

Post-shipping Observations for Cote d'Ivoire (Ivory Coast), mid-March 2019
by Ed Holroyd, Ph.D. (13.5 years warehouse experience)

For many years I have worked mainly in the far rear corner of the Project C.U.R.E. warehouse in Centennial, Colorado. It is there that the many boxes of supplies are stacked and prepared for shipment. Each row has two upper levels for pallets of each classification type, as indicated by bar codes labels placed on each box. The bottom row is called the home row. It receives boxes from sorting and serves as the supply location for box types selected (pulled) for shipment. There are separate bins for each bar code classification number from 101 to 2302, not including the major fluids which are stored along the back wall.



Storage racks for boxes of medical supplies



Home row location for boxes of Product Code 0801 - Lab blood drawing supplies



Bin label for 0801 and box with bar code label.

When a storage bin overflows into the aisle, my role is to stack the boxes on a pallet, record their bar codes with a scanner, wrap the pallet of boxes with plastic, and deliver it to a staging area for eventual lifting to the upper levels by a forklift.



Overflowed bin 1626



Stacked and wrapped pallet for Code 0606

Later, Millie Truitt receives a Pull List from headquarters for a container shipment destined for a particular country. The list specifies how many boxes of each product type are to be selected and sent to the staging area for container loading. Sometimes a shipment is to be split between two or more clinics and hospitals. If so, colored stickers are placed on each bar code label to indicate the intended recipients.



Boxes ready for loading into the container at the left.

All equipment and boxes of medical supplies have bar code labels with Product Code numbers and a brief description (in English) of typical contents. At the country of destination the boxes should be sorted by those Product Code numbers and stored accordingly. The descriptions can be given appropriate words in other languages. If there are colored stickers on the boxes and equipment, they should be sorted by such colors so that each medical facility should receive the items that were intended for them.

Last year I was able to see and photograph equipment and boxes previously shipped in a container to Ghana and delivered to the New Abirem Government Hospital. They had a large store room with shelves, making it easy to locate needed supplies and monitor their inventory.





Storeroom corner in New Abirem.



More storage racks



A room of random supplies in Ghana



The contrast between order and disorder at this facility was great. In the photo of random supplies I was able to find two of our bar code labels. It is very difficult to realize if a needed item is somewhere in that pile of boxes.

In Ivory Coast we visited two facilities that recently had received the contents of a container. The first stop was in Yamoussoukro. I photographed an exercycle and one pile of boxes with our Product Code bar code labels.



The top box had the label shown here in the center. It has two black smudge lines in the upper left. Usually there is only one such line. It is my personal indication that I lifted that box in the warehouse, placed it on a pallet of overflow boxes, and scanned its bar code. It is good to see evidence of my work in another country. The three color stickers are all blue, suggesting that the intent was for this facility to receive all boxes with the blue sticker on the Product Code bar code labels.

The second location was in the remote village of Kouadioblekro, far east of the capital. It lacks sufficient storage space. Parts of the buildings were in need of repair if/when funds might become available. Photos show the piles of boxes and enlargements of the Product Code labels on those boxes. Note the variety of sticker colors and the disorder in the piles of boxes. Local medical staff admitted that they do not know what is buried there.



Kouadioblekro village medical facilities



1 blue, 3 green stickers, 2 with Ed's mark



1 orange, with Ed's mark



1 green, with Ed's mark.

1 obscured by peeling.



1 orange, with Ed's mark.



Labels in this pile on the exam table are on the next page.



3 orange, 1 unknown on exam table itself.



1 orange, with Ed's mark

No labels visible on opened boxes dumped on floor.



1 green, with Ed's mark

Colored sticker totals:

orange - 6

green - 5

blue - 1

So some boxes should be elsewhere.

We were shown a box with a power transformer that was likely destined for a different facility and therefore was not being used in this location.

In keeping with my scientific love of classifying and ordering things, I had the urge to move all of these boxes outside to the field and sort them by Product Code numbers. The boxes would then be returned to rooms close to where particular supplies would likely be needed in the future, stacked neatly with uniform Product Code numbers.

However, storage space seems inadequate at this facility. So I had the thought that a possible solution, not necessarily ideal, would be to park a nearly empty 40-foot container indefinitely under a large shade tree. A shipment of storage racks and shelves would be supplied and erected within. The CURE boxes would then be stored in an orderly way on those shelves by Product Code numbers. Content labels would be translated into the local language for proper identifications. This obviously involves additional expense, but it would enable safe storage and orderly stacking of the medical supplies that we ship there.

Note: In the future, a needs assessment inspection should also evaluate if orderly storage of the contents of a partial or entire container shipment is available at the facility. The chaotic storage shown in these photos needs to be avoided because the chaos indicates that many needed supplies will not be found in a timely manner.

Dr. Ed Holroyd

1-303-279-5395; 5395 Howell Street, Arvada, Colorado 80002-1523, USA

eholroyd@juno.com; eholroyd3@juno.com; www.EdHolroyd.info

23 March 2019