What is claimed is:

1. A method for determining a data quality rule for a particular field of a dataset, the dataset including data records having data elements for each of one or more fields, the method including:

analyzing data records in one or more particular instances of the dataset, including analyzing data elements for the particular field for the analyzed data records to determine a reference profile for the particular field for the analyzed data records in the one or more particular instances of the dataset; and

based on the determined reference profile, determining a data quality rule for the particular field of the dataset, in which the data quality rule for the particular field of the dataset is indicative of one or more of:

(i) an allowable deviation between the reference profile for the particular field and a profile for the particular field of an instance of the dataset,

(ii) an allowable value for a data element for the particular field of a data record of an instance of the dataset, or

(iii) a prohibited value for a data element for the particular field of a data record of an instance of the dataset.

2. The method of claim 1, in which analyzing data records in the one or more particular instances of the dataset includes analyzing data elements for the particular field for data records of one or more historical instances of the dataset.

3. The method of claim 1, in which determining the reference profile for the particular field includes determining an historical average profile for the particular field.

4. The method of claim 3, in which analyzing data records in the one or more particular instances of the dataset includes analyzing data elements for the particular field for data records of multiple particular instances of the dataset until a variation in the historical average profile for the data element in the particular field varies less than a threshold amount.

5. The method of claim 1, in which determining the reference profile for the particular field includes identifying an historical average value for a data element for the particular field.

6. The method of claim 1, in which determining the reference profile for the particular field includes identifying a standard deviation of values for a data element for the particular field.

7. The method of claim 1, in which determining the reference profile for the particular field includes identifying a number of distinct values for a data element for the particular field.

8. The method of claim 1, in which analyzing data records in the one or more particular instances of the dataset includes analyzing data records in a predefined number of particular instances of the dataset.

9. The method of claim 1, including analyzing data records in the one or more particular instances of the dataset using machine learning techniques.

10. The method of claim 1, including applying the data quality rule to data records of a second particular instance of the dataset.

11. The method of claim 10, in which applying the data quality rule to data records of the second particular instance of the dataset includes determining that the second particular instance of the dataset has an error or possible error.

12. The method of claim 11, in which determining that the second particular instance of the dataset has an error or possible error includes:

determining a deviation between the reference profile for the particular field and a profile for the particular field of the second particular instance of the dataset; and

determining that the deviation between the reference profile and the profile exceeds the allowable deviation.

13. The method of claim 11, in which determining that the second particular instance of the dataset has an error or possible error includes identifying a data element for the particular field for one or more data records of the second particular instance of the dataset that does not satisfy either the allowable value or the prohibited value.

14. A non-transitory computer readable medium storing instructions for causing a computing system to determine a data quality rule for a particular field of a dataset, the dataset including data records having data elements for each of one or more fields, the instructions causing the computing system to perform the method of any one of claims 1-13.

15. A computing system for determining a data quality rule for a particular field of a dataset, the dataset including data records having data elements for each of one or more fields, the computing system including:

one or more processors coupled to a memory, the one or more processors and memory configured to perform the method of any one of claims 1-13.