BSD 600 Duet Software and Computer Update - Functionality Test Jodie Carney March 1st, 2022

Background

Computer updates were required per Idaho State Police's IT department, to be completed in the year 2022. The previously utilized BSD Puncher software version (v4.0) was not Windows 10 compatible, therefore an upgrade to v5.0.0 was required during annual maintenance. Per the vendor performing the maintenance and software upgrade, the only difference between v4.0 and v5.0.0 is Windows compatibility.

Objective

To perform functional testing of the BSD Puncher software v5.0.0, confirming that the program performs tasks as expected.

Method

The punching protocols utilized by the database laboratory were migrated to the new software by the vendor. After completion of the preventative maintenance, a full plate was punched on each of the instruments (serial numbers 1607401 and D0040) using an old input file, manually typing in the barcodes, and punching an index card.

Additionally, four columns of samples were punched alternating between a barcode and a number entry, utilizing a blank FTA card to duplicate what is done in normal processing. While punching, incorrect barcodes were deliberately scanned to test the software's ability to recognize an incorrect scan. This barcode test was performed multiple times on both instruments, with the same results obtained each time.

Results

During the full plate evaluation, the instruments performed as expected, depositing a single punch into each well.

Both instruments recognized incorrect barcode scans and produced an error message indicating that the wrong barcode had been scanned and requesting the right barcode be scanned. The correct barcode was then scanned, and each instrument was able to punch the sample. After punching, both plates were examined and found to have single punches in each well as expected.

Conclusion

The instruments performed as expected and with no differences as before the software and computer updates.

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