



Quick Start Guide to Sensor Data Integration: **Data Processing**

Sensor generated technologies should leverage transmission protocols that optimize:

1. The diversity and inclusion of the patients who can benefit from sensor generated data
2. Access for all patients and decision makers with appropriate permissions
 - Access best practices and nine action oriented resources from [DATAcc by DiMe's inclusion toolkit](#)

Ensure that all data processing steps are known and documented

- Learn about different types of sensor data at varying levels of processing [here](#)
- Use the DiMe Sensor Data Integrations Data Flow Design tool to record where data processing is happening and documentation of these operations are necessary

Algorithmic transformation of pre-processed data to clinically interpretable data and information must be correct and perform equally well across all members of the population of intended patient users

- Learn how to evaluate the performance of an algorithm processing sensor generated technology using the analytical validation steps of DiMe's [V3 framework](#)
- Review specific considerations pertinent to equity of algorithms used to generate digital clinical measures in DATAcc by DiMe's [inclusion toolkit](#)

Appropriate standards should be applied to data processing

- Review current standards pertinent to data processing [here](#)

Data Processing



Sensor-generated data is not clinically interpretable at the point of collection. For example, the electric currents on the skin captured by an ECG must be processed into heart rate before a person can understand the clinical relevance of the data. Substantial data processing is required to transform the signals captured by sensors and the high velocity flows of data they generate into information suitable for clinical decision-making.

See quick-start guides on other ART criteria



[Data Collection](#)



[Data Transmission](#)



[Data Privacy](#)



[Data Security](#)



[Data Quality](#)