

Standardization of health and social care in Danish municipalities

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HL7 FHIR DevDays 2023 | Hybrid Edition, Amsterdam | June 6–9, 2023 | @HL7 | @FirelyTeam | #fhirdevdays | www.devdays.com

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Who am I?

- Kirstine Rosenbeck Gøeg
- Health-IT consultant, Rosenbeck Informatics



...and those who are not here

KL

Health and social care in Danish municipalities

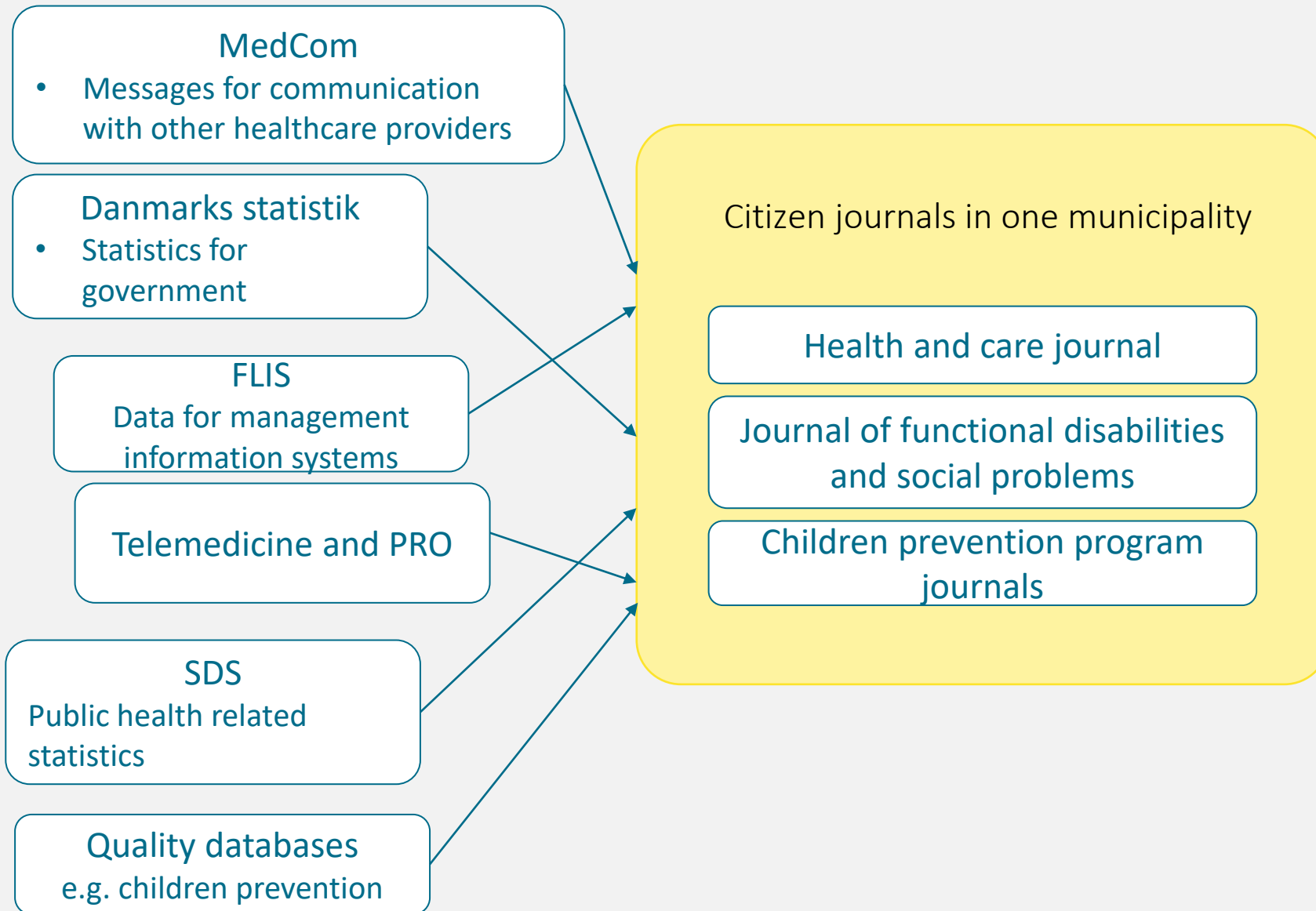
- Tasks

- Home care (including nursing homes, mostly elderly care)
- Nursing (elderly, health promotion, children)
- Physiotherapy (rehabilitation and prevention)
- Occupational therapists (assistive devices)
- Social workers (Functional disabilities and social problems)

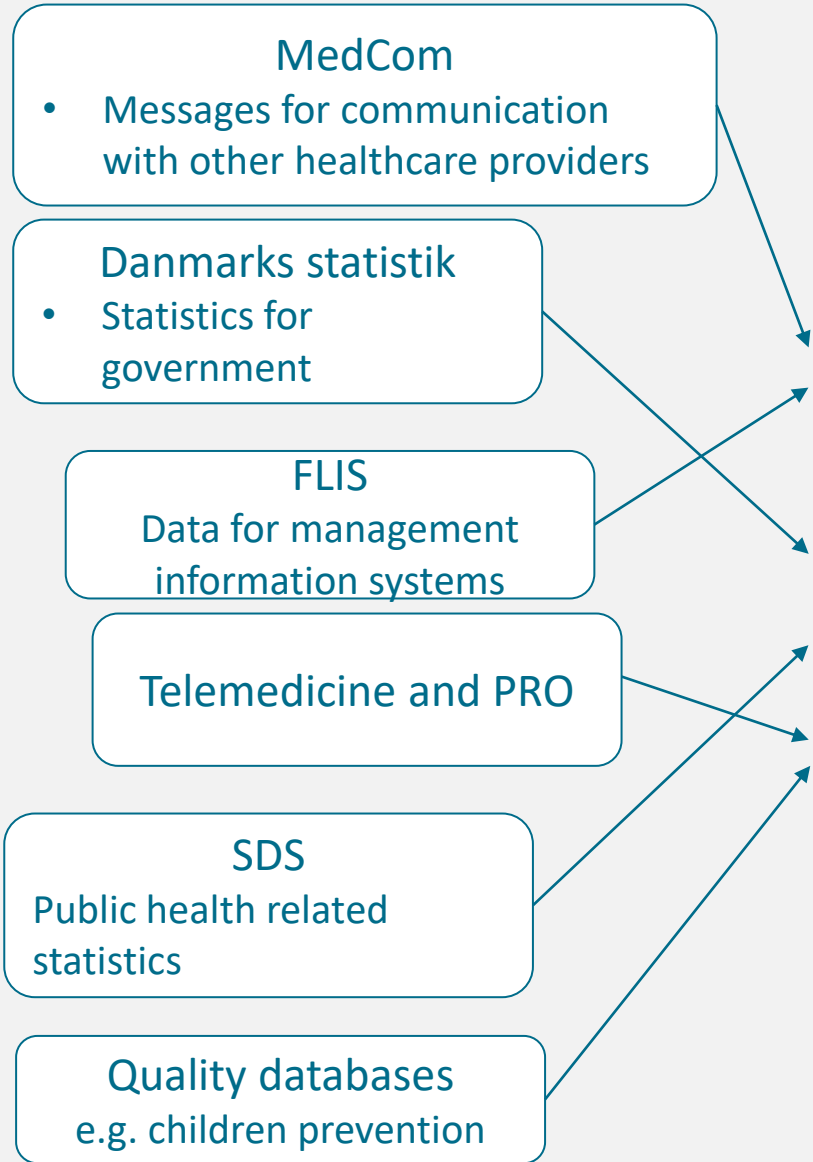


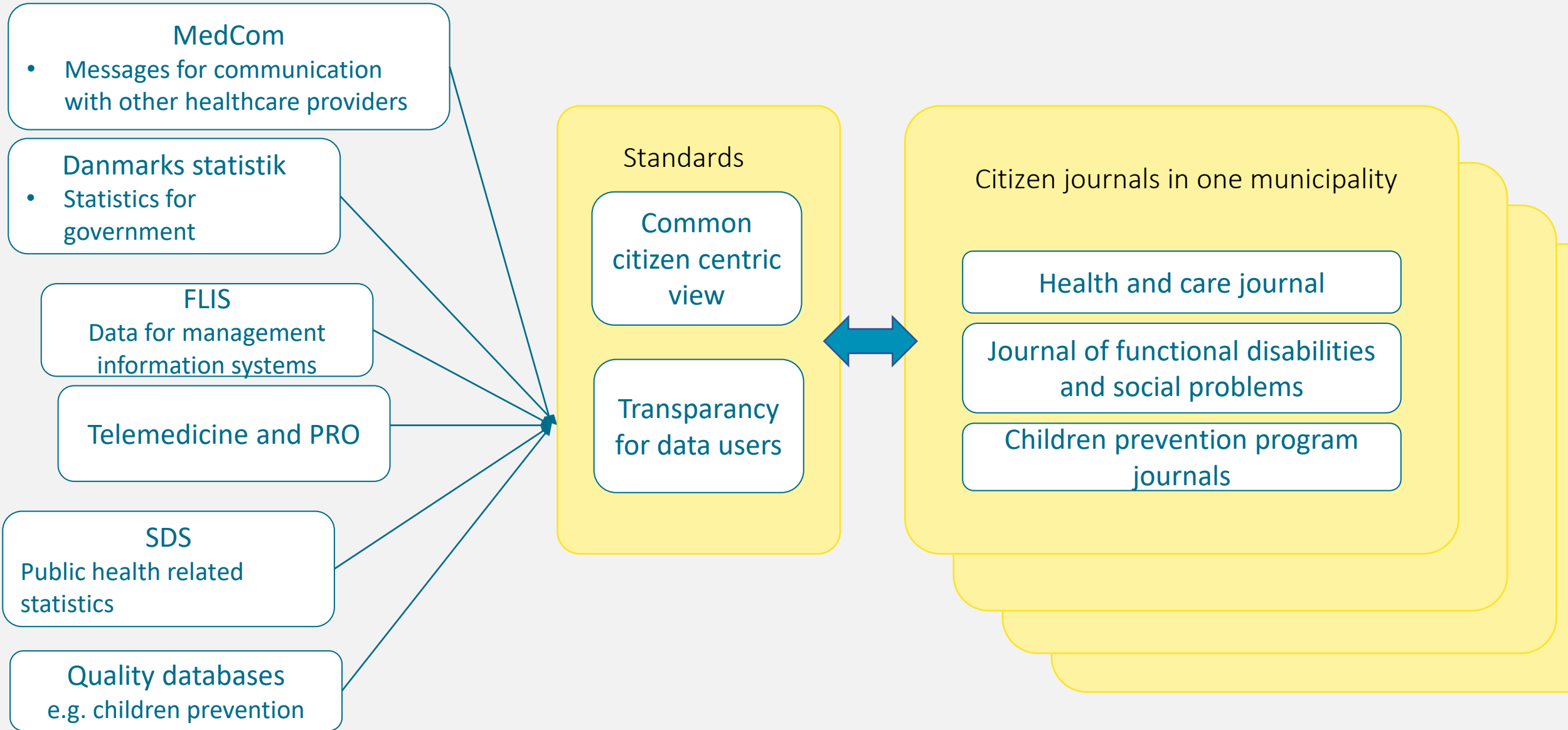
- > 100.000 employees
- > At least 3 citizen journal systems per municipality
- > Approx 10 citizen journal vendors in total





- Separate data collection
- Extra documentation work
- Acquisition of new IT-integration solutions

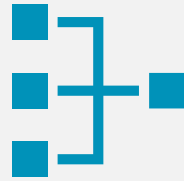




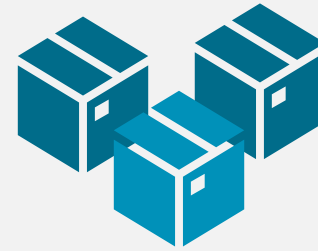
We did other things than FHIR profiling!



Interviews, workshops,
evaluations



Terminology incl.
SNOMED CT



Principles for
consistent modelling



National reporting
system



Let's look at the FHIR standards

Core

KL-term

KL-core

FFInst

Reporting

KL-gateway

KL-gateway-
prevention

KL-gateway-rehab

KL-children

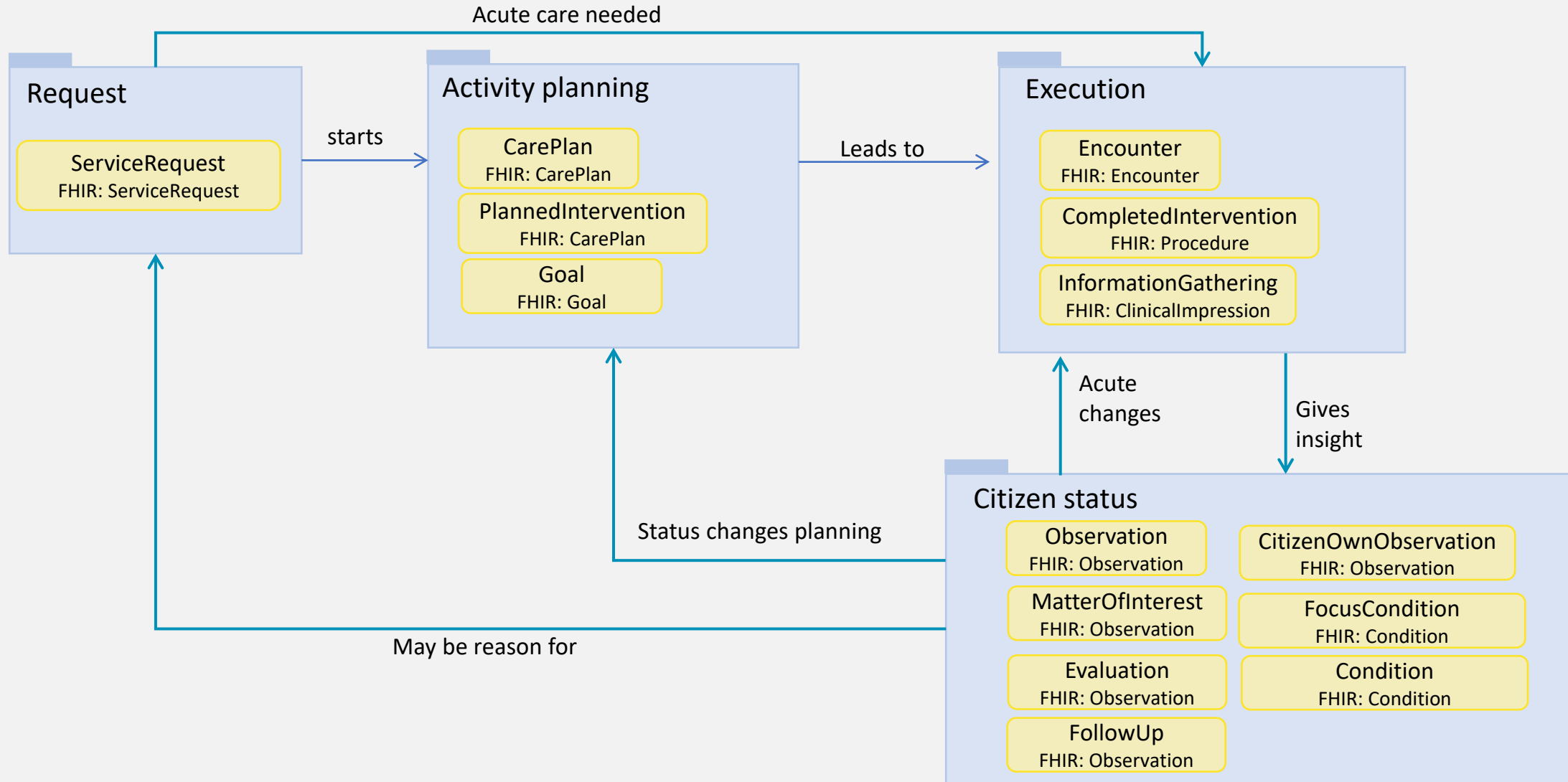
FFB-reporting

Messaging

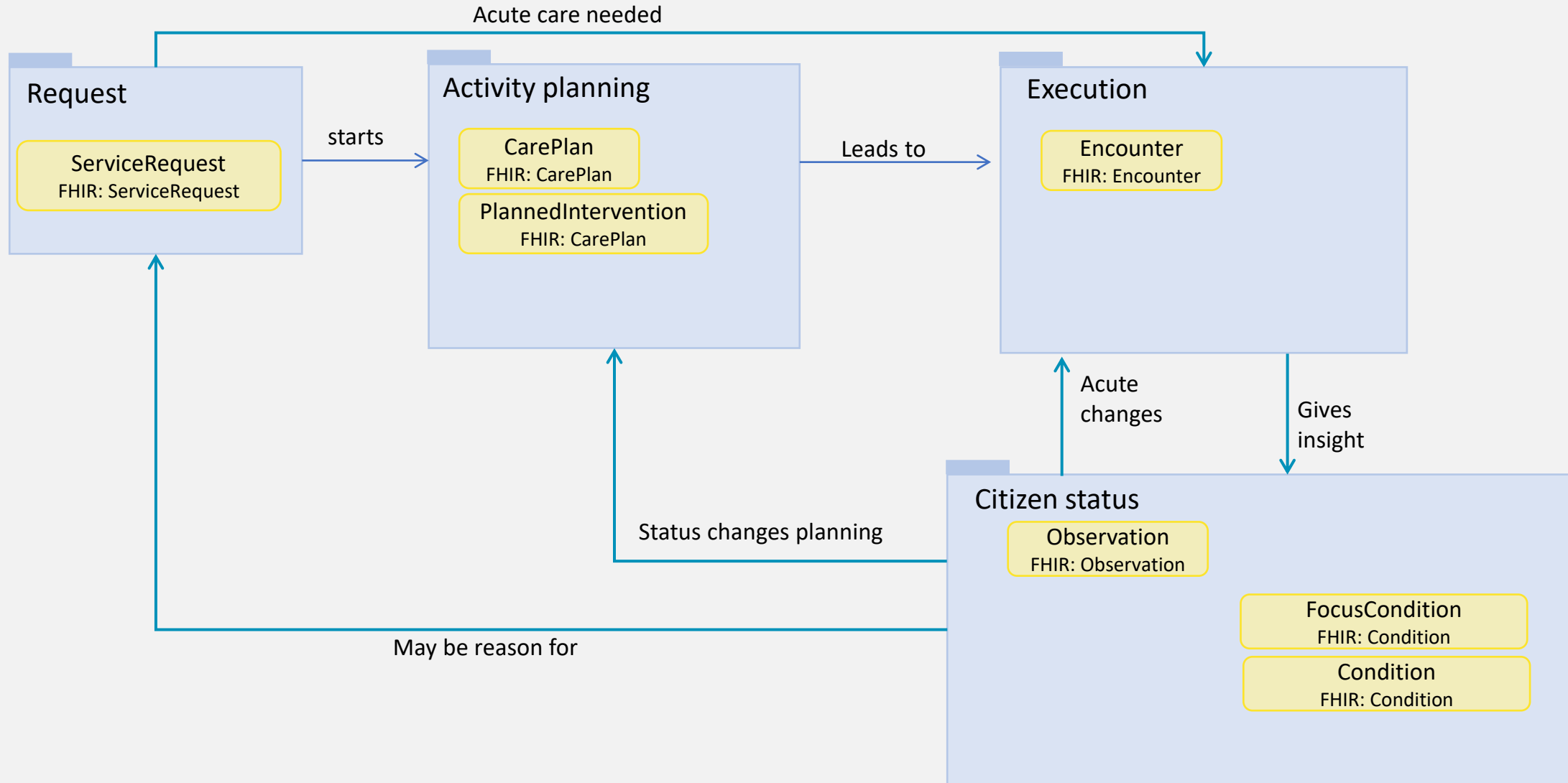
FFB-messaging

<http://fhir.kl.dk>

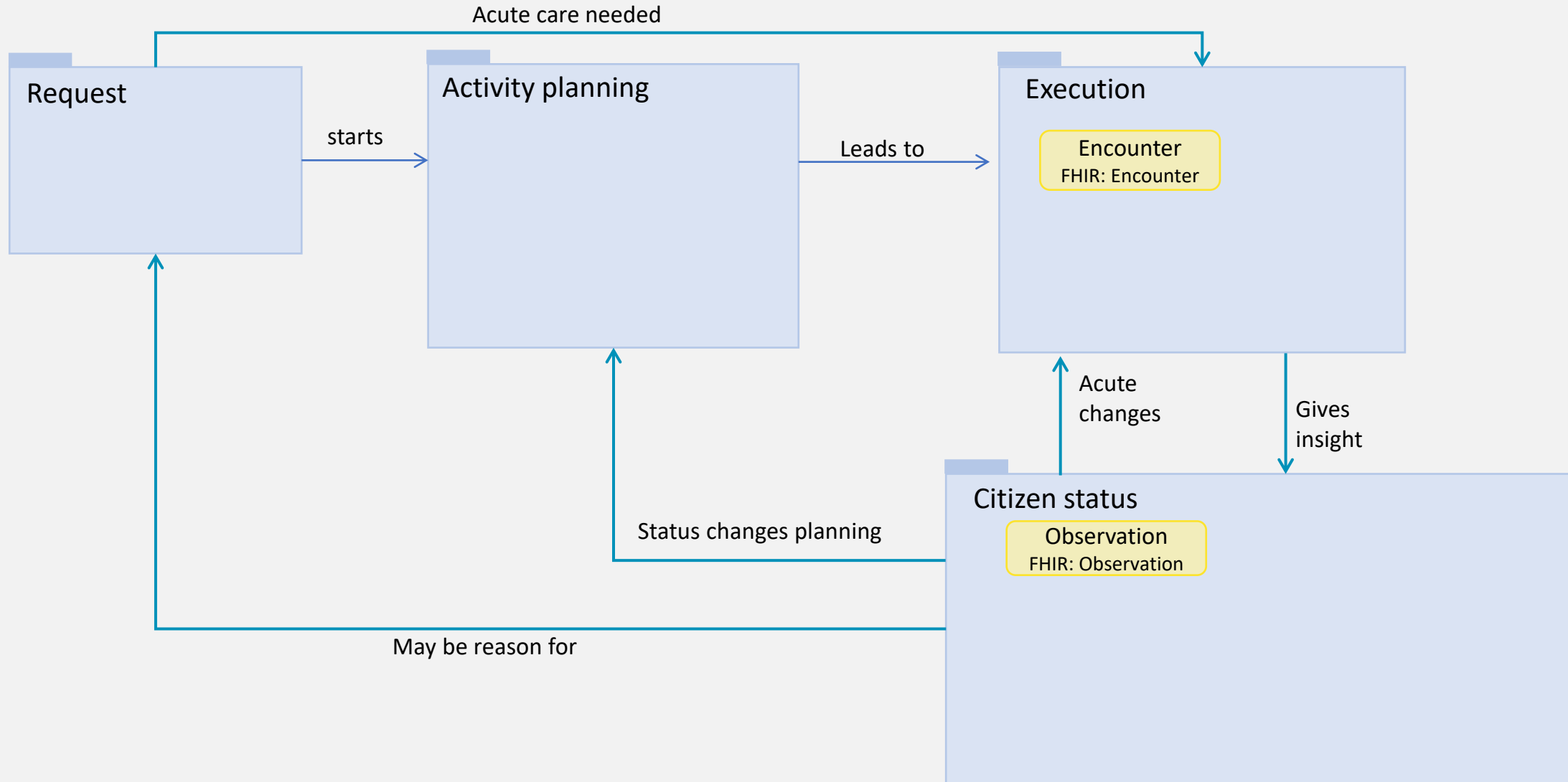
Content in KL-core



Content in KL-rehab



Content in KL-children



Implementation guides – a few words about documentation

1.4.2 Mark example

Mark is a citizen receiving home nursing interventions. In his record we can see his **nursing status** (system). The nursing status contains notes under two areas **respiration and circulation** and **skin and mucosa**. In the **skin and mucosa** area, there is a note about a pressure ulcer on his left leg. A **goal/expected future condition** is formulated for the pressure ulcer. In the **respiration and circulation** area, there is a note about formulating a future **encounter**.

After the nursing status is completed, the home care nurse updates the **overall evaluation** of Mark (Health status). After the nursing status is done, Mark actually has preexisting problems with mobility that means that he records a **problem** (included as explicit examples). The nurse writes a new overall evaluation pointing out the mobility problem. The nursing status and overall evaluation have been carried out, in an **encounter**.

After the nursing status, Mark's **pressure ulcer care intervention** is planned, and we can see that it is carried out. In addition, we can see that an **observation method** (målemetode) is added to the intervention, where it is used to check the area regularly.

At some point, the municipality receives a referral by message or phone from a general practitioner, specialist or other health professional. The municipality records the **referral**. **Extra information** might be necessary to accurately state that the referral is for recording.

Now, an acute care nurse is sent to Mark's residence i.e. an **encounter** occurs in the record. At this encounter, the nurse records **hemoglobin** and **blood glucose**. After the encounter, the nurse records the **intervention that has been carried out**.

Implementation guides – a few words about documentation

2.4.1.2 Conversions between Danish information model and FHIR-profile

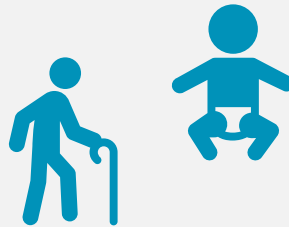
Nedenstående tabel oversætter mellem de attributter der er defineret i den fælleskommunale informationsmodel (FKI), definerer kort den enkelte attribut og hvilke af FHIR-profilens attributter der skal bruges til specifikation af indholdet

FKI-attribut	Definition	FHIR
tilstandskode	Udtrykker hvilken klasse tilstanden tilhører.	Condition.code.coding
tilstandssværhedsgrad	Udtrykker hvilken klasse tilstandens sværhedsgrad har.	Condition.severity.coding
tilstandsstatus	Klasse der udtrykker en status for om tilstanden er til stede eller ej.	Condition.clinicalStatus or Condition.verificationStat
tilstandsvurdering	Beskrivelse af en persontilstand	Condition.code.text
tilstandFagligtNotat	Beskrivelse af løbende status, der ikke ændrer på vurdering, og sværhedsgrad.	Condition.note.text
tilstandsInformant	Klasse der udtrykker hvem oplysninger vedr. tilstanden kommer fra.	Condition.note.extension
tilstandsoprettelsestid	Tidsangivelse for hvornår tilstanden først blev oprettet i journalen	Condition.recordedDate
tilstandsafslutningstid	Tidsangivelse for hvornår tilstanden er afsluttet. Med afsluttet menes at tilstanden ikke mere er et problem for borger.	Condition.abatementDate

Where do we go from here?



New professional
areas

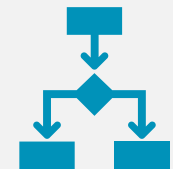


Standardization
and
implementation



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Maintainance

Contact

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Q&A

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