

Variable Name	Role	Type	Description	Missing Values
encounter_id	ID		Unique identifier of an encounter	no
patient_nbr	ID		Unique identifier of a patient	no
race	Feature	Categorical	Values: Caucasian, Asian, African American, Hispanic, and other	yes
gender	Feature	Categorical	Values: male, female, and unknown/invalid	no
age	Feature	Categorical	Grouped in 10-year intervals: [0, 10), [10, 20),..., [90, 100)	no
weight	Feature	Categorical	Weight in pounds.	yes
admission_type_id	Feature	Categorical	Integer identifier corresponding to 9 distinct values, for example, emergency, urgent, elective, newborn, and not available	no
discharge_disposition_id	Feature	Categorical	Integer identifier corresponding to 29 distinct values, for example, discharged to home, expired, and not available	no
admission_source_id	Feature	Categorical	Integer identifier corresponding to 21 distinct values, for example, physician referral, emergency room, and transfer from a hospital	no
time_in_hospital	Feature	Integer	Integer number of days between admission and discharge	no
payer_code	Feature	Categorical	Integer identifier corresponding to 23 distinct values, for example, Blue Cross/Blue Shield, Medicare, and self-pay	yes
medical_specialty	Feature	Categorical	Integer identifier of a specialty of the admitting physician, corresponding to 84 distinct values, for example, cardiology, internal medicine, family/general practice, and surgeon	yes
num_lab_procedures	Feature	Integer	Number of lab tests performed during the encounter	no
num_procedures	Feature	Integer	Number of procedures (other than lab tests) performed during the encounter	no
num_medications	Feature	Integer	Number of distinct generic names administered during the encounter	no
number_outpatient	Feature	Integer	Number of outpatient visits of the patient in the year preceding the encounter	no
number_emergency	Feature	Integer	Number of emergency visits of the patient in the year preceding the encounter	no

number_inpatient	Feature	Integer	Number of inpatient visits of the patient in the year preceding the encounter	no
diag_1	Feature	Categorical	The primary diagnosis (coded as first three digits of ICD9); 848 distinct values	yes
diag_2	Feature	Categorical	Secondary diagnosis (coded as first three digits of ICD9); 923 distinct values	yes
diag_3	Feature	Categorical	Additional secondary diagnosis (coded as first three digits of ICD9); 954 distinct values	yes
number_diagnoses	Feature	Integer	Number of diagnoses entered to the system	no
max_glu_serum	Feature	Categorical	Indicates the range of the result or if the test was not taken. Values: >200, >300, normal, and none if not measured	no
A1Cresult	Feature	Categorical	Indicates the range of the result or if the test was not taken. Values: >8 if the result was greater than 8%, >7 if the result was greater than 7% but less than 8%, normal if the result was less than 7%, and none if not measured.	no
metformin	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
repaglinide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
nateglinide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no

chlorpropamide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glimepiride	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
acetohexamide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glipizide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glyburide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
tolbutamide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no

pioglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
rosiglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
acarbose	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
miglitol	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
troglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
tolazamide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no

examide	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
citoglipton	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
insulin	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glyburide-metformin	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glipizide-metformin	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
glimepiride-pioglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no

metformin-rosiglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
metformin-pioglitazone	Feature	Categorical	The feature indicates whether the drug was prescribed or there was a change in the dosage. Values: up if the dosage was increased during the encounter, down if the dosage was decreased, steady if the dosage did not change, and no if the drug was not prescribed	no
change	Feature	Categorical	Indicates if there was a change in diabetic medications (either dosage or generic name). Values: change and no change	no
diabetesMed	Feature	Categorical	Indicates if there was any diabetic medication prescribed. Values: yes and no	no
readmitted	Target	Categorical	Days to inpatient readmission. Values: <30 if the patient was readmitted in less than 30 days, >30 if the patient was readmitted in more than 30 days, and No for no record of readmission.	no