DEFIBRILLATION NETWORK AUSTRIA: REACHING FOR A BETTER OUTCOME AFTER OUT-OF-HOSPITAL CARDIAC ARREST. M Krammel, G Wildner, C Chwojka, K Markstaller, M Baubin, G Prause, W Schreiber.

Introduction: Sudden cardiac arrest (SCA) is one of the most common causes of death in western industrialized countries. More than 12,000 people in Austria suffer SCA every year. Survival is strongly influenced by bystander cardiopulmonary resuscitation (CPR) and early defibrillation. The hospital discharge rate after out-of-hospital cardiac arrest was 11% in 2011. The bystander CPR rate was 42%, and in only 4% of cases was an automatic defibrillator (AED) used by laypeople. CPR guidelines have emphasized the importance of Public Access Defibrillation (PAD) programs since 2001. To increase PAD deployment, emergency dispatch centers can support the caller in locating and using a defibrillator, an approach that has recently been an important or the key point of several projects. Observation of these projects suggests that data collection remains neither standardized nor in all cases sufficient, and often does not meet either logistic requirements of the emergency dispatch center or the callers' direct needs. In addition, data use for further purposes is often restricted. To overcome these problems in Austria, the "Defibrillation Network Austria" campaign has been founded and will be described in this abstract.

Methods: The project is carried out under the patronage of PULS, the Austrian association against sudden cardiac arrest, by physicians and students of the public Austrian Medical Universities, members of rescue organizations, and emergency dispatch centers all over Austria. The basic idea of the national PAD registry is to establish an open, independently administrated, non-profit oriented, web-based platform containing data of all PAD locations across the nation and to link the data to the dispatch centers. The underlying dataset is a trade-off between detailed information and the reduced level of complexity resulting from the volunteer base of reporting. Existing datasets were added to the network continuously. To identify further existing and future PAD locations, "Defibrillation Network Austria" uses crowdsourcing and the involvement of defibrillator distribution companies, which will, in addition to the PAD provider, also be an important partner to keep data up-to-date.

Results: Technical solutions to facilitate data processing and the exchange between emergency dispatch systems or third-party appications, including the database, a web front end, and user-network interfaces, were developed by the Lower Austrian emergency dispatch center "144 Notruf Niederoesterreich". The so-far generated dataset consists of six major categories (e.g. defibrillator type, geographic data, location, alarm, owner, administration) with 33 input fields. Of these, a minimum of nine fields have to be completed for basic acceptance of the registration. A review process marks the validation status of the location. There are 1,745 AEDs registered at the moment, and emergency dispatch centers can now support the caller in locating and using these AEDs.

Conclusion: The national PAD registry promises to be an important cornerstone to increase use of the lifesaving potential of AEDs that are placed all over Austria. Accompanying studies have to determine the impact on overall survival.