

# DATA DICTIONARY

1. id: Unique identifier for each record.
2. encounter\_id: Unique identifier for each patient encounter.
3. patient\_nbr: Unique identifier for each patient.
4. race: Patient's reported race.
5. gender: Patient's gender.
6. age: Patient's age group.
7. weight: Patient's weight (if available).
8. admission\_type\_id: Identifier for the type of admission (e.g., emergency, elective, etc.).
9. discharge\_disposition\_id: Identifier for the disposition of the patient upon discharge (e.g., home, hospice, etc.).
10. admission\_source\_id: Identifier for the source of admission (e.g., emergency room, referring physician, etc.).
11. time\_in\_hospital: Number of days the patient spent in the hospital.
12. payer\_code: Code for the insurance provider.
13. medical\_specialty: Specialty of the admitting physician.
14. num\_lab\_procedures: Number of laboratory procedures the patient underwent.
15. num\_procedures: Number of non-lab procedures the patient underwent.
16. num\_medications: Number of medications the patient was on.
17. number\_outpatient: Number of outpatient visits the patient had.
18. number\_emergency: Number of emergency visits the patient had.
19. number\_inpatient: Number of inpatient visits the patient had.
20. diag\_1: Primary diagnosis code.
21. diag\_2: Secondary diagnosis code 1.
22. diag\_3: Secondary diagnosis code 2.
23. number\_diagnoses: Number of diagnoses associated with the patient encounter.
24. max\_glu\_serum: Maximum glucose serum test result.
25. A1Cresult: A1C test result.
26. metformin: Medication status for metformin.
27. repaglinide: Medication status for repaglinide.
28. nateglinide: Medication status for nateglinide.
29. chlorpropamide: Medication status for chlorpropamide.
30. glimepiride: Medication status for glimepiride.
31. acetohexamide: Medication status for acetohexamide.
32. glipizide: Medication status for glipizide.
33. glyburide: Medication status for glyburide.

34. tolbutamide: Medication status for tolbutamide.
35. pioglitazone: Medication status for pioglitazone.
36. rosiglitazone: Medication status for rosiglitazone.
37. acarbose: Medication status for acarbose.
38. miglitol: Medication status for miglitol.
39. troglitazone: Medication status for troglitazone.
40. tolazamide: Medication status for tolazamide.
41. examide: Medication status for examide.
42. citoglipton: Medication status for citoglipton.
43. insulin: Medication status for insulin.
44. glyburide.metformin: Medication status for combination of glyburide and metformin.
45. glipizide.metformin: Medication status for combination of glipizide and metformin.
46. glimepiride.pioglitazone: Medication status for combination of glimepiride and pioglitazone.
47. metformin.rosiglitazone: Medication status for combination of metformin and rosiglitazone.
48. metformin.pioglitazone: Medication status for combination of metformin and pioglitazone.
49. change: Whether there was a change in diabetes medications.
50. diabetesMed: Whether the patient was on diabetes medications.
51. readmitted: Whether the patient was readmitted to the hospital.

## FEATURE DESCRIPTION

1. **id:** Unique identifier for each record. This column may not have a direct medical significance but can help keep track of individual data points.
2. **encounter\_id:** Unique identifier for each patient encounter. This column helps identify and differentiate different visits or encounters for the same patient.
3. **patient\_nbr:** Unique identifier for each patient. This column helps track and distinguish different patients within the dataset.
4. **race:** Patient's reported race. This could be used to analyze disparities in healthcare outcomes among different racial groups.
5. **gender:** Patient's gender. Gender can play a role in medical diagnoses, treatments, and outcomes analysis.
6. **age:** Patient's age group. This can help categorize patients into age ranges and analyze how medical conditions and treatments vary with age.
7. **weight:** Patient's weight (if available). Weight is crucial for medication dosing and assessing overall health.
8. **admission\_type\_id:** Identifier for the type of admission. This can be used to analyze the distribution of different admission types and their impact on outcomes.
9. **discharge\_disposition\_id:** Identifier for the disposition of the patient upon discharge. This could help study where patients are sent after their hospital stay and assess readmission rates based on these dispositions.
10. **admission\_source\_id:** Identifier for the source of admission. This helps analyze where patients are coming from when they enter the hospital.
11. **time\_in\_hospital:** Number of days the patient spent in the hospital. This could provide insights into the severity of the patient's condition and its impact on the length of stay.
12. **payer\_code:** Code for the insurance provider. This could be used to analyze healthcare utilization and outcomes based on different insurance providers.

13. `medical_specialty`: Specialty of the admitting physician. This could help understand how different medical specialties are associated with specific patient populations or conditions.
14. `num_lab_procedures`: Number of laboratory procedures the patient underwent. This could indicate the extent of diagnostic testing done for a patient.
15. `num_procedures`: Number of non-lab procedures the patient underwent. This might include surgeries or other interventions.
16. `num_medications`: Number of medications the patient was on. This can provide insight into the complexity of the patient's medical regimen.
17. `number_outpatient`: Number of outpatient visits the patient had. This could indicate the frequency of post-discharge follow-up visits.
18. `number_emergency`: Number of emergency visits the patient had. This could reflect the patient's overall health status and utilization of emergency services.
19. `number_inpatient`: Number of inpatient visits the patient had. This could reflect the patient's overall hospitalization history.
20. `diag_1`, `diag_2`, `diag_3`: Primary and secondary diagnosis codes. These codes represent the medical conditions the patient was diagnosed with during the encounter.
21. `number_diagnoses`: Number of diagnoses associated with the patient encounter. This could give an indication of the complexity of the patient's medical condition.
22. `max_glu_serum`: Maximum glucose serum test result. This could indicate the patient's glucose control.
23. `A1Cresult`: A1C test result. This test measures a patient's average blood sugar levels over the past few months, giving insight into diabetes management.
24. `metformin`, `repaglinide`, etc.: Medication status columns. These columns indicate whether the patient was on specific medications, which can be used to study treatment adherence and effectiveness.
25. `change`: Whether there was a change in diabetes medications. This could indicate adjustments made to the patient's treatment regimen.

26. diabetesMed: Whether the patient was on diabetes medications. This gives an overall view of the patient's medication status.
27. readmitted: Whether the patient was readmitted to the hospital. This could be used for readmission prediction and analyzing factors associated with readmission.