The Virus Outbreak Data Network: a Collaboration between African and Europe for FAIR and GDPR-led ethical health data and AI solutions

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VODAN AFRICA
- VODAN Africa is the first successful implementation of Data in residence in the context of the COVID-19 with the installation of Machine actionable COVID-19 FAIR Data Points (FDPs) in 9 locations in Africa (Uganda -2, Ethiopia -2, Kenya -1, Zimbabwe -1, Nigeria -2, Tunisia -1, as well as the Leiden University Medical Centre (LUMC)

- Demonstration of data visiting between Africa and Europe in October 2020

- Trainings of data stewards on Metadata for Machines (M4M), FAIR Data Implementation, vocabulary and template creation

- Re-tooling CEDAR and Implementation of an embeddable editor for data entry in 84 clinics in Africa
  - Integration of a tailor-made application to allow INPUT/EDITING of data on the VODAN FDP

- To document the experiences of the VODAN Africa Team, a Special Issue is ready to be published by Data Intelligence in collaboration with the Chinese Academy of Sciences
Critical Issues

- Regulatory Framework for Data Production and Management
  - FAIR and GDPR for ethical computer and data science together with an increasing awareness in Africa of the need to retain data ownership
  - Privacy and Data Protection Laws of African Countries
  - To end data extraction and colonization of knowledge
- Africa had been at forefront of designing the first distributed machine actionable interoperable data system in which the data is held in the repository in the health facility
  - This enables digital data analytics to improve health services at point of care
  - Makes data visiting possible through federated data in ten sovereignties across Africa and Europe
History of Cooperation: Data visiting Across Africa and Europe

Implementation
Critical Issues

VODAN-Africa allows clinical and research data to be generated, curated, and held on-site at facilities.
Conclusion

This is the beginning of a new internet. Africa and Europe can work together to provide an internet where ownership of the data in the place where data is produced, strong while collaboration can provide data analytics through data visiting