

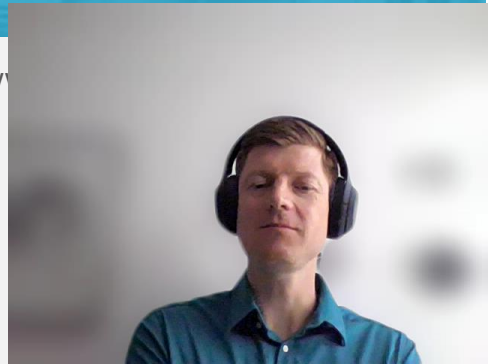
# Turning data into better healthcare: handling data for hemophilia blood disease

Marcel Hofman LOGEX/MRDM



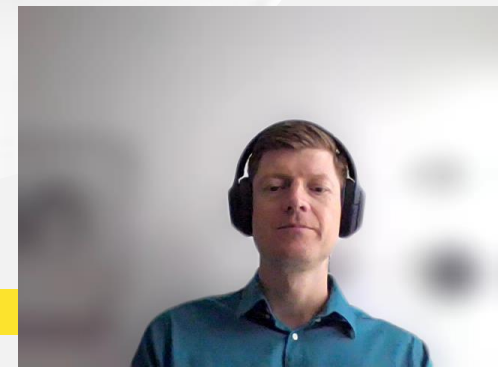
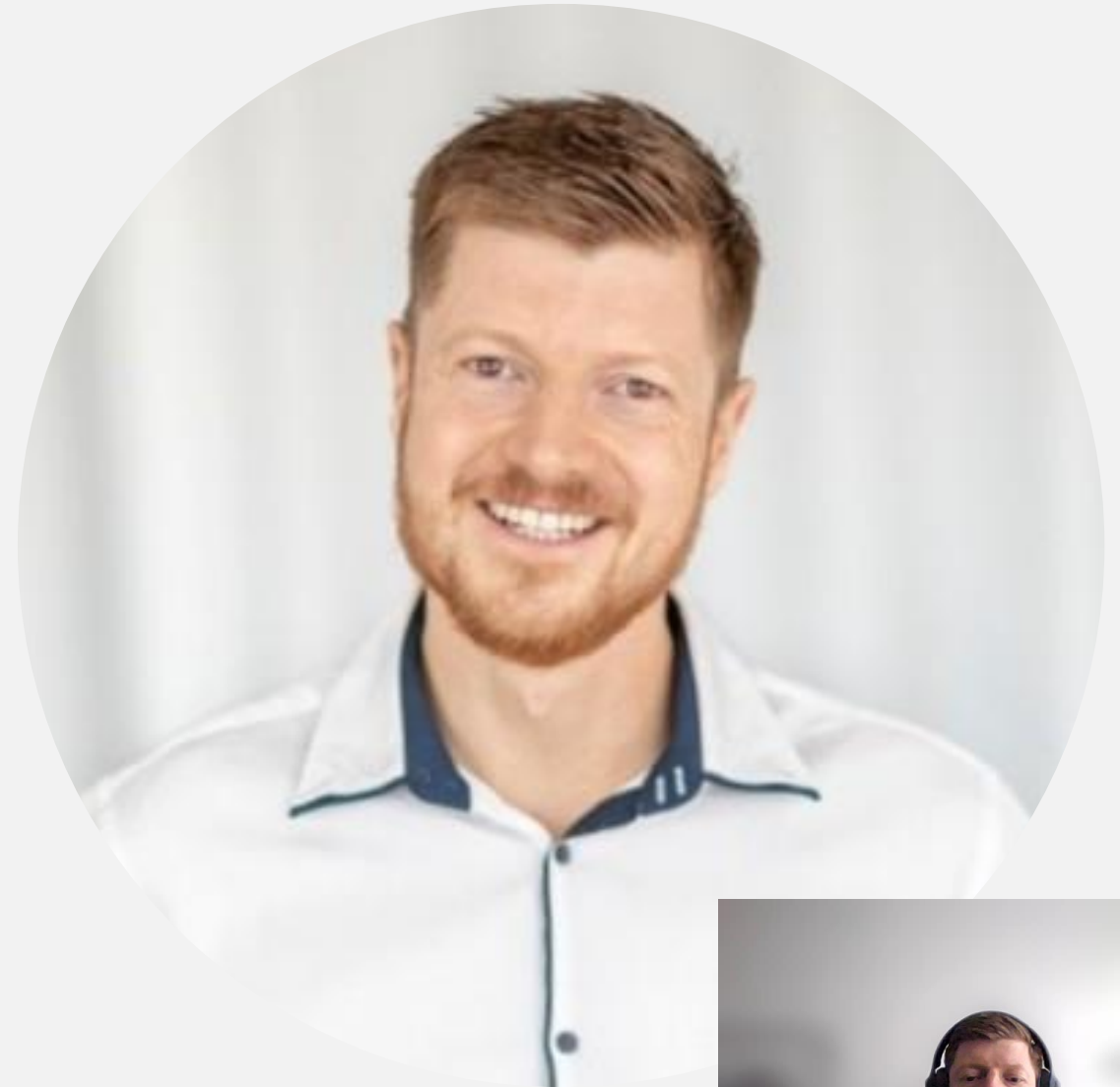
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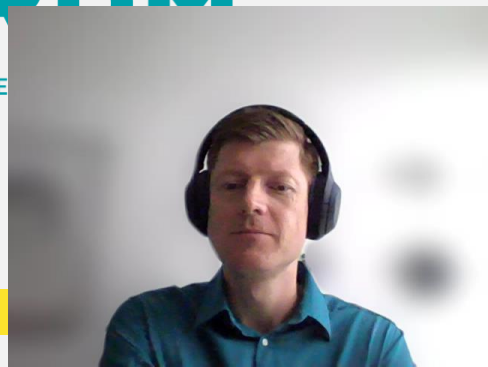
## Who am I?

- Marcel Hofman
- Lead Data Engineer at LOGEX/MRDM

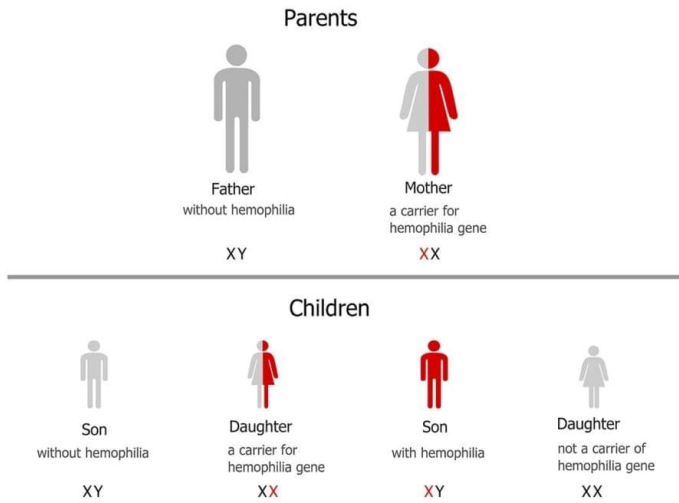
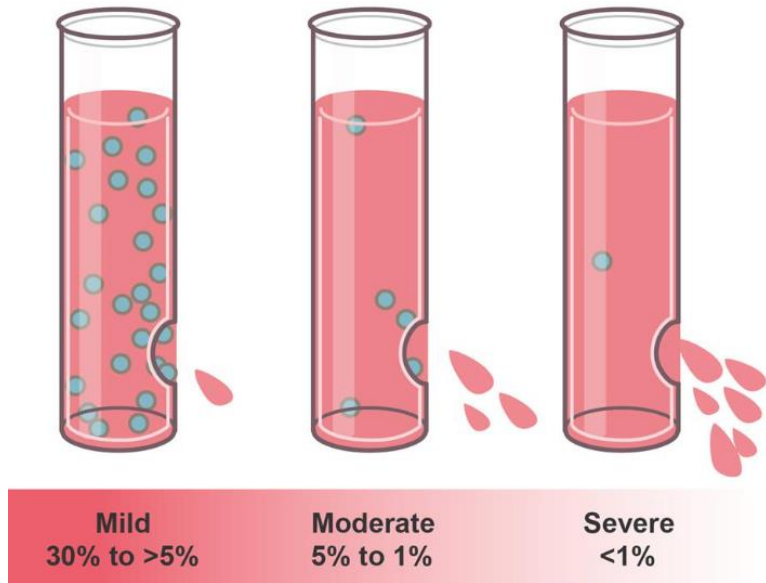


# LOGEX/MRD M: Turning Data Into Better Healthcare

- Founded in 2008
- Using advanced data analytics to help professionals in improving healthcare
- Working with > 90% of hospitals in the Netherlands
  
- Clinical Outcomes business unit of LOGEX
- #1 benchmark for physicians in the Netherlands
- Reducing the administrative burden on physicians by aligning our solutions with the existing care processes



# What is hemophilia?



# What is the HemoNED Registry?

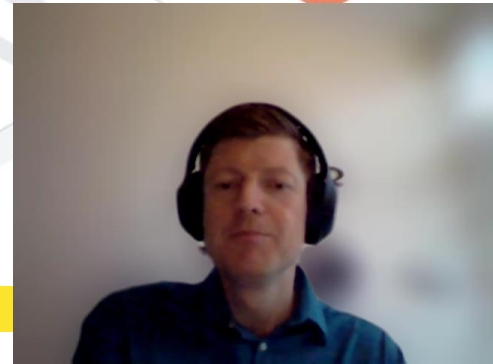
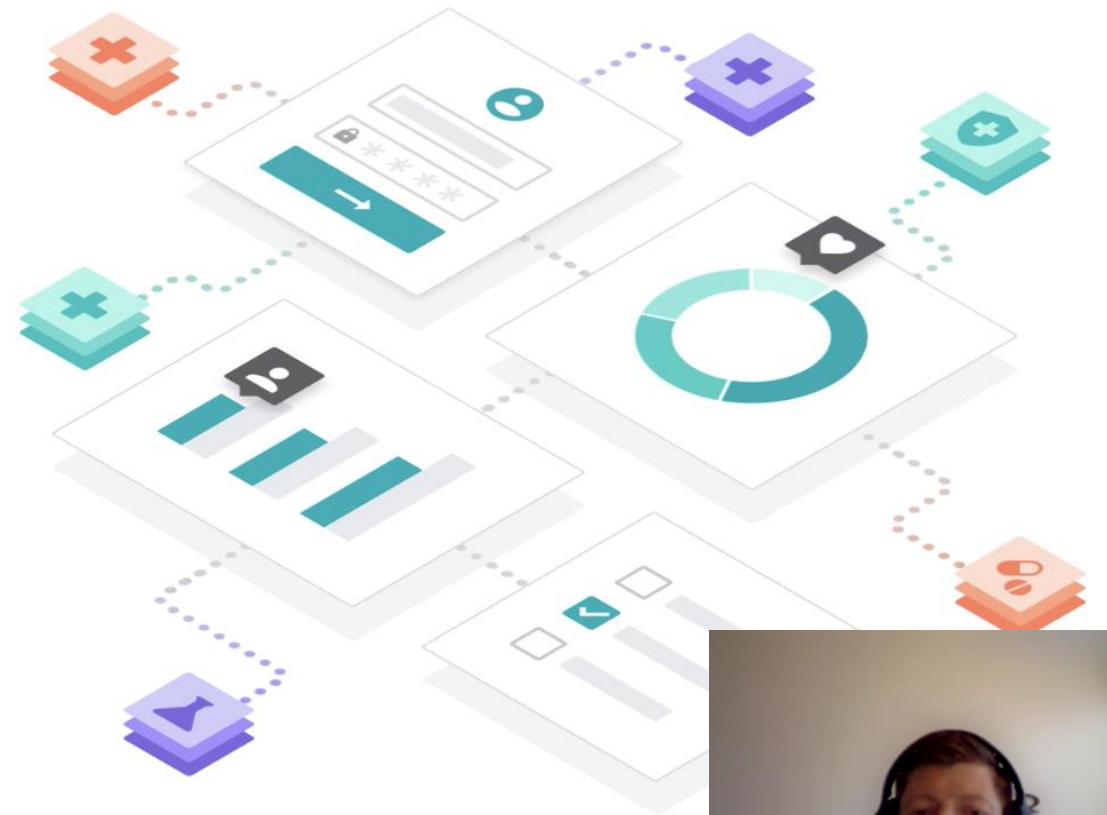


- Dutch Hemophilia Registry for people with hemophilia and associated disorders
- Facilitates monitoring patients, their treatments and the treatment results in a clear and convenient manner
- Patients record details about their infusions and bleedings by means of digital infusion log
- Provides insight into:
  - Total number of people in the Netherlands with bleeding disorders
  - Patient's diagnosis
  - Reported side effects of medication
  - Use of coagulation factors
  - Treatment results and side effects of the treatment
- Benchmarking of hemophilia treatment centers in the Netherlands and abroad



# Project Outcomes

- Increased interoperability between hospitals
- Reduced Registration Burden
- Fewer human errors – reducing manual input





# Increased Interoperability

- Implementation based on Electronic Medical Record (EMR), not for each individual hospital
- Central hosting of FHIR Endpoints
- Multiple data sources:
  - Patient
  - Hospital
  - EMR
- Datasets:
  - FHIR Medication (pharmacy)
  - FHIR Lab Results (hospitals)
  - Patient Data (hemoNED)



# Reduced Registration Burden

- Registration Burden =  
variables \* no. patients \* time required for  
manual data input
- Data used for both research and care
- Reuse of vast amounts of data
- Reduced manual input for practitioner – one  
click data transfer
- Automated data transfer from lab to registry





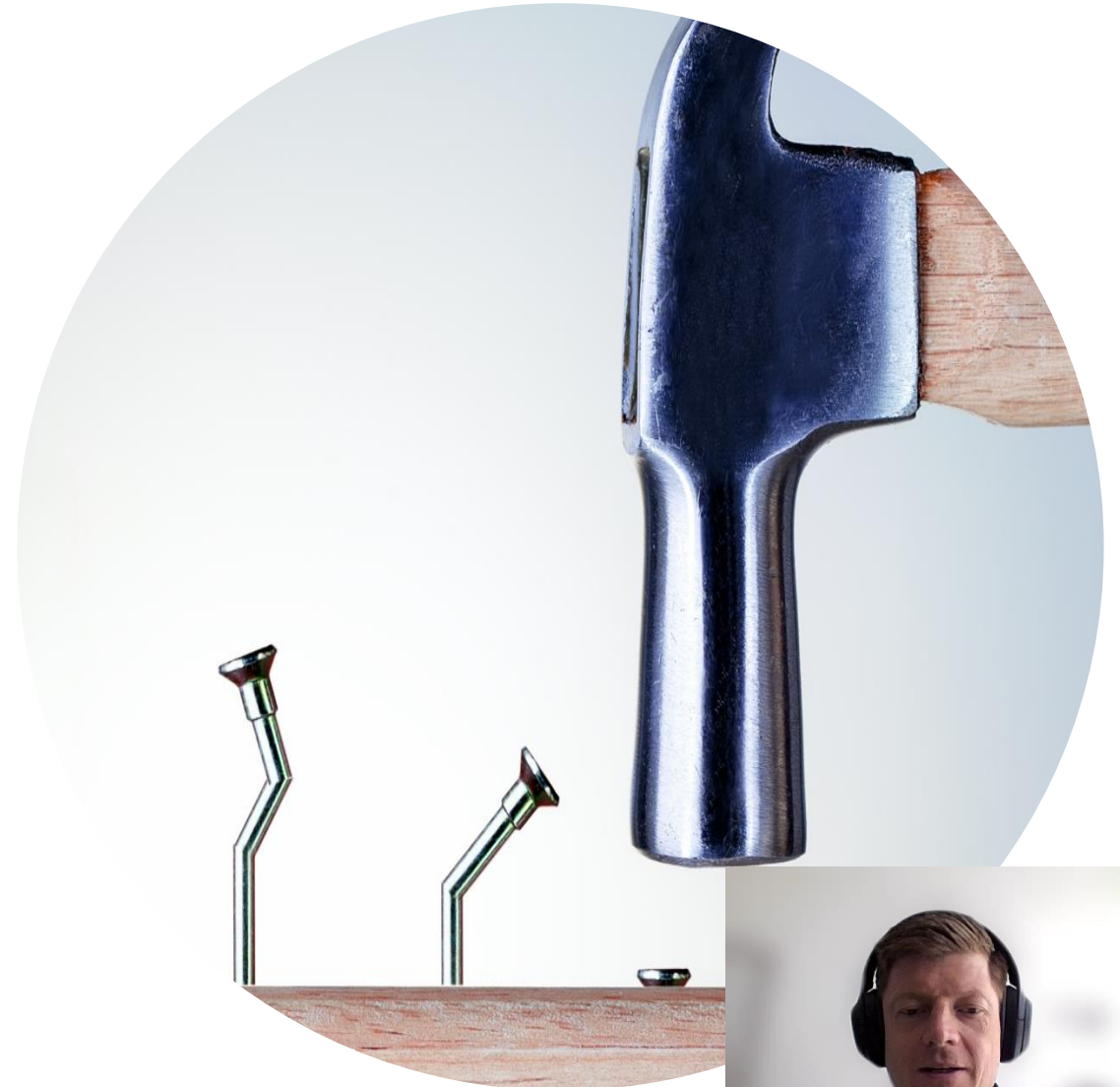
# Fewer Human Errors

- Practitioner is now less reliant on manual input
- No more need for paper-based logging
- No more no need to type out data
- Data structure is preserved



## Lessons Learned

- LOINC codes are not always consistently applied by hospitals
- Lab definitions and equipment continuously change, causing changes in LOINC codes
- With new EMR, mapping (to FHIR-profile) is required



# Contact

- During DevDays, you can find / reach me here:
  - Via Whova App – Speaker’s Gallery
  - Email: [m.hofman@mrdm.nl](mailto:m.hofman@mrdm.nl)



# Questions?



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