Adaptation of “Seniors in the community: Risk evaluation for eating and nutrition, Version II” (SCREEN II) for use in Sweden: Report on the translation process

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Målsättning
Att med Klinisk Patientnära Forskning, verka för och underlätta arbetet med patientsäkerhet, och samtidigt bereda väg för en bättre vetenskaplig förståelse och vetenskaplig förankring i den verksamhetsförlagda utbildningen för sjuksköterskestudenter. Metodiken förenar högskolans tre primära uppgifter, forskning, utbildning och samverkan.

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Introduction

This report describes the initial stages of the Swedish adaptation of “Seniors in the community: Risk evaluation for eating and nutrition, Version II” (SCREEN II) that has been developed by Heather Keller.

An agreement on copyright was made in February 13, 2007 between Keller and Westergren implying that Keller remains the copyright and that the translated tool will be used for research purposes. For use with other purposes contact should be taken with Keller (hkeller@uoguelph.ca).

The aim of the adaptation process was to produce a Swedish language version of the SCREEN II that was conceptually equivalent to the original English version developed by Professor Heather Keller, RD, PhD at the University of Guelph, Canada, in 1999. The development of SCREEN II began in 2002 and has been validated and rigorously tested for inter- and intra-rater reliability. Interviewer, self-administered, abbreviated, French and English versions are available so far.

The dual-panel methodology originally suggested by Hunt et al. (1991) and more recently recommended by Swaine-Verdier et al. (2004) was used. This methodology emphasises the importance of achieving conceptual rather than linguistic equivalence of translated items. It is not always possible to find a “natural” translation for an item in a new language. Where this is the case, it is sought to find a phrase that describes an equivalent concept. Item translations also need to be expressed in common (everyday) language, in order for them to be acceptable to future respondents. According to this method of translation, the new language version is produced by means of two panels, a bilingual panel (to provide the initial translation into the source language) and a lay-panel (where items are assessed for clarity and acceptability of language).

Coming adaptation will establish initial support for the validity and reliability of SCREEN II. These stages will include qualitative field test interviews with a small but representative sample of seniors living in the community regarding acceptability and face/content validity. Finally, psychometric evaluation will be performed to establish initial support for the validity and reliability of the Swedish SCREEN II.

This report does not cover the field testing or psychometric evaluation of SCREEN II, but only covers the initial dual-panel adaptation process.
**Bilingual translation panel**

The first translation of the SCREEN II into Swedish was conducted by a panel of seven English-speaking Swedish individuals (Table 1). The session took place at the Department of Health Sciences (Caring Science Building), Lund University, Lund, Sweden, on May 21\(^{st}\), 2007. The panel was led by Albert Westergren, and attended by Maria Nilsson and Peter Hagell. All three researchers made minor contributions to the translation process. Peter Hagell with experience from dual-panel adaptation processes since before guided the whole process. Albert Westergren has expertise within the field of eating and nutrition.

<table>
<thead>
<tr>
<th>No.</th>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>24</td>
<td>Student (professional translation)</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>25</td>
<td>Student (professional translation)</td>
</tr>
<tr>
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<td>Student (professional translation)</td>
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<tr>
<td>4</td>
<td>Female</td>
<td>39</td>
<td>Student (professional translation)</td>
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<td>Female</td>
<td>23</td>
<td>Student (professional translation)</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>27</td>
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</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>24</td>
<td>Student (professional translation)</td>
</tr>
</tbody>
</table>

All panel members were fluent in English and had Swedish as their native language. Panel members were provided with a copy of the English version of SCREEN II about a week before the meeting. They were instructed to familiarize with the content, but not to produce translations prior to the meeting. The whole group considered alternative translations suggested by panel members. Any difficulties were discussed with the panel and with the researchers until agreement was reached. When two or more alternative translations were considered equivalent, these were left as alternatives for the mono-lingual lay-panel to consider. The bilingual translation panel needed about two hours to produce and agree on the initial SCREEN II. Major discussion and difficulties are summarised below.

**Title:** The title “Rate your eating habits” was discussed. Especially whether “Rate” is a familiar word to use in Swedish. Instead a new title was suggested "Vad har du för matvanor?" that can be translated to "What are your eating habits?".

Through e-mail this was discussed with Keller (answer in capitals):

Title: In Swedish it makes more sense to write "Vad har du för matvanor?" that can be translated to "What are your eating habits?". "Rate" is less often used in similar instruments.

Is this change ok for you?

THIS CHANGE IS FINE

**Question 1a:** One pound is 454 gram. Thus 10 pounds is almost equivalent to 5 kilos, 6 pounds to 3 kilos, and five pounds to two kilos.

**Question 1b and 1c:** No problems identified.
**Question 2:** “Do you skip meals”. The panel wanted to add the word “brukar” [are you used to] in order to make it closer to general spoken Swedish language. Thus, the translation was “Brukar du hoppa över måltider?”.

**Question 3:** “Do you limit or avoid certain foods?”. The panel discussed the intention with the question. The problems might be different for a person with diabetes compared to a person with overweight. The discussion did not however cause any difficulties with the translation.

Through e-mail this was discussed with Keller (answer in capitals):
Is the main focus on persons striving to control their weight (not becoming overweight) or on persons that have to avoid some food due to other problems with their health - or both? This was a discussion that came up. However, this will not have any implications for the translation.

**Question 4:** The rating alternatives are "Very good, Good, Fair" and “Poor”. It was discussed how “Fair” should be translated into Swedish. Consensus was achieved for “Mindre god” (i.e. less good).

**Question 5:** No problems identified.

**Question 6:** The rating of answer alternatives seemed to have been wrong, as there is an overlap. But thinking of the rigorous development process it was believed that this was deliberately done. It was decided to ask Keller about this, just in case.

Through e-mail this was discussed with Keller (answer in capitals):
In the response alternatives there is an overlap: Two or more times a day. One to two times a day. Once a day. Less than once a day. A person that will respond "two times" can use both the first and second alternative. Reading the question some times make me think that this overlap is deliberately made - if so, have respondents expressed any difficulties with the overlap?

With screen we identified that some seniors had one serving on one day and other days two. So yes this was a deliberate overlap as some days people consume one and some two (at lunch and supper) meat and alternatives. Thus the inclusion of this optional. There is an occasional problem with this but for the most part it seems to work.

In addition peanut butter was thought to be seldom used in Sweden. It was decided that Albert Westergren should discuss this with Keller, a dietician and a vegetarian.

Through e-mail this was discussed with Keller (answer in capitals):
In Sweden we seldom (almost never) use peanut butter - would it be ok for you that we erase that alternative or do you suggest anything else to be written instead?

OK TO REMOVE PEANUT BUTTER AS AN EXAMPLE- PLEASE INCLUDE OTHER EXAMPLES OF 'MEAT ALTERNATIVES' THAT MAKE SENSE IN YOUR CULTURE

The panel also discussed whether tofu is a product used by vegetarians. A woman who has lived as a vegetarian for about 30 years confirmed that tofu was a product regularly used by vegetarians and she also suggested to add quorn. The dietician also agreed upon this.
**Question 7:** No problems identified.

**Question 8:** There was a discussion about how to translate "cups". It was decided that Westergren should contact Keller about this.

Through e-mail this was discussed with Keller (answer in capitals):

In Sweden we most often talk about "glass" while it in the original version "cup" is used. How many millilitres do you regard a cup to contain? Normally glasses in Sweden contain 175 ml. A big coffee cup contains 150 ml, and a small 125 ml. Thus, the amount the cup can contain has implications for how many glasses we should write.

THIS 'CUP' IS REFERRING TO 250 ML. I OPTED FOR 'CUP' AS SOME SENIORS MAY NOT BE ABLE TO DIFFERENTIATE AMOUNT IN MILLILITRES-- REALLY THIS IS ALMOST GETTING AT 'SERVING' BUT THIS TERM IS NOT AS APPROPRIATE FOR FLUIDS -- IF THE RECOMMENDATION IN SWEDEN IS 8 GLASSES OF FLUID TO OUR 8 CUPS IN CANADA, THEN THIS SUBSTITUTION WOULD BE APPROPRIATE-- HOWEVER, HOW WILL YOU GET AROUND COFFEE IN A CUP/WATER IN GLASS AS YOU WANT BOTH TO BE INCLUDED IN THE ANSWER?

BY USING THE 'GLASS' TERM PEOPLE MAY NOT REMEMBER COFFEE AND OTHER HOT BEVERAGES THAT SHOULD BE INCLUDED IN THEIR FLUID CONSUMPTION

Following this answer Westergren, Nilsson and Hagell decided to serve the lay-panel with two alternatives that either specified how many glasses and the amount considered or how many glasses and/or cups of coffee and the amount considered.

**Question 9, 10, 11, and 12:** No problems identified.

**Question 13a:** The second answer alternative was regarded as vague. Is the purpose to capture social aspects of being together? There was however no ambiguities regarding translation.

**Question 13b and 14:** No problems identified.
Lay panel

The lay panel included six Swedish individuals of average educational level who were not fluent in English (Table 2). Because most people in Sweden have some knowledge in English, it was not possible to identify a panel that did not know English. However, the knowledge among the panel members was considered limited and none of them were used to communicate in, or otherwise use English (spoken or written) on a regular basis. The session took place at the “Senioren” in Hässleholm, Sweden on June 7th, 2007. “Senioren” is a meeting place for seniors were also patient associations are allocated, for instance the Stroke association. The panel was led by Albert Westergren, and attended by Maria Nilsson and Peter Hagell.

Table 2. Characteristics of the lay panel

<table>
<thead>
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<th>No.</th>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>80</td>
<td>Retired (sales leader)</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>75</td>
<td>Retired (shop assistant)</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>65</td>
<td>Retired (state administrator)</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>65</td>
<td>Retired (economist, Swedish military)</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>61</td>
<td>Retired (lieutenant colonel)</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>83</td>
<td>Retired (pharmacist)</td>
</tr>
</tbody>
</table>

The lay panel only accessed the translated version produced by the bilingual panel. The original source language version was not available to them. However, the researchers had access to the original English SCREEN II. The panel was instructed to review the questionnaire for appropriateness of wording, consider alternative wordings forwarded by the bilingual panel or the discussion following it. They should also suggest any changes they deemed required to provide clarity and immediacy. Each item was discussed within the panel until agreement was reached. The lay panel needed about 1 ½ hour to produce and agree on the revised SCREEN II. Major discussions and difficulties are summarised below.

**Question 1a-1c:** It was suggested that question 1a-1c should be renumbered to 1, 2 and 3. However, as all affect “weight” it was decided to keep the present numbers.

**Question 2:** No problems identified.

**Question 3:** A discussion followed regarding voluntary or forced limitation or avoidance of certain foods. It was thought to cover both “voluntary” and “forced”. However, this had no implication for the wording of the question.

**Question 4:** No problems identified.

**Question 5:** “How many pieces or servings of fruit and vegetables do you eat in a day?” had been translated to “Hur många portioner frukt och grönsaker äter du per dag?” [about “How many portions fruits and vegetables do you eat per day?”] There was consensus that this should be changed to “How many times a day do you eat...”.
Question 6: “How often do you eat meat, eggs, fish, poultry, OR meat alternatives”: One member of the panel suggested that one could ask how often persons eat vegetarian alternatives. However, the other panel members suggested that one should keep the question as it was. This was also the decision made.

Question 7: Once again the question was raised about overlapping answer alternatives. The answer from Keller was discussed with the panel and it was decided to keep the answer alternatives as they are in the original version.

Question 8: Two different alternatives were presented to the panel. Immediately the panel decided that one alternative was the best (the one with only glasses instead of the one with glasses and cups). The panel agreed upon that it was important to also present the amount that one glass corresponded to.

An important suggestion came up regarding low-alcohol beer and low-alcohol cider and it was decided that also these types of beverages should be included in the amount consumed a day.

Question 9, 10, and 11: No problems identified.

Question 12: A minor discussion was raised regarding eating together with someone and socialising versus eating in the same room as others without socialising. This discussion caused no change in the question.

Question 13a and 13b: The panel thought that this question was difficult to answer. Some solutions were discussed:
- Divide the answer alternatives on 13b depending on the alternatives on 13a.
- Emphasise that respondents should answer on which one specific answer alternative reflects your situation best.
- To allow more than one answer and then use the lowest (worst) score in data handling.

Anyhow, it was decided that these thoughts should be forwarded to Keller.

Through e-mail this was discussed with Keller:

Question: The lay panel experienced question 13b as "straggling"/pointing at different directions. As I understand it might be (hopefully) that respondents think of question 13a when they answer 13b. Have you experienced that respondents mark with a cross on two alternatives or any other difficulties with the question? Would it be an obstacle if one allow persons to mark two alternatives and then when data are analysed - one only regards the worst alternative?

Answer: Yes question 13b continues to be a bit of an issue. Stats Canada has decided to pick up SCREEN II abbreviated for an upcoming national survey. This will be telephone/in person interview so they plan to ask 13a then based on the response, only ask 13b based on whether or not the person cooks. We tend not to have too many do this incorrectly when self-administer— but we usually check if possible that only one response per question. Where this is not possible we look at 13a response and then use the most appropriate response for 13b to get their score (as 13a is not scored per se). So for example- someone says they cook their own food in 13a then indicates that it is "sometimes a chore" but also checks off "I'm satisfied with the quality of food prepared by others. In this case they would get a 2 for the response of "sometimes a chore" which lines up best with their 13a response of " I do" the cooking.
Through the discussion within the panel and correspondence with Keller the question was clarified. Thus, the first three answer alternatives on 13b were connected to those respondents that always or most often cook their own meals. The last two answer alternatives on 13b were connected to those respondents who had someone else to cook for them always or most often.

**Question 14:** No problems identified.

Based on the two panel translation processes and later on the field test abbreviated and interview versions will be made in accordance with SCREEN II and the corresponding versions in English.

**Acknowledgement**

We are grateful to the participants in the two panels and to Heather Keller for fast response on the questions raised and also for her willingness to let us access and use SCREEN II.
References


Sweden adaptation of SCREEN II to undergo field test interviews.

Vad har du för matvanor?

<table>
<thead>
<tr>
<th>Namn:</th>
<th>Datum:</th>
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</thead>
</table>

- Välj det alternativ som stämmer bäst in på dig. För varje fråga ska du bara kryssa för ett alternativ.
- Dina svar ska spegla dina typiska matvanor.
- Lämna gärna egna kommentarer bredvid frågorna.

1a. Har din vikt förändrats under de senaste 6 månaderna?
- 4 Nej, min vikt har inte förändrats mer än något kilo.
- 0 Jag vet inte hur mycket jag väger eller om min vikt har förändrats.

  **Ja, jag har gått upp…**
  - 0 mer än 5 kilo  Kommentarer?
  - 1 3 till 5 kilo
  - 2 ungefär 2 kilo

  **Ja, jag har gått ner…**
  - 0 mer än 5 kilo  Kommentarer?
  - 1 3 till 5 kilo
  - 2 ungefär 2 kilo

1b. Har du försökt att förändra din vikt under de senaste 6 månaderna?
- 4 Ja
- 4 Nej
- 0 Nej, men den förändrades ändå
1c. Tycker du att du väger …?
  4 [] lagom mycket
  0 [] mindre än du borde

2. Brukar du hoppa över måltider?
  4 [] Aldrig eller sällan
  2 [] Ibland
  1 [] Ofta
  0 [] Nästan varje dag

3. Drar du ner på eller undviker viss mat?
  4 [] Jag äter nästan all sorts mat.
  2 [] Jag drar ner på viss mat och det går bra.
  0 [] Jag drar ner på viss mat men jag tycker det är svårt.

4. Hur skulle du beskriva din aptit?
  4 [] Mycket god
  3 [] God
  2 [] Mindre god
  0 [] Dålig

  4 [] Fem eller fler
  3 [] Fyra
  2 [] Tre
  1 [] Två
  0 [] Färre än två
6. Hur ofta äter du kött, ägg, fisk, fågel ELLER alternativ till kött (t.ex. torkade ärtor, bönor, linser, nötter, tofu (sojabönsprodukt), quorn (bas på svampprotein och äggvita)?

<table>
<thead>
<tr>
<th>Alternativ</th>
<th>Frekventa angivelse per dag</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Två gånger per dag eller oftare</td>
</tr>
<tr>
<td>3</td>
<td>En till två gånger per dag</td>
</tr>
<tr>
<td>1</td>
<td>En gång per dag</td>
</tr>
<tr>
<td>0</td>
<td>Mer sällan än en gång per dag</td>
</tr>
</tbody>
</table>

7. Hur ofta äter eller dricker du mjölkprodukter? 
*T.ex. mjölk, mjölk i matlagning, glass, yoghurt, ost, alternative till mjölk som berikade sojadrycker.*

<table>
<thead>
<tr>
<th>Alternativ</th>
<th>Frekventa angivelse per dag</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Tre gånger per dag eller oftare</td>
</tr>
<tr>
<td>3</td>
<td>Två eller tre gånger per dag</td>
</tr>
<tr>
<td>2</td>
<td>En eller två gånger per dag</td>
</tr>
<tr>
<td>1</td>
<td>Vanligen en gång per dag</td>
</tr>
<tr>
<td>0</td>
<td>Mer sällan än en gång per dag</td>
</tr>
</tbody>
</table>

8. Hur mycket dricker du per dag? *T.ex. vatten, te, kaffe, örtdryck, juice, läskedryck, cider, lättöl men ej övrig alkohol (stor mugg=250 ml, glas=175 ml, kaffekopp liten = 125 ml)*

<table>
<thead>
<tr>
<th>Alternativ</th>
<th>Mängd (ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>11 glas eller mer (2000 ml eller mer)</td>
</tr>
<tr>
<td>3</td>
<td>7 till 10 glas (1250 – 1750 ml)</td>
</tr>
<tr>
<td>2</td>
<td>4 till 6 glas (750 – 1000 ml)</td>
</tr>
<tr>
<td>1</td>
<td>Ungefär 3 glas (ungefär 500 ml)</td>
</tr>
<tr>
<td>0</td>
<td>Mindre än 3 glas (mindre än 500 ml)</td>
</tr>
</tbody>
</table>
9. Brukar du hosta, sätta i halsen eller känna smärta när du sväljer mat ELLER dryck?

- 4 □ Aldrig
- 3 □ Sällan
- 1 □ Ibland
- 0 □ Ofta eller alltid

10. Har du svårt att bita i eller tugga mat?

- 4 □ Aldrig
- 3 □ Sällan
- 1 □ Ibland
- 0 □ Ofta eller alltid


- 4 □ Aldrig eller sällan
- 2 □ Ibland
- 0 □ Ofta eller alltid

12. Äter du en eller flera måltider om dagen tillsammans med någon?

- 0 □ Aldrig eller sällan
- 2 □ Ibland
- 3 □ Ofta
- 4 □ Nästan alltid

13a. Vem brukar laga din mat?

- □ Jag själv
- □ Jag delar matlagningen med någon annan
- □ Oftast lagar någon annan min mat
13b. Vilket påstående angående matlagning passar bäst in på dig?

Jag lager alltid/oftast min mat själv och…

4 □ …jag tycker om att tillaga de flesta av mina måltider.

2 □ …ibland tycker jag att matlagning är jobbigt.

0 □ …oftast tycker jag att matlagning är jobbigt.

Någon annan lager alltid/oftast min mat och…

4 □ …jag är nöjd med kvalitén på den mat som andra lagar åt mig.

0 □ …jag är inte nöjd med kvalitén på den mat som andra lagar åt mig.


4 □ Aldrig eller sällan

2 □ Ibland

1 □ Ofta

Tack för din medverkan!