Supplementary Table 2: Additional comments and examples related to Table 1: Definitions of medical encounters and medical problems

Terminology	Definition	Comments / Examples
Non-reported medical problem	A medical problem experienced by an athlete participating in an event, where "*the athlete decides to either seek no assistance, or seek assistance outside of the event medical team"*	• Typically, these medical problems will not be included in research studies, unless they are collected directly from race entrants in a retrospective manner
Medical encounter	A reported medical problem that is an "*interaction between the medical team and a race participant requiring medical assistance or evaluation [1, 2], taking place from the official start of the event, up to 24 hours after the official cut-off time of the event"*	• Terms with similar meaning to "medical encounter" that are described in the body of literature, and that were considered by the consensus group, were as follows: "medical problems" [3], "medical events" [4], "medical incidents" [5, 6], "complications" [7], "complaints" [8], medical injury/illness" [1]or "casualties" [9, 10].
Minor medical encounter	A medical encounter that: *1) is not significant or severe enough to result in withdrawal of the athlete from the event following assessment by the medical staff,* **or** 2) *does not require admission and supervised medical care at race medical facilities (on the race course, or at the end of the event) or transfer to a hospital for supervised medical care*	• Minor medical encounters are usually not severe enough to affect athlete health and are not frequently and accurately reported in the medical literature. • Terms with similar meaning to "minor medical encounter" that are described in the body of literature, and that were considered by the consensus group, are as follows: "illness or injury requiring minimal examination and treatment" [11], encounters that "required no intervention beyond a short period of rest" [2], "mild, self-limiting types of injury/illness" [1], "minor illness/injury allowing the participant to continue the race" [12] • Minor medical encounters can contribute significantly to the resources that are required to provide medical care on race day • Examples of minor medical encounters include blisters, abrasions, mild sprains and strains, and mild muscle cramps
Moderate medical encounter	A medical encounter that: *1) is significant (severe) enough to result in withdrawal of the athlete from the event following assessment by the medical staff,* **or** *2) is non-life threatening but requires medical assessment and admission to the event medical facilities with supervised medical care,* **or** 3) *is non-life threatening but requires referral or transfer to a hospital*	• Terms with similar meaning to "moderate medical encounter" that are described in the body of literature, and that were considered by the consensus group, are as follows: "medical complication" [7], "medical encounters at the finish" [1], "major illness/injury preventing the participant to continue the race" [12] • Examples of a moderate medical encounter include dehydration without collapse, persistent vomiting, lacerations, moderate or severe muscle or joint injuries, and non-life-threatening fractures.
Serious / life-threatening medical encounter	A medical encounter that is known to be life- threatening and requires immediate emergency medical treatment with *1) either admission to a high-care (intensive care and*	• Terms with similar meaning to "serious / life threatening medical encounter" that are described in the body of literature, and that were considered by the consensus group, are as follows: "potentially serious chief

	observation) medical area at the event, **or** 2) *transport (with or without admission) to a hospital*	complaints" [11], serious (life-threatening) medical complication" [7], • Examples of a serious or life-threatening medical encounter include exertional heatstroke, symptomatic hyponatraemia, acute coronary syndrome, confused or comatosed athlete
Event related sudden cardiac arrest (SCA)	A medical encounter (cardiac arrest) that requires immediate cardiopulmonary resuscitation (including defibrillation), where the medical problem resulting in cardiac arrest was: *1) deemed to be directly related to the event,* **and** 2) *the onset of the medical problem occurred during the event or within 1-24 hours of the finish time [13] **	• There was broad consensus in the literature on the definition of sudden cardiac arrest [14] [15] [16] [17] [18] [19] [20] [21] • Other terms with similar meaning to "event related sudden cardiac arrest" that are described in the body of literature, and that were considered by the consensus group, are as follows: "severe cardiac events" [22]
Event related sudden cardiac death (SCD)	A medical encounter that resulted in sudden cardiac death (SCD) from a SCA, where the medical problem resulting in SCD was: *1) deemed to be directly related to the event,* **and** 2) *the onset of the medical problem occurred during the event or within 1-24 hours of the finish time [13] **	• There was broad consensus in the literature on the definition of sudden cardiac death [14] [15] [23] [24] [25] [19, 26]
Event related sudden death	A medial encounter that resulted in sudden death from non-cardiac causes, where the medical problem resulting in death was: *1) deemed to be directly related to the event,* **and** 2) *the onset of the medical problem occurred during the event or within 1-24 hours of the finish time [13] **	• There was broad consensus in the literature on the definition of event related sudden death [27] [28] [29] [30] [27] • Other terms with similar meaning to "event related sudden death" that are described in the body of literature, and that were considered by the consensus group, are as follows: "fatalities" [11], "mortality" [31-33] • Examples of non-cardiac related sudden death are severe trauma, drowning, exertional heatstroke, hyponatraemia, acute renal failure

*In order to compare sudden cardiac arrest (SCA) , sudden cardiac death (SCD) and event related sudden death data to previously reported data it is critical to record, the timing of the cardiac arrest or death in one of three possible time periods as follows: a) during the event, b) immediately after finishing and up to 1 hour after the event, and c) between 1 and 24 hours after the event.

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