



Objectives

- Recognize the challenges associated with the current Healthy Athletes screening set up.
- Understand the ways in which Special Olympics is addressing these challenges.
- Discuss ways to approve the general triage process and self-assessment questionnaire.



Background

Special Olympics (SO) Healthy Athletes (HA) provides health screenings and referrals for follow-up care spanning seven disciplines: Fit Feet (podiatry), FUNfitness (physical therapy), Health Promotion (nutrition, bone health, healthy behaviors), Healthy Hearing (audiology), MedFest (sports physicals), Opening Eyes (vision), and Special Smiles (dental). Since 1997, Healthy Athletes has provided over 1.2 million health screenings in over 110 countries.

Triage Methods

With athletes having limited time at Healthy Athletes it is important to get them screened at the disciplines matching their greatest health needs. A triage system was piloted to address this challenge with Fit Feet, FUNfitness, Healthy Hearing, Opening Eyes, and Special Smiles. Ten nursing students administered a self-assessment questionnaire to 172 randomly selected athletes at the 2010 U.S. National Games. Algorithms determined if an athlete should go to a specific HA discipline for further evaluation. Responses to the selfassessment were compared to HA screening results at the same event.

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Triage Results

Based on their responses to the triage self-assessment questionnaire, 100 athletes (58.1%) were referred to Healthy Hearing, 86 (50.0%) athletes were referred to Opening Eyes, 52 (30.2%) athletes were referred to Fit Feet, 51 (29.7%) athletes were referred to Special Smiles, and 8 (4.7%) athletes were referred to FUNfitness.

Questions for Special Smiles allowed SO athletes to accurately report their dental health needs. Athletes who were triaged to Special Smiles had higher rates of mouth pain, tooth decay, gingival signs, mouthguards given, and urgent treatment recommendations compared to athletes who were not triaged to Special Smiles.



- In many cases, there was poor agreement between answers given on the triage self-assessment questionnaire and answers given during Healthy Athletes screenings. For example, during triage, 55 athletes reported not having had an eye exam in the last 3 years. In Opening Eyes, only 62.5% of these athletes gave the same answer.
- **Triage influenced attendance.** In most disciplines, a greater portion of athletes who were triaged to specific disciplines attended them than did athletes who did not participate in triage. For example, 78.4% of athletes triaged to Special Smiles attended compared to 58.3% of all athletes who attended the Healthy Athletes screening event.



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There were some instances where a greater portion of athletes not triaged to a discipline attended anyway and had more needs than those who were triaged to a discipline. For example, athletes not triaged to Opening Eyes had a higher rate of eye disease than athletes who were triaged to Opening Eyes.



Discussion

This was a small-scale test of a triage system using selfreport data. The results of this pilot raised some important questions to consider before moving forward with a triage process in Healthy Athletes ---

- Given the poor agreement between responses during triage and responses during HA screenings, is triage using self-report data possible?
- What further exploration is needed around the reliability and validity of athlete self-report data?
- Were the questions asked during triage the right questions in order to successfully refer athletes to the disciplines they most urgently need to attend?
- What thresholds of false positives and false negatives should be considered acceptable in this environment?

If Special Olympics decides to move forward with adding a triage process to Healthy Athletes, it is imperative to consider these questions and to test a new version of the selfassessment questionnaire to develop a triage process that enhances sensitivity and sends athletes to the disciplines that best match their greatest health needs.

