2021 Virtual REx-PN® Conference

The REx-PN® Item Development Process

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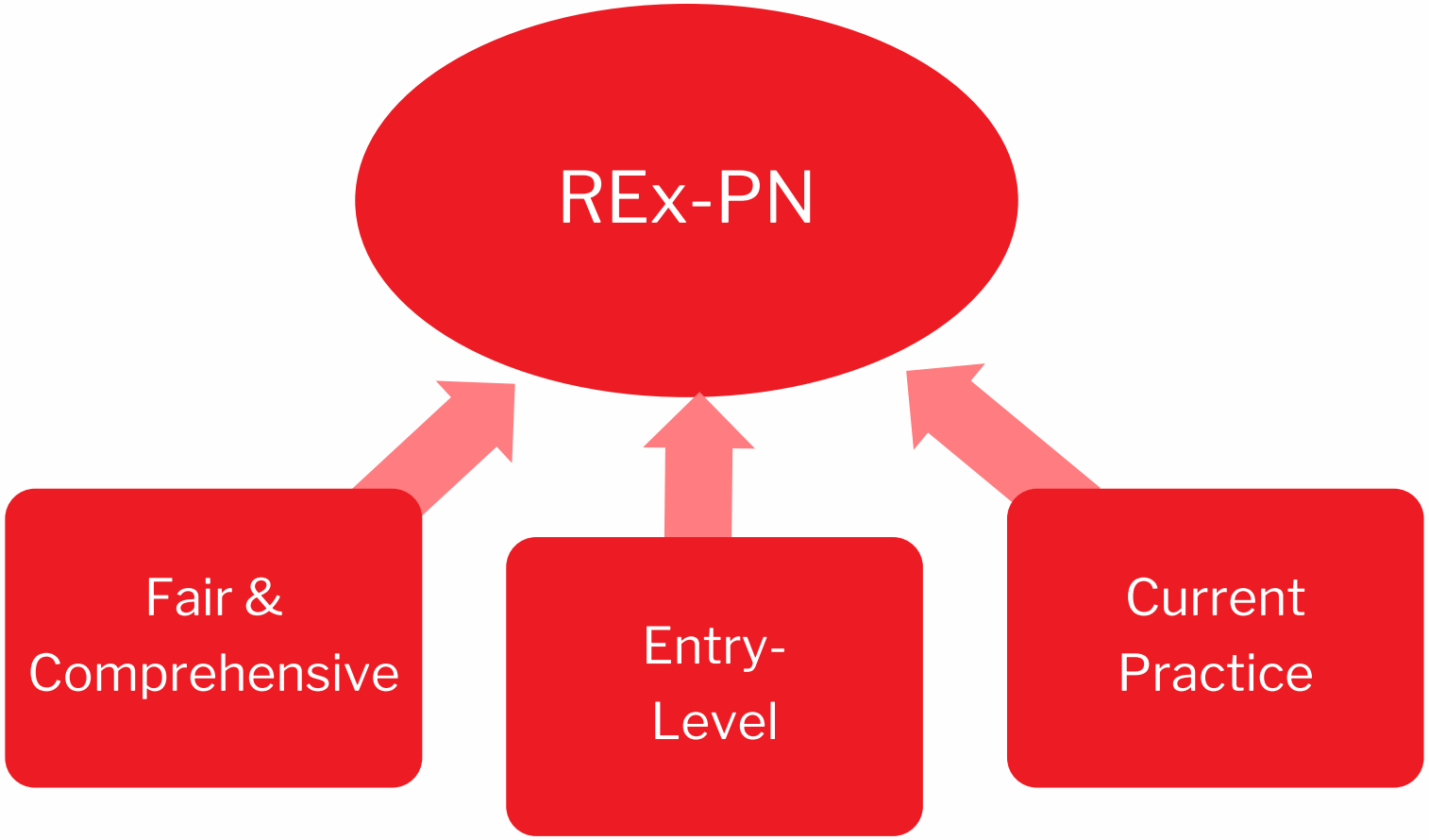
Objectives

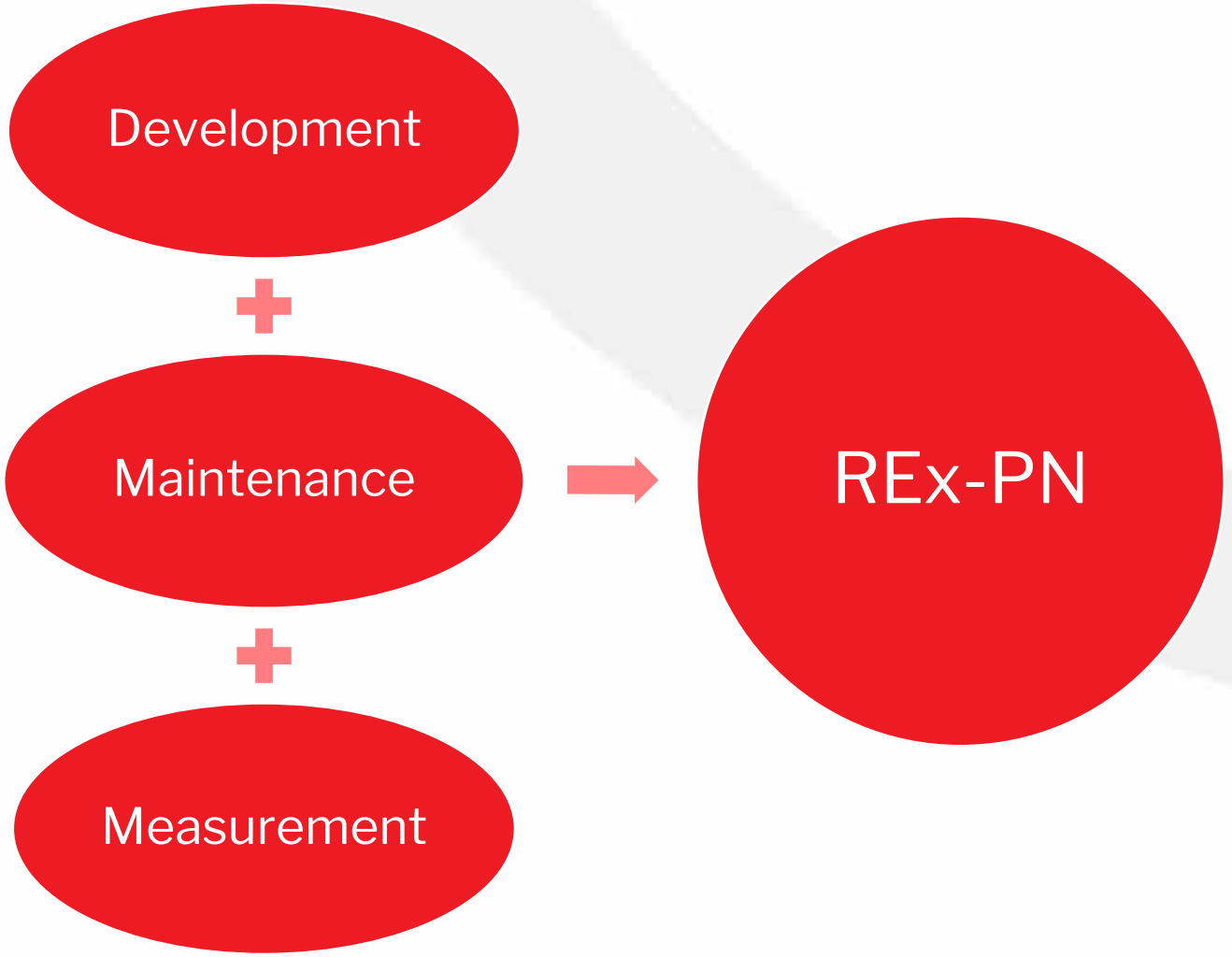
At the end of the session participants will understand:

- REx-PN® item development process
- How outdated content is identified and corrected

What is the REx-PN®?



REx-PN® Processes



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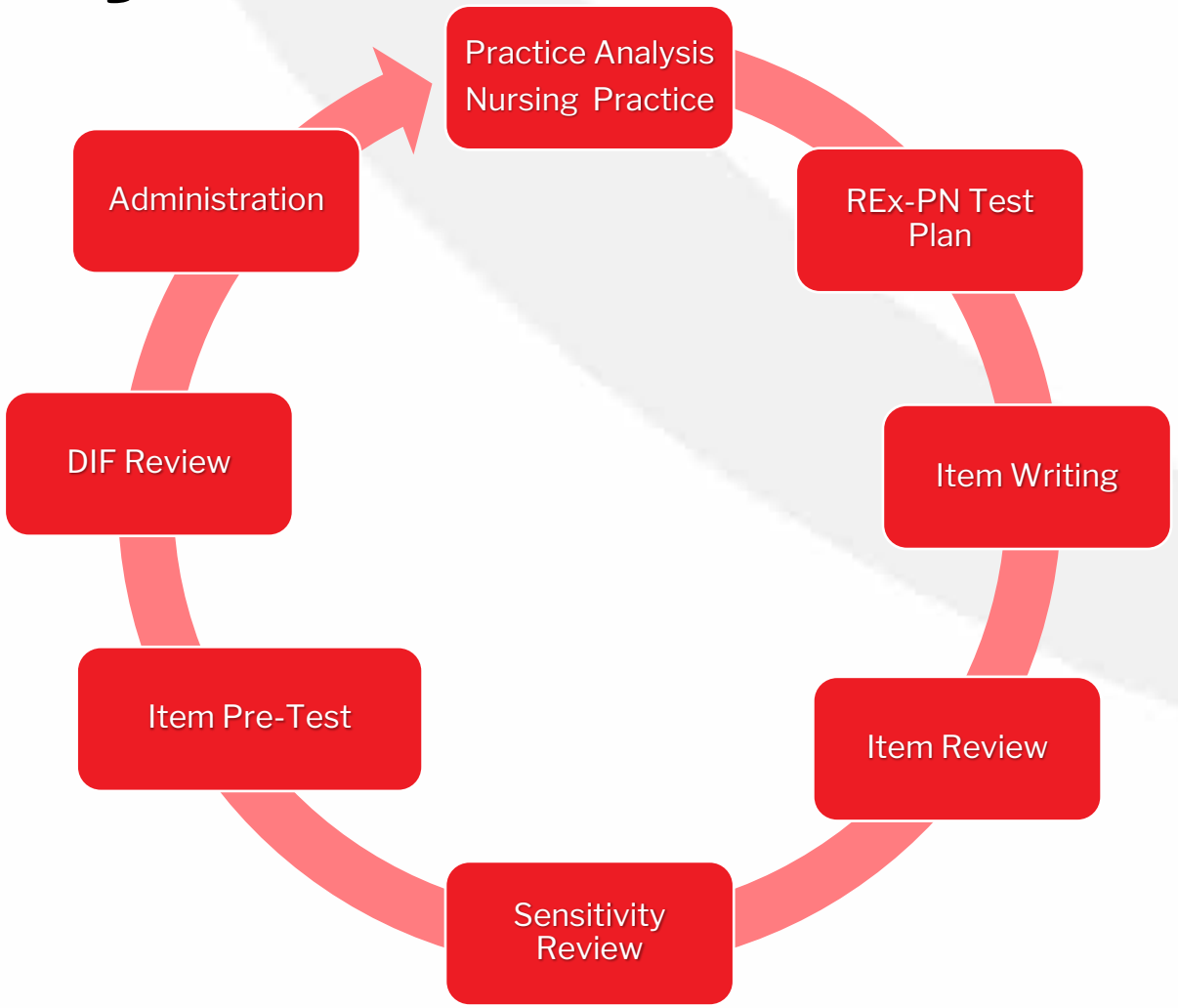
REx-PN® Overview

- Development
  - Practice Analysis
  - REx-PN® Test Plan
  - Other Development Activities
- Maintenance
  - Pool Rotation
  - Ongoing Item Review
  - Keeping the Exam Current
- Measurement

REx-PN® Cycle



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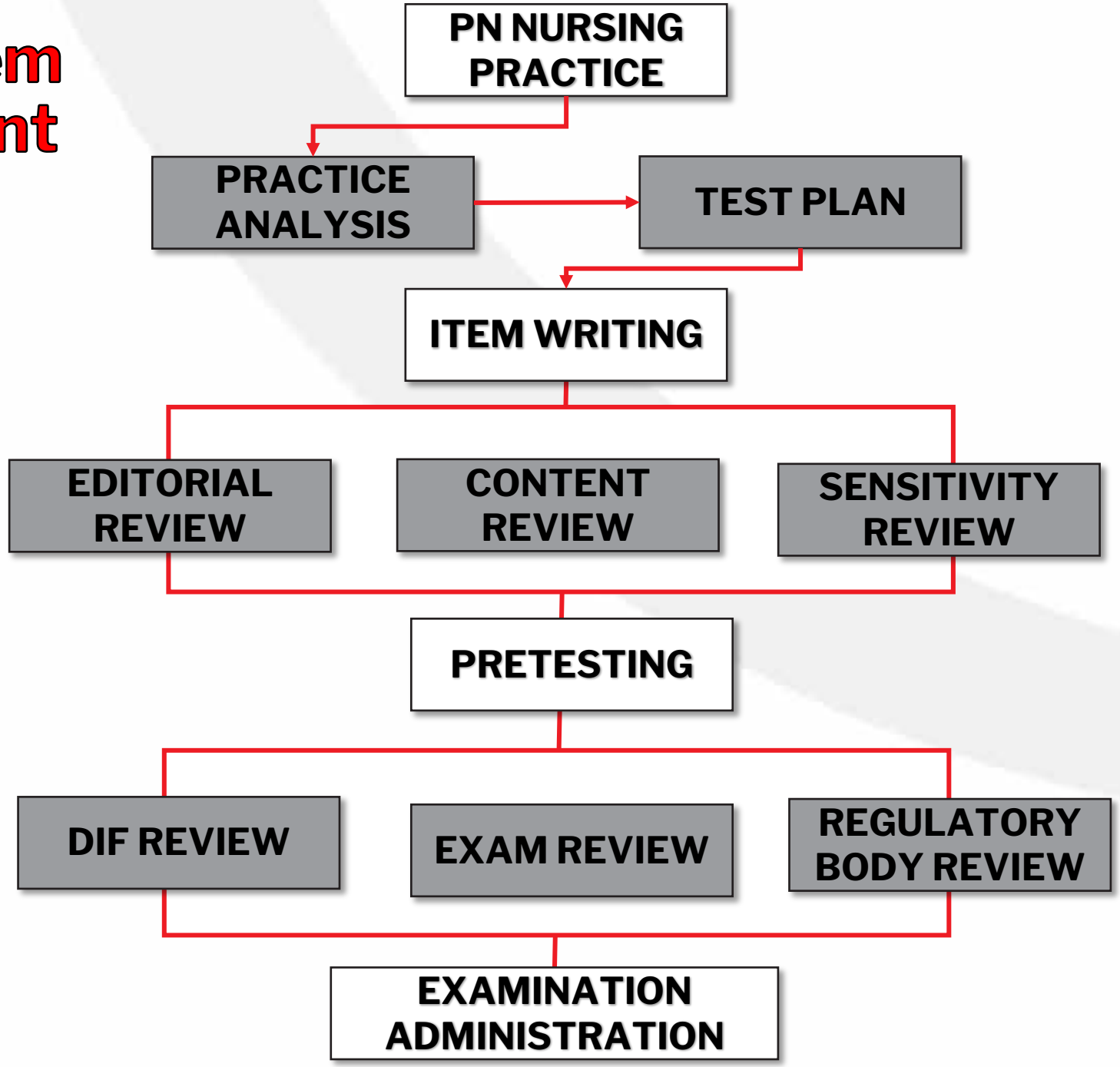
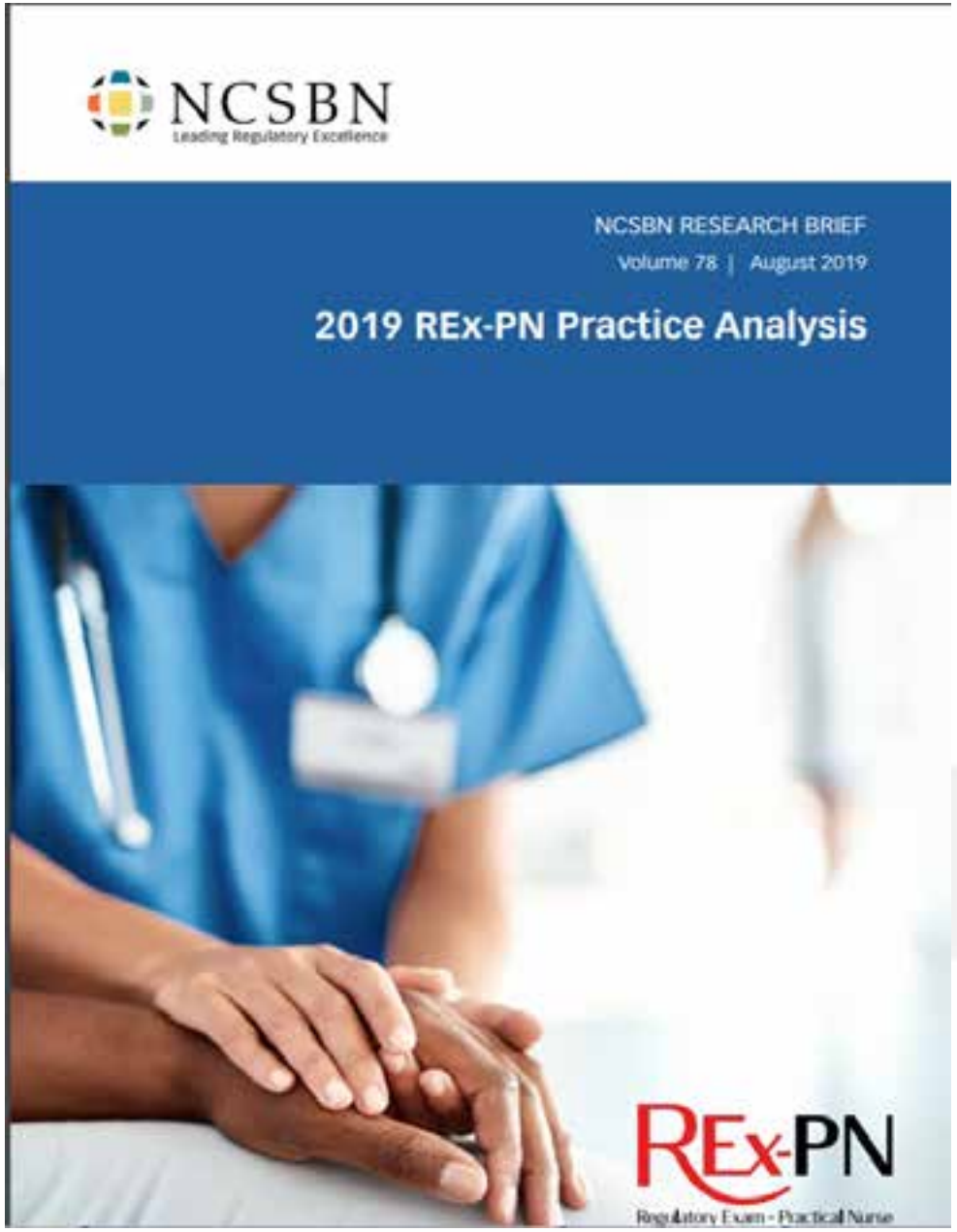
REx-PN® Item Development

REx-PN® Item Development Process



Practice Analysis

- Often referred to as a job analysis
- Analyze the on-the-job behaviors of the incumbent nurses
- Results used to develop the exam outline or REx-PN® Test Plan

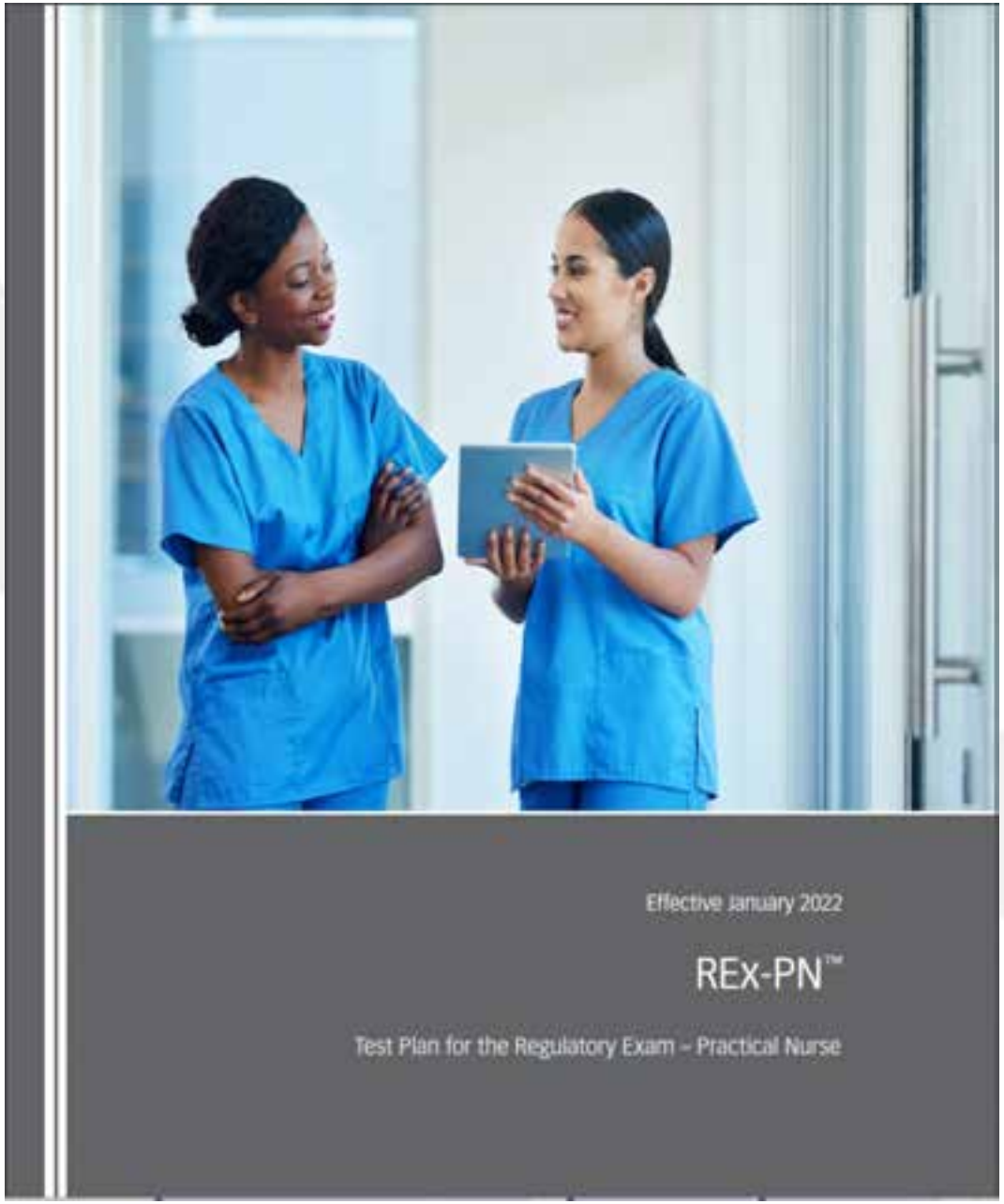


REx-PN® Test Plan

- Content Distribution
- REx-PN Integrated Processes
- Administration
- Nursing content examples
- REx-PN Item after each test plan category
- Computerized Adaptive Test (CAT) principles

REx-PN® Test Plan

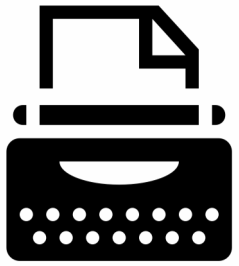
- Developed as a result of the recent practice analysis data
- Used to guide REx-PN content delivery during each exam
- Serves as a guide for candidates



Item Development

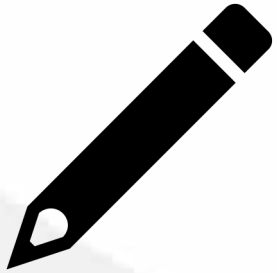
- Item Writing
- Item Review
- Sensitivity Review
- Differential Item Functioning (DIF) Review
- Nursing Regulatory Body (NRB) Review

Item Development - Roles



Item Writers

Create the questions or “items” that are used on the REx-PN®



Item Reviewers

Examine the items that are created by Item Writers

Item Development - Item Writers

Requirements

- Current, unencumbered RN or RPN/PN nursing license in British Columbia or Ontario
- Current employment position of faculty teaching PN nursing content in the clinical area

REx-PN® Items Must Be

Linked to the test plan

Suitable for entry-level practice

Accurate

Current in nursing practice

Only one correct answer

Unless multiple response

Item Development – Item Reviewers

Requirements

- Current, unencumbered RN or RPN/PN nursing license in British Columbia or Ontario
- Maintain knowledge regarding current PN practice, including entry-level PN practice
- Current employment consists of providing direct client care in a clinical setting and working with PN entry-level nurses greater than 8 hours per week **OR**
- Current employment as a clinical instructor

Unintentional Bias Reviews

- Sensitivity Review
  - Pretest
- DIF Review
  - Pretest
  - Operational

Unintentional Bias Review Criteria

- Stereotypes
- Inflammatory material
- Language
- Assumptions

Unintentional Bias Reviews

- All items are reviewed to ensure the exclusion of sensitive, unintentional biased language
- Items are edited to remove words or phrases which may affect exam measurement

Editorial Review

Grammar

Clarity

Punctuation

Spelling

One Writer

Pretest Items

- Every item is pretested before being placed in the operational pool
- Statistical data are gathered on each pretested item
- Data are used to evaluate items and ensure all operational items are accurate and fit the testing model

- **30 pretest items** on every REx-PN® exam

Pretest Items (continued)

- Randomly intermixed with operational items
- **Not** used to estimate the candidate's ability
- Used for maintaining item bank inventory
- Indistinguishable from operational items for candidates

NRB Review

- Conducted biannually
- Review criteria
  - Entry-Level appropriateness
  - Congruency in nurse administrative rules and regulations
  - Comments forwarded to REx-PN® Practical Nurse Examination Committee (PNEC)

PNEC Review

- Comprised of nurse regulators in various jurisdictions
- Establishes and maintains REx-PN® policies
- Provides item disposition

For Additional Information

- **REx-PN Webinar Series – Item Writing and Item Review**
  ncsbn.org/rex-pn

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REx-PN® Maintenance

REx-PN® Maintenance

Pool Rotation and Maintenance

Item Review

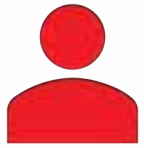
Content Currency

Pool Rotation

- REx-PN® item pool delivery schedule
- Review activities prior to pool deployment

Item Review and Maintenance

REx-PN® review is cyclical and ongoing



Occurs at each segment of item development process

Items are reviewed with each operational pool deployment

All other items reviewed at least every four years

Identification of Outdated Content

- Validation Process
  - Staff Reviews (referencing)
- Item Review Panels
  - Subject Matter Experts (SMEs)
  - NRB Reviews

Changes that Trigger Pool Reviews

Healthcare guidelines

World Health Organization (WHO)

Heart and Stroke Foundation of Canada

Medication/Device Recall or Discontinuation

Public Policy

Car Seat Guidelines

Medication Disposal

Examples

Outdated	Current
CPR Guidelines: Airway, Breathing, Compressions (ABC)	Compressions, Airway, Breathing (CAB)
Munchausen Syndrome Munchausen by proxy	Factitious Disorder Factitious Disorder imposed on another
Juvenile diabetes mellitus	Diabetes Mellitus (type 1)
Pressure ulcer	Pressure injury

Corrective Actions

Item Masking

Immediate removal of outdated content

Database Search

Internal Item Review

Item Editing

Pretesting

In Summary

- Multi-Step Process
- Strong reliance on nurse volunteers
- Extensive validation process
- Ability to remove outdated content immediately

REx-PN® Volunteer Opportunities

- Stay tuned to learn more about volunteer opportunities to participate in the development of REx-PN.

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Thank You!