Describe health disparities experienced by people with intellectual disabilities.
- Understand comorbidities faced by people with intellectual disabilities.



## Introduction

People with intellectual disabilities have poorer health, more specialized health care needs, and greater difficulty accessing health care services and doctors compared to the general population. Special Olympics International designed the Healthy Athletes® program to:

- Provide athletes with health screenings & referrals for follow-up care when needed,
- Provide training for healthcare providers in caring for patients with intellectual disabilities.
- Collect data to drive improved programs & policies.

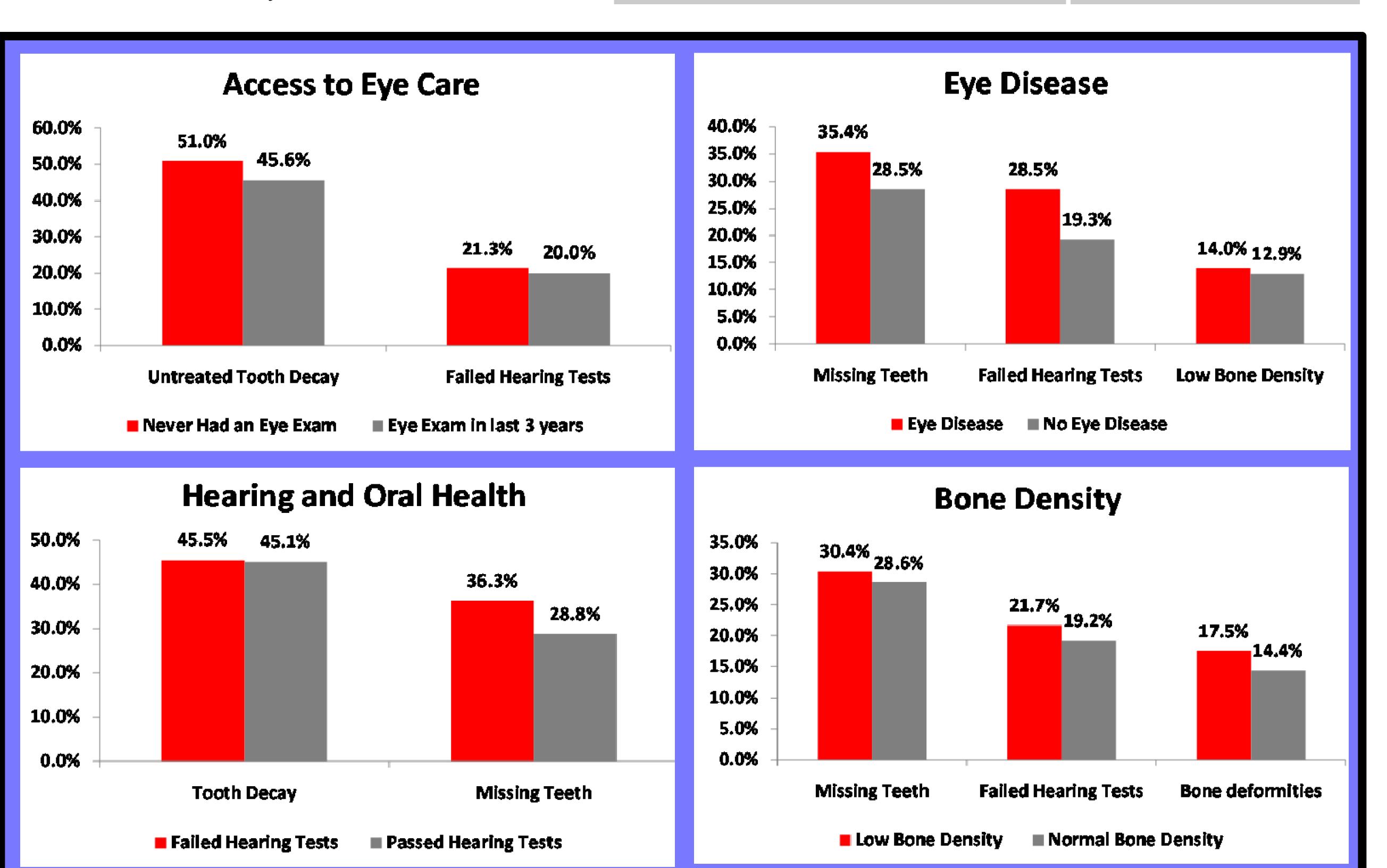
Healthy Athletes spans seven areas - Fit Feet (podiatry), FUNfitness (physical therapy), Health Promotion (nutrition, bone health, healthy behaviors), Healthy Hearing (audiology), MedFest (sports physicals), Special Olympics-Lions Clubs International Opening Eyes® (vision), and Special Smiles® (dental). Since 1997, Healthy Athletes has provided over 100,000,000 free health screenings in more than 100 countries.

# Methods

At the last four Special Olympics World Games, 37,779 screenings have been provided to 11,844 athletes from 175 countries. Screening results from athletes who attended Healthy Athletes at one of the last four World Games were included in these analyses.

Previously, health indicators from each discipline have been studied, but cross-disciplinary analyses have not been conducted. The graphs below show the results of these analyses.

Health Problem	Percent (%)
Untreated Tooth Decay	45.7%
Missing Teeth	29.5%
Failed Hearing Tests	25.2%
Low Bone Density	13.4%
Eye Disease	11.3%
Gait Abnormalities (feet)	41.6%
Bone Deformities (feet)	15.1%



## **Discussion**

Analyses of data from Healthy Athletes screenings continue to document health conditions, such as untreated tooth decay and eye disease, experienced by Special Olympics athletes. Examining comorbidities revealed certain trends, such as athletes who reported never having an eye exam were more likely to have untreated tooth decay, and athletes who had eye disease were more likely to fail hearing tests. These trends imply that if an athlete has one health condition, he/she may be more likely to have other health conditions.

These results have the potential to help improve Healthy Athletes by providing the ability to direct athletes to certain screenings based on results from other screenings. These data also will help focus efforts on the athletes most in need of enhanced health care. Moving forward, these trends will be examined at events other than World Games and potential programmatic implications will be addressed.



