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### Good science at heart

*Lessons on ethics from big data research in sudden cardiac arrest*

Bak, M.A.R.

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PHD THESIS

# GOOD SCIENCE AT HEART

Lessons on ethics from big data research in  
sudden cardiac arrest



MARIEKE BAK

# **Good Science at Heart**

Lessons on ethics from big data research  
in sudden cardiac arrest

**Marieke Bak**

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# Good Science at Heart

Lessons on ethics from big data research  
in sudden cardiac arrest

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## List of abbreviations

AED	Automated External Defibrillator
AI/ML	Artificial Intelligence / Machine Learning
ARREST	AmsteRdam REsuscitation STudies
CPC	Cerebral Performance Category
CPR	Cardiopulmonary Resuscitation
DPIA	Data Protection Impact Assessment
DPO	Data Protection Officer
ECG	Electrocardiogram
ELSI	Ethical, Legal and Social Implications
EMS	Emergency Medical Services
ESCAPE-NET	European Sudden Cardiac Arrest network towards Prevention, Education, New Effective Treatment
GDPR	General Data Protection Regulation
GP	General Practitioner
ICD	Implantable Cardioverter-Defibrillator
ICT	Information and Communications Technology
IRB/REC	Institutional Review Board / Research Ethics Committee
M&S	Modeling and Simulation
MI	Myocardial Infarction
PAD	Public Access Defibrillator
PMDD	Posthumous Medical Data Donation
PPE	Patient and Public Engagement
RRI	Responsible Research and Innovation
RWPC	Research Without Prior Consent
SCA	Sudden Cardiac Arrest
TTP	Trusted Third Party