WEBINAR

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Enhancing Inclusivity in Clinical Trial Research:

Critical Factors in COA Development and Translations

WATCH ON-DEMAND

FEATURING LIFE SCIENCE EXPERTS:

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FDA ON DIVERSITY ACTION PLANS (DAP)

In the FDA's draft guidance from June 2024, Diversity Action Plans are required for certain clinical studies involving drugs, biologics, and devices.

PURPOSES

TO IMPROVE

Representativeness

Timely access to medical discoveries

Generalizability of results

Understanding of disease/products

Information on safe & effective use of products

REQUIREMENTS

DAP CONTENT

Enrollment goals

Enrollment rationales

Measures to meet enrollment goals

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ABOUT LIONBRIDGE

Decades of supporting the full life-cycle of medicinal drugs with scale, expertise, and technology

COA/eCOA Solutions

- Translation & Linguistic Validation
- eCOA Services
- Copyrights & Licensing Support
- Rater Training Support

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RESEARCH & DEVELOPMENT
Pre-clinical Development
Clinical Drug Development PH 1-3 (CTA/IND)
Clinical Outcome Assessments (COAs)
IMP Labelling
Reporting (e.g. Plain Language Summaries)

PORTFOLIO EXPANSION
Product Extensions

Pre-market
Peri-market
Post-market

NEW DRUG APPLICATION/ MARKETING AUTHORIZATION APPLICATION
Common Technical Document (CTD)
Final Labelling (Linguistic Review)

KEEPING ON THE MARKET
Product Variations
Marketing Renewals/ Re-assessments
Post-market Surveillance/Vigilance
Post-Market Clinical Studies PH 4

PLACING ON THE MARKET
Regulatory Approvals
Approved Labelling
Product Marketing

CANADA
- Moncton
- Montréal
- Ottawa

UNITED STATES
- Boise, Idaho
- Los Angeles, California
- New York, New York
- Waltham, Massachusetts

Mexico City

CENTRAL AMERICA
- San José

SOUTH AMERICA
- São Paulo

EUROPE
- Copenhagen · Zilina
- Espoo · Madrid
- Paris · Barcelona
- Mougins · Gothenburg
- Berlin · Basel
- Wuppertal · Lausanne
- Dublin · Zurich
- Amsterdam · Bristol
- Warsaw (2)

ASIA
- Beijing · Yokohama
- Jinan · Singapore
- Shanghai · Seoul
- Hong Kong · Taipei
- Chennai · Bangkok
- Mumbai

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ABOUT PEARSON

80+ years of experience in the assessment field.

Comprehensive portfolio of research-based instruments that are valid, reliable, and represent the highest technical quality in assessments.

Large international presence.

FOUR TYPES OF COAS IN CLINICAL TRIALS

FDA Definition of **Clinical Outcome Assessments (COAs):**

an instrument used to describe or reflect how a person feels, functions, or survives and can be reported by a health-care provider, a patient, a non-clinical observer (such as a parent), or through performance of an activity or task.

Patient-reported outcome measures (PROs)	Observer-reported outcome measures (ObsROs)	Clinician-reported outcome measures (ClinROs)	Performance outcome measures (PerfOs)

THE IMPORTANCE OF COA SELECTION

During protocol development, selected COAs should be validated with diverse populations.

Lack of trial diversity can result in limited treatment options for underrepresented populations.

Using unfit cognitive scales has been cited as a significant reason that 98% of phase II and III clinical trials for Alzheimer's disease have failed.

(Nelson, 2023; Kim, et al., 2022)

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DEFINING BIAS

Test Bias

Systematic favoritism or disadvantage in the assessment process.

Construct-Validity Bias

Whether a test accurately measures what it was designed to measure.

Item Bias

When the characteristic of a test item causes participants of the same ability level to perform differently because they are from different groups.

REDUCING TEST BIAS IN TEST DEVELOPMENT

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ITEM PLANNING

- SKIN TONE

- HAIR/EYE COLOR

- HAIRSTYLE/TEXTURE

- GENDER (MALE, FEMALE, GENDER NEUTRAL)

- REGION

- PARENT EDUCATION LEVEL THAT INFLUENCE SOCIO-ECONOMICS

- DISABILITY

- STEREOTYPICAL "ROLES"

GENDER NEUTRALITY

Use gender neutral language.

Scoring guidelines for children who do not use binary gender pronouns.

Many assessments now generate electronic reports that do not include gender pronouns.

EXPERT PANEL REVIEWS FOR BIAS

Examine test components (i.e., stim books and record forms) for item appropriateness and any potential bias toward:

- GENDER
- ETHNICITY
- CULTURAL BACKGROUND
- DIALECTICAL VARIATION
- SOCIAL STATUS
- EDUCATION LEVEL

"GLOBAL ITEM SETS"

Global reviewers examine test components to help create "global item sets"

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KEY OBJECTIVES:
INTERNATIONAL PUBLICATIONS

Provide good translations & adaptations

Maintain theoretical constructs

Be sensitive to cultural context
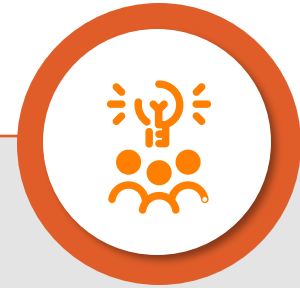
Develop psychometrically sound outcome measures

INTERNATIONAL TEST DEVELOPMENT

"Test adaptation refers to all of the activities including the decision on whether or not a test in a second language and culture could measure the same construct in the first language..."

International Test Commission 2016

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INTERNATIONAL TEST COMMISSION (ITC)

The ITC provides the most influential and comprehensive recommendations for cross-cultural adaptation.

www.intestcom.org

INTERNATIONAL
TEST
COMMISSION

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PHASES OF INTERNATIONAL TEST ADAPTATION

- PRECONDITION
- TEST/ITEM DEVELOPMENT
- CONFIRMATION (EMPIRICAL ANALYSES)
- ADMINISTRATION
- SCORE SCALES AND INTERPRETATION
- DOCUMENTATION
- FORMAL REVIEW BY LOCAL AUTHORITIES

EXAMPLE: WMS-V (IN DEVELOPMENT)

- Wechsler Memory Scale, 5th Edition
  - Currently undergoing standardization in the U.S.
  - Conducting an international review during U.S. development work to ensure the suitability of items for international use.

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EXAMPLE: RAVEN'S PROGRESSIVE MATRICES

- Non-verbal with few verbal instructions
- Measure of general intelligence or "g"
- Content is considered "culture free"
- European norms created from 6 EU countries
- Suitable for use in highly diverse regions.

TEST DEVELOPMENT:
PROCEDURES TO IDENTIFY AND ELIMINATE BIAS

- Follow APA & AERA test development guidelines for fairness
- Expert bias review
- DIF analysis using IRT and Mantel-Haensze methods
- Measurement invariant analysis
- Demonstration, teaching, & sample items
- Response process analysis
- Scoring studies for verbal subtests
- Normative samples randomly stratified according to census data

LINGUISTIC VALIDATION:
REDUCING BIAS IN LOCALIZATION WHILE ADAPTING FOR CULTURAL APPROPRIATENESS

Linguistic Validation:
An industry-recognized methodology for the localization of Clinical Outcome Assessments (COAs) leveraging translation and cultural adaptation

Linguistic Validation Process's Core Goals:
- Equivalence to the original measure
- Easy interpretation and understanding by the intended study populations
- Comparability across languages and cultures

LINGUISTIC VALIDATION
REDUCING BIAS IN LOCALIZATION WHILE ADAPTING FOR CULTURAL APPROPRIATENESS

1 TRANSLATABILITY ASSESSMENT

2 CONCEPT ELABORATION

3 AUTHOR REVIEW

4 DUAL FORWARD TRANSLATION

5 RECONCILIATION

10 FORMAT CHECK AND PROOFREADING

9 CLINICIAN REVIEW

8 FORWARD/BACK RESOLUTION

7 COMPARATIVE REVIEW

6 BLINDED (DUAL) BACK TRANSLATION

11 RESPONDENT RECRUITMENT

12 RESPONDENT INTERVIEWS

13 REPORT CREATION

14 IMPLEMENTATION

15 CERTIFICATION

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Interview Participant#	Age (full years)	Sex	Gender	Ethnicity	Educational level	Profession or employment	Disease	Year of diagnosis
#								
Participant#1								
Participant#2								
Participant#3								
Participant#4								
Participant#5								

The categories below are available as drop-down lists for "Sex" and "Educational Level". The rest of the categories are free text.

"Sex" refers to the biological/physiological characteristics, whereas "Gender" refers to socially constructed characteristics (internal sense of self, identity

| Male |
| Female |

| No formal |
| Primary |
| Secondary |
| Third Level |

RIGHTSHOLDER RECRUITMENT:
MAINTAINING DIVERSITY

Lionbridge's Global Community is 500,000 people strong.

In the Life Sciences Community, over 40% self-identify as meeting diverse criteria for their region or country.

Leveraging a diverse community in all of Lionbridge's localization activities is essential to ensure content is fit for its purpose and intended audience.

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Q&A

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