



Exertional syncope in with college varsity athletes

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Background

- A small number of studies including a small number of patients suggest that syncope during exertion is associated with increased risk of cardiac disease [1-3].

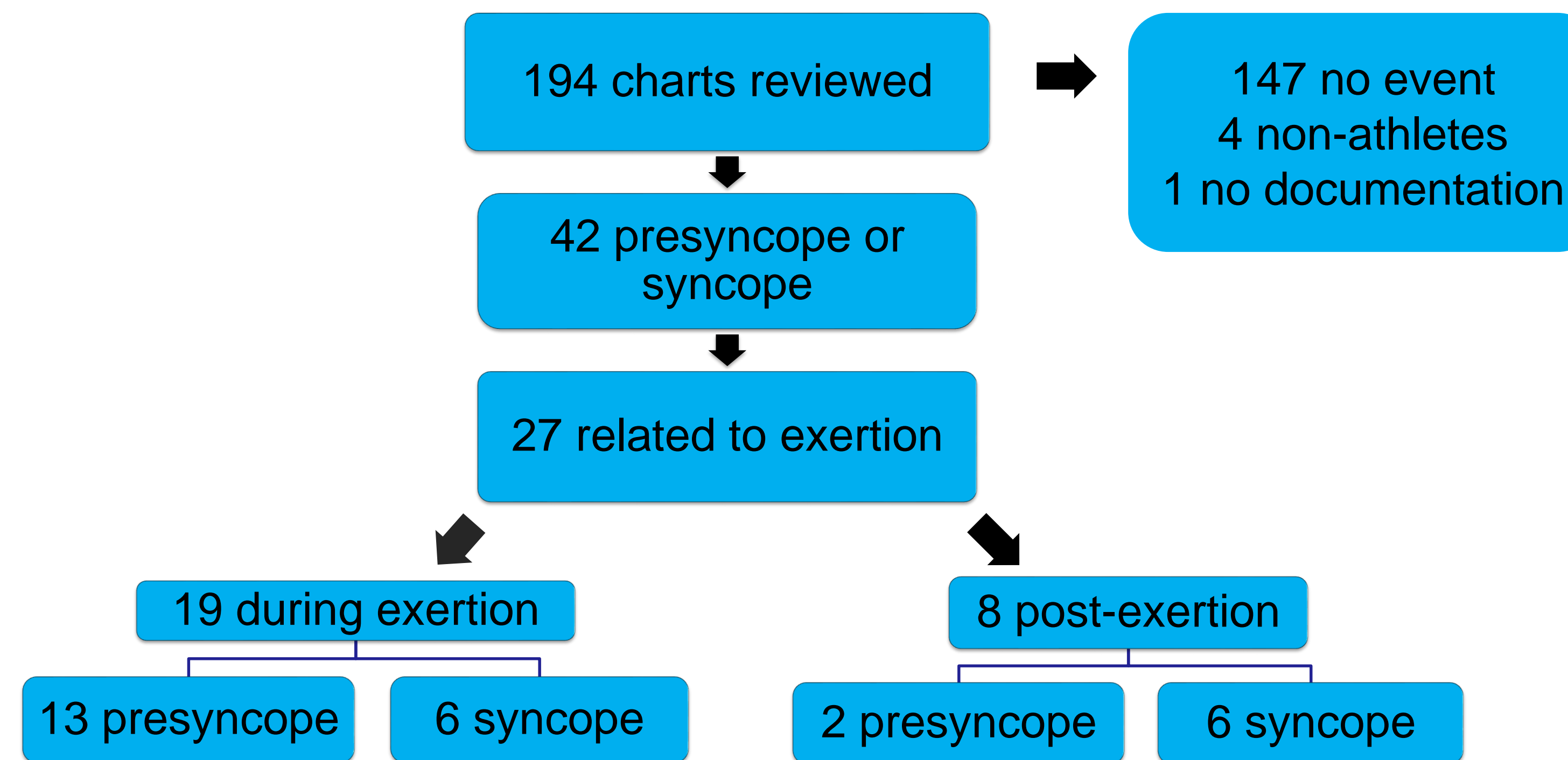
Objectives:

- Describe the underlying etiology of athletes presenting with exertional syncope at a single Division I University
- Describe the diagnostic evaluation of athletes presenting with exertional syncope

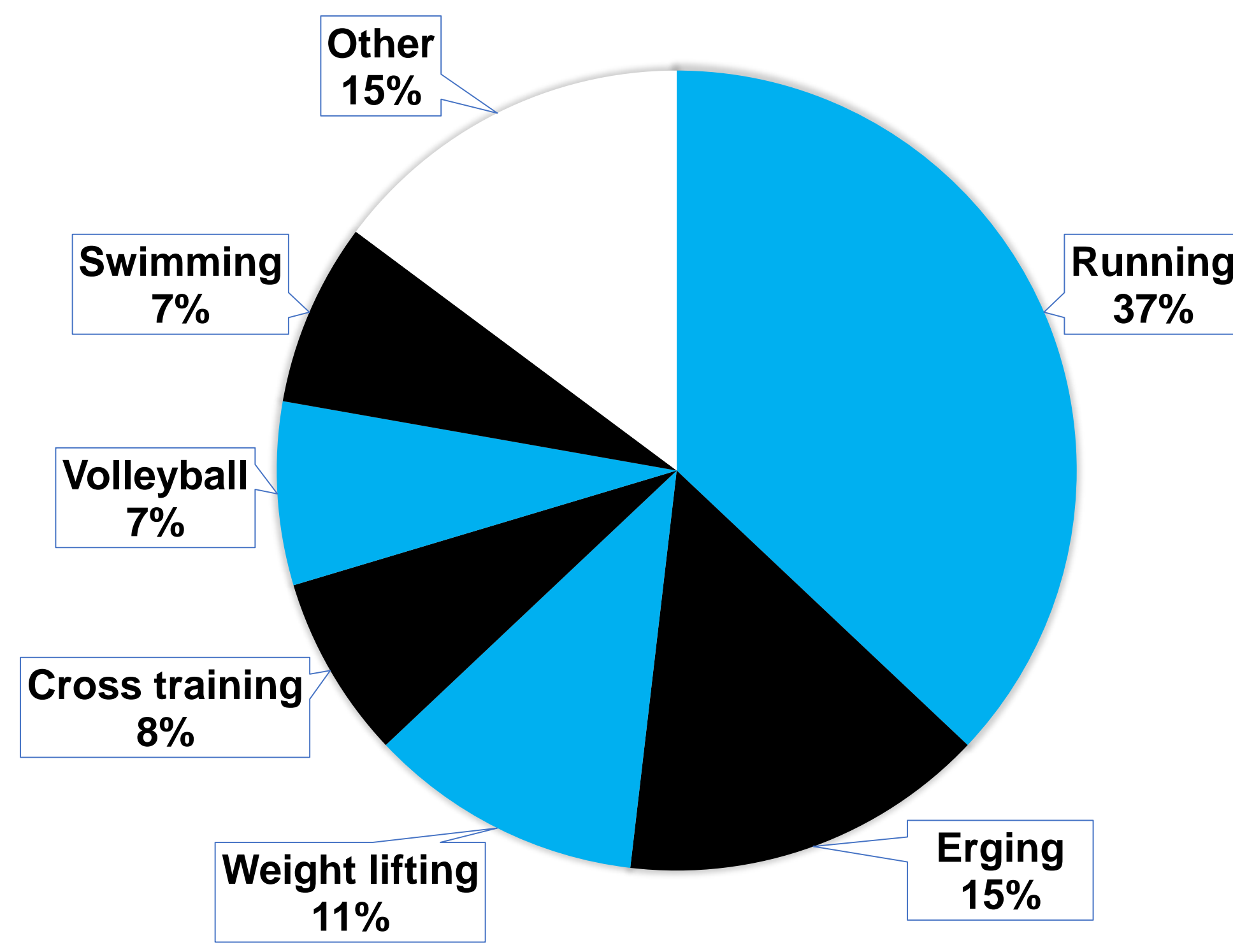
Methods

- Retrospective medical record review
- Patients records were reviewed if they met the following inclusion criteria:
 - Age 17 to 26
 - Identified as a varsity athlete based on an encounter with a Yale University Sports Medicine physician at Yale Health.
 - Any medical encounter with associated ICD-9 or ICD-10 code related to syncope from Jan 2011 to Jan 2019.

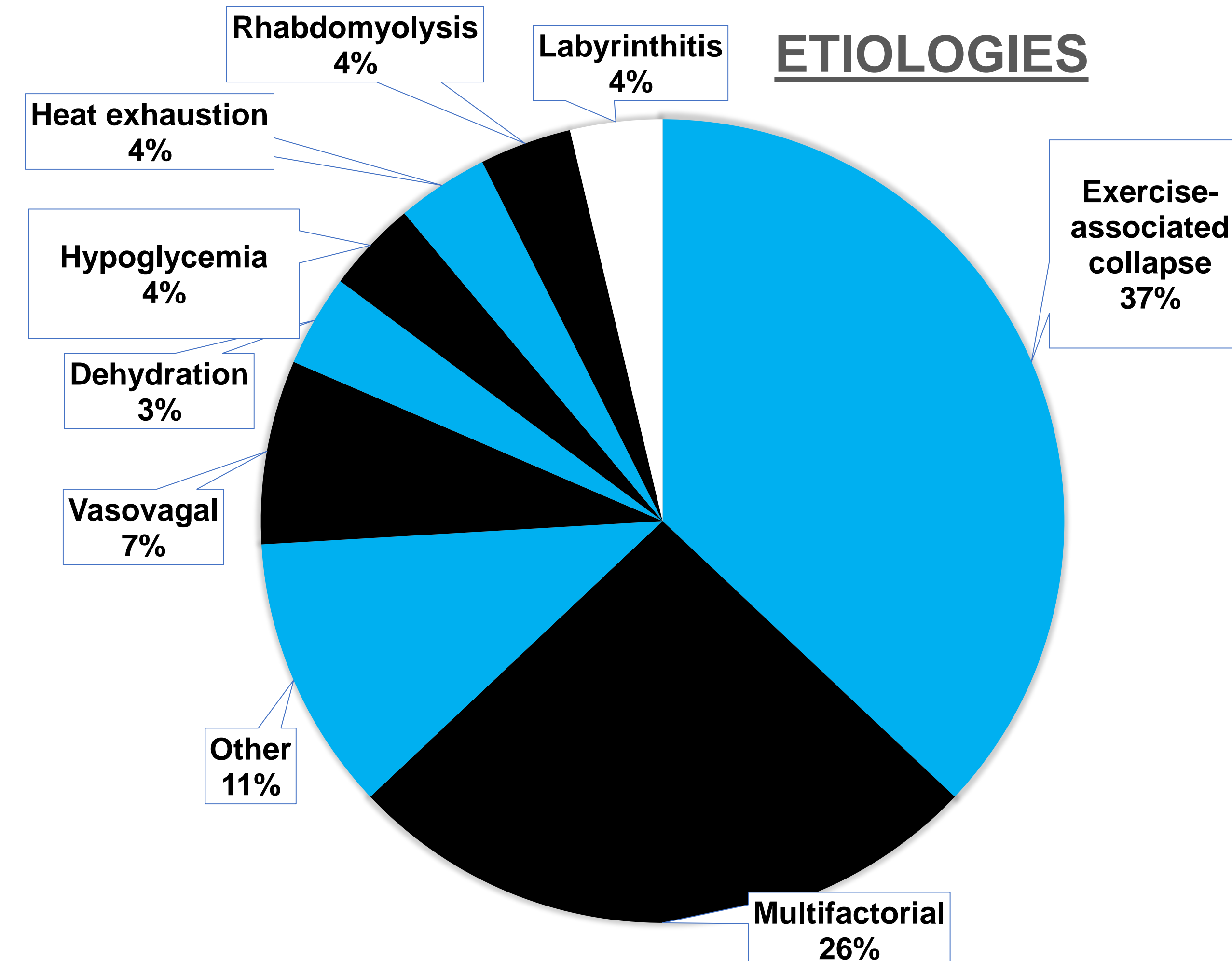
Results: Etiologies/Activities



ACTIVITY AT TIME OF EVENT

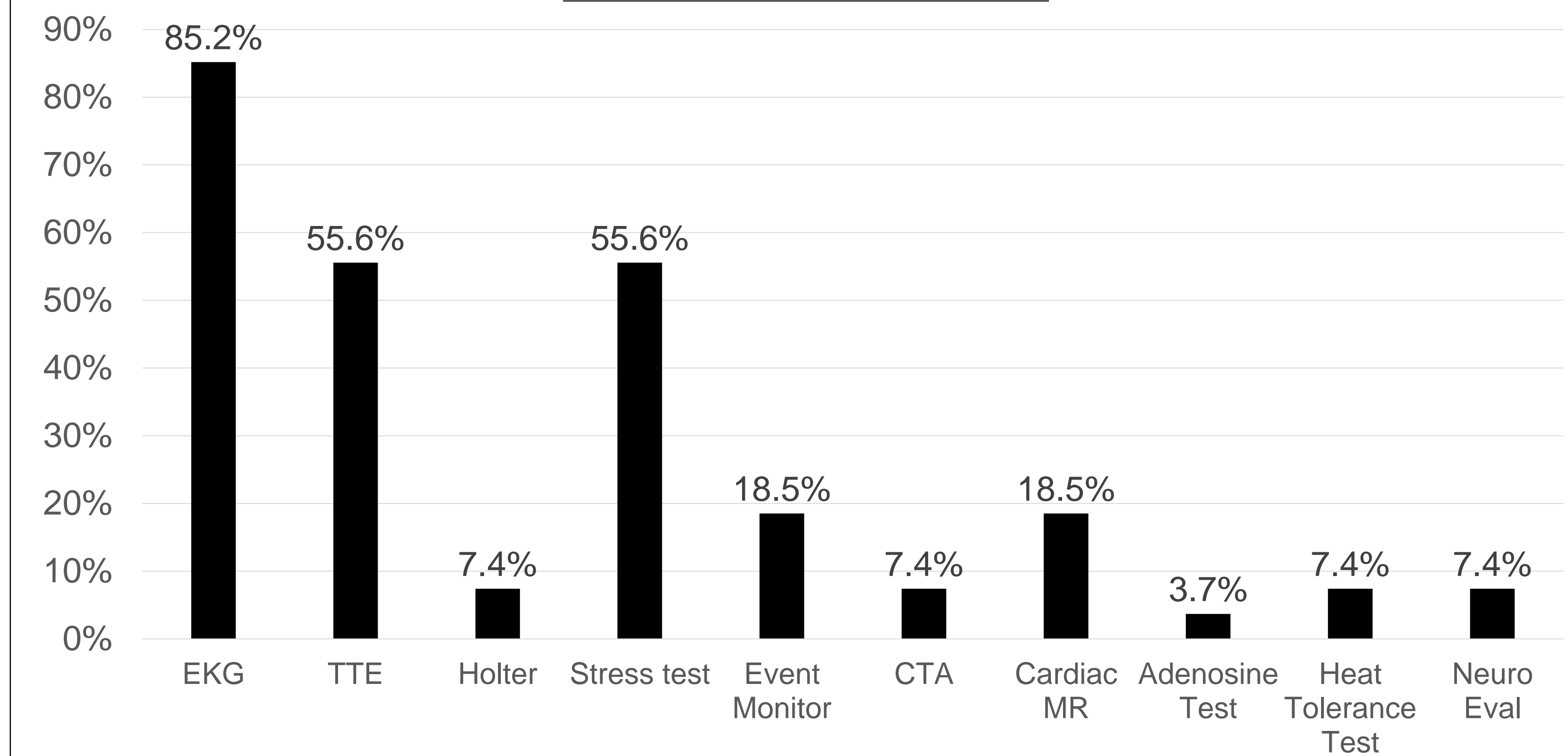


ETIOLOGIES

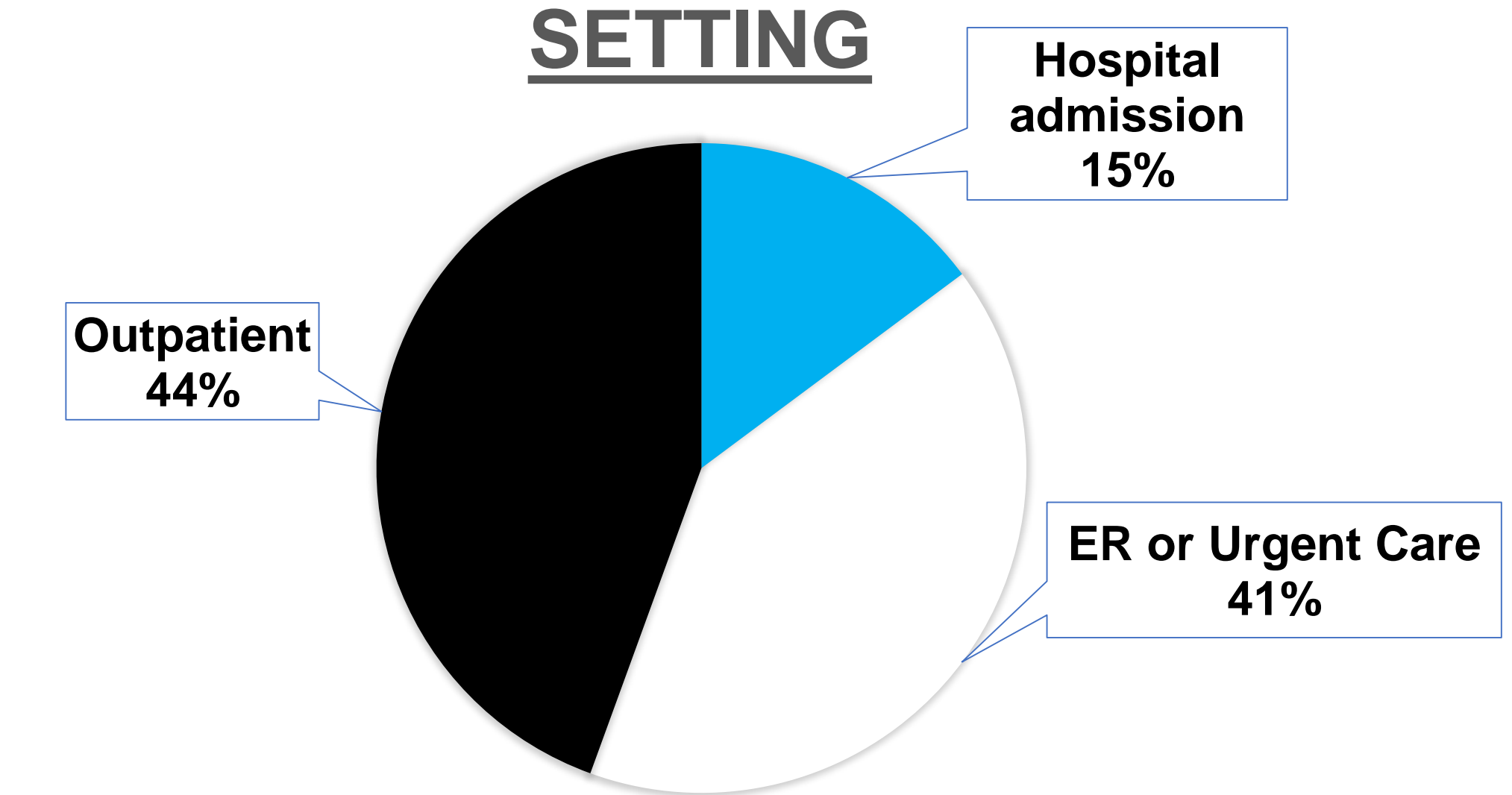


Results: Diagnostic Evaluation

DIAGNOSTIC TESTING



SETTING



Conclusions

- Underlying cardiac disease is uncommon in college varsity athletes that present with exertion-related syncope.
- However, as exertion-related syncope can be a precursor to sudden cardiac death, it is important to rule out potentially dangerous etiologies.
- Larger studies are needed to define the incidence of cardiac disease and to evaluate the optimal work up for athletes presenting with exertion-related syncope.

References

- F. Colivicchi, F. Ammirati, M. Santini, Epidemiology and prognostic implications of syncope in young competing athletes, Eur Heart J 25(19) (2004) 1749-53.
- L.V. Kaiser-Nielsen, S.G. Tischer, E.B. Prescott, H.K. Rasmussen, Symptoms, diagnoses, and sporting consequences among athletes referred to a Danish sports cardiology clinic, Scand J Med Sci Sports 27(1) (2017) 115-123.
- B.J. Maron, W.C. Roberts, H.A. McAllister, D.R. Rosing, S.E. Epstein, Sudden death in young athletes, Circulation 62(2) (1980) 218-29.