



### Dementia in Swedenthe Swedish Registry for Cognitive/dementia disorders, SveDem

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## SveDem, the Swedish Registry for cognitive/dementia disorders, www.svedem.se

www.svedem.se



- ☐ National quality registry to improve diagnostics, treatment and care in dementia
  - ✓ Internet based
  - ✓ Includes patients at the time of the dementia or MCI diagnosis
  - ✓ Annual follow-up through the chain of care
     Specialist or primary care units, nursing home, home health care
  - ✓ Main purpose: to follow national dementia guidelines by quality indicators
  - ✓ Cover 35-40% of the <u>estimated</u> incident dementia cases/year—but ca 50% of expected cases are undetected
  - ✓ IT- support and security by Uppsala Clinical Research Center, UCR



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106 427
individuals with dementia
disorders
102 171
Follow-ups

57 memory clinics (100%)
918 primary care units (78%)
1 460 elderly care units in 102
municipalities

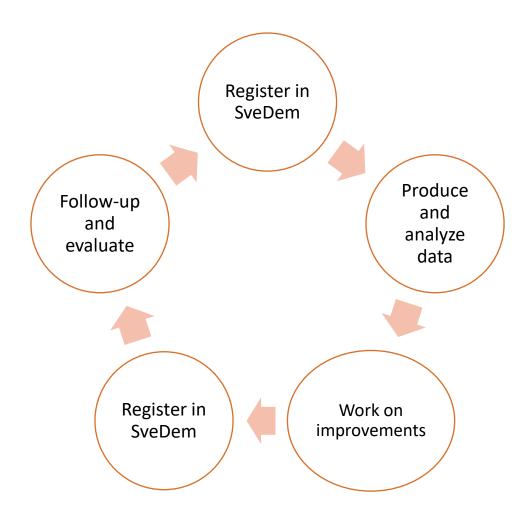
Religa, Eriksdotter et al. PLoS One. 2015



### Do not register for the sake of registrationbut to improve care!

### Use SveDem to:

- Keep track of the status of the unit's investigation and follow-up processes
- Evaluate the unit's compliance with national guidelines and care processes
- Use the results to identify areas for improvement





## National guidelines and care processes and defined goal levels for indicators









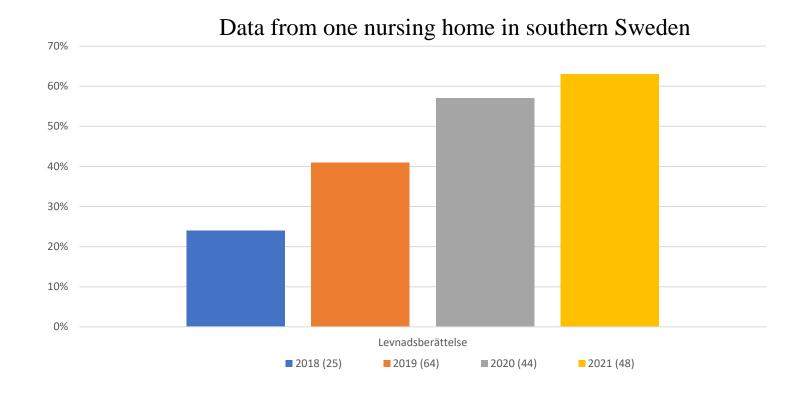
www.socialstyrelsen.se

https://nationelltklinisktku nskapsstod.se



# Improvements of person-centered care in nursing homes in collaboration with the Swedish Dementia Center program "Stjärnmärkt"

National indicator goal level: ≥98 % Proportion of persons with dementia where the life story of each individual is used in their care









### Increased knowledge about persons with dementia-Data from 101 702 individuals

#### AT THE TIME OF THE DEMENTIA DIAGNOSIS:

- Mean age: 79,3 years old
- 4,4% <65 years
- 94 % live in their own home, of whom 44% live alone
- Women in majority (58 %)
- Mild stage (MMSE 22/30)
- 75% are treated with cardiovascular drugs



Fotograf: Yanan Li



### What is unique with SveDem?

- By merging SveDem with national registers such as
  - Swedish National Patient Registry
  - Swedish Prescribed Drug Registry
  - Gothenburg CSF registry with dementia biomarkers
  - Dental registries
  - Other quality registers

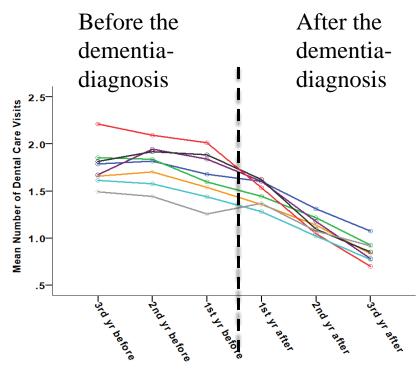
A deeper understanding of the relation between dementia, comorbidities and health outcomes is obtained, to improve management of these diseases.

AI can contribute with finding new potential factors/patterns



### Important to maintain good oral health!

#### **Number of dentist visits**



Fereshtehjehnad et al, Alz and Dem 2018



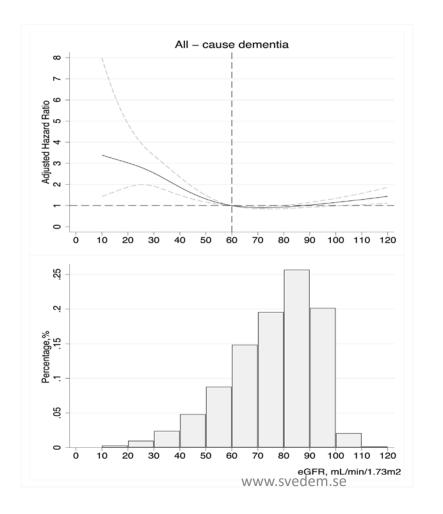
#### Dementia leads to worse oral health

Fereshtehjenad et al, Alz &Dem 2018, Lexomboon et al Gerodontology 2020, Tan ECK et al J Alzheimers Dis 2020. www.svedem.se



## Chronic kidney disease increases the risk of dementia in the general population

• Among 0.5 million subjects, both lower kidney function (<60ml/min/1.72m<sup>2</sup>) and faster kidney function decline (>2ml/min/1.73m<sup>2</sup>/year) are associated with increased dementia risk during 5-years follow up.



(Xu H, Eriksdotter et al. Neurology 2021)



## Current pharmacological treatment in Alzheimer's disease

Guidelines by the Swedish national Board of Health and Welfare recommend when a patient is diagnosed with Alzheimer's disease (AD)

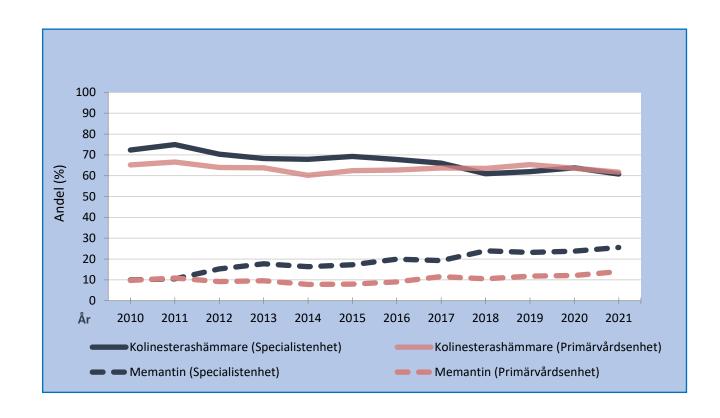
- ✓ treatment with Cholinesterase-inhibitors (ChEIs) in mild to moderate AD
- ✓ treatment with Memantine in moderate AD



The ChEIs currently in use: donepezil, galantamine and rivastigmine



## Cholinesterase inhibitor treatment at diagnosis has decreased

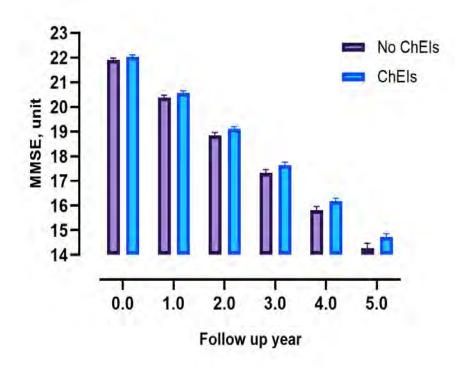


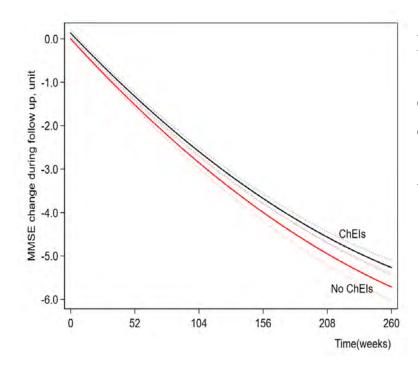
SveDem:s årsrapport 2021

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- Cholinesterase inhibitors were associated with modest but persistently slower cognitive decline over five years
- Cholinesterase inhibitors were associated with reduced risk of death (27%)
- Galantamine was associated with a reduced risk of severe dementia





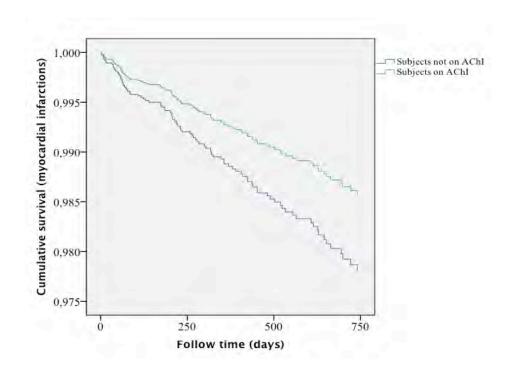
Data from SveDem: 11652 patients with cholinesterase inhibitors compared to propensity score matched 5826 untreated patients

Xu, Garcia-Ptacek....Eriksdotter, Neurology 2021

Neurology PODD <a href="http://traffic.libsyn.com/neurology/April2027202021\_Neurology20Podcast\_V3.mp3">http://traffic.libsyn.com/neurology/April2027202021\_Neurology20Podcast\_V3.mp3</a>



# Treatment with ChEI in patients with Alzheimer's disease reduced the risk for myocardial infarction with 38% and death with 36%



**On ChEI,** n=5159

Not on ChEI, n=1914

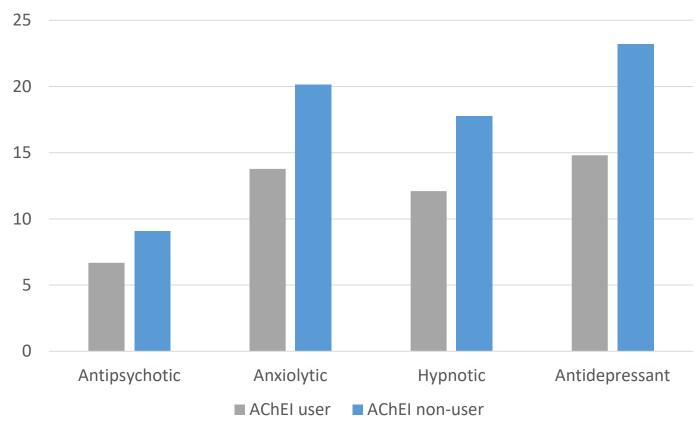
Nordström et al Eur Heart J, 2013

ChEI use was associated with reduced risk of ischemic stroke and death in people with AD. *Tan et al, Alz Dem 2018* 

ChEI use was associated with 16% reduced risk of death in patients with AD and diabetes compared with non-users *Secnik et al 2017, 2020* 



## Cholinesterase inhibitor treatment reduced the use of antipsychotic drugs and antidepressants

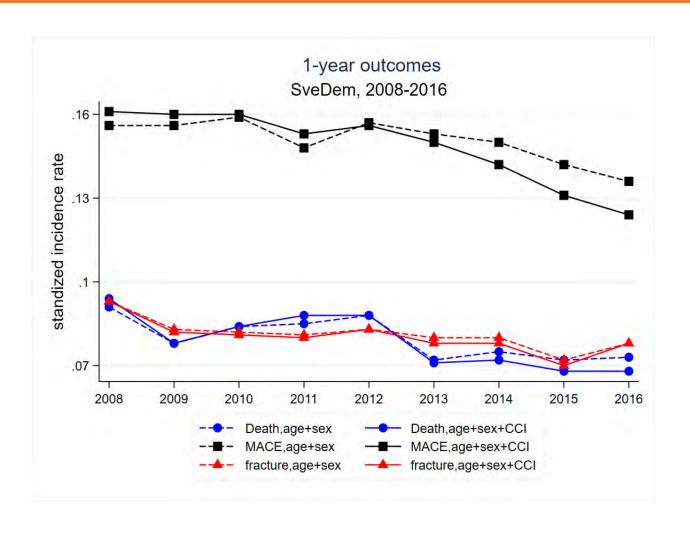


Tan, Eriksdotter et al, Am Ger Psych 2020

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## Risk of death, cardiovascular events and hip fractures among dementia patients decreased from 2008 to 2016



Those diagnosed with dementia in 2016 showed a

- 16 % reduction of hip fractures
- 23 % reduction of cardiovascular events (MACE)
- 28% reduction of mortality than those diagnosed in 2008

The risk of dying was 43% higher compared to the age-matched population in Sweden in 2008 and 27% higher in 2016.

Xu...Eriksdotter, JAMDA, 2020



## Thank you for your attention!

If you want to know more:

Please visit

www.svedem.se

or

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