ATLAS Stride7 dataset extraction

The purpose of this document is to provide a definitive manual to understand every aspect of Stride7 dataset extraction and transformation into ATLAS database. All information is organized based on language features available in ATLAS to understand where do all the datapoints from ATLAS originate.

Exclusion of patients
Patients, for whom there are no information outlined in this document are excluded. If patients have only demographic data and not other extractable information, they are excluded as well.

Exclusion of events
Events are excluded if they are based on a date that is either empty, null or zero.

Time precision
Since there is varying time precision in the dataset, we used the highest precision possible, in this case the precision is 1 day. Events that happened on the same day will be treated as if they happened at the same time. All the time events are extracted with FLOOR() to round the decimal portion of the offset to day precision.

ICD9

ICD9 datapoint is characterized by:
- ICD9 code
- start time (in minutes)
- end time (in minutes)
- primary flag

LPCH_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id, YEAR(admit_date_time) FROM stride7.LPCH_dx_admit_de

SELECT dx_id, current_icd9_list FROM stride7.dictionary_diagnoses_LPCH

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id, YEAR(admit_date_time) FROM stride7.SHC_dx_admit_de

SELECT dx_id, current_icd9_list FROM stride7.dictionary_diagnoses_SHC

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

LPCH_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id, YEAR(contact_date) FROM stride7.LPCH_dx_extinjury_de

SELECT dx_id, current_icd9_list FROM stride7.dictionary_diagnoses_LPCH

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes

FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date) FROM stride7.SHC_dx_extinjury_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

LPCH_dx_hl7_de

SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(visit_duration), **code**, visit_type, dx_px_type_text, YEAR(contact_date) FROM stride7.LPCH_dx_hl7_de

code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start time
FLOOR(visit_duration) + FLOOR(age_at_contact_in_days) => end time
YEAR(contact_date) => year
PRIMARY = true if dx_px_type_text starts with "Primary"

SHC_dx_hl7_de

SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(visit_duration), **code**, visit_type, dx_px_type_text, YEAR(contact_date) FROM stride7.SHC_dx_hl7_de

code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start time
FLOOR(visit_duration) + FLOOR(age_at_contact_in_days) => end time
YEAR(contact_date) => year
PRIMARY = true if dx_px_type_text starts with "Primary"

LPCH_dx_hsp_acct_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.LPCH_dx_hsp_acct_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_dx_hsp_acct_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.SHC_dx_hsp_acct_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1

dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes

```
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false
```

LPCH_dx_pat_enc_de

SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date), primary_dx_yn FROM stride7.LPCH_dx_pat_enc_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 1

```
dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if primary_dx_yn = "Y"
```

SHC_dx_pat_enc_de

SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date), primary_dx_yn FROM stride7.SHC_dx_pat_enc_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1

```
dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if primary_dx_yn = "Y"
```

LPCH_dx_prob_list_de

SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), **dx_id**, YEAR(noted_date), principal_pl_yn FROM stride7.LPCH_dx_prob_list_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 1

```
dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if principal_pl_yn = "Y"
```

SHC_dx_prob_list_de

SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), **dx_id**, YEAR(noted_date), principal_pl_yn FROM stride7.SHC_dx_prob_list_de

SELECT **dx_id**, **current_icd9_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1

```
dx_id => current_icd9_list => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent codes
FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if principal_pl_yn = "Y"
```

LPCH_px_icd_de

```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM
stride7.LPCH_px_icd_de
```

code => (only if sab = "ICD9CM") => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent
codes
visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(age_at_contact_in_days) => year
PRIMARY = false

SHC_px_icd_de
```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM
stride7.SHC_px_icd_de
```

code => (only if sab = "ICD9CM") => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent
codes
visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(age_at_contact_in_days) => year
PRIMARY = false

LPCH_px_cpt_prov_de
```
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id,
dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM
stride7.LPCH_px_cpt_prov_de

SELECT primary_dx_id, current_icd9_list FROM stride7.dictionary_diagnoses_LPCH

SELECT primary_dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c =
1
```

primary_dx_id => (only if > 0) => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent
codes
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = true

Same process follows the **dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id**, except that the
PRIMARY = false

SHC_px_cpt_prov_de
```
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id,
dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM
stride7.SHC_px_cpt_prov_de

SELECT primary_dx_id, current_icd9_list FROM stride7.dictionary_diagnoses_SHC

SELECT primary_dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 1
```

primary_dx_id => (only if > 0) => hierarchical expansion in ICD9 hierarchy => ICD9 + all the parent
codes
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = true

Same process follows the **dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id**, except that the
PRIMARY = false

LPCH_px_icd_hsp_de
```
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), ref_bill_code, ref_bill_code_set_c FROM
stride7.LPCH_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.lpch_cl_icd_px on
(stride7.LPCH_px_icd_hsp_de.icd_px_id = stride7_dictionaries.lpch_cl_icd_px.icd_px_id)
```

ref_bill_code => (only if > ref_bill_code_set_c = 1) => hierarchical expansion in ICD9 hierarchy =>
ICD9 + all parent codes
FLOOR(age_at_proc_in_days) => start date

```
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = false
```

SHC_px_icd_hsp_de
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), **ref_bill_code**, ref_bill_code_set_c FROM stride7.SHC_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.shc_cl_icd_px on (stride7.SHC_px_icd_hsp_de.icd_px_id = stride7_dictionaries.shc_cl_icd_px.icd_px_id)

```
ref_bill_code => (only if > ref_bill_code_set_c = 1) => hierarchical expansion in ICD9 hierarchy =>
ICD9 + all parent codes
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = false
```

ICD10

```
ICD10 datapoint is characterized by:
- ICD10 code
- start time (in minutes)
- end time (in minutes)
- primary flag
```

LPCH_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.LPCH_dx_admit_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2

```
dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character
=> split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the
parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false
```

SHC_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.SHC_dx_admit_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2

```
dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character
=> split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the
parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false
```

LPCH_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date) FROM stride7.LPCH_dx_extinjury_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date) FROM stride7.SHC_dx_extinjury_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

LPCH_dx_hsp_acct_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.LPCH_dx_hsp_acct_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_dx_hsp_acct_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), **dx_id**, YEAR(admit_date_time) FROM stride7.SHC_dx_hsp_acct_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_SHC

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

LPCH_dx_pat_enc_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), **dx_id**, YEAR(contact_date), primary_dx_yn FROM stride7.LPCH_dx_pat_enc_de

SELECT **dx_id**, **current_icd10_list** FROM stride7.dictionary_diagnoses_LPCH

SELECT **dx_id**, **ref_bill_code** FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if primary_dx_yn = "Y"

SHC_dx_pat_enc_de
```sql
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id, YEAR(contact_date), primary_dx_yn FROM stride7.SHC_dx_pat_enc_de

SELECT dx_id, current_icd10_list FROM stride7.dictionary_diagnoses_SHC

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2
```

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if primary_dx_yn = "Y"

LPCH_dx_prob_list_de
```sql
SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), dx_id, YEAR(noted_date), principal_pl_yn FROM stride7.LPCH_dx_prob_list_de

SELECT dx_id, current_icd10_list FROM stride7.dictionary_diagnoses_LPCH

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2
```

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if principal_pl_yn = "Y"

SHC_dx_prob_list_de
```sql
SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), dx_id, YEAR(noted_date), principal_pl_yn FROM stride7.SHC_dx_prob_list_de

SELECT dx_id, current_icd10_list FROM stride7.dictionary_diagnoses_SHC

SELECT dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2
```

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"
PRIMARY = true if principal_pl_yn = "Y"

LPCH_px_cpt_prov_de
```sql
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id, dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM stride7.LPCH_px_cpt_prov_de

SELECT primary_dx_id, current_icd10_list FROM stride7.dictionary_diagnoses_LPCH
```

```sql
SELECT primary_dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_LPCH where ref_bill_code_set_c = 2
```

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = true

Same process follows the dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, except that the PRIMARY = false

SHC_px_cpt_prov_de
```sql
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id, dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM stride7.SHC_px_cpt_prov_de
```

```sql
SELECT primary_dx_id, current_icd10_list FROM stride7.dictionary_diagnoses_SHC
```

```sql
SELECT primary_dx_id, ref_bill_code FROM stride7.dictionary_diagnoses_SHC where ref_bill_code_set_c = 2
```

dx_id => current_icd10_list => text field can contain multiple ICD10 codes delimited by ',' character => split into individual ICD10 codes => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
dx_id => ref_bill_code => hierarchical expansion in ICD10 hierarchy => ICD10 + all the parent codes
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = true

Same process follows the dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, except that the PRIMARY = false

LPCH_px_icd_hsp_de
```sql
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), ref_bill_code, ref_bill_code_set_c FROM stride7.LPCH_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.lpch_cl_icd_px on (stride7.LPCH_px_icd_hsp_de.icd_px_id = stride7_dictionaries.lpch_cl_icd_px.icd_px_id)
```

ref_bill_code => (only if > ref_bill_code_set_c = 2) => hierarchical expansion in ICD10 hierarchy => ICD10 + all parent codes
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

SHC_px_icd_hsp_de
```sql
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), ref_bill_code, ref_bill_code_set_c FROM stride7.SHC_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.shc_cl_icd_px on (stride7.SHC_px_icd_hsp_de.icd_px_id = stride7_dictionaries.shc_cl_icd_px.icd_px_id)
```

ref_bill_code => (only if > ref_bill_code_set_c = 2) => hierarchical expansion in ICD10 hierarchy => ICD10 + all parent codes
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
PRIMARY = false

VISIT TYPE

VISIT TYPE datapoint is characterized by:
- VISIT TYPE name
- start time (in minutes)
- end time (in minutes)

SHC_visit_de
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), **enc_type_c**,
FLOOR(age_at_hosp_admsn_in_days), FLOOR(age_at_hosp_disch_in_days) FROM stride7.SHC_visit_de

SELECT disp_enc_type_c,**name** FROM stride7_dictionaries.shc_zc_disp_enc_type

1. If age_at_contact_in_days > 0 AND enc_type_c exists in the shc_zc_disp_enc_type
enc_type_c => name => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date

2. If age_at_hosp_admsn_in_days > 0 AND age_at_hosp_disch_in_days > 0
enc_type_c = "INPATIENT"
FLOOR(age_at_hosp_admsn_in_days) => start date
FLOOR(age_at_hosp_disch_in_days) => end date

LPCH_visit_de
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), **enc_type_c**,
FLOOR(age_at_hosp_admsn_in_days), FLOOR(age_at_hosp_disch_in_days) FROM stride7.LPCH_visit_de

SELECT disp_enc_type_c,**name** FROM stride7_dictionaries.lpch_zc_disp_enc_type

1. If age_at_contact_in_days > 0 AND enc_type_c exists in the lpch_zc_disp_enc_type
enc_type_c => name => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date

2. If age_at_hosp_admsn_in_days > 0 AND age_at_hosp_disch_in_days > 0
enc_type_c = "INPATIENT"
FLOOR(age_at_hosp_admsn_in_days) => start date
FLOOR(age_at_hosp_disch_in_days) => end date

LPCH_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id,
YEAR(admit_date_time) FROM stride7.LPCH_dx_admit_de

FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"

SHC_dx_admit_de
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id,
YEAR(admit_date_time) FROM stride7.SHC_dx_admit_de

FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"

LPCH_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id,
YEAR(contact_date) FROM stride7.LPCH_dx_extinjury_de

FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"

SHC_dx_extinjury_de
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id,
YEAR(contact_date) FROM stride7.SHC_dx_extinjury_de

FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"

LPCH_dx_hl7_de

SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), **enc_type_c**,
FLOOR(age_at_hosp_admsn_in_days), FLOOR(age_at_hosp_disch_in_days) FROM stride7.LPCH_visit_de

```sql
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(visit_duration), code, visit_type,
dx_px_type_text, YEAR(contact_date) FROM stride7.LPCH_dx_hl7_de
```

visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start time
FLOOR(visit_duration) + FLOOR(age_at_contact_in_days) => end time
YEAR(contact_date) => year

SHC_dx_hl7_de

```sql
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(visit_duration), code, visit_type,
dx_px_type_text, YEAR(contact_date) FROM stride7.SHC_dx_hl7_de
```

visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start time
FLOOR(visit_duration) + FLOOR(age_at_contact_in_days) => end time
YEAR(contact_date) => year

LPCH_dx_hsp_acct_de
```sql
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id,
YEAR(admit_date_time) FROM stride7.LPCH_dx_hsp_acct_de
```

FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"

SHC_dx_hsp_acct_de
```sql
SELECT patient_id, FLOOR(age_at_admit_in_days), FLOOR(age_at_disch_in_days), dx_id,
YEAR(admit_date_time) FROM stride7.SHC_dx_hsp_acct_de
```

FLOOR(age_at_admit_in_days) = start time
FLOOR(age_at_disch_in_days) = end time
YEAR(admit_date_time) = year
VISIT TYPE = "UNKNOWN"

LPCH_dx_pat_enc_de
```sql
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id,
YEAR(contact_date), primary_dx_yn FROM stride7.LPCH_dx_pat_enc_de
```

FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"

SHC_dx_pat_enc_de
```sql
SELECT patient_id, FLOOR(age_at_contact_in_days), FLOOR(age_at_contact_in_days), dx_id,
YEAR(contact_date), primary_dx_yn FROM stride7.SHC_dx_pat_enc_de
```

FLOOR(age_at_contact_in_days) = start time
FLOOR(age_at_contact_in_days) = end time
YEAR(contact_date) = year
VISIT TYPE = "UNKNOWN"

LPCH_dx_prob_list_de
```sql
SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), dx_id, YEAR(noted_date),
principal_pl_yn FROM stride7.LPCH_dx_prob_list_de
```

FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"

SHC_dx_prob_list_de
```sql
SELECT patient_id, FLOOR(age_at_noted_in_days), FLOOR(age_at_noted_in_days), dx_id, YEAR(noted_date),
principal_pl_yn FROM stride7.SHC_dx_prob_list_de
```

FLOOR(age_at_noted_in_days) = start time
FLOOR(age_at_noted_in_days) = end time
YEAR(noted_date) = year
VISIT TYPE = "UNKNOWN"

LPCH_px_icd_de
```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM stride7.LPCH_px_icd_de
```

visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(age_at_contact_in_days) => year

SHC_px_icd_de
```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM stride7.SHC_px_icd_de
```

visit_type => VISIT TYPE
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(age_at_contact_in_days) => year

LPCH_px_cpt_prov_de
```
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id, dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM stride7.LPCH_px_cpt_prov_de
```

FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"

SHC_px_cpt_prov_de
```
SELECT patient_id, FLOOR(age_at_service_in_days), FLOOR(age_at_service_in_days), primary_dx_id, dx_two_id, dx_three_id, dx_four_id, dx_five_id, dx_six_id, YEAR(contact_date) FROM stride7.SHC_px_cpt_prov_de
```

FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"

LPCH_px_icd_hsp_de
```
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), ref_bill_code, ref_bill_code_set_c FROM stride7.LPCH_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.lpch_cl_icd_px on (stride7.LPCH_px_icd_hsp_de.icd_px_id = stride7_dictionaries.lpch_cl_icd_px.icd_px_id)
```

FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"

SHC_px_icd_hsp_de
```
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), ref_bill_code, ref_bill_code_set_c FROM stride7.SHC_px_icd_hsp_de LEFT OUTER join stride7_dictionaries.shc_cl_icd_px on (stride7.SHC_px_icd_hsp_de.icd_px_id = stride7_dictionaries.shc_cl_icd_px.icd_px_id)
```

FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"

LPCH_px_cpt_de
```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM stride7.LPCH_px_cpt_de
```

FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(contact_date) => year
visit_type => VISIT TYPE

SHC_px_cpt_de
```
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), code, sab, visit_type FROM stride7.SHC_px_cpt_de
```

FLOOR(age_at_contact_in_days) => start date

```
FLOOR(age_at_contact_in_days) => end date
YEAR(contact_date) => year
visit_type => VISIT TYPE
```

LPCH_px_cpt_hsp_de
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), cpt_code FROM
stride7.LPCH_px_cpt_hsp_de

```
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
```

SHC_px_cpt_hsp_de
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), cpt_code FROM stride7.SHC_px_cpt_hsp_de

```
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
```

LPCH_px_cpt_prov_de
SELECT patient_id, FLOOR(age_at_service_in_days), YEAR(contact_date), cpt_code FROM
stride7.LPCH_px_cpt_prov_de

```
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
```

SHC_px_cpt_prov_de
SELECT patient_id, FLOOR(age_at_service_in_days), YEAR(contact_date), cpt_code FROM
stride7.SHC_px_cpt_prov_de

```
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
```

CPT

```
CPT datapoint is characterized by:
- CPT code
- start time (in minutes)
- end time (in minutes)
```

LPCH_px_cpt_de
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), **code**, sab, visit_type FROM
stride7.LPCH_px_cpt_de

```
code => CPT
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(contact_date) => year
visit_type => VISIT TYPE
```

SHC_px_cpt_de
SELECT patient_id, FLOOR(age_at_contact_in_days), YEAR(contact_date), **code**, sab, visit_type FROM
stride7.SHC_px_cpt_de

```
code => CPT
FLOOR(age_at_contact_in_days) => start date
FLOOR(age_at_contact_in_days) => end date
YEAR(contact_date) => year
visit_type => VISIT TYPE
```

LPCH_px_cpt_hsp_de
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), **cpt_code** FROM stride7.LPCH_px_cpt_hsp_de

```
cpt_code => CPT
FLOOR(age_at_proc_in_days) => start date
```

```
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
```

SHC_px_cpt_hsp_de
SELECT patient_id, FLOOR(age_at_proc_in_days), YEAR(proc_date), **cpt_code** FROM stride7.SHC_px_cpt_hsp_de

```
cpt_code => CPT
FLOOR(age_at_proc_in_days) => start date
FLOOR(age_at_proc_in_days) => end date
YEAR(proc_date) => year
VISIT TYPE = "UNKNOWN"
```

LPCH_px_cpt_prov_de
SELECT patient_id, FLOOR(age_at_service_in_days), YEAR(contact_date), **cpt_code** FROM stride7.LPCH_px_cpt_prov_de

```
cpt_code => CPT
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
```

SHC_px_cpt_prov_de
SELECT patient_id, FLOOR(age_at_service_in_days), YEAR(contact_date), **cpt_code** FROM stride7.SHC_px_cpt_prov_de

```
cpt_code => CPT
FLOOR(age_at_service_in_days) => start date
FLOOR(age_at_service_in_days) => end date
YEAR(contact_date) => year
VISIT TYPE = "UNKNOWN"
```

LABS

```
LAB datapoint is characterized by:
- LAB code
- time (in minutes)
- numeric value (optional)
- textual value (optional)
```

```
Numeric and textual values are stored independently of each other, so there is no link between a
textual and numeric values.
```

```
If a lab has more than 20 unique textual results (case insensitive), the textual values will not be
recorded.
```

LPCH_lab_de
SELECT patient_id, FLOOR(age_at_lab_in_days), YEAR(lab_time), component_text, labvalue, **LOINC_CODE** FROM stride7.LPCH_lab_de

SELECT LOINC_CODE, **long_common_name** FROM stride7.dictionary_loinc

```
LOINC_CODE not null => long_common_name => LAB code
LOINC_CODE is null => component_text => LAB code
age_at_lab_in_days => time
```

```
1. labvalue == null
textual value = "NO VALUE"
numeric value = N/A
```

```
2. lab value is numeric
textual value = N/A
numeric value = labvalue
```

LPCH_lab_epic_de
SELECT patient_id, FLOOR(age_at_taken_in_days), YEAR(taken_time), lab_name, ord_value, **LOINC_CODE** FROM stride7.LPCH_lab_epic_de

SELECT LOINC_CODE, **long_common_name** FROM stride7.dictionary_loinc

```
LOINC_CODE not null => long_common_name => LAB code
LOINC_CODE is null => lab_name => LAB code
```

```
age_at_taken_in_days => time

1. ord_value == null || ord_value.trim() is empty
textual value = "NO VALUE"
numeric value = N/A

2. ord_value is numeric
textual value = N/A
numeric value = ord_value

3. ord_value is textual
textual value = ord_value
numeric value = N/A
```

SHC_lab_epic_de

SELECT patient_id, FLOOR(age_at_taken_in_days), YEAR(taken_time), lab_name, ord_value, **LOINC_CODE** FROM stride7.SHC_lab_epic_de

SELECT LOINC_CODE, **long_common_name** FROM stride7.dictionary_loinc

```
LOINC_CODE not null => long_common_name => LAB code
LOINC_CODE is null => lab_name => LAB code
age_at_taken_in_days => time

1. ord_value == null || ord_value.trim() is empty
textual value = "NO VALUE"
numeric value = N/A

2. ord_value is numeric
textual value = N/A
numeric value = ord_value

3. ord_value is textual
textual value = ord_value
numeric value = N/A
```

Cultures labs

SELECT stride7.SHC_lab_epic_comment_de.patient_id, FLOOR(stride7.SHC_lab_epic_de.age_at_taken_in_days), YEAR(stride7.SHC_lab_epic_de.taken_time), stride7.SHC_lab_epic_de.**group_lab_name**, stride7.SHC_lab_epic_comment_de.cmt_results FROM stride7.SHC_lab_epic_comment_de join stride7.SHC_lab_epic_de on (stride7.SHC_lab_epic_comment_de.order_proc_id = stride7.SHC_lab_epic_de.order_proc_id) where stride7.SHC_lab_epic_de.group_lab_name like "%culture%"

SELECT cmt_result, **mapped_name**, **flag** from user_podalv.lab_cultures_map

SELECT group_lab_name, **mapped** FROM user_podalv.lab_cultures_lab_names_map

```
For all the labs that have a group_lab_name that contains "culture" string, extract the name and
transform it to "CULTURE [xxxx]" name. If the cmt_results contains a string enclosed with "[" "]"
characters, extract the string within the brackets as it is a name of a positive virus / bacteria
finding. If there are no braces, it indicates a NEGATIVE finding.

group_lab_name => transformed LAB code
age_at_taken_in_days => time
textual value = transformed cmt_results or "NEGATIVE" if cmt_results does not contain "[" "]"
```

DEPARTMENT

```
DEPARTMENT datapoint is characterized by:
- DEPARTMENT name
- start time (in minutes)
- end time (in minutes)
```

SHC_visit_de

SELECT patient_id, **department_id**, FLOOR(age_at_contact_in_days), YEAR(contact_date) FROM stride7.SHC_visit_de

SELECT department_id, **department_name** FROM stride7.dictionary_department_SHC

```
department_id => department_name => DEPARTMENT name
age_at_contact_in_days => start time
age_at_contact_in_days => end time
```

LPCH_visit_de
SELECT patient_id, **department_id**, FLOOR(age_at_contact_in_days), YEAR(contact_date) FROM stride7.LPCH_visit_de

SELECT department_id, **department_name** FROM stride7.dictionary_department_LPCH

department_id => department_name => DEPARTMENT name
age_at_contact_in_days => start time
age_at_contact_in_days => end time

SHC_visit_appt_de
SELECT patient_id, **department_id**, FLOOR(age_at_contact_in_days), YEAR(contact_date) FROM stride7.SHC_visit_appt_de

SELECT department_id, **department_name** FROM stride7.dictionary_department_SHC

department_id => department_name => DEPARTMENT name
age_at_contact_in_days => start time
age_at_contact_in_days => end time

LPCH_visit_appt_de
SELECT patient_id, **department_id**, FLOOR(age_at_contact_in_days), YEAR(contact_date) FROM stride7.LPCH_visit_appt_de

SELECT department_id, **department_name** FROM stride7.dictionary_department_LPCH

department_id => department_name => DEPARTMENT name
age_at_contact_in_days => start time
age_at_contact_in_days => end time

RX

RX datapoint is characterized by:
- RxNorm code
- start time (in minutes)
- end time (in minutes)
- route
- status

Medication records with status "Canceled" or "Denied Approval" are ignored as they were not dispensed.

LPCH_med_de
SELECT patient_id, **medication_id**, FLOOR(age_at_order_in_days), YEAR(order_time), **order_status_c**, **med_route_c**, med_id, FLOOR(age_at_start_in_days), FLOOR(age_at_end_in_days), FLOOR(age_at_discon_in_days), **ordering_mode_c**, **order_class_c** FROM stride7.LPCH_med_de

SELECT medication_id, **rxcui** FROM user_podalv.dictionary_medications_LPCH

SELECT order_status_c, **name** FROM stride7_dictionaries.lpch_zc_order_status where name <> ""

SELECT order_class_c, **name** FROM stride7_dictionaries.lpch_zc_order_class

SELECT med_route_c, **accom_reason_c** FROM stride7_dictionaries.shc_zc_admin_route

If there is med_id record in SHC_med_admin_de table, times in the SHC_med_admin_de are used and override times in this table

medication_id => rxcui => RxNorm code
start time = age_at_start_in_days (if null, age_at_order_in_days is used)
end time = age_at_discon_in_days (if null, age_at_end_in_days is used)
med_route_c => accom_reson_c => route
status:
1. if there is med_id record in LPCH_med_admin_de table, "INPATIENT ADMINISTERED" is used
2. if ordering_mode_c == 1 "INPATIENT PRESCRIBED" is used
3. if ordering_mode_c == 1 "OUTPATIENT PRESCRIBED" is used
4. if order_class_c => name starts with "historical" or equals to "patient supplied" "HISTORICAL" is used

SHC_med_de
SELECT patient_id, **medication_id**, FLOOR(age_at_order_in_days), YEAR(order_time), **order_status_c**, **med_route_c**, med_id, FLOOR(age_at_start_in_days), FLOOR(age_at_end_in_days), FLOOR(age_at_discon_in_days), **ordering_mode_c**, **order_class_c** FROM stride7.SHC_med_de

SELECT medication_id, **rxcui** FROM user_podalv.dictionary_medications_SHC

SELECT order_status_c, **name** FROM stride7_dictionaries.shc_zc_order_status where name <> ""

SELECT order_class_c, **name** FROM stride7_dictionaries.shc_zc_order_class

SELECT med_route_c, **accom_reason_c** FROM stride7_dictionaries.shc_zc_admin_route

```
If there is med_id record in SHC_med_admin_de table, times in the SHC_med_admin_de are used and
override times in this table

medication_id => rxcui => RxNorm code
start time = age_at_start_in_days (if null, age_at_order_in_days is used)
end time = age_at_discon_in_days (if null, age_at_end_in_days is used)
med_route_c => accom_reson_c => route
status:
1. if there is med_id record in SHC_med_admin_de table, "INPATIENT ADMINISTERED" is used
2. if ordering_mode_c == 1 "INPATIENT PRESCRIBED" is used
3. if ordering_mode_c == 1 "OUTPATIENT PRESCRIBED" is used
4. if order_class_c => name starts with "historical" or equals to "patient supplied" "HISTORICAL" is
used
```

LPCH_med_hl7_de
SELECT patient_id, **hl7_medication_id**, FLOOR(age_at_start_in_days), YEAR(start_time), order_status, **route_id**, med_id, FLOOR(age_at_end_in_days) FROM stride7.LPCH_med_hl7_de

SELECT medication_id, **rxcui** FROM user_podalv.dictionary_medications_hl7

SELECT med_route_c, **accom_reason_c** FROM stride7_dictionaries.shc_zc_admin_route

```
medication_id => rxcui => RxNorm code
start time = age_at_start_in_days
end time = age_at_end_in_days
med_route_c => accom_reson_c => route
status = "unknown (hl7)"
```

SHC_med_hl7_de
SELECT patient_id, **hl7_medication_id**, FLOOR(age_at_start_in_days), YEAR(start_time), order_status, **route_id**, med_id, FLOOR(age_at_end_in_days) FROM stride7.SHC_med_hl7_de

SELECT medication_id, **rxcui** FROM user_podalv.dictionary_medications_hl7

SELECT med_route_c, **accom_reason_c** FROM stride7_dictionaries.shc_zc_admin_route

```
medication_id => rxcui => RxNorm code
start time = age_at_start_in_days
end time = age_at_end_in_days
med_route_c => accom_reson_c => route
status = "unknown (hl7)"
```

DEMOGRAPHICS

SELECT patient_id, gender, race, ethnicity, FLOOR(age_at_death_in_days), YEAR(death_date) FROM stride7.demographics

```
gender => GENDER
race => RACE
ethnicity => ETHNICITY
age_at_death_in_days > 0 => DEATH
```

VITALS

```
VITALS datapoint is characterized by:
- VITALS name
- measurement time (in minutes)
- numeric value
```

SELECT patient_id, FLOOR(age_at_contact_in_days), bp_systolic, bp_diastolic, temperature, pulse, weight_in_lbs, height, respirations, bmi, bsa, YEAR(contact_date) FROM stride7.LPCH_visit_de WHERE (bp_systolic <> 0 OR bp_diastolic <> 0 OR temperature <> 0 OR pulse <> 0 OR weight_in_lbs <> 0 OR height <> "" OR respirations <> 0 OR bmi <> 0 OR bsa <> 0) UNION SELECT patient_id, age_at_contact_in_days, bp_systolic, bp_diastolic, temperature, pulse, weight_in_lbs, height, respirations, bmi, bsa, YEAR(contact_date) FROM stride7.SHC_visit_de WHERE (bp_systolic <> 0 OR bp_diastolic <> 0 OR

temperature <> 0 OR pulse <> 0 OR weight_in_lbs <> 0 OR height <> "" OR respirations <> 0 OR bmi <> 0 OR bsa <> 0)

```
VITALS name = bp_systolic, bp_diastolic, temperature, pulse, weight_in_lbs, height, respirations, bmi,
bsa
measurement time = age_at_contact_in_days
numeric value:
height is parsed from feet and inches to inches
```

NOTES

```
NOTE datapoint is characterized by:
- note type
- note id
- time (in minutes)
- term / family history term / negated term
```

SELECT tid, str FROM terminology4.str2tid group by tid
SELECT nid, tid, negated, familyHistory FROM stride7.term_mentions

SELECT note_id, note_type, age_at_note_in_days, YEAR(note_date), patient_id FROM stride7.note_clinical_meta_de

SELECT note_id, note_type, age_at_note_in_days, YEAR(note_date), patient_id FROM stride7.note_radiology_meta_de

SELECT note_id, note_type, age_at_note_in_days, YEAR(note_date), patient_id FROM stride7.note_pathology_meta_de

```
nid => note_id => note_type => note type
nid => note id
age_at_note_in_days => time
tid => str => term (if negated <> 0 => negated term, if familyHistory <> 0 => family history term)
```