



# DATA QUALITY in the world of Healthcare



The amount of data available across Healthcare services has grown exponentially recently. The sharing of data and progress across the sector is becoming a requirement, as countries work together on global issues. Poor quality data is no better than having no data at all, and sometimes can even have a negative impact as time is spent attempting to use it and incorrect conclusions can be drawn from it.



## What are the Issues Currently Facing Healthcare?

Issues with data quality can be varied, ranging from missing values, to the data itself being invalid, e.g. input not matching national definitions. The potential uses for medical data are varied and valuable, however, a high level of data quality is essential to be able to maximise the potential opportunity and safeguard against mis-identification.

Incomplete or inaccurate data is not a secure foundation for data sharing. Interoperability enables safer transitions of care, which leads to better patient outcomes over all. For example, a patient who is on vacation and falls ill may not be able to provide all details of his medical history, which can make all the difference to the doctor charged with his care.

## Healthcare has undergone Rapid Digital Transformation

With massive amounts of data being collected every minute, it is essential that there are transparent data quality standards that help support evidenced based care. In particular, data quality is paramount when trying to interpret and design healthcare policy based on the trends and patterns identified by automated analytics of big data or longitudinal patient data spanning many years.



**BUTTERFLY**  
DATA



## THE SOLUTION

A data literate healthcare organization with a robust governance process and emphasis on data quality throughout the patient care life cycle can be transformative, embedding insight the company generates from its data and improving processes iteratively based on feedback. A good data quality culture would include having controls for how data is validated on entry or capture, and systems to automatically check the quality of data, and where possible also remediate and standardise the data to improve it.



**DATA INTEGRATION**  
Identifying, obtaining, and combining raw data



**DATA QUALITY**  
Evaluating, cleansing, and refining for maximum benefit



**DATA TRANSFORMATION**  
Preparation, filtering, and segmentation



**ANALYTICS & MODELING**  
Analysis, insights, and visualizations



**DATA SCIENCE**  
Machine learning, classification, and prediction

## THE BUTTERFLY VALUE ADD

At Butterfly Data we have experience improving data quality at all touchpoints. Our aim is to apply our analytical expertise your data problems and assist with implementation of consistent procedures to ensure that high-quality data is available for you to:

- Improve analysis of key metrics
- Support and improve dashboard development.
- Measurably improve patient care.
- Support population health management.
- Support commissioning decisions and policy developments.
- Create, support and improve patient-centric analyses.



*Increased data quality means better insights from your data. Better insights can lead to efficiency gains, so healthcare professionals can focus on what they do best, providing better care for patients.*

