



## **Adding Wireless Bedside Collections to Your *Millennium* Platform**

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Many facilities have converted various functions of patient care to wireless technologies. If specimen collection is something that has yet to be added to the realm of wireless capabilities at your facility, consider its possibility. Much in the way of enhancements to both hardware and software has made it easier to expand your arsenal. There are also more reliable wireless networks that have been installed (a prerequisite) in most facilities making the transition easier from a connectivity standpoint.

*Millennium* has multiple choices of build to facilitate the construction of handheld collection methods regardless of a facility's approach to bedside collection. Whether you are relying on a nurse-collect approach, phlebotomy-collect approach, or a combination of these, reliable methods of wireless PPID (Positive Patient Identification) and specimen collection can take place. Careful consideration should be made as to current and future states of bedside collection as budget, regulatory, and policy changes may alter practices and ultimately the construction of handheld technology. If you are considering any type of consolidated approach to bedside collection (such as patient-care tech-collect only or other, single-resource-type, individual collections) you may wish to conduct these changes before designing handheld specimen collection. Or you may consider executing changes at the particular time of reconfiguration to coincide with the implementation of the handheld technology. In any case mapping current and future state workflows for all locations where collections take place is most essential and cannot be over-emphasized. Remember to include pre-admit, outpatient, clinic, office, and other remote sites to your workflow assessment as they often have a variety of collection methods and personnel.

When making the switch to wireless collections, a significant point of examination regarding default collection types is whether the facility has already built much in the way of order sets and various order types for specialty areas. The actual event of standing at the patient bedside to perform PPID and handheld collection requires much in the way of background work. Logging into a wireless collection-device platform and seeing orders to collect from a patient indicates that personnel, orders, specimen types, collection jobs, netting, locations, priorities, patient statuses, etc., have all been built correctly.

### **Case 1: Facilities where all collections are performed by nursing personnel**

Some current *Millennium* facilities use HHSC (Hand Held Specimen Collection) as their platform for bedside collections. This is a PathNet application and was the first point of entry into the wireless collection methodology. These facilities are comfortable with this approach. (discussion of HHSC will be done in the phlebotomy collection case study). Most facilities using nurse-collect may consider the CareMobile approach which provides real-time-orders information on the handheld device. All of the activity is based upon tasks identical to other CareNet activities. CareMobile handles medication as well as collection orders among its various functions. CareMobile allows for PPID just as HHSC allows. Both applications have methods of overriding this important step yet there are audit methods capable of tracking this activity.

At the time of PPID, active orders are searched and any "Dispatched" orders that fall within the established and built Look Ahead/Look Back window will be displayed based upon the specimen type. Nurse collection options are dependent on the "Order Detail" commands: Exclude, Include, or Only are the choices for allowing the active orders to be listed as desired. When multiple nurses or care staff assume collection tasks, use of the Multi-Patient Task list is useful to find all collections for specific patients. This can also facilitate cases where there are blood/gas orders that nursing may collect. If, however, RT collects its own specimens, based upon the correct build of a venous-type specimen and the collection type of RT, these can be seen either on a task list in PowerChart or on the handheld device.

Netting is the capability for orders to be condensed into a practical level of collection times to avoid multiple sticks to a patient. The use of collection runs in operations based upon the nurse-collect type can facilitate this netting. An example

would be ordering routine collection at 0600 that can be netted along with an 0500 STAT order if the operations tasks are scheduled correctly and the collect type match. Timed collection can also be netted in this manner.

Using CareMobile devices allows a flexible approach to collection, but build and testing for various options need careful consideration. For example, what's to be done when a collection of multiple blood tubes is not completed and there are uncollected orders? Rather than indicate a "re-collect" or "on-hold" status when using the handheld device (which will cause the task to drop off the PAL), selecting "reschedule" will allow the order to remain until collection can take place. Most nursing tasks involving a STAT order are priorities, so it is convenient to use the same setup -- like those built from routines -- for STAT-collect orders. Also, rather than have STAT orders print upon signing the order at the nurse station, the nurse simply takes the handheld device and printer to the bedside and begins the PPID process. Again, timed orders can likewise be built along with other priorities designed by your facility.

### **Case 2: Facilities where all collections are performed by laboratory personnel**

Although a facility may exclusively use lab (phlebotomy) for collections, it may of course have specific instances where nursing and also physicians perform collections. In these specific cases, defaults can be built as nurse-collect for a STAT order which will allow a nurse or physician to perform these collections in workflow. Other specimen types such as body fluids can be built with preferences that exclude them from collection runs and thus allow them to be ordered and subsequently downloaded onto the handheld device. This would also apply to RT (blood/gas) collections and other priorities as well. For all other collections the collect type would be "lab." With this collect-type set up for the "routine" collections, operations tasks would be built to correspond to the actual collection schedules that the lab has established. Collection runs would also allow for netting in either scenario where a STAT order has been placed. For example, routines would net along with the STAT order so that nursing could collect; or a subsequent routine order could be added before the collection run and it will net to the phlebotomy run. Any routine type orders placed after the logic window has been established will fall into the next collection run.

Lab has the option to simply go to the nursing location at any time after the completed collection run, or it can print a collection list to assist with personnel distribution for that particular day and shift. Printed collection lists can be customized by use of templates that allow for various combinations of location, priorities, specimen, etc., to be built and used as needed.

**(Note:** In each type of build, the "specimen type codes" can control what is or is not downloaded to the handheld device. Specimen types that should not qualify can be omitted. Leaving the preference blank will allow for all types to download. Code Set 2052 Specimen Type lists the values used for these preferences. Also keep in mind that any preferences built follow the standard preference hierarchy: user overrides position, position overrides facility, facility overrides default system settings of preference.)

### **Case 3: Facilities where collections are performed by nursing personnel and phlebotomy**

Where facilities use both nursing staff and phlebotomy on a routine basis to collect orders, a combination of CareMobile and HHSC can be employed using specific guidelines for successful operation.

Initially, all orders (Sets, Plans, Individual, etc.) must be built with the "Nurse Collect" type. This will enable collection lists to be built and all units to have orders that net according to desired windows of time. (It is suggested that blood/gas orders have a unique specimen type other than "blood" to segregate them from the nurse and phlebotomy collections and allow RT to easily see its orders in the task list.) By coding respective preferences for either nursing or lab staff, dual-collection facilities are aided by defaults which log the activity under the appropriate format, either CareMobile (nurse) or HHSC (lab) when the collector logs into the handheld device.

Facilities that use both CareMobile and HHSC can view either "tasks" or "lists" of collections depending on the application in use. As mentioned earlier, "missing" a collection, should be marked as "rescheduled." This allows the specimen collection to be rescheduled and subsequently performed by, say, nursing without generating a new order. The handheld application automatically shifts between collection parties. If an order is cancelled, lab would not act to change the order; rather it would notify the nursing staff who would take appropriate action in order to remove the order from all respective applications.

In this scenario, where collections are performed by different departments based upon patient locations and a patient is transferred from one type of collect unit to another, careful construction and testing need to be performed to ensure that uncollected orders “follow” the patient regardless of any practice where nursing verifies open orders upon transfer.

### **Collections in other locations**

For other nursing location such as surgery, ED, clinic, office, PACU, etc., each scenario can be arranged with various build techniques to allow for wireless handheld technology. For any of these locations or outpatient settings when a phlebotomy staff may be present, orders can be entered without the need of operations tasks running in the background. As soon as the order is created, CareMobile and HHSC will download these orders by scanning the patient barcode ID band and completing the steps to add a patient to respective collection lists, ad hoc.

### **Conclusions**

CareMobile and HHSC offer respective clinical areas versatile choices for collection practices and approaches. CareMobile has the advantage of allowing for many bedside patient care tasks to be completed on the same device. In the HHSC case, lab staff has the security of PPID for their collection lists. HHSC technology also carries a full array of reporting, auditing and tracking technology to allow for accurate collection-method assurance, compliance fulfillment and utilization management.

If you would like more information VCS can help. Please contact us at 610.444.1233 or [ves@getvitalized.com](mailto:ves@getvitalized.com). Additional information resides on our website, [www.getvitalized.com](http://www.getvitalized.com).