

Barcode use in Bika

Requirements overview

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After feedback from on-line discussion triggered by expanding Bika's Android functionality to use tablet cameras as barcode scanners and the portability opening up more possibilities, the functions below were mooted as requirements.

One respondent wisely wrote about the latter, *'focus on actions that are particularly suited for a portable device, and those items that are difficult to do with a portable device but there is a reason to do so'*.

The barcode functions can be divided into 3 groups, Navigating by barcode, Data entry by barcode and Barcode actions. Note that only a limited part of these are currently implemented while we await sponsorship.

Data entry by barcode

Scanning a barcode with the cursor focus on an editable field, the scanned codes are read into the field, e.g. for report and query parameters, selecting samples for worksheets, etc.

This will often be used for scanning in barcodes generated ex-LIMS, e.g. Client Sample IDs, Instruments, Inventory items, PT Samples, Reference Standards

Workflow Actions

It should also be simple to set up the LIMS in any of several workflow action 'modes' where the same action will be carried out on the scanned items thereafter until the user exits the mode, e.g. to receive the samples being scanned, disposing of them etc.

Where Bika is configured to include sampling, a sampling mode can also be used in the field when scanning pre-labelled containers, the for preserving them.

This also comes into play during in sample storage, and supply inventory management.

This becomes important for sample tracking and chain of custody, e.g. scan sample from storage to cart, scan cart to lab, scan sample to bench or test. If these procedures are too cumbersome, users will simply ignore them. Some control can be exerted by e.g. not allowing results to be captured for a sample the LIMS indicates to still be in storage.

Navigating by barcode

Where none of the above was picked, the LIMS will try to navigate to the object scanned, e.g. opening ARs, QC Reference Samples, Worksheets, Storage positions, Batches, Inventory items (eventually), Instruments and in In Bika Health: Patients and Clinical Cases.