

Classification of Health Interventions in Sweden, functioning use-case

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- **Health and social care in Sweden**
- **National Board of Health and Welfare**
 - Health-related classifications
 - National classification of health care interventions (KVÅ)
 - National classification of social care interventions and activities (KSI)
- **Use cases focusing on functioning**
 - National health data registers
 - For local and regional follow-up and quality improvement

Health and social care in Sweden

- **290 municipalities in 21 regions**
- **The regions**
 - hospital care, open specialized care and primary care
- **The municipalities**
 - social care
 - health care in special forms of housing and ordinary home



The National Board of Health and Welfare

The National Board of Health and Welfare (NBHW) is a government agency under the Ministry of Health and Social Affairs

- with a very wide range of activities and many different duties within the fields of social services, health and medical services, patient safety and epidemiology.

The majority of our activities focus on staff, managers and decision makers in the above mentioned areas. We give support and exert influence in many different ways:

- We collect, compile, analyse and pass on information.
- We develop standards based on legislation and the information collected.
- We also undertake other official duties such as maintaining health data registers and official statistics.

Sweden National Board of Health and Welfare – Health-related classifications

- International Statistics Classifications of Diseases and Related Health Problems (ICD-10-SE)
- International Classification of Functioning, Disability and Health (ICF)
- Classification of Health Care Interventions (KVA)
- Classification of Social Care Interventions and Activities (KSI)

WHO reference classifications



Classification of Health Care Interventions (KVÅ) – Sweden

- Classification of Surgical Procedures (KKÅ)
- Classification of Medical Procedures (KMÅ)
 - Two chapters in KMÅ developed by using ICF as target in the same as ICHI
 - Chapter for investigative/assessment interventions
 - Chapter for therapeutic/supportive interventions
 - These are targeting body functions, activities and participation and environmental factors in ICF

Mappning KVA till ICHI

Mapping Swedish surgical and functioning interventions to ICHI

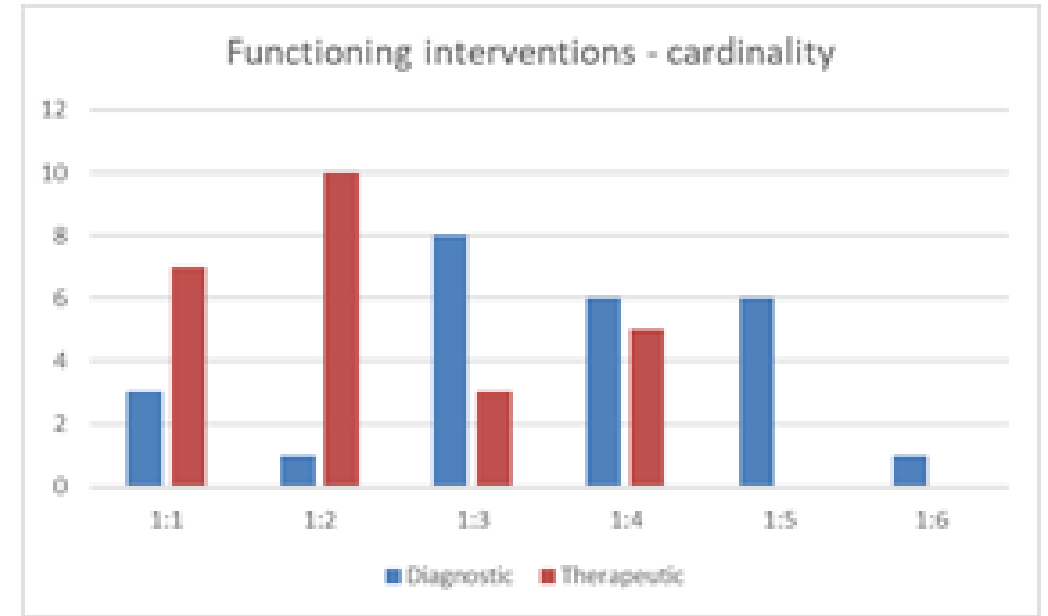
Two subsets of interventions (50 orthopaedic surgical interventions and 50 functioning interventions) were mapped to ICHI

Orthopaedic surgical interventions (50 interventions)

- Cardinality of maps - 1:1 (68%), 1:2 (20%), 1:3 (10%)

Functioning interventions (50 interventions)

- Cardinality of maps - 1:1 (20%), 1:2 (22%), 1:3 (22%), 1:4 (22%), 1:5 (12%), 1:6 (2%)
- The diagnostic functioning interventions have higher cardinality than the therapeutic interventions.



Classification of Social Care Interventions and Activities (KSI)

- Developed during 2012-14 by National Board of Health and Welfare commissioned by the government
- Based on ICHI structure and content
- Development of the classification
 - by identifying relevant Actions and Targets (in ICHI) for social care.
 - together with about 270 professionals in social care (60 municipalities), experts in social care at National Board of Health and Welfare, representation from other organizations
- Published 2015



Classifications in different formats

Socialstyrelsen

KVA – medicinska åtgärder

Skriv in kod eller använd fritext för att söka på ord

Sök

Klassifikation av medicinska åtgärder 2021

Dölj meny

- G Kompensation, information/undervisning, samordning, administrativ handläggning
- P ICF-associerade utredande åtgärder**
 - PA Utredning av psykiska funktioner
 - PA005 Bedömning av temperament och personlighetsfunktioner
 - PB Utredning av sinnesfunktioner och smärta
 - PA006 Bedömning av energi och driftfunktioner
 - PC Utredning av röst- och talfunktioner
 - PA007 Bedömning av sömnfunktioner
 - PD Utredning av hjärt-kärlfunktioner, blodbildnings-, immunsystemet och andningsfunktioner
 - PA008 Bedömning av uppmärksamhetsfunktioner
 - PE Utredning av matsmältnings- och ämnesomsättningsfunktioner och endokrina funktioner**
 - PA009 Bedömning av minnesfunktioner**
 - PA010 Bedömning av psykomotoriska funktioner
- Q ICF-associerade behandlande åtgärder
- S Anestesi
- V Standardiserade vårdförlopp (SVF)
- X Övriga åtgärder
- Z Tilläggs-koder

PA009 Bedömning av minnesfunktioner

Bedömning av korttidsminne, långtidsminne samt att återge minnen. Innefattar insamling och analys av information från exempelvis standardiserade bedömningsinstrument, skattningsskalor, intervju och/eller observation. ICF b144

Use cases – national register (1)

National Patient register - mandatory

- For inpatient - diagnosis (ICD-10-SE) and performed interventions (KVÅ)
- Open specialized care - diagnosis (ICD-10-SE) and performed interventions (KVÅ) by physicians
 - Open specialized care – plan to be improved to also cover interventions (KVÅ) performed by other professionals in psychiatric care
- Proposal to cover primary care (diagnosis ICD, functioning ICF) and interventions (KVÅ) performed by different professionals

Use cases – national register (2)

National patient-register for health care in the municipalities

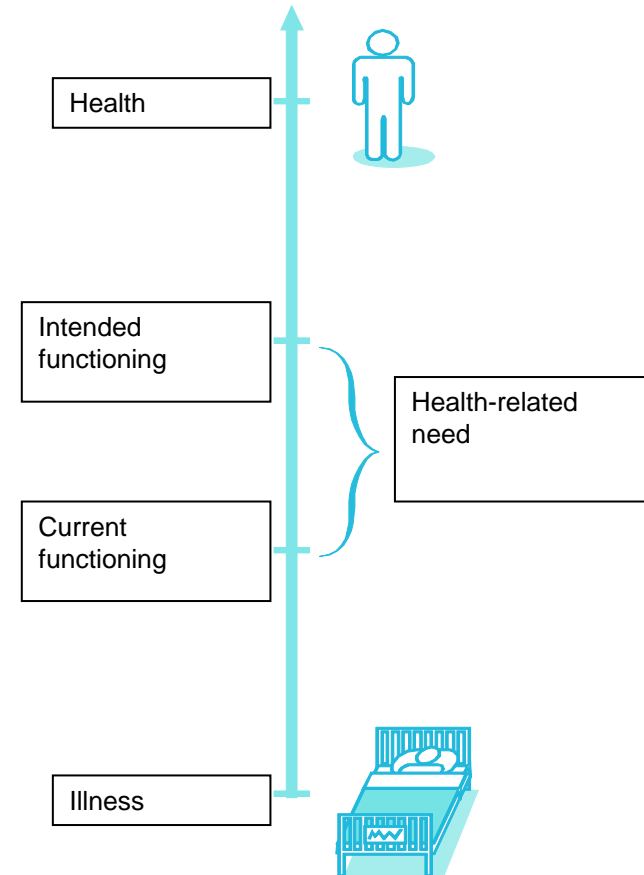
- Approved regulation
 - mandatory for all municipalities to report individual-based data on **performed health interventions** from **1 January 2019** to the national patient-register for health care in the municipalities
- Report every month performed health interventions for each patient per day and the professional who performed the intervention (e.g. nurses, occupational therapists, physiotherapists)
- The health interventions have to be classified by using the Swedish Classification of Health Care Interventions (KVÅ) - the most specific intervention
- There are today no regulation that support collection of data concerning an individual's functioning, e.g. by using ICF.

Use case - needs orientated approach

ICF to describe patient's needs and follow results

- Describe the patient's needs
 - Describe and assess the current functioning
 - Determine goals
 - Assessed needs of interventions
- Follow the results
 - Describe and assess the current functioning
 - Goals achievement

KVÅ to describe planned and performed investigative and therapeutic interventions



Use case - digital structured documentation

Data workflow for documentation, coding and reporting data.

KVÅ can be used (blue)
ICD can be used (brown)
ICF can be used (red)

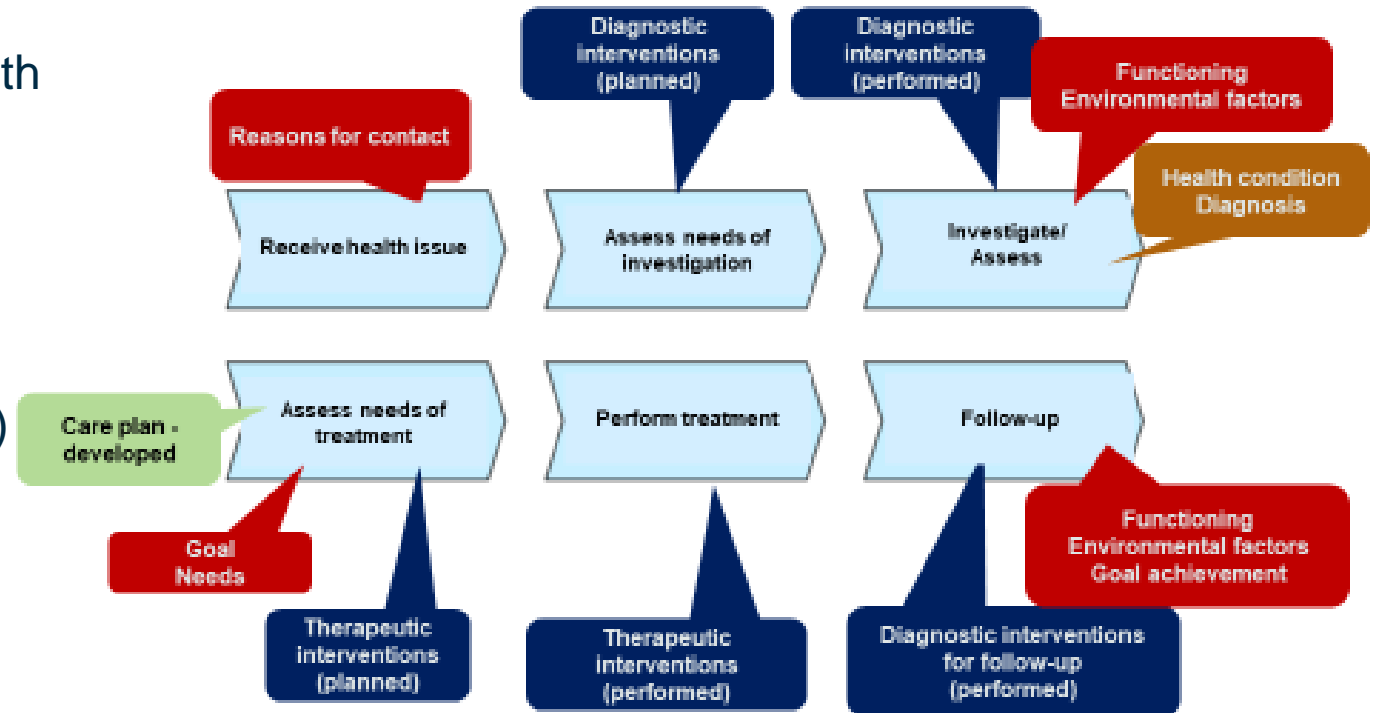
National strategy for e-health

- Structured digital documentation (EHR) with coded information
- For re-using the information for different purposes
- National informations structure
- Use of classifications (ICD, ICD, KVÅ/KSI)

NBHW – regulations

- Use unambiguous terms
- Recommendations to use classifications

Process model - health care



Use case - Health care in the municipalities

- Developed subsets
 - Multi-professionals (e.g. nurses, occupational therapists, physioterapists)
 - Updates every year
 - For local follow-up, work with quality improvement, management of care
- E-learning tool
 - about using ICF and KVA in structured documentation for follow-up and quality improvement at local level

ICF components	Number
Body functions	105
Body structures	22
Activities and Participation	125
Environmental factors	28
Total	280

KVA- parts	Number
Investigative interventions	124
Therapeutic interventions	205
Managing interventions	29
Total	358

The numbers in sub sets 2021

Comments about the use of ICF and KVA

– in municipalities' health care

“this becomes a goldmine”

*”today we think and experience,
and can not show data”*

- Now we are going to have data for
 - follow up
 - work with quality improvement
 - following trends
 - local, regional and national level
- Now we can show the data and results
 - for decision makers, politicians

Example of diagnostic interventions targeting ICF (KVA)

The performed diagnostic interventions are targeting

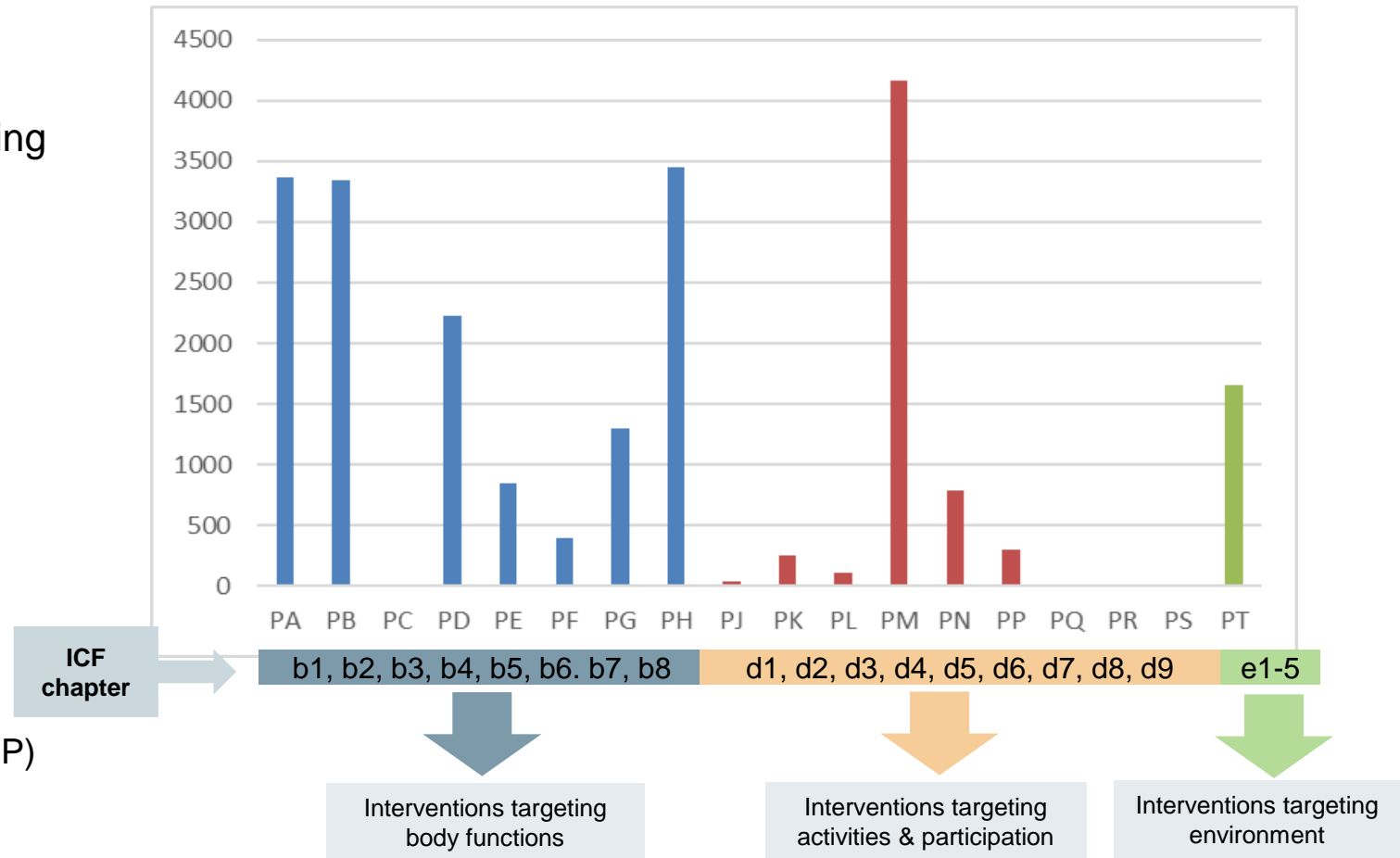
- body functions (67%)
- activities and participation (A&P) (25%)
- environment (7%).

The most frequently performed diagnostic interventions are targeting:

- PM - mobility (A&P)
- PH - functions of the skin and related structures
- PA - mental functions
- PB - sensory functions and pain

Not performed interventions targeting:

- PC - voice and speech functions
- PQ - interpersonal interactions and relationships (A&P)
- PR - major life areas (A&P)
- PS - community, social and civic life (A&P)



Diagnostic interventions during 2019 for about 4200 patients in one municipality

Use case – health indicators

- Percentage (%) of persons, who have received follow-up of prescription of assistive devices (QT017) within six months after test / prescription a wheelchair (GA023) or other assistive devices (GA025) within municipalities health care. (Table show for 2020)
- Interventions - KVA
 - GA023 Testing and prescribing wheelchairs
 - GA025 Testing and prescribing other assistive devices (exl wheelchairs)
 - QT017 Follow-up of prescription of assistive devices

At national level	Testing and prescribing wheelchairs and other assistive devices (GA023, GA025)	Follow-up prescription of assistive devices (QT017)
Age	Number	Percentage
0-64 years	16 874	42
65 years and older	108 879	40
Totally	125 753	41

Use case – social care with individual needs in focus

- **National informations structure/specification**
 - Process model, concept model and information model
- **Structured digital documentation using ICF and KSI**
 - Subsets of ICF – focusing on activities and participation
 - Subsets of KSI – to describe investigative, supportive interventions
- **Education to local process leaders**

Assessment of functioning and goal setting

Hantera ansökan
 Inhämta uppgifter
 Bedöma behov
 Besluta
 Utforma uppdrag

Bedöma behov **Needs assessment**

2 Personlig vård

- ✓ Att tvätta sig
- Kroppsvård
- Att sköta toalettbehov
- Att klä sig
- Att äta
- Att dricka
- Att sköta sin egen hälsa

ATT TVÄTTA SIG

Qualifiers

Assessed functioning	Ingen	Lätt	Måttlig	Stor	Total	Ej specificerat	Ej tillämbart
Bedömt funktionstillstånd	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avsett funktionstillstånd = Mål	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal – intended functioning							

Assessed functioning
 Bedömt funktionstillstånd

Test har, till följd av ryggsmärta, svårt att duscha på egen hand. Behöver stöd att schamponera håret, tvåla in och skölja av kroppen. Klarar själv, till viss del, att skölja ur schampot ur håret. Behöver stöd att torka sig med handduk efter duschen.

Goal – intended functioning
 Avsett funktionstillstånd = Mål

Tests mål är att han, vid kommande uppföljning ska klara fler delar av duschmomentet på egen hand.

2 Personal care
Washing oneself
 Caring for body parts
 Toileting
 Dressing
 Eating
 Drinking
 Managing one's own health

ICF-code
 d510
 d520
 d530
 d540
 d550
 d560
 d570

Needs assessment – planned interventions

Utredning 7705
 Utredning IBIC SoL
 Test Testsson 121212-TF12

Avslutad utredning
 2021-10-11

✓ Hantera ansökan ○ Inhämta uppgifter ✓ **Bedöma behov** ✓

Lägg till bedömning

* ICF-område valt vid föregående bedömning

1 ✓ * Personlig vård

- ✓ * Att tvätta sig
 - Kroppsvård
 - Att sköta toalettbehov
 - Att klä sig
 - Att äta
 - Att dricka
 - Att sköta sin egen hälsa

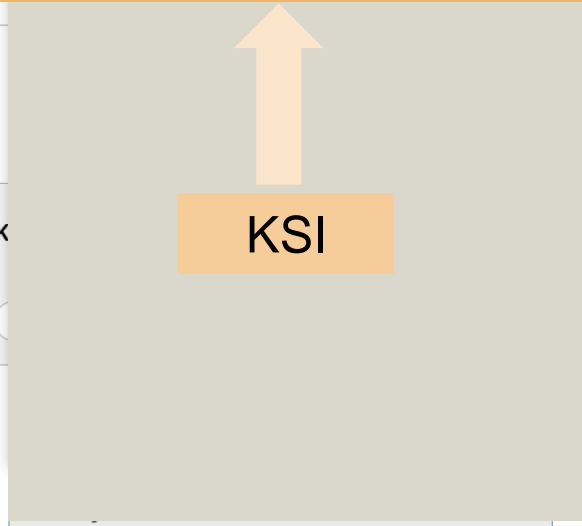
Interventions

Inriktning på stödet Stödjande/tränande ✓

Insatskategori *
 KSI

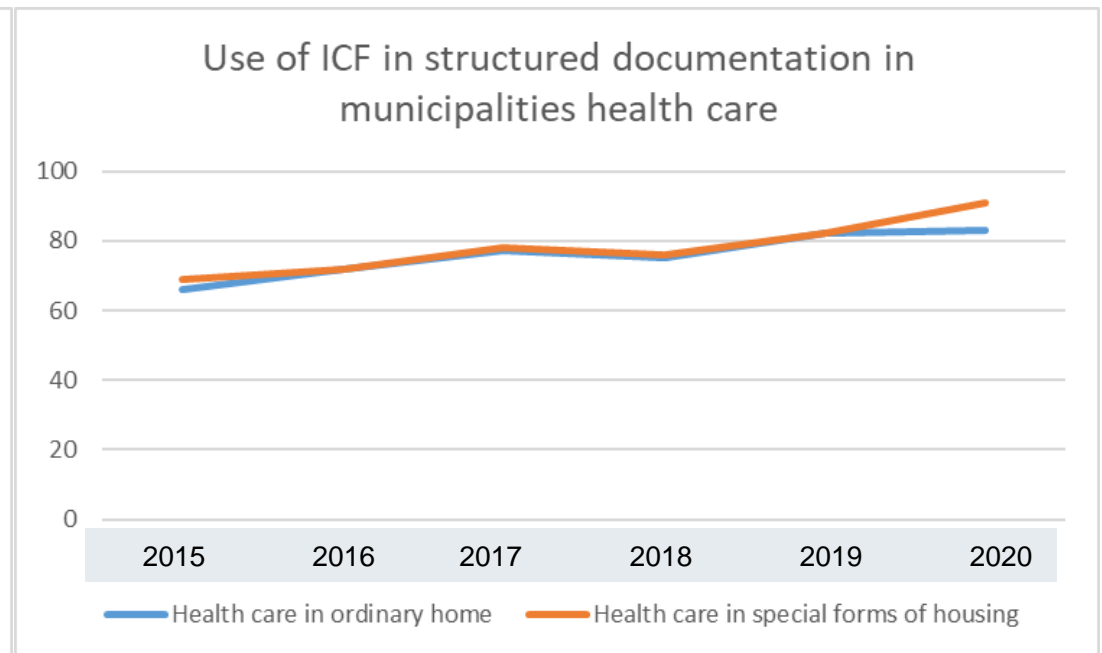
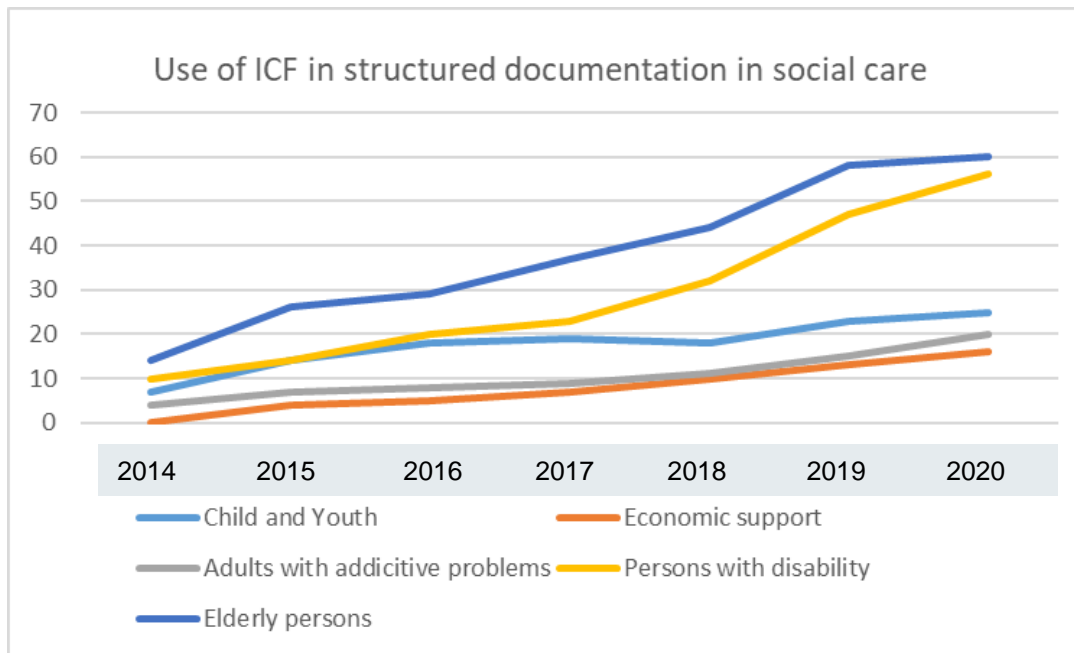
Personal care
Washing oneself
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 Toileting
 Dressing
 Eating
 Drinking
 Managing one's own health

- Training in washing oneself SMB.PH.ZZ
- Advising about washing oneself SMB.PN.ZZ
- Perform the task of washing oneself SMB.RA.ZZ
- Practical support with washing oneself SMH.RB.ZZ
- Emotional support for washing oneself SMB.RC.ZZ



Coverage of use of ICF in municipalities in Sweden (n=290)

- Using ICF in structured digital documentation
 - Social care – increased during 2014 – 2020, especially for elderly persons (14 to 60%) and persons with disability (10 to 56%)
 - Health care – increased about 20 percent during 2015 – 2020



Using ICHI with ICD and/or ICF

ICHI has been designed to align where relevant with ICD and ICF, and to be used alongside both of those classifications.

- ICHI functioning targets are drawn from the ICF
- Several extension codes (medicaments, anatomy) are ICD extension codes

ICHI	ICF	ICD
<ul style="list-style-type: none">• Describe investigative and assessment intervention(s)• Record planned or performed therapeutic or supportive interventions to achieve goal(s)• At follow-up, used again to document any performed investigative and assessment intervention(s)	<ul style="list-style-type: none">• Describe the result of investigative and assessment intervention (s)• Document functioning-related goals agreed upon & any needs for assistance• Describe the person's functioning after provided therapeutic or supportive interventions	<ul style="list-style-type: none">• Record patient's health condition(s)

The person's functioning before and after the intervention(s) can be compared and if the functioning-related goals have been achieved, ICHI, ICF and ICD can be used together in the digital structured documentation in the electronic health record.

Conclusions

The interventions classifications in health and social care

- KVÅ/KSI – describing e.g. planned, performed interventions in the care process
- provide common language and frameworks
- Use case
 - in structured documentation in EHR – reusing the information
 - comparisons of data for
 - follow-up and work with quality improvement
 - at local, regional and national levels
- KVÅ/KSI or ICHI, ICF and ICD complement each other

Thank you for your attention!

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More information:

www.socialstyrelsen.se

www.socialstyrelsen.se/utveckla-verksamhet/e-halsa/klassificering-och-koder/