



Automating the Release of Blood: Should We? Could We? Will We? When?



"There will be six designated yawning breaks during my presentation. Please pace your boredom accordingly."

REMOTE RELEASE OF BLOOD



- Could we?
 - YES
- Should we?
 - YES
- Will we?
 - YES
- When?
 - We have.....

What is "REMOTE RELEASE OF BLOOD ?"

Definition:

"The provision of blood and/or blood products at a site other than the sample testing site"

"The provision or issuing of blood and/or blood products by non-Transfusion Medicine Technologists"

"Computer or Automation assisted issuing techniques"



ENABLERS: REMOTE RELEASE OF BLOOD



- Common Laboratory Information System
- Barcode Capabilities
- Electronic Crossmatch Process
- "Just In Time" Delivery of Blood Products
- "Vending Machine"
- Interfaces
- Standard Operating Procedures
- Training Packages
- Support – Clinical, Administrative, Technical

ENABLERS: Laboratory Information System

- Hamilton Experience:
 - Meditech
 - Sunquest
 - HBO
- Meditech – solution for the city (laboratory perspective)
 - Common databases
 - Common patient histories
 - Consolidate testing
 - Common inventories
 - Shipping of samples and product



ENABLERS: Electronic Crossmatch and Barcode Capability

- Eliminates the need for IS
- Requires group confirmation of all RCC's upon inventory
- Patients require 2 blood types – historical and current or 2 current
- Straight forward patient utilize computer to perform crossmatch
 - Barcode on release
 - Barcode on RCC
 - EXM Rules
 - Product issued

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ENABLERS: "JUST IN TIME" Delivery of Blood Products

- Straight forward Blood Group?
 - Yes
- Unexpected Antibodies?
 - No
- FXM required?
 - No
- Immediate Spin required?
 - No
- EXM?
 - Yes!
- Setup blood in advance?
 - Absolutely not!

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REMOTE RELEASE OF BLOOD

- Could we, Should we, Will we.....
 - YES
- Utilizing the common LIS
 - Common database
 - Shipping samples
 - Consolidated testing
- EXM
 - Application of rules
- JIT
 - Blood not setup
- REMOTE RELEASE

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REMOTE RELEASE OF BLOOD

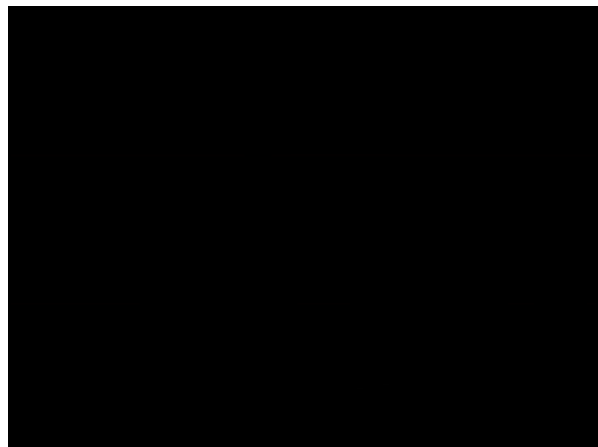
The Vending Machine


- Hemonentics
- Bloodtrack Manager
 - Hemosafe
 - Interface
 - Remote Release
- MLT,MLA,Clerk,Porter,Nurse,Physician

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MOVIE CLIP

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Vending Machine

- Inventory consists of:
 - Autologous
 - Allogeneic
 - Crossmatched
 - Manipulated RCC's
 - Irradiated
 - CMV negative
 - Phenotyped
- Via complex interface inventory is downloaded to LIS


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Vending Machine

- Very complex interface
- Interface acts as a technologist would – using barcode on release form:
 - Patient eligible for EXM?
 - Antibody history?
 - Historical blood grp?
 - Current blood grp?
 - Special requirements
 - Crossmatched blood available?
 - Autologous blood available?


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Vending Machine

- Appropriate unit selected
- Single door opens – unit is presented
- Visual inspection completed and recorded electronically
- Unit is confirmed (barcodes)
- Transfusion label prints
- Label, unit and patient confirmed
- Unit issued


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Vending Machine

- Remote allocation
- Emergency Issue


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Vending Machine – Uses?

- Operating Suite
- Intensive Care Units
- Post Anaesthetic Care Units
- Emergency Room
- High end users
- CORE Labs?


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Remote Release – Products/Processes

- Interfaces
- Standard Operating Procedures
- Training Packages
- Support – Clinical, Administrative, Technical


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Remote Release – What does it mean to Blood Banks?

- Do we need on site fully functioning Blood Banks?
- Do we need TM techs to issue blood?
- Can we improve TAT?
- Can we reduce non-value added workload
- Can we reduce overall workload
- Can we utilize Remote Release to assist with staffing shortages


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Could We? Should We? Will We? When?

We are doing it now.

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Points to Consider

- Expanding vending machine process to other products
- Eliminating the need for group confirmation
- Auto verification
- Remote test resulting


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"You missed the meeting, but I remember the basics. They want us to do something sometime about some problem with someone somewhere."



Thank-You

Questions?

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