The quality of diabetes care in Belgium through a cascade of care lens: health insurance data linked to lab data

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BACKGROUND

Several patients with **diabetes (T2D)** and especially **vulnerable patients** do not have access to care or are **not well followed-up** (also in high income countries), while effective interventions are available

Highlights the importance of :

- Quality assessment &
- Getting a better understanding of **the entire care continuum** & **quality of care assessment?**
Who do we lose where and why?

OBJECTIVES

Developing a **theoretical framework of quality assessment**

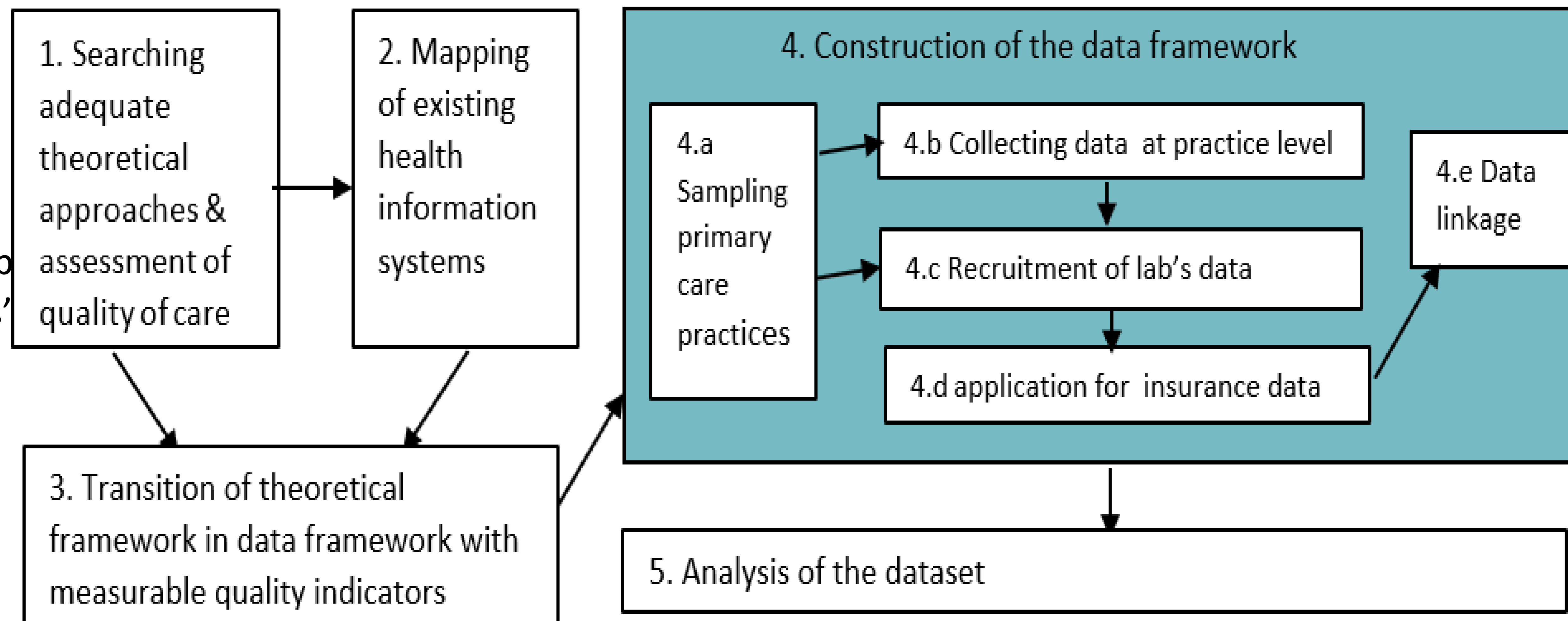The translation to **an integrated diabetes care database,** using
- adequate data sources & including
- measurable quality indicators

- To measure **structure, process** and **outcomes** of integrated T2D care
- To assess quality of integrated care
- To study differences in quality of care between patient groups and organization types of primary care practices

METHODS

- **Study setting:** high income country Belgium (in Europe), fragmented healthcare system and data landscape

- **Research methods:**
  literature reviews,
  expert consultations,
  iterative working group
  sessions, stakeholders'
  interviews

- **Phrases approach**
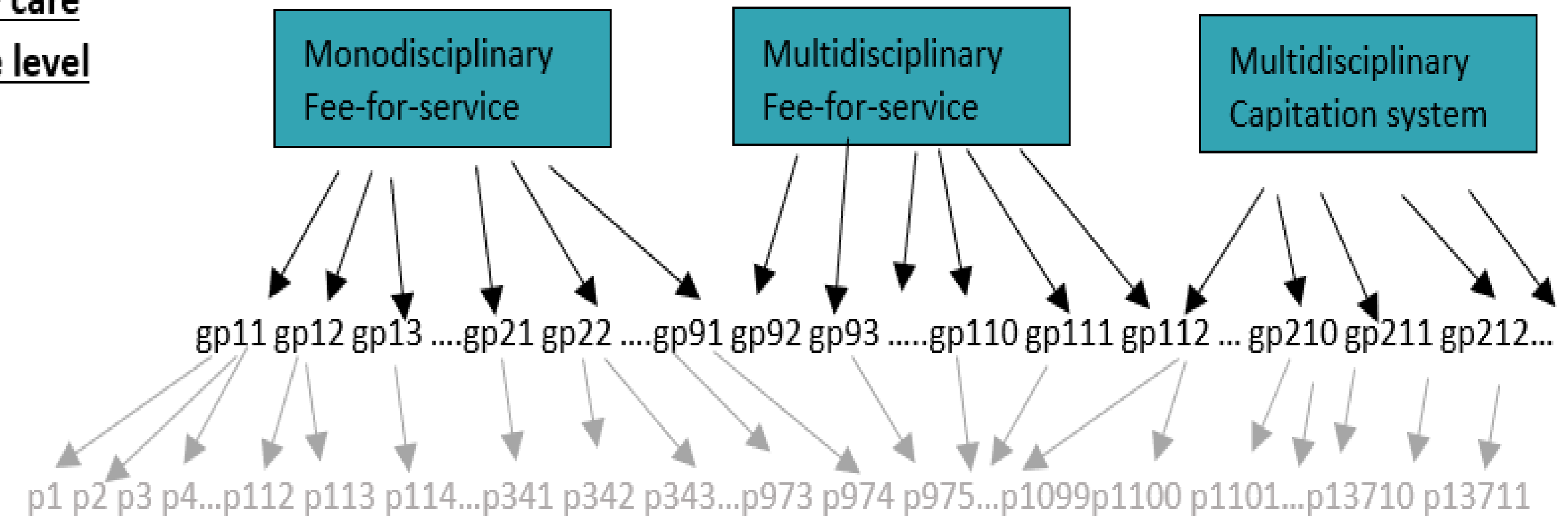 of development of
  Integrated database

1. Searching adequate theoretical approaches & assessment of quality of care

2. Mapping of existing health information systems

3. Transition of theoretical framework in data framework with measurable quality indicators

4. Construction of the data framework

4.a Sampling primary care practices

4.b Collecting data at practice level

4.c Recruitment of lab's data

4.d application for insurance data

4.e Data linkage

5. Analysis of the dataset

DATAFRAME

Quality dimension	Theoretical approach	Measuring tool	Data level & Source
Structure organization	Chronic care model	Assessment of Chronic Illness Care tool ACIC-Sub scores: -Organization -Community linkages -Self-management support -Decision support -Delivery system design -Information systems	Health system & Primary care practice level **Self-collected data** (interviews with GPs)
Process	Cascade of care (CoC) approach	CoC bars: -tested -diagnosed -linked to care -taking treatment -followed up,	Patient level Administrative data: **health insurance data** (IMA) & **lab data**
Outcomes		-under control	

RESULTS

- **ACIC** scores are visualized by **spiderwebs**

- **CoCs** in **bar charts** can be stratified by practice type and patient group
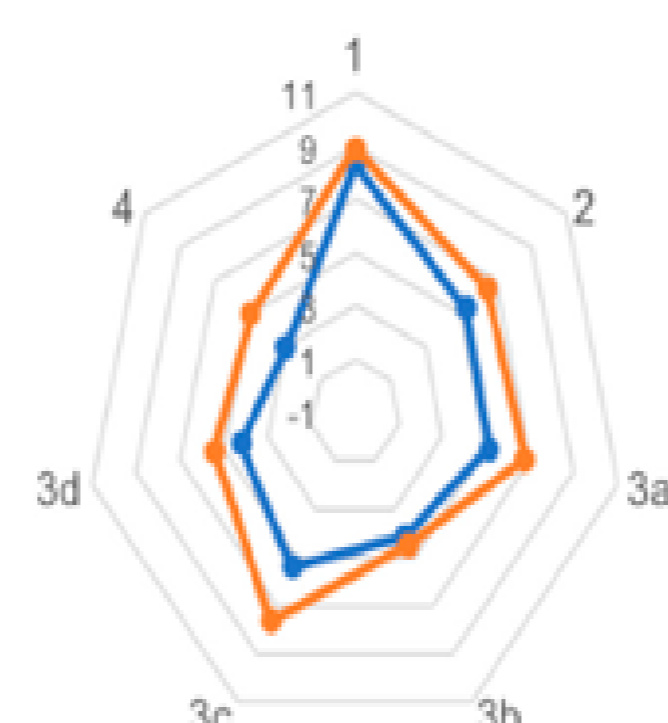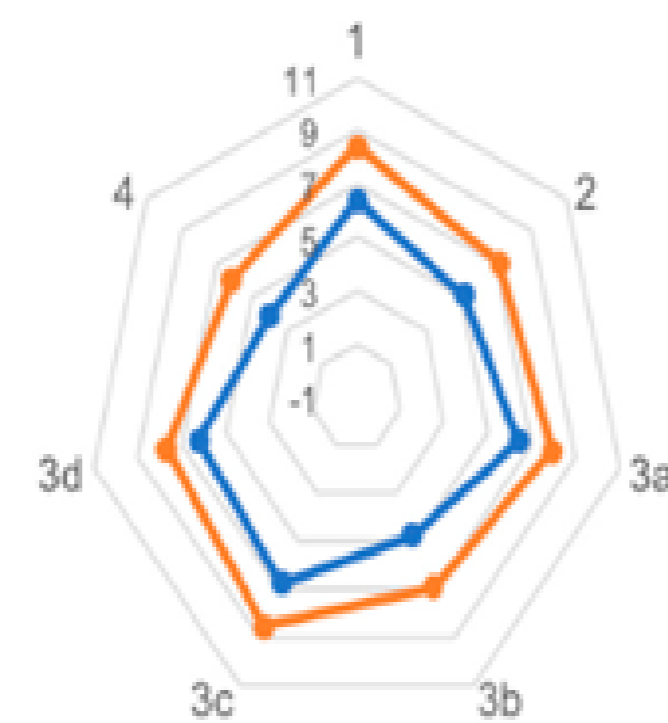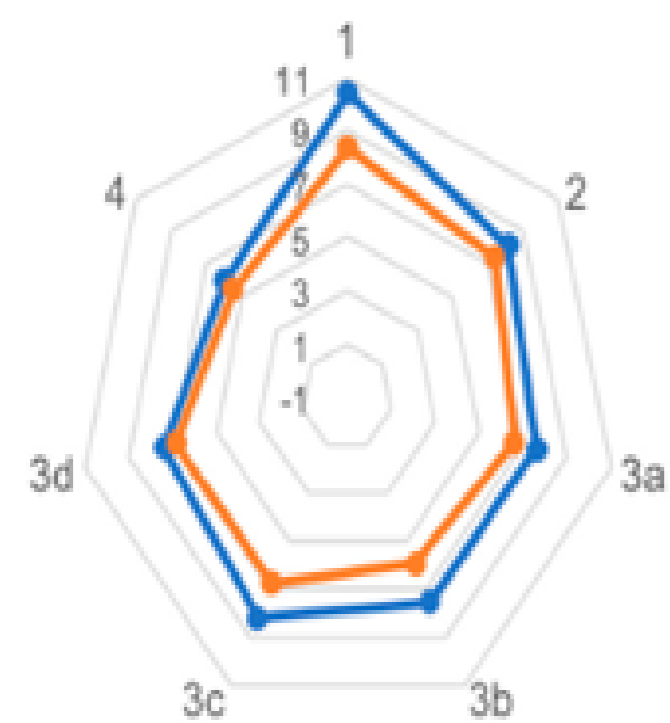
Fictive example

Primary care practice level

| Monodisciplinary Fee-for-service | Multidisciplinary Fee-for-service | Multidisciplinary Capitation system |

gp11 gp12 gp13 ....gp21 gp22 ....gp91 gp92 gp93 .....gp110 gp111 gp112 ... gp210 gp211 gp212...

Patient level

p1 p2 p3 p4...p112 p113 p114...p341 p342 p343...p973 p974 p975...p1099 p1100 p1101...p13710 p13711
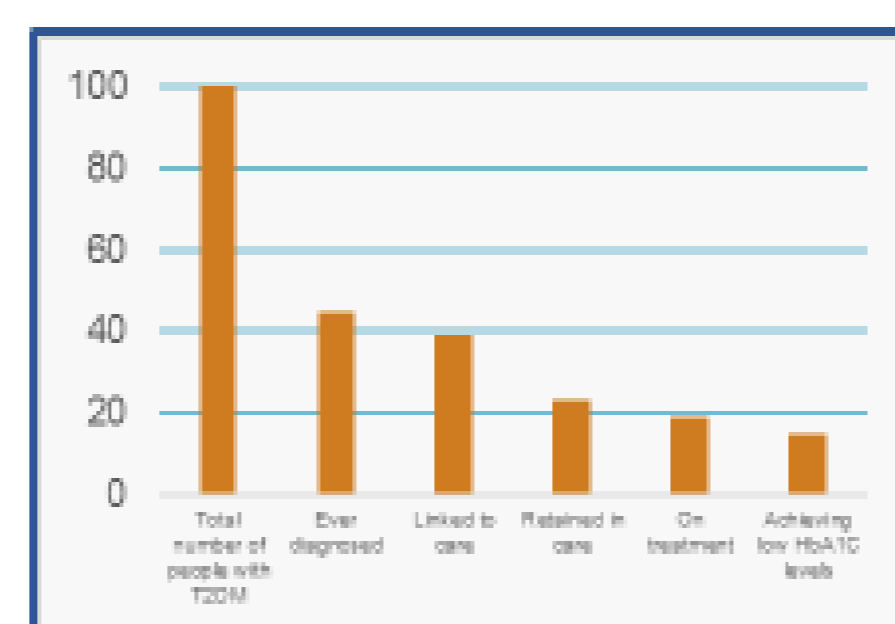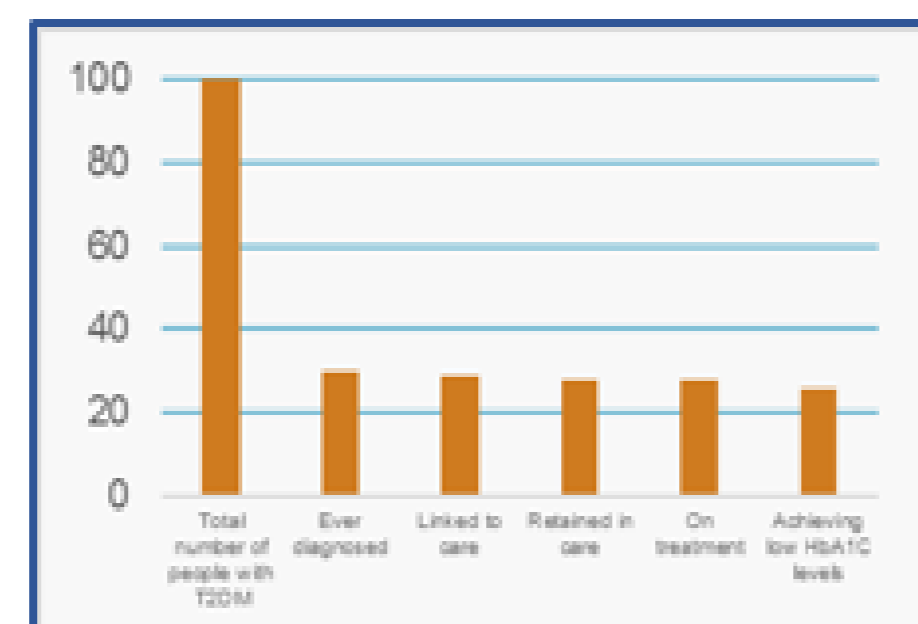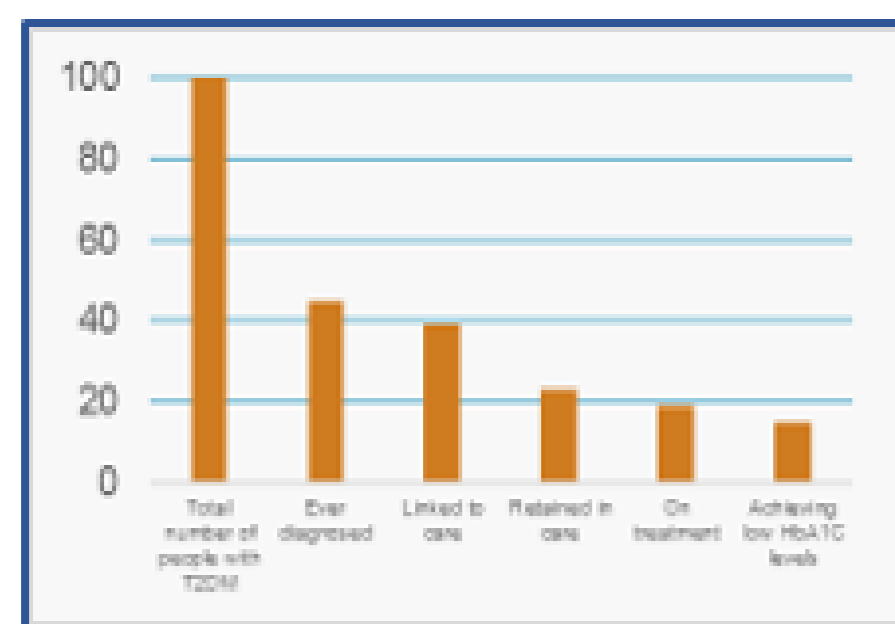
Primary care type 1

Primary care type 2

Primary care type 3

Structure-organization

Process-outcome

- **Integrated multilevel data base:**

  - patients clustered in GP-practices
  - structure-organization information at GP-practice level
  - process-outcomes information at patient level