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sensitivity and specificity of 0,787 and 0,757 respectively. ROC area under curve (AUC) was 0.815. (Figure 2) No meaningful cut-off value to differentiate between type 2 and no MI was found with a ROC AUC of 0.565. (Figure 3)

**Conclusion:** For patients with OHCA, hs-TnT is not useful to differentiate between MI as cause of OHCA and other causes. We propose a different model to assess MI status in OHCA patients, not based on hs-TnT levels.

Figure 1

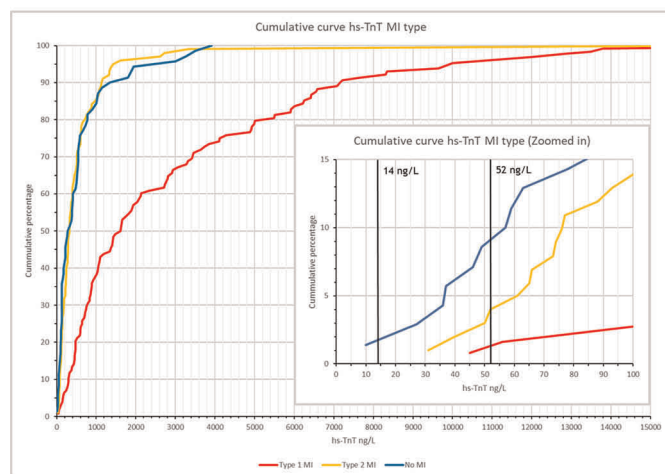
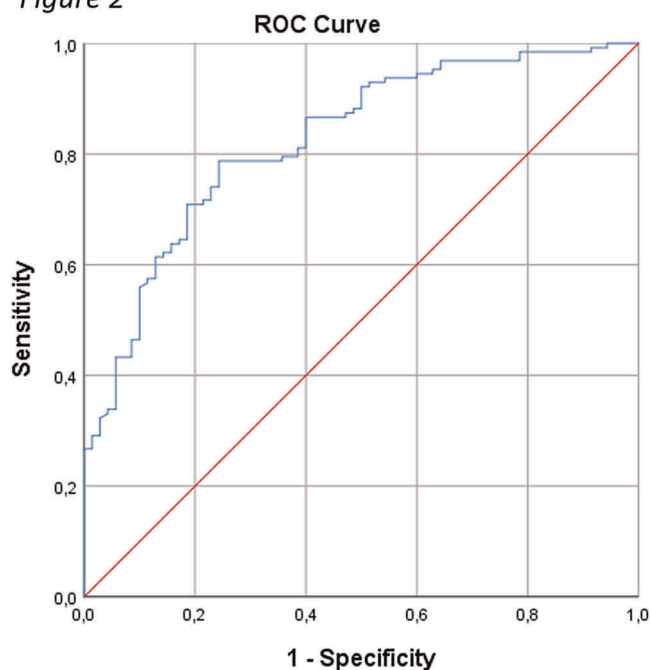
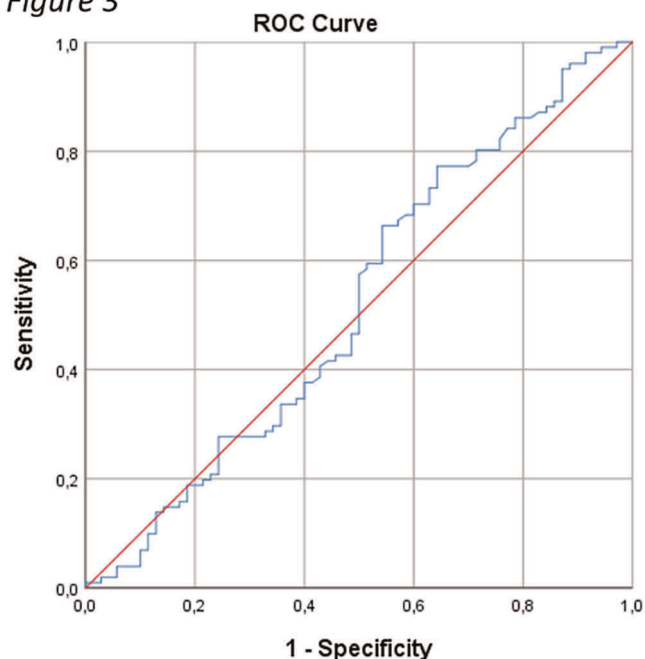


Figure 2



Diagonal segments are produced by ties.

Figure 3



## Reference

1. Thygesen K *et al.* Fourth universal definition of myocardial infarction (2018). *European Heart Journal*. 2019;40(3):237–69.

## Y03

### The nationwide impact of COVID-19 on Advanced Life Support courses. A retrospective evaluation by Resuscitation Council UK

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**Purpose:** The COVID-19 pandemic led to widespread workforce redistribution within the National Health Service (NHS) to accommodate the influx of patients with COVID-19. Medical education was consequently sacrificed to focus on patient care<sup>1</sup>. This observational study characterises the impact that the COVID-19 pandemic had on Advanced Life Support (ALS) courses in the United Kingdom (UK).

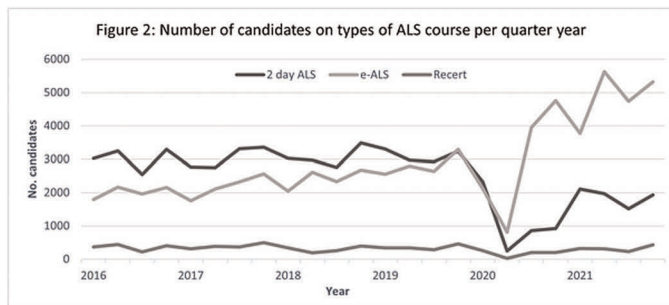
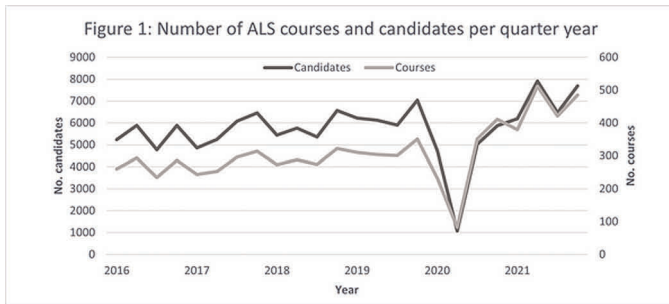
**Methods:** We extracted data for ALS courses between 01/01/16 and 31/12/21 from the Resuscitation Council UK learning management system (LMS). Chi-squared and t-tests were used in Microsoft Excel to compare pre/post-pandemic outcomes with the national lockdown on 23/03/20 as the cut-off date. P-values of <0.05 were significant.

**Results:** There was a decline in the number of courses, and candidates attending ALS courses in the second quarter of 2020 (Fig 1). Subsequently both rebounded in 2021 to exceed pre-pandemic levels.

Post-pandemic there has been a significant increase in the number of e-ALS candidates compared to the traditional 2-day ALS course (P < 0.001, Fig 2).

The mean number of candidates on individual ALS courses was significantly lower post-pandemic (14.8 vs 20.2,  $P < 0.001$ ).

Both CAS-Test and MCQ performance were significantly lower post-pandemic ( $P < 0.001$ ). Overall course results were marginally lower post-pandemic (Fig 3,  $P < 0.001$ ).



**Conclusions:** COVID-19 caused a sharp decline in the number of ALS courses and candidates being trained in the second quarter of 2020. These have since rebounded but with a marked increase in

candidates undertaking e-ALS. Social distancing measures likely explain why the average course size has reduced by 25%; this will have far-reaching ramifications for course centres. Surprisingly there has been a decline in candidate performance in both forms of ALS assessment since the pandemic. Further research is required to ascertain the cause of this.

**Reference**

1. Papapanou M *et al.* Medical education challenges and innovations during COVID-19 pandemic. *Postgraduate Medical Journal*. 29 March 2021.

**Y04**

**Trends in pediatric out-of-hospital cardiac arrest over an 18-year period in Rotterdam, the Netherlands**

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**Purpose of the study:** Survival following pediatric out-of-hospital cardiac arrest (pOHCA) increases due to ‘chain-of-survival’ improvements. Shockable rhythm is associated with long-term favorable neurologic outcome (1). This study investigates secular long-term outcome at least one year after pOHCA and secular trend in bystander CPR, AED use and shockable rhythms.

**Materials and methods:** All children aged 1 day-18 years with non-traumatic pOHCA between 2002–2019 admitted to the emergency department or pediatric intensive care unit (PICU) of Erasmus MC Sophia Children’s Hospital were included. Long-term outcome was determined using a Pediatric Cerebral Performance Category (PCPC)

**Table 2: Course outcomes per year**

Year		2016	2017	2018	2019	2020	2021	Total
ALS CAS-Test	Pass	17694	18433	18523	20300	12947	21792	109689
	Fail	3379	3531	3927	4441	3214	5425	23917
	Overall	21073	21964	22450	24741	16161	27217	133606
	Pass rate (%)	84.0	83.9	82.5	82.1	80.1	80.1	82.1
ALS MCQ	Pass	20212	20981	21524	23677	15427	25799	127620
	Fail	848	972	925	1060	728	1414	5947
	Overall	21060	21953	22449	24737	16155	27213	133567
	Pass rate (%)	96.0	95.6	95.9	95.7	95.5	94.8	95.5
ALS Overall	Pass	20124	20873	21352	23600	15312	25488	126749
	Fail	1068	1207	1237	1261	916	1619	7308
	Total	21192	22080	22589	24861	16228	27107	134057
	Pass rate (%)	95.0	94.5	94.5	94.9	94.4	94.0	94.5

**Table 2:** (abstract: Y03)