improvements although highly qualified physicians carry out the service.

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27 IMPLEMENTATION, TEMPORAL CHANGES, AND FOLLOW-UP OF A NATIONWIDE AED-NETWORK

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Aim To describe the temporal development of automated external defibrillator (AED) deployment in Denmark according to type of AED location and accessibility.
Methods We collected information on all AEDs registered in the nationwide Danish AED network, 2007–2015, including type of AED location, accessibility 24 hours a day (24/7), and year of deployment.
Results The number of registered AEDs available for public access defibrillation increased from 140 in 2007 to 12 666 in 2015. In total, 14,390 AEDs were registered during the study period. Of these, most AEDs were placed in companies/offices (29.3%, n=4,213), followed by school/education facilities (12.6%, n=1,819), and sport facilities (10.2%, n=1,464) whereas few AEDs were deployed in residential areas (6.9%, n=999) and transportation facilities (1.0%, n=147). In 2007 and 2008, most AEDs were placed in sports facilities but then declined. From 2009 and forward, most AEDs were placed in companies/offices, whereas deployment in residential areas showed a temporal increase. AED accessibility 24/7 increased from 11.4% in 2007 to 35.2% in 2015, with residential areas having the highest 24/7 accessibility (83.2%, n=758), followed by churches/community centres (74.5%, n=301), and transportation facilities (69.0%, n=87). Despite AED deployment was highest in companies/offices only 14.8% (n=542) of these AEDs were accessible 24/7.
Conclusion The number of public available AEDs in Denmark has markedly increased from 2007–2015, with companies/offices, school/education facilities, and sport facilities as most frequent places of AED deployment. However, only 14.8% of AEDs placed at companies/offices had 24/7 accessibility.
Conflict of interest None declared.
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28 THE DIFFERENCE BETWEEN PHYSICIAN ASSISTANTS AND AMBULANCE NURSES AS SOLO EMERGENCY CARE PROVIDERS IN EMS, A CROSS SECTIONAL STUDY

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Aim The aim of the study is to compare the assessment, treatment, referral, and follow up contact with the dispatch centre of emergency patients treated by the physician assistant (PA) and ambulance nurse (RN) in emergency medical services (EMS) in the Netherlands.
Methods In a cross-sectional document study in two EMS regions we included 991 patients, treated by two PAs (n=493) and 23 RNs (n=498). Data were drawn from predefined and free text fields in the electronic patient records and analysed using descriptive statistics. We used $\chi 2$ and Mann-Whitney U tests to analyse for differences in outcome of care. Statistical significance was assumed at a level of $p<0.05$.
Results In line with the medical education, PAs used a medical diagnostic approach (16%, n=77) and an exam of organ tract systems (31%, n=155). PAs consulted more often other medical specialists (33%) than RNs (17%) ($\chi 2=35.5$, $p<0.0001$). PAs referred less patients to the general practitioner (GP) or emergency department (ED) (50%) compared to RNs (73%) ($\chi 2=52.9$, $p<0.0001$). Patient follow up contact with the dispatch centre within 72 hour after completion of the emergency care on scene showed no variation between PAs (5%) and RNs (4%).
Conclusion PAs seemed to operate from a more general medical perspective. They referred significantly less patients to the ED.

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29 INVESTIGATING THE POPULATION CHARACTERISTICS, PROCESSES AND OUTCOMES OF PRE-HOSPITAL PSYCHIATRIC AND SELF-HARM EMERGENCIES IN SCOTLAND: A NATIONAL RECORD LINKAGE STUDY

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Aim To investigate the demographic characteristics, care pathways, and clinical and service outcomes of people who present to ambulance services with a psychiatric or self-harm emergency