

Dementia Diagnostics: The Adaptation of the British Sign Language Cognitive Screening Test into German Sign Language

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Background Deaf – Dementia - Diagnostics

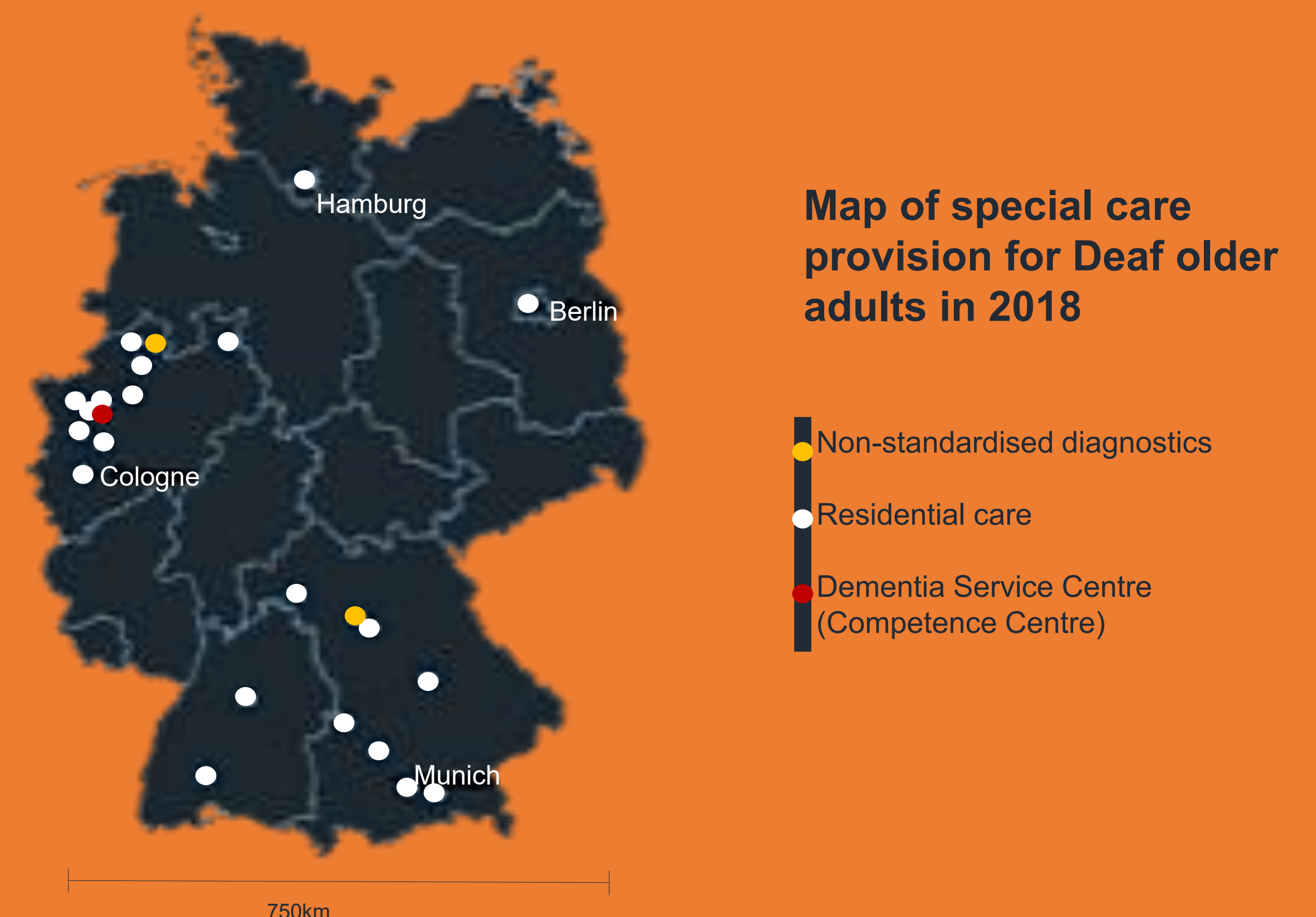
- › Deaf people in Germany use German Sign Language (DGS) to communicate (~80,000 people).
- › Sign languages have **no written form** and Deaf people show **lack of written language comprehension**.³
- › Dementia in Deaf people is diagnosed through interpreters or lip—reading and writing notes.⁴
 - › high number of misdiagnoses⁵
 - › quality factors: invalid and unreliable⁶
- › Only in two clinics **non-standardised diagnostics** are conducted: on-the-spot translations of MMSE⁷ and DemTect⁸ into German Sign Language.
 - › unreliable test results⁹
- › The **first sign language based dementia cognitive screening test** was developed in the UK in 2015 – the British Sign Language Cognitive Screening Test (BSL-CST).¹⁰

Methodology

- 1 Exploring the gap and **identifying key players in pre-diagnostic settings** through
 - semi-standardised expert interviews and
 - a survey study.
- 2 Analysing **cultural and linguistic differences between German and British Sign Language** users (aiming for equivalence):
 - **cultural test adaptation**^{11 12} in mixed Deaf - hearing research team, including clinicians and original test development team.
- 3 Formulating an implementation plan of the adapted screening tool into general diagnostics by taking a **participatory approach**, including stakeholders / future users of the test.

Aim Filling the gap of a sign-language based dementia diagnostic test and improving (health) care for Deaf older people in Germany.

Cultural Test Adaptations of Dementia Diagnostic Screening Tools are needed in Sign Languages to test Deaf People



2 Adaptation of test items

BSL-CST¹⁰

- › Screening test is based on Addenbrooke's Cognitive Examination Revised (ACE-R)¹³, Montreal Cognitive Assessment (MoCA)¹⁴ and Deaf specific test items.
- › Areas tested: memory, attention, orientation, semantic fluency, visual-spatial abilities, executive functions and language.
- › Normed (N= 226, age range 50-89) and clinically applied (UK)

Task: LANGUAGE – Picture Naming



Test item¹⁰



British Sign Language - CHOCOLATE



German Sign Language - CHOCOLATE

Check for

- › **Frequency**
How often is the sign used?
- › **Iconicity**
How much does the form relate to the meaning?
- › **Age of acquisition**
When was the sign acquired?
- › **Regional variation**
Where is the sign used?

DGS-CST

- › Screening test will be based on the BSL-CST, considering the validated German ACE-R¹⁵ and MoCA¹⁶.
- › Translation, 2 separate versions (1 native signer, 1 BSL-DGS interpreter)
- › Changed and new test items added
- › Expert recommendations from clinicians

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