Summary of the Management Job Analysis Survey Performed by the CBSPD – 2019

In October 2019, the CBSPD performed a Job Analysis survey of the Sterile Processing Management roles and responsibilities. The purpose of the CBSPD Job Analysis in Sterile Processing Management was to identify the knowledge that is important to competent Sterile Processing Managers. The report on the Job Analysis describes the

- 1) Rationale for conducting the job analysis
- 2) Methods used to define job-related tasks and knowledge
- 3) Types of data analyses conducted, the results of the analyses; and
- 4) Recommended test specifications that will be used to develop an examination for the Sterile Processing Management certification program.

This activity is required by the National Commission for Certifying Agencies to ensure the exam content remains relevant, current and reflects current information for the profession.

This job analysis study involved a multi-method approach that included subject-matter experts and a survey. First, a group of subject-matter experts identified the knowledge that is important to the work performed by Sterile Processing Managers. A survey was then developed and sent to Sterile Processing Managers professionals in the United States and internationally.

The use of the job analysis to define the content domain is a critical component in establishing the content validity of licensure and certification examinations. Content validity is the primary validation strategy used in these examinations. It refers to the extent to which the content covered by an examination overlaps with the important components (tasks, knowledge, skills, or abilities) of a job. Demonstration of content validity is accomplished through the judgments of subject-matter experts. The process is enhanced by the inclusion of large numbers of subject-matter experts who represent the diversity of the relevant areas of expertise.

The major focus of conducting a job analysis study is to establish the importance of the job tasks and knowledge. This, in turn, guides the development of test specifications and content valid certification examinations. What matters most is that the credentialing examination covers important job-related knowledge linked to important tasks performed by Sterile Processing Managers. Consistent with a content validity framework, the job analysis study was designed to obtain input from many subject-matter experts at critical points.

Methods Used - A Committee of certified Sterile Processing Management professionals with a specialty in Sterile Processing Management developed the survey. The survey consisted of six sections (I) Rules and Regulations; (II) Roles and Responsibilities; (III) Fiscal Management (IV) Human Resources Management (V) Life Science (VI) General Knowledge. The survey was designed to take less than one hour to complete.

For the frequency statements, respondents were asked to evaluate each for importance. For the knowledge areas, respondents were requested to provide importance ratings as well. The rating scales used in the task section and knowledge area section of the survey were:

- ✓ How important is performance of the frequency for a newly certified (after one year of practice) Sterile Processing Manager to practice in a manner that protects the health, safety, and welfare of the public?
 - 0 Very low importance
 - 1 Low importance

- 2 Average importance
- 3 High importance
- 4 Very High Importance

Knowledge Areas - How important is performance of this knowledge for a newly certified (after at least one years of practice) Sterile Processing Manager to practice in a manner that protects the health, safety, and welfare of the public?

- 0 Very low importance
- 1 Low importance
- 2 Average importance
- 3 High importance
- 4 Very High Importance

In Part III of the survey, the participants were asked to provide the percentage weight (emphasis) they would recommend as content for an examination. This was accomplished by distributing 100 questions across seven major knowledge areas. These questions distributions were converted into percentages, within ten-point intervals, representing the percent of items that the survey respondents believed should be devoted to each area. This rating can be used by the test specifications committee as a guide for emphasizing or de-emphasizing content in the examination.

Extensive demographic data was accumulated during the survey and reported in the report.

The survey was posted on the internet using a survey service. Certified Managers already listed in the CBSPD database were emailed about participating in the survey as well as notifications posted on the CBSPD social media pages.

The survey was posed for 45 days then the results tabulated. The 2019 Test Specifications for the CBSPD Management exam were approved by the CBSPD Board of Directors in November, 2019.

The Exam content (test specifications are listed in the Management Certification Candidate Bulletin which is posted on the CBSPD webpage in the Management Candidate Bulletin. A copy of the test specifications follows.

Knowledge Ratings - based on 100 questions

Domain 1: Rules and Regulations – 19 % of exam (19) questions)

- 1. K.1. Federal, state, and local regulations and standards that impact the department's operations (e.g., FDA, OSHA, CMS, HIPAA, EPA), Ergonomics
- 1.K.2. Standards and Guidelines (e.g. AAMI steam sterilization, liquid chemicals, ETO, flexible endoscopes), AORN Guidelines, the Joint Commission (JC), CDC that impact SPD activities.
- 1.K.3. Ethics compliance with professional standards and professional behavior

Domain 2: Roles and Responsibilities – 20 % of exam (20 questions)

- 2.K.1. Decontamination methods; cleaning effectiveness testing (types, how to perform) documentation of same
- 2.K.2. Operation and testing of decontamination equipment (e.g. spray arms in washers)
- 2.K.3. Use of detergents, and disinfectant solutions (both environmental and high level) and their actions (e.g., pH levels, dilution, temperature, disposal, etc.) . Processing of patient care equipment.
- 2.K.4. Packaging materials and systems (e.g., paper-plastic pouches, Tyvek pouches, disposable wrappers, reusable wrappers, rigid container systems). Also includes selection and use.
- 2.K.5. Care, handling, inspection, safety testing, accountability and functionality of surgical instruments and flexible endoscopes.
 - a. Tray assembly, labeling and use of count sheets.
 - b. Repair and maintenance of instruments and sharps.
- 2.K.6 Management of loaner equipment
- 2.K.7. Methods, parameters and documentation of sterilization (e.g., steam, ETO, gas plasma, hydrogen peroxide-ozone, vapor phase hydrogen peroxide, etc.) and associated monitoring controls (e.g. chemical and biological monitors) Lot control labeling; documentation of items processed and quality assurance testing of sterilizers.
- 2.K.8. Recall procedures for in-house and outside manufactured items.
- 2.K.9. Parameters for sterile storage Factors affecting sterility maintenance including transport of sterile items.
- 2.K. 10. Methods and procedures for off-site processing by another facility (either just sterilization or the entire process).
- 2.K.11. Principles of stock rotation.
- 2.K.12 Procedures for patient care equipment, surgical case carts and specialty carts.
- 2.K.13 Protocols for TASS and CJD

Domain 3: Fiscal Management – 14 % of exam (14 questions)

- 3.K.1. Financial reports, spreadsheets and graphs, cost analysis.
- 3.K.2. Operational needs, managing budgets, capital budgeting

Domain 4: Human Resources Management – 13 % of exam (13 questions)

- 4.K.1. Developing and maintaining competency-based Job Descriptions for sterile processing personnel; career ladders for staff
- 4.K.2. Measurable annual competencies, performance standards and performance appraisals, feedback on work performance
- 4.K.3. Training resources (e.g., videos, manuals from manufacturers, self-study manuals, workbooks), methods and techniques, requirements for trainers
- 4.K.4. Staffing needs based work volume and productivity; how to perform a productivity analysis
- 4.K.5. Motivation, communication and corrective action procedures
- 4.K.6. Documentation of training, annual competencies, corrective action, incident reports, etc. Documentation of Inservices

Domain 5: Life Sciences – 14 % of exam (14 questions)

- 5.K.1. Basic anatomy, physiology, microbiology and infection control as it relates to sterile processing department
- 5.K.2. Types of microorganisms (e.g., bacteria, fungus, virus, prions, spores) and how they are destroyed and transmitted; Biofilms

Domain 6: General Knowledge – 20% of exam (20 questions)
6.K.1. Development, implementation and maintenance of departmental policies and procedures
6.K.2. Process improvement plans, disaster planning and customer relations
6.K.3. Fire, electrical and equipment safety including interpretation of all signs and symbols
6.K.4. Latex allergies