Table 1

CPR performance in two groups of lay rescuers guided by 112 dispatchers via audio or video calls Median (P25–P75).

	Video CPR ($n = 60$)	Phone CPR ($n = 22$)	p-Value
Median rates	116.0 (104–120)	109.0 (90–122)	0.31
Median depth (mm)	49.0 (42–59)	48.0 (27–56)	0.35
Correct hand position (%)	59 (10–178)	47 (0–146)	0.18
Total number of compressions	421 (349–478)	364 (280–406)	0.0015
Time to first compression (s)	145 (127–172)	103 (96–118)	0.0001
Hands Off (s)	0 (0–0.80)	6 (0–21)	0.0016
Unconscious recognition (s)	39 (33–46)	27 (25–31)	0.0001
Open airway (s)	66 (55–76)	60 (56–70)	0.30
Recognition of no-breathing (s)	93 (79–106)	77 (69–85)	0.0016

Hands Off (s): Time interval (in s) starting after the first chest compression. (No-flow time) when chest compressions are stopped by the lay rescuer.

vs. 48 mm; $p = 0.35$). The median no-flow time was significantly greater in the video group. Hands-off period was almost inexistent in the video group (0 vs. 6; $p = 0.0016$). Time periods attributed to checks for responsiveness, airway opening manoeuvres and breathing checks are depicted in Table 1.

Conclusion: According to these preliminary results, we believe that dispatchers should be trained to videoconference-assisted CPR in the future. Indeed, videoconference may allow bystander reach compressions rates and depths close to international guidelines[2] and reduce 'hands-off' events during CPR.[3,4] Further evaluation of the effect of this assistance on early gasp recognition may also be interesting.[5]

Keywords: Video CPR; Phone CPR; Cardiac arrest.

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Defibrillation

AP062

Integrating operational public access defibrillators in the chain of survival: Implementation and first uses

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Background: Positive impact of public access automated external defibrillators (PA-AEDs) is directly related to their accessibility. Despite over 95,000 AED sold in last 5 years in France, only few emergency medical services (EMS) are able to use them. ARLoD®

Fig. 1.

Fig. 2.

(Association for Census and Location of Defibrillators), independent and non-profit structure, was created to count, locate PA-AEDs and make information available to all EMS.

Material and methods: ARLoD® has developed database gathering comprehensive information upon PA-AEDs on French territory. Database is supplemented spontaneously or on demand through a web platform (www.defib-arlod.fr). Every input is verified, completed and confirmed before acknowledgement. Geoline®, specific web-based software, extracts information from database in two ways: (1) dispatcher enters address or GPS coordinates in a specific web interface (www.defib-arlod.fr/urgence) or (2) uses automated connector software linking directly Geoline® to EMS software. Real time checking displays available PA-AEDs around location. Optimal pathways and travel times are calculated (Fig. 1).

Results: Up today, ARLoD® database gathers around 9500 PA-AEDs. Confirmed PA-AEDs are known to be operational. Recently, real-time checking with Geoline® has allowed successful resuscitation in a 20-year old onlooker during a sport's meeting. One minute after onset of cardiac arrest, EMS dispatcher sent rescue teams. Simultaneously, he told the witness to provide CPR and to find someone to fetch a PA-AED displayed by Geoline® (Fig. 2). First external electric shock (EES) was given 3 min later. 2 min later, a second EES made the patient return to spontaneous cardiac activity and breathing. 5 min later, rescuers arrived and put him on oxygen. Medical crew carried him to Intensive Care Unit after stabilization. He was discharged from hospital at day 10 without sequel.

Conclusion: By providing information to emergency professionals on the location of operational PA-AEDs the closest to the scene of a cardiac arrest, ARLoD® appears as an additional asset in the chain of survival.