

Design of Diagnostic Test Quick Reference Guide

The Rapid Influenza Test was a prototype developed to provide relatively quick test results for several influenza types. PSE designed the Quick Reference Guide (QRG) in a format that simplified use. PSE then conducted user testing to validate that the QRG was user friendly, easy to use, and met all regulatory requirements (e.g., Clinical Laboratory Improvement Amendments)

Problem/Challenge:

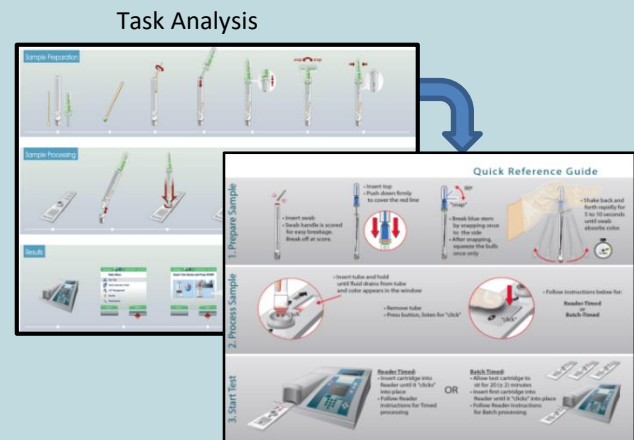
Develop a QRG that enables novice users to process samples correctly. Highlight steps that could lead to false results if not performed accurately.

Approach:

Task analyses were performed to determine which steps were more difficult or confusing. Tasks were decomposed into essential subtasks. The text was assessed for CLIA reading capability requirements. Observed healthcare providers as they performed a diagnostic test using the QRG.

Solution:

Healthcare providers relied heavily on the QRG during initial use of the test device. Overall, the QRG was found to explain the diagnostic procedure clearly. Device labeling recommendations were reported.



Final product demonstrated required actions with text for critical steps

Benefits of our Approach:

- Determine actions and/or cognitive processes required for accurate task completion
- Systematically identify processes that can be illustrated in manageable steps
- Design instructional material based upon human factors best practices (layout, alignment, proximity, etc.)
- Identify and mitigate sources of product issues (user experience, product design, etc.)
- Provide summary statistics and video data to supplement the usability report