

# Clinical trial of a new protocol and clinical tool designed to assess the audiological needs of individuals with hearing loss

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# Introduction

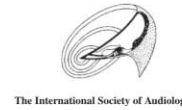
- Needs assessment is an important part of the audiological evaluation
- A needs assessment consists of:
  - Exploring the difficulties experienced by the client in daily life because of the hearing loss
  - Identifying personal and environmental factors that may influence the rehabilitation process
- This assessment is essential so that the audiologist can recommend a treatment plan that is adapted to the specific needs of the client.
- It does not only consist of determining whether the person needs to wear hearing aids or not, it is more global than that.

# Introduction

- A protocol and a clinical tool were recently developed and published to guide this intervention – The Quebec Audiological Assessment Protocol for Younger and Older Adults (QAAP-YOA)

<https://www.tandfonline.com/doi/full/10.1080/14992027.2021.1947532?scroll=top&needAccess=true>

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ORIGINAL ARTICLE



## Development of a protocol and a clinical tool to assess the audiological needs of younger and older adults with hearing loss

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# Introduction

## Quebec Audiological Assessment Protocol for Younger and Older Adults (QAAP-YOA)

- Based on the principles of the ICF, client-centered care and goal setting



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- Sections included in the QAAP
  - Audiological needs
  - Living conditions
  - Personal factors
  - Discussion with the client concerning treatment goals and intervention strategies
  - Recommendations
- + What information should be included in the report



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- Sections included in the QAAP
  - Audiological needs
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  - Personal factors
  - Discussion with the client concerning treatment goals and intervention strategies
  - Recommendations
- + What information should be included in the report
- Not only intended for hearing aid evaluations, but rather for all kinds of audiological interventions



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First trial of the QAAP in the clinic, with audiologists and clients





# Learner outcomes

Upon completion of this activity, participants will be able to:

- 1) Assess the audiological needs of their hearing-impaired clients following a validated and standardized protocol;
- 2) Understand the potential impacts of the implementation and use of the QAAP on their workload and job quality;
- 3) Recognize ways to facilitate the implementation of the QAAP in their practice and to minimize its impact on their workload.



# Research objectives

- 1) Measure the effects of the use of the QAAP on audiologists' workload and job quality
- 2) Explore the clinical relevance, usefulness, advantages and disadvantages of the QAAP
- 3) Identify facilitators and obstacles to the implementation of the QAAP in the clinic
- 4) Identify the modifications that may be required to the QAAP



# Methods

## Participants

- 5 experienced audiologists who work in primary-care settings
  - 3 women and 2 men, mean age of  $37.0 \pm 7.8$  years-old
  - Mean working experience of  $11.4 \pm 8.0$  years
- 29 adult hearing-impaired clients
  - 10 women and 19 men, mean age of  $69.2 \pm 14.4$  years-old
  - Mean PTA of  $47.4 \pm 20.0$  dB HL left ear and  $52.3 \pm 22.0$  dB HL right ear
  - Most common hearing loss causes: noise exposure (n=9) and presbycusis (n=6)



# Methods

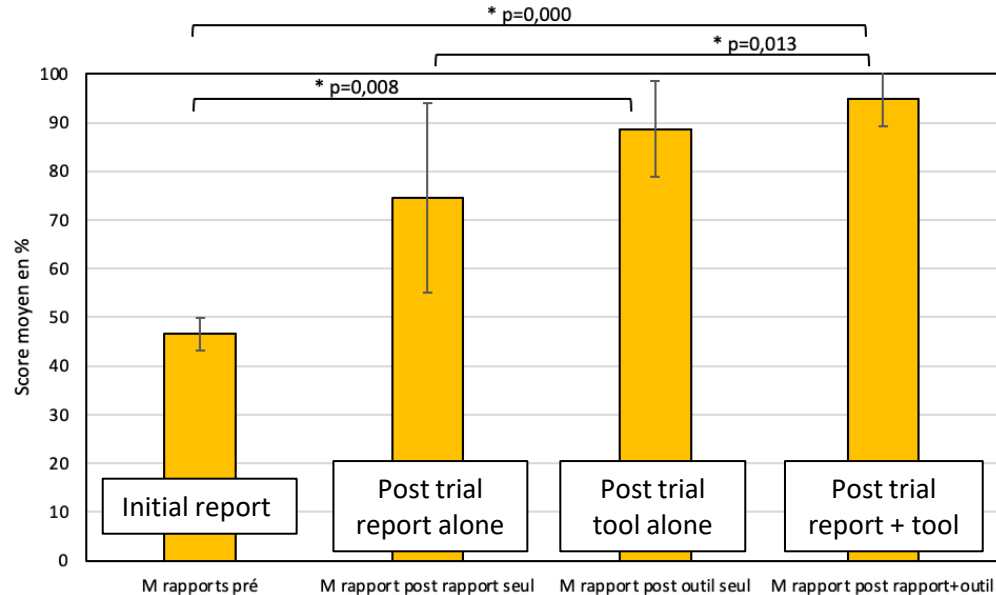
## Procedures

- Initial documentation of the usual workload of audiologists (ex. number of clients met in one day, time spent providing direct or indirect services to patients, etc.)
- Needs assessment reports collected
- Audiologists participated in a two-hour training session which included a description of the QAAP and instructions on how to use it
- Audiologist applied the QAAP with clients (3 to 10 clients per audiologist)
- Documentation of the audiologists' workload after the trial
- Needs assessment reports written in accordance with the instructions included in the QAAP also collected
- Individual semi-structured interviews were done with audiologists and clients

# Results

## Workload and job quality – Quality of audiological reports

- Mean compliance rate of the audiological reports with the QAAP requirements generally better after the trial, and significantly better with the use of the QAAP accompanying clinical tool ( $p < 0.008$ )





# Results

## Workload and job quality – Time required to apply the QAAP

- The additional time required to administer the QAAP in the clinic with the client varied between 5 to 30 minutes per patient
- The additional time required to complete the clinical tool that accompany the QAAP in the clinic with the client varied between 5 to 60 minutes per patient
- All audiologists mentioned that the time required to apply the QAAP and to complete the clinical tool was more important at the beginning and that there was a reduction of this time with experience, after a break-in period
  - A realistic mean estimate  $\approx$  30 minutes total / patient



# Results

## Clinical relevance, usefulness, advantages and disadvantages

- Audiologists
  - Relevant and useful in the clinic
  - Allows for a more comprehensive and consistent needs assessment, and better adapted recommendations
  - The majority of audiologists said they were satisfied
  - The protocol is not necessarily applicable for all clients (ex. ENT cases)
  - Time required to apply the protocol



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  - The majority of audiologists said they were satisfied
  - The protocol is not necessarily applicable for all clients (ex. ENT cases)
  - Time required to apply the protocol
- Clients
  - No specific issue raised by clients
  - All said they were satisfied





# Results

## Proposed changes to the QAAP-YOA

- Proposed changes mainly to reduce administration time and to facilitate its use with clients in the clinic
  - Use of a digital platform
  - Integrate better the QAAP within the present clinical tools and procedures (ex. intake tool vs needs assessment)
  - Maybe develop different versions of the QAAP for different profiles of clients



# Conclusions

- 1) Assess the audiological needs of their hearing-impaired clients following a validated and standardized protocol;
  - The QAAP-YOA is a clinical protocol that can help audiologists to complete audiological needs assessment with their clients
  - Based on the principles of the ICF, client-centered care and goal setting
  - Sections included in the QAAP
    - Audiological needs
    - Living conditions
    - Personal factors
    - Discussion with the client concerning treatment goals and intervention strategies
    - Recommendations
  - + What information should be included in the report



# Conclusions

- 2) Understand the potential impacts of the implementation and use of the QAAP-YOA on their workload and job quality;
  - Audiologists judged the QAAP relevant and useful in the clinic because it allows for the completion of a more comprehensive and consistent needs assessment, which led to better informed recommendations
  - Audiologists and clients were generally satisfied with the application of the QAAP
  - Additional time is required to administer the QAAP and to complete the clinical tool



# Conclusions

- 3) Recognize ways to facilitate the implementation of the QAAP-YOA in their practice and to minimize its impact on their workload.
  - Be prepared, get training, revisit your present clinical tools and procedures to make space for a more comprehensive needs assessment
  - Allow you some time to adapt



# Conclusions

- Future work to convert the QAAP-YOA in a digital format, which would allow, among other advantages, shorter administration time, distance and self administration

# Thank you !

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