Project TOM: Results of implementing a multifactorial approach to prevent falls and improve autonomy in community-dwelling older adults
“Ministry encourages regional collaboration in order to live longer at home” (letter to parliament, 2014)

“Seven out of ten 75+ would prefer to live in their own house until death” (WoON, 2010)
Aim

To assess the impact of a multifactorial fall prevention program (TOM) on mobility and wellbeing and its acceptability and feasibility.
TOM participant

- 65 years and older
- Increased risk of falling
- Lives independently
  - Within the region of the living lab
- Has access to pc and email address
- Has no internal electronic equipment
TOM approach

TOM intervention period

14 weeks

Impact questionnaire
- falls & fear of falling
- perceived health & self-sustainability

Functional tests 1

In Balans & Social Support

Functional tests 2

Nutritional screening

Informational presentation nutrition

Mobility Monitor

Measurement T0

2 weeks before TOM starts

Impact questionnaire
- falls & fear of falling
- perceived health & self-sustainability

Measurement T1

2 weeks after TOM ends

Impact questionnaire
- falls & fear of falling
- perceived health & self-sustainability

Process measurement
- focus groups participants
- interviews professionals

Measurement T2

6 months after TOM ends

Impact questionnaire
- falls & fear of falling
- perceived health & self-sustainability
5 Living Labs

**Living Lab 1 - BEST**
- April – July 2017
- 42 participants

**Living Lab 2 – VITAAL VECHTDAL**
- October 2017 – January 2018
- 33 participants

**Living Lab 3 - HOUTEN**
- April – July 2018
- 25 participants

**Living Lab 4 – AMSTERDAM**
- September – December 2018
- 10 participants

**Living Lab 5 – VOORBURG**
- September – December 2018
- 14 participants

**TOTAL**
- 124 participants
Results

Functional tests
- Participants: 61
- Average age: 75 years
- 15 male & 46 female

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed up and Go</td>
<td>9.3 sec</td>
<td>7.9 sec</td>
</tr>
<tr>
<td>Chair Stand</td>
<td>15.0 sec</td>
<td>11.8 sec</td>
</tr>
<tr>
<td>Functional Reach</td>
<td>26.5 cm</td>
<td>29.3 cm</td>
</tr>
<tr>
<td>One-leg stand</td>
<td>8.2 sec</td>
<td>8.9 sec</td>
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</tbody>
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Impact questionnaire
- Participants: 88
- Average age: 75 years
- 32 male & 56 female

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<thead>
<tr>
<th>Before</th>
<th>After</th>
<th>6 months after</th>
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</thead>
<tbody>
<tr>
<td>Fallers</td>
<td>38 (43.2%)</td>
<td>21 (23.9%)</td>
</tr>
<tr>
<td>Fear of falling</td>
<td>2.07</td>
<td>1.88</td>
</tr>
<tr>
<td>More social support</td>
<td>64%</td>
<td></td>
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<tr>
<td>Feel better</td>
<td>57%</td>
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Mobility monitor
- Participants: 80
- Average age: 75 years
- 33 male & 47 female

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<thead>
<tr>
<th>Before</th>
<th>After</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.5%</td>
<td>More steps</td>
<td></td>
</tr>
<tr>
<td>55.0%</td>
<td>More standing up from chair</td>
<td></td>
</tr>
</tbody>
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Process
- Focus group participants: 25
- Telephone interview professionals: 30

"Thanks to TOM, we are in balance. That enriches our lives." — participant TOM

+ Social interaction
+ Multidisciplinary character
- Connection between TOM components
- Personalised feedback
Conclusion

The approach of TOM provides a relevant blueprint for a local fall prevention method in order to maintain older adults’ self-management and independence.
THANK YOU!