Self-fitting hearing aids: issues of candidacy and support

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<table>
<thead>
<tr>
<th></th>
<th>Initial setup</th>
<th>Ongoing use and management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional hearing aid</td>
<td>![Image of a person]</td>
<td>![Image of an older person]</td>
</tr>
<tr>
<td>Self-fitting hearing aid</td>
<td>![Image of a person]</td>
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- Accessibility
- Cost-effectiveness
- User independence and control
Overarching goal: To map out a service delivery model that will support self-fitting hearing aid users

**Candidacy:** What factor(s) predict success with setting up a self-fitting hearing aid?

**Support:** To what extent do people need support with setting up a self-fitting hearing aid? What is the nature of the required support?
**STUDY DESIGN**

- Cognitive function
- Problem-solving skills
- HA self-efficacy
- Health locus of control
- Previous HA experience

Initial assessment

Self-fitting setup procedure

Outcome assessment

*Target N = 60*

*N to date = 49*
STUDY DESIGN

Cognitive function
Problem-solving skills
HA self-efficacy
Health locus of control
Previous HA experience

Initial assessment
Self-fitting setup procedure

Multimedia instructions and support from a clinical assistant as needed

Target N = 60
N to date = 49
Setting up the hearing aids, part 1:
The physical handling steps

<table>
<thead>
<tr>
<th>Step</th>
<th>% Correct</th>
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<tbody>
<tr>
<td>Identify L &amp; R HAs</td>
<td>100</td>
</tr>
<tr>
<td>Choose ear tip size</td>
<td>100</td>
</tr>
<tr>
<td>Adjust tube length</td>
<td>88</td>
</tr>
<tr>
<td>Insert HAs into ears</td>
<td>82</td>
</tr>
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Setting up the hearing aids, part 2:
Using the smartphone and app

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<td>Pair HAs to phone</td>
<td>63</td>
</tr>
<tr>
<td>Assign L &amp; R HAs in app</td>
<td>43</td>
</tr>
<tr>
<td>Automatic hearing test</td>
<td>67</td>
</tr>
<tr>
<td>Practice fine-tuning</td>
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### Setting up the hearing aids, part 2:
Using the smartphone and app

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RESULTS

67% Successful

- Completed the task independently, using the instructions only
- Correctly identified specific difficulties and sought help with them from the CA

OR

33% Unsuccessful

- Did not complete the self-fitting task
- Did not recognise errors in earlier steps until help was sought from the CA for a later step

N = 49 to date
A person who is successful at setting up a self-fitting hearing aid is likely to…

- Be younger
- Own a smartphone or tablet
- Have previous HA experience
- Have better self-management skills
- Have better cognitive function
- Be a better problem-solver
- Have higher HA self-efficacy
- Believe less strongly in the effect of “powerful others” on health status
The majority of problems required face-to-face contact with the clinical assistant to adequately resolve.

Many participants, especially those without previous HA experience, have been requesting rehabilitative support, not just technical support.

Some participants experienced significant ongoing problems during the field trial, yet did not seek help.

“How do I cope in noisy places?”

“What do I say when my friends see my hearing aids?”
**Assessment**

Primarily focuses on auditory characteristics (audiogram, speech discrimination)

**HA Fitting**

Performed by audiologist in the clinic; client receives paper instruction booklet to take home

**Follow-up**

Primarily focuses on ensuring HA settings are appropriate and client has mastered HA handling skills
**Assessment**

Includes assessment of predictive factors; informs decision to offer SFHAs as an intervention option.

**SFHA Fitting**

Performed by the client at home; technical support delivered via a range of modalities and tailored to individual needs and abilities.

**Follow-up**

Focuses on meeting client’s psychosocial needs and providing rehabilitative support.

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**Discussion**

**Assessment**

Next best thing to a face-to-face encounter.

Let’s Skype!

**SFHA Fitting**

Hi! How are you going? Is there anything we can help you with?

Support-seeking prompts via the app.

**Follow-up**

Support-seeking prompts via the app.
THANK YOU