# EPRD Dataset - Feature Analysis

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| Name | Description | Data type | Missingness |
|---|---|---|---|
| aufndatum | Date the patient was admitted to the hospital. | Date | No |
| opdatum | Date the operation took place. | Date | No |
| entl_verleg_tag | Date the patient was discharged from the hospital. | Date | No |
| TimeToSurgery | Time between admission and surgery. | Numerical | No |
| TimeToDischarge | Time between surgery and discharge. | Number | No |
| Weekday | Weekday of operation (Montag-Sonntag). | Categorical | No |
| Holiday | 1 for operation on a holiday, 0 otherwise. | Boolean | No |
| Weekend | 1 for operation on the weekend, 0 otherwise. | Boolean | No |
| HoliWeekend | 1 if **Holiday** OR **Weekend** are true, 0 otherwise. | Boolean | No |
| TypeTreatment | Hemi endoprosthesis ("Hemi") or total endoprosthesis ("HTEP"). | Categorical | No |

| Diagnosis | ICD-code for the primary diagnosis | Categorical | No |
|---|---|---|---|
| entl_verleg_grund | Number code for the discharge reason. | Categorical | No |
| VitalStatus | 1 for deceased patients, 0 for alive. | Boolean | No |
| Sex | "male" or "female". | Categorical | No |
| AgeAdmission | Age of admission. | Numerical | No |
| AgeDekade | Decade of admission age. | Numerical | No |
| GeriatricComplexTreat | 1 if a geriatric complex treatment took place during the patient's stay, 0 otherwise. | Boolean | No |
| FixationNum | Number denoting **Fixation**. | Categorical | No |
| Fixation | Type of fixation of the patient's prosthesis (i.e. "zementiert", "zementfrei", etc.). | Categorical | No |
| TypeHemi | Type of hemi endoprosthesis if applicable, "NA" otherwise. | Categorical | No |
| TypeHemiNum | Number denoting **TypeHemi**. | Categorical | No |
| TypeShaft | Prosthetic shaft type. | Categorical | Yes (0.0051%) |
| TypeShell | Prosthetic shell type. | Categorical | Yes (67.3%) |

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|---|---|---|---|
| Durability | Equivalent to **ObservationTime**. | Numerical | No |
| Failure | 1 if the prosthetic failed, 0 otherwise. | Boolean | No |
| FailInfection | 1 if the failure was caused by infection, 0 otherwise. | Boolean | No |
| FailMech | 1 if the failure was mechanical, 0 otherwise. | Boolean | No |
| ObservationTime | Number of days the patient was observed with a correctly operating prosthetic. | Numerical | No |
| OPSCodesWechsel | OPS-codes conducted during the operation. | Categorical | No |
| AngegebenerWechselgrund | If a prior operation occurred, the reason for it is denoted here. | Categorical | Yes (0.43%) |
| Numb_ElixDiagnosis | Number of Elixhauser-comorbidities present in the patient. | Numerical | Yes (0.43%) |
| ElixhauserScore | Mortality score calculated via Van-Walraven algorithm using the number of Elixhauser-comorbidities. | Numerical | Yes (0.43%) |
| NumYear2022 | Number of operations the respective hospital conducted in the year 2022. | Numerical | Yes (33.4%) |
| BMI | Body Mass Index of the patient. | Numerical | Yes (21.9%) |
| TypeStemFixation | Stem fixation type. | Categorical | No |