

European Federation of Audiology Societies (EFAS)



EFAS Working Group on school age hearing screening, Interlaken, Switzerland, meeting 08JUN17

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Introduction

At former meetings of the EFAS working group on school age hearing screening (EFAS WG SHS) it was decided to focus on the investigation of more efficient methodology for hearing screening (Q1) and Incidence of hearing impairment at post-neonatal age until 18 year (Q2) in a pilot project. The outcomes of this pilot project may be a stimulant to consider a large study across-Europe and application for an EU-project.

Q1: Methodology

The Sound Ear Check (SEC), a new screening methodology for SHS, based on ecologically relevant sounds, developed and optimized by partners Netherlands-Leuven, language independent, with child friendly pictures, will be administered in combination with the locally used SHS screening methodology in minimal 2000 children (by each contributing partner), possibly at different ages, at least at school-entry (5 or 6 year old). This pilot project will be covered with own resources of the contributing partners. The Sound Ear Check will provide an across-partner and across-languages reference measure.

Q2: Evidence/Incidence

Investigation of evidence for the necessity of SHS, inventory of the already available information, pilot studies in some countries on a regional or country scale, based on typically 2000 children (by each contributing partner) with records tracked from NHS (Neonatal Hearing Screening) to SHS, with whatever the used screening methodology is for SHS, the comparison of SHS data with NHS databases will be made to extract information about incidence

Activities of WG SHS at EFAS 2017 Interlaken

At the Interlaken EFAS-congress a satellite symposium/session with 3 reports from the WG SHS (Jan Wouters, Sam Denys, Jan de Laat) was organized on Wednesday 07JUN17, as well as a 1 hour meeting during lunch time on Thursday 08JUN17 to answer questions and discuss EFAS WG SHS issues with the interested partners.

The presentations are available on the google drive EFAS WG SHS under Presentations and documents

Action plan 2017-2018

Organize, prepare and start pilot project with application of Sound Ear Check (language independent) together with school age hearing screening as applied in own country (Q1) and, if applicable, compare with the NHS data for all screened children (Q2).

A number of measurement sets (with Sound Ear Check only, or plus Digit Triplet Test in own language) will be provided for partners in the pilot project. Partners Leuven and Netherlands developed and implemented the test on tablet. A demo was given at the WG SHS meeting on 08JUN17. This will be ready for use and delivery at the time of the next WG SHS meeting in Leuven. A description of the test procedure and test setup is provided in attachment and on the google drive EFAS WG SHS under Presentations and documents.

A meeting of the EFAS Working Group and project partners will be organized in Leuven in the week 14 to 16 November 2017, and concentrated around 1 day, on Wednesday 15NOV17. We suggest to meet for a first get-together the evening before (for dinner together and 1 hour meeting for discussion agenda). We will meet from 9h to 16h on 15NOV17. For the people who do not have to catch train and/or airplane immediately after 16h we can continue until 20h and dinner for further (practical) arrangements. A second option is Thursday 16NOV17.

Please inform us of your presence, your travel arrangements, and if we have to make a hotel reservation or you. It is our pleasure to invite you for dinner in a nice Leuven restaurant the evening before.

Tasks for every partner (before 15SEP17?)

Provide translations of the text lines used in the test procedure (introduction and info for supervising clinician) for implementation in other languages. A document (Excel-sheet) with an overview of the necessary text lines that have to be filled out in each language is attached and available on the Google drive EFAS WG SHS.

Evaluation of the test materials: each partner can check the sounds and pictures used in the SEC implementation for their applicability in children at school entry (5-6 years old, depending on country). A description of the test procedure and test setup is provided in attachment and on the google drive EFAS WG SHS under Presentations and documents.

Each partner provides information about their own standard SHS-method and test procedures

Submit necessary documents for approval of local medical ethical committee. See attached document.

Agenda of Leuven meeting (at 15NOV17, but to be prepared at forehand)

Deliver the measurement sets of calibrated headphone plus tablet with software installed, manual, training and supplementary info, 1 set per partner (max 2 sets)

Discuss and finalize test protocol with aspects: a common denominator for all (SEC), the usual country-specific SHS-test will as usual be administered (using the standard method), and

complimented with at least the SEC, power calculations, how to deal with conductive hearing loss, test-retest reliability, distribution of thresholds, precise test procedures

Define criteria and number of tests: each partner will accumulate tests of minimum 2000 children from a general population, per 1000 we expect between 0.5% (neonatal referral rate) and 5% (SHS referral rates with DTT at age 10y in Flanders), thus between 10 and 100 per 2000, that fall outside normal definition. The data of the normal hearing children will be used for distribution analysis and more precise determination of criteria.

Agreements about data: data are kept in one common database (separate from each partners own national health database), all data will be anonymized according to common key, each partner (or organization in partner country) has transcription key of own children, each partner has the freedom to use the own data

Agreements about publication: each partner owns own data and can make use of them, collaboration Leuven-Netherlands can use complete dataset for analyses. An article about whole study will be used as a report of the EFAS WG SHS

Agreements about use of material: a price of 500 EUR per set will be requested for rent during the pilot project. The measurement sets remain property of partner Leuven and will be returned after the pilot project. Partners can make use of the test sets as long as project and collaboration runs.

Partners in the project:

Finland:	(Q1)Q2	Tytti Willberg	tytti.willberg@tyks.fi
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Additional information (in attachment and on Google drive EFAS WG SHS see

<https://drive.google.com/open?id=0Bwk9b3e5-K60b2NMbzYxNXJoM00>)

- Excel-sheet SEC_Translations to fill in text lines for other languages
- Document SEC_Info with Methods and Materials (description of the test procedure and test setup)

Mailing list and Interested others

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