

# *CMRP CERTIFICATION*

## Overview Session

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# *A Mark of Distinction*

## **CMRP status allows you to:**

- Have a premier credential based on a sound assessment to distinguish yourself in an increasingly competitive marketplace.
- Enjoy the pride of recognition and knowing you are among the elite in the field of healthcare materials management.

# *CMRP Overview Session Disclaimer*

**Please be advised that this is only an overview of the Materials Management Review Guide.**

It should not be inferred that test items in the examination are selected from any single reference or set of references or that participation in this review session guarantees a passing score on the examination.

# American Hospital Association Certification Center (AHA-CC)

- **Governed by a Board of Directors**
- **AHA-CC is an independent body affiliated with the AHA**
- **Certification Program Committee**
  - Content experts
  - Test development
  - Scoring and analysis
- **Designed to test full scope competency of individuals involved in materials management**



# *CMRP Eligibility Concept*

- No membership requirement
- Requirements blend **EXPERIENCE** and **EDUCATION**
- Requirements are designed to include experienced healthcare materials managers

# CMRP Eligibility Requirements

- **Baccalaureate degree + 3 years of associated materials management\* experience**
- **Associate degree or equivalent + 5 years of associated materials management\* experience**
- **High school diploma or equivalent + 7 years of associated materials management\* experience.**

\* Associated healthcare resource and materials management includes persons who are involved in the materials functions of healthcare facilities; or are active in the healthcare materials supply chain, including manufacturers, vendors, distributors, consultants, and employees of group purchasing organizations.

# Administration

- Examination application processed
- Eligibility confirmation sent to candidate
- Confirmation notice received
- Registration fees
  - AHRMM Members \$275; Non-members \$425
- Schedule appointment
  - Reschedule once within 4 business days – No Charge
  - Rescheduled within 90 days – \$100 rescheduling fee
  - Reschedule after 90 days – resubmit application and pay fee (members \$275; non-members \$425)

# Administration

- **Selected H&R Block computers**
- **Photo ID (2 forms of identification)**
- **Paper and pencil or computer-based**
  - 2 hours
  - 110 questions (10 pretest)
- **Results upon completion of computer-based**
- **Certification**
  - Letter
  - Pin
  - Renewal
  - Employer Notification Form
  - Certificate

# Exam Specifications

- **AHRMM role delineation study identified real-world tasks that were grouped into categories and weighted to produce exam specifications.**
  1. Procurement/Product Value Analysis – 25%
  2. Inventory Distribution Management – 20%
  3. Information Systems and Data Management – 15%
  4. Finance – 15%
  5. Strategic Planning, Leadership and Compliance – 25%

# Exam Categorized

- Each item is categorized by a cognitive level that a candidate would like use to respond:
  - **Recall** – ability to recall or recognize specific information
  - **Application** – ability to comprehend, relate, or apply knowledge to new or changing situations
  - **Analysis** – the ability to analyze and synthesize information, determine solutions, and/or evaluate the usefulness of a solution

# *Test Items*

## **To ensure reliability and validity, test items are:**

- Written by experienced healthcare resource and materials managers
- Geared to test application of knowledge - not just recall of facts
- Reviewed to ensure clarity

# Measurement Expertise

- To ensure the highest standards in testing, the AHA-CC engaged **Applied Measurement Professionals, Inc. (AMP)** to assist with:
  - Test development
  - Test administration
  - Scoring, score reporting, and analysis

# Examination Administration

- **CMRP Exam is offered via computer at over 170 AMP Assessment Centers throughout the United States.**
- **Scores are kept PRIVATE.**



# Examination Administration

- **Examination Application within *CMRP Handbook and Application* available through:**
  - AHA-CC's website: [www.aha.org/certification](http://www.aha.org/certification)
  - AHRMM's website: [www.ahrmm.org](http://www.ahrmm.org)
  - AMP at **(913) 895-4600**
- **Examination fees**
  - \$275 for PMG and AHA At-large Members
  - \$425 for Non-members
- **Certification is valid for 3 years**

# Healthcare Overview

- **Reimbursement history**
  - 1960 and 1970's – “The good old days”
    - Cost Plus
  - 1980's
    - DRG's
    - Medicare Prospective Payment
    - HMO's
  - 1990's
    - Healthcare Reform

# *Purchasing, Procurement and Product Value Analysis*

- **Administer and direct the program to purchase materials, supplies, and capital equipment**
- **25 items**
  - Recall – 5 items
  - Application – 15 items
  - Analysis – 5 items

# *Purchasing, Procurement and Product Value Analysis*

- **4 Steps of “Act of Purchasing”**
  1. Requisitioning
  2. Sourcing
  3. Negotiating
  4. Ordering

# *Purchasing, Procurement and Product Value Analysis*

- **Requisition / Purchase order types**
  - Stock
  - Non-stock
  - Electronic
  - Traveling
  - Blanket
  - Standing
  - Open

# *Purchasing, Procurement and Product Value Analysis*

- **Freight terms and title of goods**
  - FOB destination
  - FOB shipping point
  - FOB destination, prepay freight, and add
  - FOB shipping point, freight allowed
- **Payment terms and conditions**
  - 2% 10 days, Net 30
  - COD
  - Credit card / purchase card

# *Purchasing, Procurement and Product Value Analysis*

- **Legal aspects of purchasing**
  - Product liability
  - Wrongful rejection
  - Failure to deliver
  - Liabilities and warranties
  - Uniform Commercial Code (UCC)
  - Robinson-Patman Act

# *Purchasing, Procurement and Product Value Analysis*

- **Right of possession**
  - “Absence of rightful rejection”
    - noted by agreement, delivery, use or payment
- **Unconscionable contracts**
  - Unfair, one-sided but NOT illegal
- **Liabilities and warranties**
  - Implied
  - Expressed

# *Purchasing, Procurement and Product Value Analysis*

- **Safe Harbor**
  - Published in 1991 as an Amendment to the 1972 Medicare Fraud regulation
  - Prohibits:
    - Knowing and willful solicitation, receipt, offer, payment of remuneration in return for referral of Medicare patient
    - Knowing, willful, payment, receipt remuneration to induce the purchase of goods/services which will be paid for by Medicare

# *Purchasing, Procurement and Product Value Analysis*

- **Safe Harbor requires hospitals to:**
  - Report all discounts, free goods, warranties in cost report, submitted to Medicare.
  - Discounts are acceptable as rebates, credits. Must involve goods sold.
  - Cannot rebate one item based on purchase of another.
  - Cannot link incentive to furnish goods at no charge if another item is purchased.

# *Purchasing, Procurement and Product Value Analysis*

- **Uniform Commercial Code (UCC)**
  - Established in 1952
  - Governs purchases in 49 states
  - Excludes services associated with products
  - Purchase of goods > \$500 must be confirmed in writing to be enforceable under the law
  - Statute of limitations is 4 years

# *Materials Manager's "Tool Bag"*

- **Activity Based Costing (ABC)**
  - A cost management tool to identify and allocate overhead costs
- **Activity Based Management (ABM)**
  - Minimize costs, eliminate duplication
  - Continually evaluate new supply chain process

***Using ABC/ABM procedures will help ensure maximum returns for efforts expended and costs that have been incurred.***

# *Materials Manager's "Tool Bag"*

- **Value Added Opportunities**
  - Additional services offered as incentives
- **Value Analysis**
  - Functionally oriented process
  - Best and most economical procedures, products, equipment, or services
  - Meet the needs of the user while reducing the overall cost involved

# *Materials Manager's "Tool Bag"*

- **Total Delivered Costs**
  - All aspects of the product cycle
    - purchase price, receiving, warehousing, delivery
    - holding, value of money, pilferage, obsolescence
- **Outsourcing**
  - Reduce the overall cost
  - Increase the quality

# *Inventory Distribution Management*

- **Assure that the organization's acquisition and distribution strategies and practices improve the overall healthcare supply chain system**
- **20 items**
  - Recall – 8 items
  - Application – 12 items
  - Analysis – 0 items

# *Inventory Distribution Management*

- **Inventory control should:**
  - Provide monetary savings
  - Improve service levels
  - Improve internal operations
  - Review supply utilization
  - Reduce waste
  - Fully utilize MMIS

# *Inventory Distribution Management*

- **Inventory – “Product on Hand”**
  - Stock – may also be used to describe inventory
    - Current asset that has been acquired by cash and is yet to be consumed
    - Physical inventory – actual counting of supplies and comparing the amount on hand with the amount on the financial statement
  - Turns-Total annual inventory purchases divided by the end inventory value

# *Inventory Distribution Management*

- **Inventory can be counted 2 ways:**
  - Periodic Counting
    - Regular intervals – usually 6 or 12 months
  - Cycle Counting
    - Continuously selecting subgroups to count
    - Typically 10% of stock per month

# *Inventory Distribution Management*

- **Successful Inventory Control**
  - To achieve balance between stock on-hand and need
- **ABC Analysis – highest to lowest dollar**
  - “A” 10% inventory account for 70% of dollars
  - “B” 20% inventory account for 20% of dollars
  - “C” 70 % of inventory account for 10% dollars

# *Inventory Distribution Management*

- **“A” items have highest priority**
  - Increasing the order frequency of “A” items has the same effect as increasing turn rate

# *Inventory Distribution Management*

- **Lead time = require / order / receive / distribute**
- **Safety stock- protection against stock-out**
  - Supply level calculations
  - Maximum/minimum
    - Economic order quantity

*The greater the order quantity, larger the inventory.*

*The longer the lead time, the greater the inventory.*

*The higher the safety stock, the greater the inventory.*

# *Inventory Distribution Management*

- **Inventory Valuation**
  - Last In, First Out (LIFO)
    - Newest define cost
  - First In, First Out (FIFO)
    - Oldest define cost
  - Average costing inventory
    - Weighed average cost

# *Inventory Distribution Management*

- **Carry Costs include such areas as:**
  - Invested capital
  - Handling charges
  - Storage
  - Insurance
  - Cost of money
  - Spoilage
  - Data processing

# *Inventory Distribution Management*

- **3 Types of Inventory**
  - Official
    - Maintained as assets on balance sheets
  - Unofficial
    - Expenses upon receipt
  - Consignment
    - Housed by the facility, purchased when used

# *Inventory Distribution Management*

- **Inventory Strategies**

- Consolidation
- Reduction
- Storage space

- **Inventory Ratios**

- Not in-stock
- Fill-rate
- % of back orders

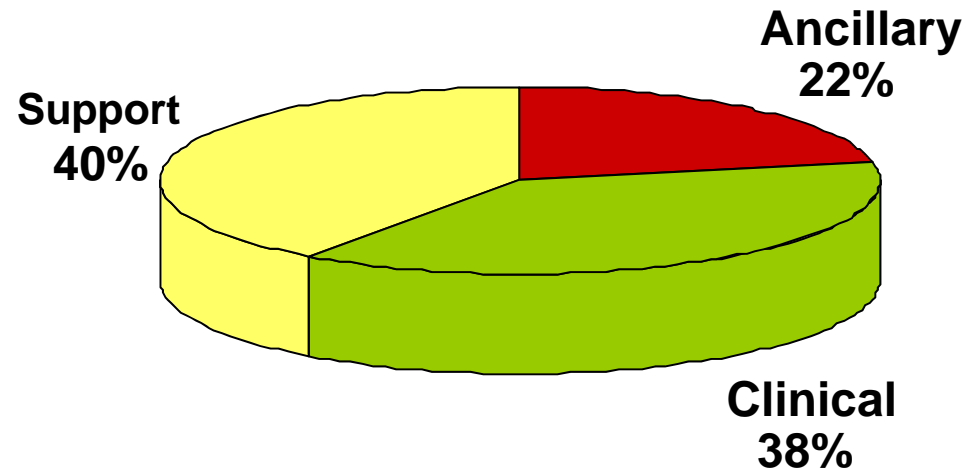
# *Inventory Distribution Management*

- **Distribution Methods**
  - Random request
  - Emergency
  - PAR
  - Exchange carts
  - Case carts
  - JIT
  - Stockless

# *Inventory Distribution Management*

- **Inventory Management in the OR**
  - Intense need
  - Diverse users
  - Largest dollar volume
  - “Unofficial”
  - Preference items
  - Low-turn rate
  - (Out of control)

# Typical Operational Supply Spend



## Support / Non Medical

- Dues and Subscriptions
- Environmental
- Food
- Freight
- General Supplies
- Office Supplies
- Purchased Services
- Repairs & Maintenance
- Service Contracts
- Telecommunications
- Transportation
- Travel
- Utilities

## Clinical / Medical

- Anesthesia Supplies
- Cardiac Implants & Supplies
- IOL's
- IV's
- Med/Surg Supplies
- Orthopedic Implants & Supplies
- Pacers
- Packs & Gowns
- Prosthesis Other
- Suture, Syringes & Needles

## Ancillary

- Lab Supplies
- Radiology
- Blood
- Drugs

*Let's Take 5....*



**It's time for a  
Quick Break!**

# *Information Systems and Data Management*

- **Direct acquisition and implementation of an automated, system-wide materials management information system**
- **15 items**
  - Recall – 3 items
  - Application – 9 items
  - Analysis – 3 items

# *Information Systems and Data Management*

- **Materials Management Information System (MMIS) includes:**
  - Purchasing, Receiving, Inventory
    - Interfaces to:
      - Accounts payable
      - General ledger
      - Patient accounts
      - Surgery
      - Other clinical departments (as determined)

# *Information Systems and Data Management*

- **Selection Process**
  - Multi-disciplinary taskforce
  - Identified processes
  - Research marketplace
  - Determine functionality requirements
  - Develop RFP
  - Demonstrations
  - Develop project plan

# Information Systems and Data Management

- **Electronic Data Interchange**
  - Transmit data between computer systems
  - Standard communication protocols
  - Health Industry Business Communication Council (HIBCC)
  - American National Standards Institute (ANSI)
    - ANSI x .12
    - File Transfer Protocol (FTP)

# Information Systems and Data Management

- **Bar-coding standards adopted by HIBCC**
  - “Code 39” or “Code 3 of 9”
- **EDI data sets most commonly used:**
  - 832-price catalog
  - 850-purchase order
  - 855-PO confirmation
  - 856-advance ship notice / auto receipt
  - 810-invoice

# Information Systems and Data Management

- **The Internet and Business**
  - WWW – World Wide Web
  - XML – Extensive markup language
  - HTTP – Hypertext transfer protocol
  - UML – Unified modeling language
  - URL – Uniform resource locator
  - LAN – Local area network
  - ERP – Enterprise resource planning

# Finance

- **Finance and accounting principles used to better understand an organization's financial culture**
- **15 items**
  - Recall – 3 items
  - Application – 9 items
  - Analysis – 3 items

# Finance

- **Balance Sheet**
  - Assets
    - Current assets and fixed assets
  - Liabilities
    - Current and long term
  - Owner's equity or fund balances
    - Money to fund future programs

**Assets = Liabilities + Owner's Equity**

# Finance

- **Ratios**
  - Liquidity ratio
    - The ability to pay bills
  - Leverage ratios
    - Measure ability to meet long-term needs
  - Efficiency ratios
    - How well assets are managed to produce a profit

# Finance

- **Break-Even Analysis**

- Revenue
- Fixed costs
- Variable costs
- Volume
  - $BEP = \text{Fixed cost} / (\text{Price} - \text{variable cost})$

- **Return on Investment (ROI)**

- Revenue from investment resulting in profit

# Finance

- **Value Analysis**
  - Reduction of non-salaried expenses from a multidisciplinary or team approach
  - Quantitative techniques used include:
    - Cost benefit analysis
    - Life cycle
    - Forecasting
    - Unit cost
    - In-use cost
    - Environmental cost
    - Impact of staff productivity

# Finance

- **Value Analysis Application includes:**
  - Multidisciplinary approach
  - Utilize brainstorming to problem solve
  - Breaks down functions
  - Identifies potential alternatives
  - Reviews the total delivered cost
  - Patient-focused, high-quality approach

# Finance

- **Retention of Health Information / Records**
  - Legal regulatory agencies include:
    - HCFA
    - Medicare
    - OSHA
    - TJC
    - Specific state regulation

# Finance

- **Record Retention Schedules**
  - Patient records adult.....10 years
  - Patient records minor....statute of limitations
  - Diagnostic images.....5 years
  - Fetal heart monitor.....10 years
  - Register of birth.....permanent
  - Register of death.....permanent
  - Register of surgery.....permanent

# Finance

- **Below are examples of materials management record types and one organization's examples of their retention schedules:**
  - Capital budget purchasing.....10 years
  - Consultant contracts.....permanent
  - Leases and rentals.....5 years
  - Maintenance and service.....5 years
  - Warranty contracts.....permanent
  - Purchase orders.....2 years
  - Requisitions.....1 year

# Finance

- **Corporate Compliance Programs**
  - Conflict of interest policy
  - Background check on employees
  - Guidelines for ethical behavior
  - State and federal statute associated with Medicare and Medicaid

# Finance

- **Asset Management Program**
  - Financial analysis
  - Acquisition vs. Rental
  - Receipt
  - Distribution and tracking
  - Charging
  - Maintenance
  - Replacement
  - Disposal

*Let's Take 5 Again...*

**It's time for another break!**



# *Strategic Planning, Leadership and Compliance*

- **Overview of using the principles of strategic planning and quality management to manage customer services**
- **25 items**
  - Recall – 10 items
  - Application – 15 items
  - Analysis – 0 items

# *Strategic Planning, Leadership and Compliance*

- **Plan – Control – Improve**
  - Set goals
  - Provide infrastructure
  - Provide resources
  - Quality leadership and support

***New The Joint Commission requirement  
for facilities key to your future success!***

# *Strategic Planning, Leadership and Compliance*

- **12 Steps**
  1. Identify customers
  2. Determine customers needs
  3. Respond to customer needs
  4. Quality goals to meet customer needs
  5. Produce product/process
  6. Prove process
  7. Measure and control
  8. Establish standards
  9. Identify problems
  10. Solve problems
  11. Measure success
  12. On-going process plan

# *Strategic Planning, Leadership and Compliance*

- **Framework**
  - Vision – Mission – Principles
- **Implementation**
  - Goals – Objectives - Strategies
- **Process**
  - Annual Plan – Evaluation – Performance Reports

# *Strategic Planning, Leadership and Compliance*

- **Overview of Hazardous Materials and Waste**
  - Agencies and organizations that control handling and transportation include:
    - Occupational Safety & Health Administration (OSHA)
    - Environmental Protection Agency (EPA)
    - The Joint Commission (TJC)
    - Department of Transportation (DOT)

# *Strategic Planning, Leadership and Compliance*

- **Chemical Hazards Communication Standard (CHCS) spells out employee “right to know” regulations**
  - Education and training
  - Material Safety and Data Sheets (MSDS)
  - Use and location of safety equipment
  - Policies and procedures
  - Documentation and labeling

# *Strategic Planning, Leadership and Compliance*

- **Classification of Hazardous Materials / Waste**
  - Six (6) specific classifications of waste:
    - Non-hazardous, general solid
    - Hazardous – corrosives, flammables, reactive / toxic chemicals
    - Cytotoxic
    - Infectious
    - Physical hazardous – sharps, needles, glass
    - Radioactive

# *Strategic Planning, Leadership and Compliance*

## **Medical waste disposal**

- **Steam sterilization**
- **Dry Heat Sterilization**
- **EtO sterilization**
- **Incineration**
- **Off-site disposal (landfill)**
- **Microwave techniques**

# *Strategic Planning, Leadership and Compliance*

- **Surgical Linen Standards (AORN)**
  - Blood and aqueous fluid resistant
  - Abrasive resistant
  - Lint free
  - Meet NFPA requirements
  - Eliminate heat build up
  - Be easily draped

# *Strategic Planning, Leadership and Compliance*

- **Linen General**
  - Flame retardant fabrics
  - Security and identification
  - Transportation and storage
  - Chemicals and laundering
  - Inventory and tracking
  - Pounds per patient day/charge back
  - Ordering and cycling

# Strategic Planning, Leadership and Compliance

- **Sterile Processing Overview**
  - Decontamination Process:
    - Thorough cleaning procedure
      - Sorting
      - Pre-cleaning
      - Transportation
      - Disassembly
      - Cleaning
      - Decontamination
    - Disinfection
      - Chemicals
      - Ultrasonic

# *Strategic Planning, Leadership and Compliance*

- **Sterilization**
  - Thermal is steam or dry heat
    - Steam safest, most practical
    - Dry heat slower less even
  - Ethylene Oxide (EtO) Gas
    - Require proper aeration
  - Maintenance of equipment by a professional
  - Packaging should allow max penetration

# *Strategic Planning, Leadership and Compliance*

- **Sterilization (cont.)**
  - Monitoring
    - Mechanical
    - Chemical
    - Biological
  - Documentation (TJC)
    - Maintenance records
    - Monitoring
    - Staff education
    - Policies and procedures

# *Frequently Asked Questions (FAQs)*

- **Why is a TRUE certification program important?**
  - It recognizes a level of competency.
  - It is a way to express value to your employer.
  - It encourages continued personal and professional growth in the practice of healthcare materials and resource management.

# FAQs

- **What makes this certification different from AHRMM's Fellow program (FAHRMM)?**
  - The AHA-CC is independent of AHRMM and administers the certification.
  - CMRP is the most nationally recognized credential for the materials management profession.
  - Passing the CMRP demonstrates a mastery of a well-defined body of knowledge and is based on national standards.

# FAQs

- **What makes this certification different from AHRMM's Fellow program (continued)?**
  - FAHRMM status is presented to Certified Senior or CMRP members in good standing with AHRMM, who've met specified achievement criteria, and have submitted an acceptable, original unpublished paper on a current aspect of materials management.
  - FAHRMM requirements are designed so that those who apply and attain this level must be persons of exceptional achievement as judged by their peers.

# FAQs

- **CMRP Certification is only valid for 3 years. What happens after that?**
  - Renewal is obtained through 45 contact hours of continuing professional education or successful re-examination at the option of the CMRP certified professional.

# *Need More Information?*

- Obtain the *CMRP Handbook and Application* through:
  - AHA-CC's website: [www.aha.org/certification](http://www.aha.org/certification)
  - AHRMM's website: [www.ahrmm.org](http://www.ahrmm.org)
  - AMP at **(913) 895-4600**

# *Distinguish Yourself*

Over **1,100** materials management professionals have received the CMRP designation.

This number continues to rise every month!



# *Distinguish Yourself*

Successful candidates are recognized at AHRMM's Annual Conference & Exhibition each year!

A letter is sent from AHA-CC to employer upon request.



# *Purpose of CMRP Certification*

- **Recognize individuals who meet eligibility.**
- **Encourage continued personal and professional growth in the practice.**
- **Provide a national standard of requisite knowledge required for certification.**

***Our Standard of Excellence  
Be Proud of It!***

# *Recognizing our Region CMRP's*

## WASHINGTON

- Kevin Burns
  - Nancy Chester
  - Jack Gallagher\*
  - Janelle Monell\*
  -
- Tony Carrillo
  - Adrian Paul Cushman
  - Jason Moulding
  - Kathi Pressley\*\*

# *Recognizing our Region CMRPs*

## WASHINGTON

- Roberta J. Wilson\*
- Martina Blackett
- Max F. Rothwell
- Scott Bradley Coleman\*
- Kristy L. Dawson
- George T. Ott
- Kevin Hunt
- Don Wolfe\*
- Ray Moore\*
- Kelly O'Connell
- Helene M. Schultz
- Rick Swangwan\*
- Patricia A. Van Effen\*

# *Recognizing our Region CMRPs*

## **OREGON**

- **Lisa M. Atkins\***
- **Valerie A. Bailey\*\***
- **John Frasso**
- **Tammie A. Shultz\***
- **Elizabeth F. Urbancic**
- **Susan J. Gardner**
- **Donna Bean\*\***
- **Ernest C. Monts**
- **Kevin Swartout**
- **Shanna Oberbeck\***

# *Recognizing our Region CMRPs*

## **ALASKA**

- **Cynthia Leeann Cohen**
- **Lee M. Erickson**
- **Mark Robert Lamey**
- **Christopher M Rutz**
- • **Susan M. Turley**

# *Recognizing our Region CMRPs*

## **IDAHO**

- **Karen Heileson**
- **Terri Hull\***

## **MONTANA**

- **Kathy S Tokar**
- **Bryan D. Buckridge**
- **Stephen V. Redgate**
- **Gerry L. Slingsby**



**AHRMM**

Association for Healthcare  
Resource & Materials Management  
*of the American Hospital Association*



# Questions?



American Hospital  
Association

# Sample Questions

- **Total capital equipment life cycle costs include the:**
- **A. Depreciation expense**
- **B. Initial purchase price**
- **C. Future replacement price**
- **D. Manufacture's standard warranty price.**

# *Samples Questions*

**Turns are defined as a basic measure of efficiencies in:**

- **A. Management**
- **B. Vendor delivery**
- **C. Financial control**
- **D. Inventory control**

# *Sample Questions*

**To establish accurate product data in the MMIS, data synchronization requires common manufacturer name, manufacturer product number and**

- A. Expiration date**
- B. Packaging data**
- C. Latex indicator**
- D. Lot number**

# Sample Questions

## Early Steps when choosing a replacement computerized MMIS are to

1. Define current cost of operations
  2. Select a task force
  3. Define functional requirements
  4. Select a vendor
- A. 1,2 and 3 only
- B. 1,2 and 4 only
- C. 1,3 and 4 only
- D. 2,3 and 4 only

# *Samples Questions*

Which of the following is the correct sequence of stages in the process improvement cycle?

1. Improve
2. Measure
3. Control
4. Define
5. Analyze

- A. 1,4,5,3,2
- B. 2,1,5,3,4
- C. 4,2,5,1,3
- D. 5,1,4,2,3

# Sample Questions

The Joint commission standards for Environment of Care require that the Materials Management department have which of the following?

- A. A cost reduction plan
- B. A value analysis program
- C. An employee development plan
- D. An emergency management plan

# Sample Questions

**When a capital requisition has been generated, a buyer needs to take which of the following criteria into account to determine the best method of procurement?**

- A. Shortages in the industry**
- B. Lease or purchase decision**
- C. Whether an item is in stock**
- D. Economic events in the industry**

# Sample Questions

**What does FOB destination mean?**

- A. The buyer pays all freight charges**
- B. The seller pays all freight charges**
- C. The seller retains ownership in transit**
- D. The buyer retains ownership in transit**

# Sample Questions

**A basic stock out ratio is calculated by dividing the**

- A. Reorder point by the lead time**
- B. Average usage by the monthly receipts**
- C. Number of lines out by the number of lines ordered**
- D. Number of stock outs by the number of receipts**

# *Samples Questions*

**To maximize return on investment for a new MMIS, implementation processes should do which of the following?**

- A. Encourage and act on user feedback**
- B. Utilize the system's "best practices."**
- C. Incorporate customization of the system as part of the overall plan**
- D. Map business processes to system processes immediately after activation**

# Sample Questions

Which of the following is the **LEAST** effective strategy for a hospital surviving a prospective payment system?

- A. Laying off staff**
- B. Increasing efficiencies**
- C. Reducing budgetary costs**
- D. Maximizing payment from contractual payers**

# Sample Questions

**A hospital is considering developing a sterile custom pack program. To help offset initial start-up costs, the hospital may market its services to smaller facilities within a 50-mile radius. The hospital's MM department should consider which of the following before making this decision?**

- 1. A market review of other facilities to determine if there is interest**
- 2. A cost analysis of equipment, supplies and labor needed for the venture**
- 3. A comparative analysis of in-sourcing and out-sourcing to determine cost benefit ratio**
- 4. A report stating how much expansion would be possible for the MM department**

*continued*

- **A. 1,2 and 3 only**
- **B. 1,2 and 4 only**
- **C. 1,3 and 4 only**
- **D. 2,3 and 4 only**