

From community-based registrations of traffic accidents towards prevention

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Eurosafe Vienna 2022

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Introduction

- 17,4 million people
- 147 billion kilometers in traffic (2020)
- 582 traffic fatalities (2021)
- 19,700 road users seriously injured (MAIS 2+), based on police-registered crashes



- Policymakers use police-registered cases, but we know this registration is incomplete

Objective



- Information on victims, accidents, circumstances and locations is registered in medical records of Ambulance Services and Emergency Departments
- Can we obtain this information for prevention purposes, without administrative burden on medical services?



Our methods in pilots



Results pilots

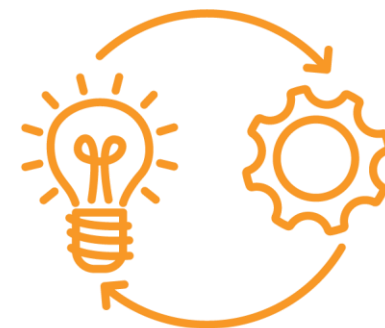
- **More detail** information on road traffic injuries in ambulance data than in the police registration and about **three times more cases**
- With Emergency Department data added about four times more cases
- Specifically for cyclists eight times more cases




Upscaling to a national registration

Desired outcome:

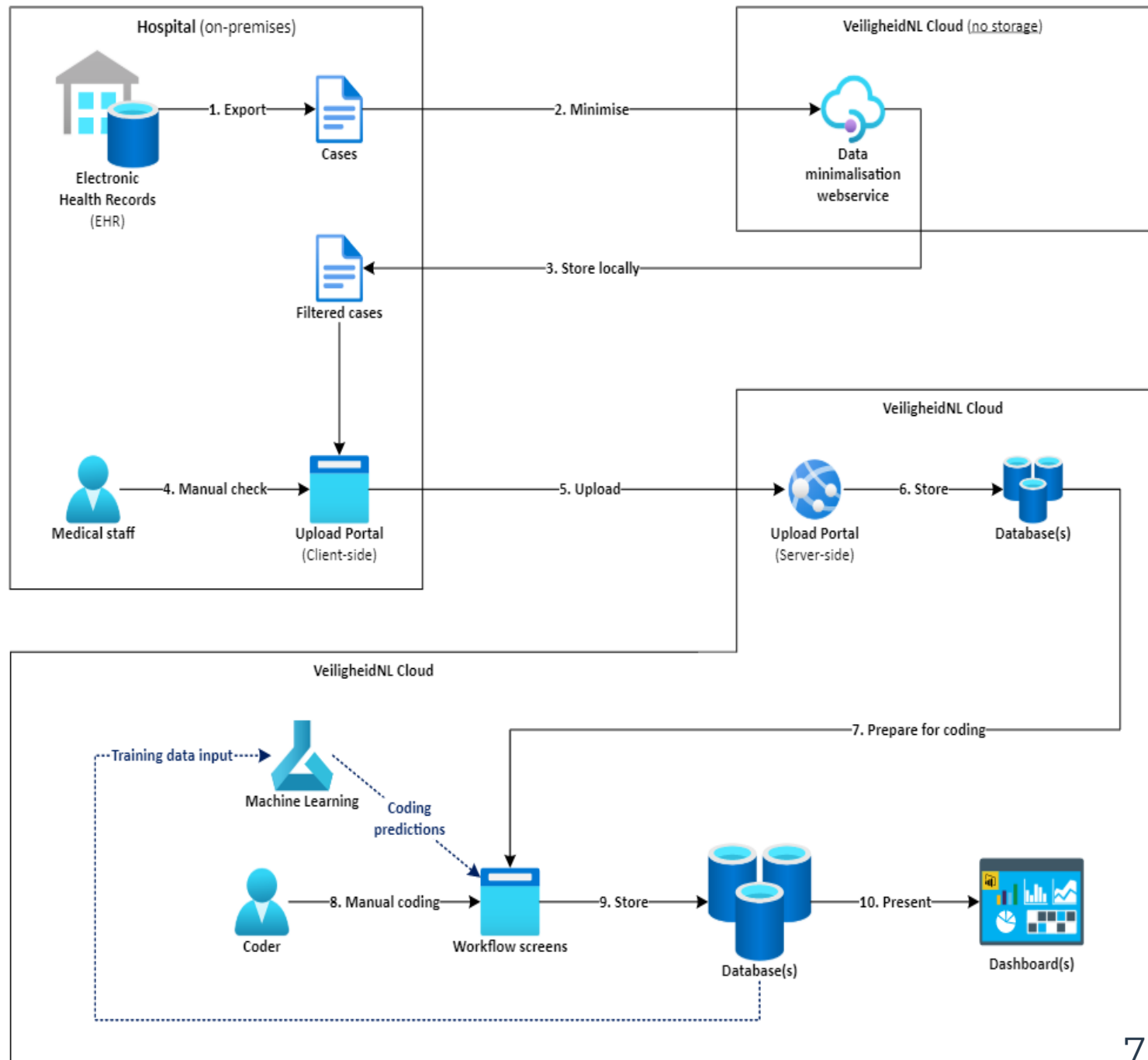
- Less burden on medical services
- More efficiency – technical innovation
- More user-friendly dashboard



GDPR issues:

- More privacy experts  = more opinions 
- Dutch legislation is open tot multiple interpretations as to under what circumstances pseudonymized data from medical records may be used
- Some medical services export pseudonymized data, others anonymous data only
- Amendments to the law?

Technical innovation





Interactive dashboard

Conclusions



- With innovative techniques, information in medical records can be obtained for prevention, with minimum effort from medical staff
- A community-based registration of traffic accidents in which medical data are used reveals valuable information that was formerly not available
- Policymakers can take targeted and effective action based on such data