Analysis of Operating Room Service Lead Workload

Final Report

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EXECUTIVE SUMMARY

The Nurse Manager of the University Hospital (UH) Operating Rooms reported that the role of the service lead is inconsistent across services and is not aligned with the new team model for the operating rooms. According to UH guidelines, a UH service lead’s general purpose is to coordinate surgical patient care and supervise the functions of a specific service regarding the availability of staffing, supplies, equipment, and instrumentation.

The Nurse Manager asked the team to document the current workload of service leads in the 11 UH services, develop a standardized role for service leads across all services, and identify best practices which could be shared across services. To document the current workload, the team observed, surveyed, and interviewed all 11 service leads. Additionally, the team performed a workload sampling study. Using the above data collection methods, the team discovered the current workload distribution, identified functions that could be standardized across services, and made recommendations for implementing standards for the service lead role.

Methods
The team followed a two-tiered data collection approach for further analysis. First, the team collected qualitative data through a literature research and observations, surveys, and interviews of the 11 service leads. Next, the team collected quantitative data through a workload sampling study, which the service leads completed in three days each. The combination of data provided the team with information on both the expectations and current workload of UH service leads, which were not necessarily the same in some instances.

Key Findings
Using the data collected, the team found 6 key facts which were directly influencing the issues earlier-described by the Nurse Manager. These were the following:
- UH, CVC, & Mott Service Lead Role Differs from AORN Definition
- Service Leads at UH Perform a Broader Body of Work than at Mott and CVC
- Majority of UH Service Leads Feel Tasks are Appropriate
- UH Service Leads Struggle to Fit Their Workload into Eight-Hour Workdays
- Workloads Vary Greatly across Services
- Satisfaction of Service Leads Varies Across Services

Conclusions
Based on the key findings, the team came to the following two conclusions:
- Inefficiencies in some daily tasks: The most prominent inefficiency was time spent by service leads walking and searching for missing equipment from the rooms. Other examples of inefficiencies include performing tasks that could be completed by perioperative technicians (PTs), such as picking cases, opening cases, and doing inventory.
- Importance of dedicated PTs: The importance of dedicated PTs became apparent in the difference between service leads who could delegate the above-mentioned tasks to their PTs to those who could not. The team found service leads with dedicated PTs were enabled to focus their time on the other functions of their job, thereby allowing them to fit their workload in one day.
Recommendations
Near the end of the project, the team developed the following recommendations:

- Standard Role Across Services
- Best Practices

The standard role can be implemented for services with dedicated PTs and includes the following functions: case preparation, ordering, vendor management, education, working cases, and pick-list maintenance. The frequency for these tasks will vary somewhat by service, but should have approximate averages of 25%, 20%, 15%, 15%, 15%, and 10%, respectively. The function of pick-list maintenance is limited to approval and supervision of the updating process, rather than the actual manual process of entering information into the computer system.

Best practices found were all related to improving communication among team members within a service. First, the team recommends that PTs utilize the white boards in the rooms when borrowing equipment to avoid items being misplaced or lost. For example, a person borrowing a piece of equipment should write the room in which the equipment will be borrowed and also the room to which it should be returned. Second, PTs could post the pick-list outside of the operating room doors once completed, which may save the service lead time when making rounds. Finally, the service lead can post a one-day advanced schedule in addition to the one-week advanced schedule to increase visibility into the next day and highlight special needs of cases.
INTRODUCTION

The work of the service lead has changed over the years and has become non-standardized between the various Operating Room services offered by the University Hospital (UH), such as neurology, gynecology, and urology. The Lean Coach reported the lack of standardization is due to the specialized equipment, supplies, and the unique needs of each service as well as role changes within the department. For these reasons, the Nurse Manager of the UH Operating Rooms asked the IOE 481 student team to develop standardized roles for service leads across all services. To develop the standardized role, the team documented the current workload of service leads in 11 services and distinguished similar tasks that can be standardized from tasks that must remain different due to special needs of specific services. As requested by the Nurse Manager of the UH Operating Rooms, the team conducted a series of observations, interviews, and studies to document the current workload, develop a standardized role for the service leads, and recommend best practices that can be implemented across all services. The purpose of this report is to present the team’s methods of analysis, key findings of the current state, and recommendations for the future role of UH service leads.

Background

According to UH guidelines, a UH service lead’s general purpose is to coordinate surgical patient care and supervise the functions of a specific service regarding the availability of staffing, supplies, equipment, and instrumentation. However, the Nurse Manager of the UH Operating Rooms reported that the role of the service lead is inconsistent across services and is not aligned with the new team model—which includes the service leads, service specialists, perioperative technicians, and other nurses—for the operating rooms.

Specifically, there has been concern that the workload distribution between the roles of service leads and service specialists is unbalanced. For example, some services have both a service lead and service specialist. Their roles are not clearly defined, so the tasks of a service lead in one service may actually be the tasks of a service specialist in another and vice versa. On the other hand, the service leads without service specialists perform all of the tasks required for a particular service, including ordering supplies and equipment. In addition, a significant portion of the equipment and supply acquisition work was shifted onto the service leads. Depending upon the nature of the service and the range of tasks that have been assumed by the service leads and service specialists over time, there has been concern that the workload is unbalanced and at risk of not being equitable across service areas.

With the service leads performing demanding tasks such as ordering, the Nurse Manager expressed concerned that the service leads are straying too far from their traditional role as clinical experts. To maintain functionality in the team model for operating rooms, a clinical expert must be on hand to deliver high quality, cost-effective perioperative care. Therefore, when the IOE 481 team standardized the role of the service leads, a primary focus was put on determining appropriate work and the most efficient and equitable distribution of workload.
Key Issues
The following key issues of the project were identified:
- Lack of a standardized UH service lead role
- Undocumented current state of workload distribution
- No best practices sharing across services or centers

Goals and Objectives
To document the current state and standardize the service lead role in the UH Operating Rooms, the team achieved the following tasks:
- Determined core work for the service lead role
- Documented the current workload of 11 UH service leads
- Reviewed the literature and benchmarked with similar academic medical centers to determine how this work is being accomplished elsewhere

With this information, the team developed recommendations to:
- Share best practices across services
- Standardize the service lead role where possible
- Distribute workload more efficiently within services to match standard work

Project Scope
The scope of the project included only the role of the UH Operating Rooms service leads. The team analyzed staff, supplies, equipment, and other resources as they pertained to the service leads. The job functions performed by the service leads were observed to create a current state job matrix. Studies were performed to determine the optimal role of service leads working in the UH Operating Rooms.

The project did not focus on the service leads from Mott Children’s Hospital or the Cardiovascular Center (CVC), but they were included for benchmarking and best practice comparisons. While the roles of operating room staff and core managers are related to the service lead role, they are outside of the project scope due to time constraints.

Support Provided by Operating Entities
The client provided problem details, contact information, expectations, paging data, and any other required resources as the project developed. She helped the team access UH operating rooms and the supplies necessary, such as scrubs, to observe the service leads in the operation rooms and surrounding areas. The client aided the team in scheduling interviews with the UH service leads. Acting as a liaison between the project team and the UH staff, she encouraged cooperation for surveys, interviews, observations, workload sampling, and pedometer studies.

The project coordinators guided the team as the project developed, ensuring high analytical quality and positive client relationships. The project coordinators also provided access to past projects and other data collection tools such as beepers. Lastly, they provided ongoing feedback to the project team to keep the project on task and to help develop the team’s professional abilities.
APPROACH AND METHODOLOGY

The team began the project by collecting qualitative data with literature research, observations, surveys, and interviews to understand the current expectations and practices of UH service leads. This qualitative data was backed up by quantitative data from the workload sampling study to understand the distribution of time spent within each service.

Literature Research
The team completed a literature research to understand service lead standards both within UH and at external institutions. First, the team utilized internet searches and job descriptions from UH, Mott, and CVC to compare and contrast role definitions. In the internet searches, with the help of the Nurse Manager, the team accessed the Association of Peri-Operative Register Nurses’ (AORN) Perioperative Care Coordinator Nurse Competency Statements. Perioperative Care Coordination is another name for this service lead role, and the document provided a list of expected competencies and functions for this role, which the team used as the main benchmark in this project. Next, the team reviewed four past projects—two from the IOE 481 project database and two that were provided by the project coordinators (See Appendix A). Although these projects were not directly related to service leads, they were useful in validating data collection methods and analysis.

Observations
The team observed the 11 service leads in UH for two-hour time blocks over a three week period from February 16 through March 6, 2009. This amounted to 26 total hours of observations. The purpose of these observations was to gain familiarity with the operating room team model and the current functions of the service leads. During these observations, the observing member noted the tasks the service lead performed. The team members also began dialogue with the service leads to understand their perception of problems and to gain insight into opportunities for improvement. The team members were also introduced to other key staff, including service specialists, perioperative technicians, and core managers. These perceptions were later compared to the service lead’s own perceptions through the survey results, and the actual body of work performed by the service leads as verified by the workload sampling study.

Surveys
The team created a six-question survey for the service leads at UH, CVC, and Mott to be completed through SurveyMonkey.com (See Appendices B & C). The survey was distributed online on March 3, 2009. The survey collected data to gauge where the service leads think they are spending most of their time, any impediments to carrying out their work, and their satisfaction levels with their roles. The team received responses from all 16 service leads total at these three hospitals; the responses were anonymous, so the respondents could only be identified by hospital.

Interviews
The team interviewed all 11 UH service leads between March 18 and March 25, 2009. The same 11 questions (See Appendix D) were asked of all the service leads in each interview. The team used information gleaned from observations and survey results to develop this set of interview
questions to help the team identify differences and similarities across services. All interviews were carried out individually, lasting approximately 30 minutes each. Due to time constraints, some service leads did not get an opportunity to provide responses for all questions.

**Workload Sampling Study**

The team performed a workload sampling study to determine the actual percentage of time spent on each of 14 identified tasks (See Appendix E). The data collection card was developed based on observed tasks, as well as the responses to two survey questions related to key tasks performed and approximate percentage of time spent on each. The workload sampling study began on March 19 and lasted until April 6, 2009 at which time all service leads had completed the study. Each service lead completed the study for three days with the exception of two service leads who were only able to perform the study for two days. The beepers used in the study were set to go off randomly throughout the day, approximately 4 times per hour, at which time the service leads would place a mark in the appropriate box on the data collection card indicating what task they were currently performing at what hour of the day. The team members explained the purpose, procedures, and expectations of the study with the service leads during interviews. The service leads were also provided with an instruction sheet (See Appendix F). The core managers facilitated in distributing the beepers, instructions, and data collection cards to all the service leads.

**Pedometer Study**

The team conducted a pedometer study in conjunction with the workload sampling study. A separate line was provided on the data collection sheet to record the pedometer steps at the end of each day of the study. Information regarding this study was also included on the instruction sheet and the core managers were responsible for distributing the pedometers as well as beepers to the service leads. Due to concerns that the pedometers were inaccurate and malfunctioning, this data was not taken into consideration for analysis. The service leads, during the time of the study, noted discrepancies between the pedometer readings, and thus one service lead wore two pedometers throughout the day for two consecutive days to compare the results. One pedometer recorded 2,293 and 2,718 steps respectively, while the other recorded 3,894 and 4,234 steps respectively. Because one service lead was wearing two pedometers and because there was a broken pedometer, not all the service leads wore a pedometer for the three assigned days, thus the data is skewed and cannot be analyzed for accurate results.

**ANALYSIS AND KEY FINDINGS**

Once data collection was complete, the results were analyzed and key finding from each of the methods above were brought to light.

**UH, CVC, & Mott Service Lead Role differs from AORN Definition**

After completing the literature research of job descriptions of the service lead position, the team determined 13 core competencies and 10 core functions expected of service leads based on the AORN guidelines for a Perioperative Care Coordinator. The 13 core competencies expected of all service leads include leadership, clinical expertise, change management, collaboration, communication, conflict resolution, critical thinking, finance/resource management, political skills, mentoring skills, quality improvement, project management, and technology. There is no
formal training provided in most of those expectancies, so some service leads may have stronger
skill sets than others.

While the core competencies are expected of all service leads, they may translate into different
functions performed. The team asked the Nurse Managers of the three medical centers to
compare the 10 core functions defined by AORN to functions performed by service leads. The
functions performed by a service lead are marked with an ‘X’ in Table 1 below.

**Table 1. Benchmark of Service Lead Functions**

<table>
<thead>
<tr>
<th>FUNCTIONS</th>
<th>UH</th>
<th>CVC</th>
<th>MOTT</th>
<th>AORN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Management</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Patient/Family Educator</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cost-Reduction Specialist</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Equipment/Supplies Manager</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Inventory Manager</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry Consultant</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry/Education Networking</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>RN First Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mott: Note 1: Budget – Capital/equipment; provides complete info with quotes to
manager (involves research and quotes)

Note 2: Industry consultant – consulting with rep regarding cases (on-site)

The Nurse Managers did not have full descriptions of the categories, so the findings may be
skewed. However, this table still outlines the 10 core functions as defined by AORN, which the
Nurse Managers may use for future reference.

**Service Leads at UH Perform a Broader Body of Work than Mott and CVC**

This table above is not representative of a UH service lead’s entire body of work, so additional
data was gathered in the form of a survey. The survey collected both qualitative and quantitative
data in the first two questions by asking the service leads which key tasks they performed and the
percentage of time spent on each task. In comparison to results from the service leads at CVC
and Mott, the team found that the service leads from UH perform a much broader body of work
(See Table 2).

<table>
<thead>
<tr>
<th></th>
<th>UH</th>
<th>CVC</th>
<th>Mott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Number of Tasks Listed</td>
<td>19</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Maximum Number of Tasks Listed</td>
<td>37</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Minimum Number of Tasks Listed</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
As the table above shows, on average the UH service leads listed a higher number of tasks than the CVC and Mott service leads. Furthermore, the highest number of tasks listed by a UH service lead was 37, which is considerably higher than 15, the maximum listed at both CVC and Mott. The minimum number of task listed, however, was the same at all medical centers. This shows a wide variation across services in the number of tasks the service leads at UH are performing regularly, indicating lack of standardization in the service lead core work. There is less variation in the number of tasks listed by CVC and Mott service leads. When examining their responses, the service leads at these medical centers appear to have a more standardized role and UH service leads.

**Majority of UH Service Leads Feel Tasks are Appropriate**

The team also collected data on how appropriate the service leads view the body of work they listed on the survey (See Figure 1).

![Figure 1. Service Lead’s Perceived Appropriateness of Their Combined Tasks](image)

The mean of the responses was 5.27, thus the service leads overall perceived their combined tasks to be somewhat appropriate. Given the importance of their role to quality patient care, a mean of 5.27 is not desirable, especially since it means that some service leads ranked their appropriateness at only a 3 or 4. Reasons for finding their body of work to be somewhat inappropriate may be explained by our next key finding.

**Satisfaction of UH Service Leads Varies across Services**

Figure 2 shows how satisfied the service leads reported that they are with their work; responses are also on a 1 to 7 scale, with 1 being extremely unsatisfied and 7 being extremely satisfied. The mean of the responses was 4.9, thus overall the service leads are only somewhat satisfied with their work. Once again, there is an outlier, indicating potential problems with workload distribution not being equitable across all services.
Service Leads Struggle to Fit Their Workload into Eight-Hour Workdays

No quantitative data was collected during the observation phase of the project, but observations allowed the team to understand the tasks performed by the service leads on a daily basis and develop perceptions regarding importance of these tasks. The team observed that service leads were extremely busy and constantly on the move to ensure their service was running on-schedule. However, some of the tasks they were performing were a result of miscommunication or error, such as searching for missing equipment or re-opening a contaminated room. As a result, tasks like these are often too distracting for the service lead to perform other necessary functions. In the end, some service leads end up staying later or working through their lunch and/or breaks to compensate for distractions. In interviews, several service leads admitted that they often have to take their work home with them at the end of the day.

After observing the distractions, the team used the survey to collect data on how frequently the service leads perceive that their work is impeded by lack of communication as well as other factors (See Figure 3).
The mean of the responses was 5 for communication and 5.45 for other factors, thus confirming that service leads view their work as being frequently impeded. Furthermore, miscommunication makes up almost 50% of these impediments. There were, however, a few responses indicating that individuals felt they were rarely distracted, signaling possible best practices. This was noted for further examination in later parts of the project.

**Workloads Vary Greatly Across Services**

After gaining a preliminary understanding of tasks and potential distractions, the team conducted a workload sampling study to determine where time is being spent. The responses from the survey were used to develop a list of 12 key tasks performed regularly by service leads at UH. These tasks, in no particular order, are room preparation, working cases, ordering, inventory management, case preparation, communication, education, equipment management, locating missing items, pick-list maintenance, meetings, and vendor management. The team used the interviews to determine the importance of each of these tasks as they pertain to the service lead, service specialist, and perioperative technician (PT). See Appendix F for a description of the categories as they may relate to the different roles. Due to time constraints, the service specialists and PTs were never given beepers, so the frequency of their tasks is also based on the interviews. All of the data was combined to develop the current state job matrix (See Table 2).
Table 3. UH Service Lead Current Job Matrix

\[ \text{N=11, March 18 – April 6 2009, IOE 481} \]

<table>
<thead>
<tr>
<th></th>
<th>ENT</th>
<th>ORAL SURGERY</th>
<th>GYNECOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room Preparation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>7.65%</td>
<td>4 High</td>
</tr>
<tr>
<td>Working Cases</td>
<td>2</td>
<td>11.55%</td>
<td>1 High</td>
</tr>
<tr>
<td>Ordering</td>
<td>3</td>
<td>7.14%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>4</td>
<td>5.56%</td>
<td>4 Med</td>
</tr>
<tr>
<td>Case Preparation</td>
<td>5</td>
<td>3.22%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Education</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Equipment Management</td>
<td>2</td>
<td>5.69%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Locating Missing Items</td>
<td>3</td>
<td>3.22%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Pick-list Maintenance</td>
<td>4</td>
<td>3.22%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Meetings</td>
<td>5</td>
<td>3.22%</td>
<td>3 Med</td>
</tr>
<tr>
<td>Vendor Management</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>75.67%</td>
<td>74.99%</td>
<td>96.37%</td>
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<th>PLASTICS</th>
<th>TRAUMA, BURN, MISC</th>
<th>UROLOGY</th>
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<tr>
<td><strong>Room Preparation</strong></td>
<td></td>
<td></td>
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<tr>
<td>Vendor Management</td>
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<tr>
<td><strong>Total:</strong></td>
<td>85.50%</td>
<td>80.66%</td>
<td>98.30%</td>
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<th>NEURO SURGERY</th>
<th>ORTHOPEDIC</th>
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<tr>
<td><strong>Room Preparation</strong></td>
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<td>3 Med</td>
</tr>
<tr>
<td>Vendor Management</td>
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<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>82.20%</td>
<td>87.00%</td>
<td>97.00%</td>
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<thead>
<tr>
<th></th>
<th>GENERAL SURGERY</th>
<th>TRANSPLANT</th>
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<tr>
<td><strong>Room Preparation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>6.00%</td>
</tr>
<tr>
<td>Working Cases</td>
<td>2</td>
<td>2.00%</td>
</tr>
<tr>
<td>Ordering</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Case Preparation</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Education</td>
<td>3</td>
<td>2.00%</td>
</tr>
<tr>
<td>Equipment Management</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Locating Missing Items</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Pick-list Maintenance</td>
<td>4</td>
<td>2.00%</td>
</tr>
<tr>
<td>Meetings</td>
<td>5</td>
<td>2.00%</td>
</tr>
<tr>
<td>Vendor Management</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>80.00%</td>
<td>93.33%</td>
</tr>
</tbody>
</table>
As seen in Table 2, service leads are spending a significant portion of time on tasks that are not of high importance. Room preparation and locating missing items are examples of tasks that the service leads do not need to be spending so much time on. Service leads in Gynecology, Neuro Surgery, and Trauma, Burn, MIS are spending 23%, 16%, and 23% of their time on room preparation, respectively. Service leads are spending too much time on room preparation, considering that room preparation is rated an importance of 1 on a 1-5 scale (1 being unimportant, and 5 being the most important).

Another task that service leads are spending a lot of time on is communication. All service leads are spending a high percentage of time on communication; 9 services spend between 10% and 28% of their time on communication, and the other 2 services, plastics and orthopedics, both spend 6.5% of their time on communication. While communication is a very important part of the service leads job, better communication techniques and best practices can reduce the amount of time spend on communication.

The disparity between the assigned importances to each service is due to the nature of the service. For example, some services, such as plastics, demand a high amount of case preparation due to the high volume of implants required, the necessary paperwork, and the logistics involved. The team noted these explanations in an explanation of importance rankings document (See Appendix G). However, for the most part, it has been determined that the importance is fairly standard across all services, despite service lead’s perceptions that there is great variance in the work demanded from each of their services. The key issue lies in the fact that the frequencies that important tasks are performed by all three roles vary greatly, indicating that there is no standardized way of completing this work.

A large discrepancy is found in the work completed by the service specialists and PTs. Not only are some services lacking a service specialist, but those that do have a service specialist report that a very different body of work is performed, as shown in Table 2 above. Additionally, some services do not have dedicated PT, which refers to a PT who is not floating between services but rather is trained and stationed with one service only. Another difference between PTs is whether they are licensed or not. Both circumstances greatly affect the service lead’s ability to delegate and the team dynamics overall. Finally, the PT hours may vary; some come later in the day, only work a few days a week, or work on the weekends, making it hard for them to assist the service specialist.

CONCLUSIONS

The above key findings all pertained to UH service leads being spread too thinly in their everyday workload. This analysis has led to two conclusions which address the key issues of the UH operating rooms: inefficiencies in some daily functions and the importance of dedicated PTs.

Inefficiency in Some Daily Functions
For service leads at UH, the most predominant portion of non-value added time is due to searching for missing equipment or supplies from rooms. The equipment and supplies are missing because they were not returned from another room after they were borrowed. The
service leads are often hunting for missing equipment across all the rooms, and in some cases, across the three cores, which takes a considerable amount of time for walking.

The team also found inefficiency in the service leads daily function, because the service leads are doing work that could be completed by a PT. Example of this included common inventory of the cores and the shelves in the rooms, picking and opening cases, and entering updated pick-list information into the computer system. Although these tasks are all relevant to running the operating rooms, they are not of equal importance to other more important duties the service leads perform. When the service leads spend their time on work that could be completed by others, they are taking away from time that could be spent on case preparation, ordering, education, and vendor management.

**Importance of Dedicated PTs**
The team noticed a large discrepancy between services with dedicated PTs and those which used ‘floater’ PTs. In cases where the services have dedicated PTs, the service leads could rely upon the PTs for picking cases, opening the rooms, and completing inventory of common supplies. However, if the service only has floater PTs, then the service leads are too involved with the above-mentioned tasks. They cannot efficiently delegate tasks, and it takes away from the rest of their duties. Some service leads are even working 10-11 hour daily shifts to try to fit the necessities of their work into one day. This leads to overall job dissatisfaction and overexertion to the point of exhaustion.

The team found that the differences in the roles of the UH service leads was not so much because of differences due to service as differences due to the surrounding team members. Those without service specialists (educators) need to dedicate a portion of their day to education, especially when dealing with orientees. Those without dedicated PTs need to add common duties such as opening and doing inventory to their every day tasks. Although the service specialist is a great help in education and in some cases, giving breaks so the service leads can complete other work, the team found that the dedicated PTs made the most difference in allowing the service lead to operate efficiently.

**RECOMMENDATIONS**

Based on the conclusions, the team recommends a standard role for service leads across services and specific best practices that can be implemented for further improvement.

**Best Practices**
Through observation and interviews, the team found examples of best practices that could be implemented across services for improvement, primarily dealing with communication. First, to greatly reduce and even eliminate the need for searching for missing equipment, the PTs should all be instructed to write on the white boards of the rooms. For example, if a piece of equipment is borrowed from room 12 to use in room 14, then the white board in room 12 should read ‘Equipment X. loaned to room 14’ and the white board in room 14 should read ‘Equipment X. borrowed from room 12 – return when finished.’ Such a simple practice will avoid searching for missing equipment, and will encourage equipment to be returned after use.
Additionally, the team observed instances where pick-lists were taped outside operating room doors to visually communicate that the room/case had already been picked. This is helpful because the service lead can still cycle the rooms to check on the cases as they are being picked; without going inside the rooms to double check, they can be visually queued that the work has been completed. Furthermore, there were instances where the service lead would post a one-day advanced schedule in addition to the one-week advanced schedule. Posting advanced schedules highlights special needs (by color code for further visual information), providing foresight to the next day (in the event that front loading might be necessary), and alerting staff to the most recent additions and cancelations.

A third best practice was the implementation of a regular team bulletin, distributed through a team email list to keep team members up to date with upcoming cases, events, education, and technology in their specific service. While many service leads have already set up team email lists to use for important matters, few have implemented this team bulletin. Those who have, find it effective for change management and information sharing. While it does require time to put together, it reduces possible impediments in the future because communication is clearer and everyone is receiving the same information.

Finally, a best practice in the Ortho service is a posting of clear and standardized roles for the people in the OR (i.e. scrub nurse, circulating nurse, etc.) as well as the results and expectations from a past 5S Lean study. This is extremely helpful because it allows the team to know what needs to be done and how they should do it. Also, it provides incentive to keep the OR neat, clean, and clear of any unnecessary items.

**Standard Role Across Services**
The recommended standard role for UH service leads should lead to a higher perception of workload appropriateness, fewer job impedances, and greater job satisfaction. The team developed a job description for the service leads which should serve as the standard across all of the UH services (See Figure 4).

First, the team focused on creating a job summary for the role. Second, the team explains the scope of service lead responsibilities, and the areas service lead work should impact. Next, the team identified 6 key responsibilities where service leads should spend the majority of their time: case preparation, vendor management, education, ordering, working cases, and pick-list maintenance based on the level of training and clinical expertise required. The breakdown of time that service leads should spend on each of these 6 responsibilities is 25%, 20%, 15%, 15%, and 15%, respectively. Lastly, the Service Lead Job Description includes the knowledge, skills, relevant education and training that service leads should have.
Service Lead Job Description

Purpose of the Position/Job Summary
A University Hospital (UH) Service Lead is responsible for independently and collaboratively coordinating surgical patient care. Primary duties include providing leadership, clinical expertise, and functional direction to the operating room team. The Service Lead is an expert in surgical case management, cost reduction, and change management.

Scope & Impact
The scope of a Service Lead’s responsibilities includes his/her specific service within the operating rooms. Service Leads have an impact on the entire Operating Room Administration’s budget, patient turnover rates, and surgical case standards.

Key Responsibilities

<table>
<thead>
<tr>
<th>Percent of Time</th>
<th>Key Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Case Preparation</td>
</tr>
<tr>
<td></td>
<td>- Advanced Scheduling (Cases and Staff), Special Needs, Communication with Surgeons</td>
</tr>
<tr>
<td>20</td>
<td>Vendor Management</td>
</tr>
<tr>
<td></td>
<td>- Manage Relationship with Vendors, New Equipment Orientation, Investigating New Products</td>
</tr>
<tr>
<td>15</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>- Clinical Expertise</td>
</tr>
<tr>
<td>15</td>
<td>Ordering</td>
</tr>
<tr>
<td></td>
<td>- Special Needs, Cost Reduction, Inventory/Equipment Management</td>
</tr>
<tr>
<td>15</td>
<td>Working Cases</td>
</tr>
<tr>
<td></td>
<td>- Floating, Giving Breaks, Circulating, Scrubbing</td>
</tr>
<tr>
<td>10</td>
<td>Pick-list Maintenance</td>
</tr>
<tr>
<td></td>
<td>- Supervising Updating DPCs, Communication, Approving Changes</td>
</tr>
<tr>
<td>100%</td>
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</tbody>
</table>

Knowledge and Skills
- **Required**: Clinical Expertise, Change Management, Communication, Teamwork, Conflict Resolution, Resource/Financial Management, Quality Improvement, Project Management, Technological Advancements
- **Preferred**: Leadership, Political Skills, Mentoring Skills, Critical Thinking,

Relevant Education and Training for the Position
- **Education/Training**: .4 FTE clinical work
- Licenses or certifications required, if any:

Figure 4. Standard Job Description for UH Service Leads

4/2009
For this standard role to be implemented, all services need dedicated PTs to relieve the service leads of tasks like inventorying supplies and opening cases. Furthermore, dedicated PTs could enter the updated pick-list information into the computer system. While service lead approval and restricted access is still necessary to maintain the legitimacy of the doctor preference cards (DPCs), the process of manually entering the information into the system is both time consuming and does not require clinical expertise. Therefore, it is more cost efficient for this work to be performed by PTs while service leads focus on other areas. If each service has a dedicated PT, then the service leads could distribute their time as shown in Figure 4.

Given that PTs need to be flexible to support a service, having truly ‘dedicated’ PTs may not be cost effective. However, the team proposes that each PT have both a primary and secondary training in a service. This way, they will act as dedicated PTs, but in the absence of peers, they will still be able to fill in for other services. This is still an improvement because instead of filling in for any of the 11 services, it will be more structured and the PTs will still have a secondary training in that particular service.

The only difference that will remain between services is the presence of a service specialist. If a service has a service specialist, then the service lead will not need to devote 20% of her time to education. This number will be much closer to 5%, and the remaining 15% can be added to vendor management and ordering, as would be necessary for services like Neuro Surgery and Orthopedics.

**EXPECTED IMPACT**

This project provided a detailed description of the current workload for UH service leads. Areas in need of improvement have been identified with recommended solutions addressing standardization across services and best practices sharing, which may be considered for future implementation. The overall impact of this project is to standardize the service lead role and clarify variation in the standard role as it differs across services, to efficiently and productively distribute workload across all services for improved overall satisfaction as well as improved quality of patient care in the operating rooms, and to facilitate best practice sharing at UH and with other similar institutions.
APPENDIX A: Project References

1) Analyzing Nursing Workload at C.S. Mott Children’s Hospital After CareLink Implementation, 12 December 2007, Stephanie Clarke, Christine Cubbin, Brett Milliman, and Tiger Li

2) Analysis of Perioperative Technician Workload at the University of Michigan Hospital, 12 December 2008, Bradley Hoath, Julian Mancia, Jason Shoemaker


4) Workload Analysis of Ambulatory Care Nursing: Briarwood Medical Group, 14 April 2008, Mary Jo Luppino, Jamie Tompkins, and Tim Vezino
APPENDIX B: Survey

1. Please list the activities/tasks you perform regularly.

2. Approximately what percentage of time goes towards each of the previously mentioned activities/tasks?

3. How appropriate are these combined tasks given your role as a service lead? (7 – Appropriate, 1 – Inappropriate)

4. What parts of your job are you satisfied with? Please list at least 3

5. How often is your job impeded by:
   - Lack of communication? (7 – Always, 1 – Never)
   - Other Factors? (7 – Always, 1 – Never)
     Please list other factors.

6. How satisfied are you with your current workload? (7 – Satisfied, 1 – Unsatisfied)
APPENDIX C: Survey Response Summary

1. Please list the activities/tasks you perform regularly.

<table>
<thead>
<tr>
<th></th>
<th>UH</th>
<th>CVC</th>
<th>Mott</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Number of Tasks Listed</td>
<td>19</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Maximum Number of Tasks Listed</td>
<td>37</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Minimum Number of Tasks Listed</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Approximately what percentage of time goes towards each of the previously mentioned activities/tasks?

Key tasks listed by UH service leads (based on number of service leads who listed the task and percent of time service leads report spending on the task):

- Opening/setting up rooms/performing counts
- Being in the rooms (i.e. giving breaks, etc.)
- Ordering supplies/etc.
- Inventory/supply/equipment management
- Case preparation/Scheduling
- Communication (phone/email/pages)
- Teaching/training
- Fixing broken/improperly prepared equipment/instruments/supplies
- Searching for missing equipment/instruments/supplies
- Pick-list maintenance
- Meetings
- Working/communicating with vendors

Mott and CVC service leads report spending most of their time (About 80%) being in the rooms/working cases.
3. How appropriate are these combined tasks given your role as a service lead?  
(7 – Appropriate, 1 – Inappropriate)

<table>
<thead>
<tr>
<th>Response</th>
<th># of UH Responses</th>
<th># of CVC Responses</th>
<th># of Mott Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td></td>
<td></td>
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<tr>
<td>2</td>
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<td></td>
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<tr>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>1</td>
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</tr>
<tr>
<td>7</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Average</td>
<td>5.272727273</td>
<td>5.666666667</td>
<td>6.5</td>
</tr>
</tbody>
</table>

4. What parts of your job are you satisfied with? Please list at least 3

Majority of responses vary greatly. Some common responses are:
- Patient care
- Working with nursing staff, surgeons, teams, patients/teamwork
- Involvement in educational processes related to service/continuous improvement
- Working cases/being in the rooms

These satisfiers were listed by service leads from all three medical centers that were surveyed.

5. How often is your job impeded by:
   Lack of communication? (7 – Always, 1 – Never)
   Other Factors? (7 – Always, 1 – Never)
   Please list other factors.

<table>
<thead>
<tr>
<th>Lack of Communication?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
</tr>
<tr>
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</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
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<td>5</td>
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<td>6</td>
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<tr>
<td>7</td>
</tr>
<tr>
<td>Average</td>
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</tbody>
</table>
Other Factors?

<table>
<thead>
<tr>
<th>Response</th>
<th># of UH Responses</th>
<th># of CVC Responses</th>
<th># of Mott Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
<td>1</td>
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<tr>
<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>2</td>
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<tr>
<td>6</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
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</tbody>
</table>

Average 5.454545455  5.333333333  4.5

Other factors include (lists by service leads at all medical centers):
- Surgeons/other key staff unavailable
- Lack of support
- Time constraints/not enough time
- Instrument and equipment problems

UH service leads also noted that their jobs are impeded by lack of standardization within service and across OR

6. How satisfied are you with your current workload?
   (7 – Satisfied, 1 – Unsatisfied)

How satisfied are you with your current workload?

<table>
<thead>
<tr>
<th>Response</th>
<th># of UH Responses</th>
<th># of CVC Responses</th>
<th># of Mott Responses</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
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<td>2</td>
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<td>3</td>
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<td>1</td>
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<tr>
<td>7</td>
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<td>1</td>
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</tbody>
</table>

Average 4.909090909  5.666666667  4
APPENDIX D: Interview Questions

Interviewee:___________________ Service:_________________ Date:_______

1. Do you have assigned rooms?
   a. How many?
   b. In what core?

2. Does your service have a:
   a. Dedicated PT?
      i. If yes, how are her duties different from yours?
   b. Service specialist?
      i. If yes, how are her duties different from yours?

3. How do you rely upon your team members?
   a. How do you communicate among your team members?
   b. How do you keep track of what’s being done? (i.e. standards/postings or habits?)

4. What are your scheduled hours?
   a. What are your actual hours?
   b. Do you work from home often?
   c. Is there anything that would better allow you to finish your work during the day?

5. What do you do to make sure the cases scheduled after your shift run smoothly?

6. What is important about your job that isn’t as relevant to other services?

7. Do you communicate with the surgeons regarding:
   a. Updating and maintaining their pick sheets?
   b. Special needs for cases?
   c. How effective is that communication?

8. In what ways are communications through pages, emails, and meetings beneficial and/or interferences?
   a. Pages?
   b. Emails?
   c. Meetings?
   d. Others?

9. If you had the power to change one thing about your job, what would you change?

10. What’s the most important part of your job?

11. What amount of time in the room would allow you to maintain clinical expertise?
APPENDIX E: Workload Sampling Data Collection Card

<table>
<thead>
<tr>
<th></th>
<th>6 - 7am</th>
<th>7 - 8am</th>
<th>8 - 9am</th>
<th>9 - 10am</th>
<th>10 - 11am</th>
<th>11 - 12pm</th>
<th>12 - 1pm</th>
<th>1 - 2pm</th>
<th>2 - 3pm</th>
<th>3 - 4pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening/setup room/performing counts</td>
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<td>Being in the rooms (i.e., giving breaks, etc.)</td>
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<td>Ordering supplies/etc</td>
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<tr>
<td>Inventory/supply/equipment management</td>
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<td>Case preparation/scheduling</td>
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<td>Communication (phone/email/pages)</td>
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<tr>
<td>Teaching/training</td>
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<td>Fixing broken/improperly prepared equipment/instruments/supplies</td>
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<tr>
<td>Searching for missing equipment/instruments/supplies</td>
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<tr>
<td>Pick list maintenance</td>
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<tr>
<td>Meetings</td>
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<tr>
<td>Working/communicating with vendors</td>
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<td>Miscellaneous</td>
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<td>Personal time</td>
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</table>

Pedometer Steps: ____________________
APPENDIX F: Instructions for Filling Out Data Collection Card

Instructions for Filling out Data Collection Sheet

1. Enter your name, the date, and your service on the top of the sheet. You will get ONE CARD PER DAY and data collection will last for three days.

2. For each activity, there are ten squares, one for each hour of the shift. You have been provided a beeper that it set to go off randomly, approximately four times per hour. Each time the beeper goes off, please mark the appropriate box indicating what activity you are performing and what hour of the day is it. REMEMBER: Since it is random, it may seem like the beeper is going off close together for a while, or it might not go off for a long time. Please keep this in mind. However, if the beeper continues to not go off, please check the battery. It requires one AA battery.

3. Use your best discretion when selecting which activity to mark; some activities are quite similar—i.e. looking for equipment that belongs in a room or hunting for supplies for a specific case, thus these would both be marked under “Searching for missing equipment/instruments/supplies” instead of marking one or both as miscellaneous.

4. When not at work, the beeper may be turned off with the ON/OFF switch on the side. If turned off, please do not forget to turn the beeper on at the very beginning of your shift. When it is first turned on, it will beep or vibrate depending on what setting it is on—this does not count as one of the random beeps throughout the day.

5. There is a Slient/BEEP switch on the side of the beeper. The beep is multiple beeps lasting about 1 second. The silent is a vibration lasting about 5 seconds. Use whichever is preferable, however, please keep in mind that if it is on the silent setting and it will rattle noisily, especially if sitting on a hard surface, and it may possible “walk” of the edge of a desk/table and break.

6. The pedometers can be turned on and off and reset. Please reset the pedometer at the beginning of each day of data collection. At the bottom of the data collection sheet there is a slot to record pedometer steps: please write the reading on the pedometer at the end of the work day here.

7. Once you are done with your three days of data collection, please turn the three completed cards into Ellen Mckeown. Please turn the pedometers and beepers into the core managers so they can be passed on to the other service leads.

Please contact Kimberly (grosskim@umich.edu), Kelsey (kelselee@umich.edu), or Kevin (kevliang@umich.edu) if you have any questions or concerns.
### APPENDIX G: Job Matrix Category Descriptions

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Preparation</td>
<td>Opening, performing counts, setting up the rooms for cases throughout the day</td>
</tr>
<tr>
<td>Working Cases</td>
<td>Being the third person in the rooms, scrubbing, circulating, giving breaks (PT: assisting RN during cases)</td>
</tr>
<tr>
<td>Ordering</td>
<td>Looking up items, completing and filing paperwork for order, working with purchasing office</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>Ensuring that appropriate levels of supplies/equipment are maintained, supplies are stored in the correct location</td>
</tr>
<tr>
<td>Case Preparation</td>
<td>Scheduling cases, scheduling team members, case specific preparation (PT: picking upcoming cases)</td>
</tr>
<tr>
<td>Communication</td>
<td>Sending/receiving/responding to phone call, emails, and pages</td>
</tr>
<tr>
<td>Education</td>
<td>Teaching seminars/classes, guide students, educational materials management, online projects</td>
</tr>
<tr>
<td>Equipment Management</td>
<td>Fixing broken/improperly prepared equipment/supplies, replacing parts in kits, cleaning/sterilizing</td>
</tr>
<tr>
<td>Location Missing Items</td>
<td>Hunting for equipment that has been moved or misplaced and returning it to its proper location</td>
</tr>
<tr>
<td>Pick-List Maintenance</td>
<td>Identifying items that need to be updated, making changes to preference cards</td>
</tr>
<tr>
<td>Meetings</td>
<td>With team, core, core manager, other service leads/PTs/service specialists, department</td>
</tr>
<tr>
<td>Vendor Management</td>
<td>Learning about new products, bringing vendors into the OR</td>
</tr>
</tbody>
</table>
APPENDIX H: Job Matrix Workload Descriptions

**ENT**
- Room preparation: usually done by circulating nurse/scrub so they know where everything is
- Working cases: only in room when giving breaks (a couple hours a week)
- Ordering: PT does all ordering except for special/rare items (then service lead does it)
- Inventory management: same PT does all inventory management
- Case preparation: service lead double checks upcoming cases/needs
- Communication: email and face to face; also have group email
- Education: service lead plays role of ‘service specialist’
- Equipment management: service lead is responsible
- Locating missing items: people help, but primarily service lead searches
- Pick-list maintenance: nurse (Jill) updates pick sheets in system for service lead
- Meetings: doesn’t hold any special meetings
- Vendor management: not as prevalent

**NEURO**
- Room preparation: PT’s responsibility
- Working cases: service specialist goes in before service lead
- Ordering: shared b/w service lead/specialist
- Inventory management: shared
- Case preparation: primarily service specialist
- Communication: a lot w/ surgeons
- Education: service specialist’s responsibility
- Equipment management: service lead is primarily responsible
- Locating missing items: people help, but primarily service lead searches
- Pick-list maintenance: service lead’s responsibility
- Meetings: primarily organized by service specialist
- Vendor management: service specialist’s responsibility

**GYNECOLOGY**
- Room preparation: team works together—PT is unlicensed
- Working cases: service lead needs to be able to be in the rooms—preferably as 3rd person
- Ordering: service lead’s responsibility
- Inventory management: shared by PT/service lead, but primarily service lead since PT is unlicensed
- Case preparation: service lead’s responsibility
- Communication: service lead’s responsibility
- Education: there is a shared service specialist who aligns with urology mostly instead of gynecology, leaving it to be the service lead’s responsibility
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible/accountable, but should not be spending her time looking for the items
- Pick-list maintenance: service lead’s responsibility—gets some help from PT
- Meetings: team meetings, core meetings, service lead/specialist meetings
- Vendor management: service lead’s responsibility

**PLASTICS**
- Room preparation: team works together—currently no dedicated PT, sometimes replacement comes in at noon but cannot help with morning preparation
- Working cases: in and out of rooms all the time
- Ordering: service lead’s responsibility—very important because of high volume of ordering required for implants
- Inventory management: service lead’s responsibility
- Case preparation: service lead’s responsibility—very important because of implants/surgeon’s preference/last minute changes
- Communication: service lead’s responsibility
- Education: service lead’s responsibility
- Equipment management: service lead’s responsibility
- Locating missing items: service lead is ultimately responsible/accountable, but should not be spending her time looking for the items—hard without a PT
- Pick-list maintenance: service lead’s responsibility
- Meetings: 2x a month for dept, 1x a month for team, 1x with C core, couple meetings a month for service leads, 1x a month with Marta, 1x month C core service leads with Marta
- Vendor management: service lead’s responsibility

**TRAUMA, BURN, MIS**
- Room preparation: team works together
- Working cases: service lead mostly just to give breaks (no service specialist)
- Ordering: service lead’s responsibility
- Inventory management: service lead’s responsibility—some task-by-task assistance from PT
- Case preparation: service lead’s responsibility
- Communication: service lead’s responsibility
- Education: service lead’s responsibility
- Equipment management: service lead’s responsibility—some task-by-task assistance from PT
- Locating missing items: service lead is ultimately responsible/accountable, but should not be spending her time looking for the items—PT helps a lot
- Pick-list maintenance: service lead’s responsibility (lots of problems with inaccurate pick lists due to lots of special needs)
- Meetings: some meetings for team/core
- Vendor management: service lead’s responsibility

**UROLOGY**
- Room preparation: team works together—PT does a lot of the work
- Working cases: gives breaks, checks on rooms
- Ordering: service lead’s responsibility
- Inventory management: shared by PT/service lead (PT does inventory for OR 24)
- Case preparation: service lead’s responsibility
- Communication: service lead’s responsibility
- Education: there is a shared service specialist who aligns with urology mostly instead of gynecology, but it is reported that all the service specialist tends to do is work cases, so education remains mostly up to service lead
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible/accountable, but should not be spending her time looking for the items—PT helps with this a lot
- Pick-list maintenance: service lead’s responsibility
- Meetings: team meetings once a month
- Vendor management: service lead’s responsibility

**ORAL**
- Room preparation: PTs/Service specialist’s responsibility
- Working cases: service lead’s responsibility when giving breaks
- Ordering: PT orders all plating systems
- Inventory management: PT does all inventory
- Case preparation: service lead’s responsibility
- Communication: service lead’s responsibility
- Education: service lead’s responsibility; training book given to orientees
- Equipment management: service lead is primarily responsible
- Locating missing items: shared between PT/service lead
- Pick-list maintenance: service lead’s responsibility
- Meetings: doesn’t hold any special meetings
- Vendor management: not as prevalent

**SPORTS MED**
- Room preparation: PTs/Service specialist’s responsibility (but hard b/c PTs are not dedicated)
- Working cases: service lead is in the room 2-4 hours a day
- Ordering: service lead’s responsibility
- Inventory management: shared by PT/service lead, but primarily service lead since PTs are not dedicated
- Case preparation: service lead’s responsibility
- Communication: service lead’s responsibility
- Education: service lead’s responsibility
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible
- Pick-list maintenance: service lead’s responsibility
- Meetings: doesn’t hold any special meetings
- Vendor management: service lead’s responsibility; extremely important/prevalent
ORTHOPEDIC
- Room preparation: Team works together (there is 1 PT, but orthopedic is a very busy service, so service lead helps often; PT should be held accountable when things are not set up correctly)
- Working cases: service lead is in the room scrubbing, circulating, giving breaks
- Ordering: service lead’s responsibility
- Inventory management: service lead’s responsibility
- Case preparation: service lead’s responsibility
- Communication: paging, email, etc…
- Education: service specialist’s responsibility (1 service specialist)
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible (Diane wishes PTs would be held accountable for their work; ex: set up incorrect/missing items)
- Pick-list maintenance: service lead’s responsibility
- Meetings: once a month team meetings
- Vendor management: service lead’s responsibility; extremely important/prevalent

GENERAL SURGERY
- Room preparation: Team works together (there are 2 PT, one works 4 days a week, one works 5 days a week)
- Working cases: service lead is in the room scrubbing, circulating, giving breaks
- Ordering: service lead’s responsibility
- Inventory management: service lead’s responsibility
- Case preparation: service lead’s responsibility
- Communication: paging, email, etc…
- Education: service specialist’s responsibility (1 service specialist; service specialist knows what is going on; covers for service lead if they are on vacation)
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible
- Pick-list maintenance: service lead’s responsibility
- Meetings: once a month team meetings
- Vendor management: service lead’s responsibility; extremely important/prevalent

TRANSPLANT
- Room preparation: Team works together (there are 2 PT, one works 4 days a week, one works 5 days a week)
- Working cases: service lead is in the room scrubbing, circulating, giving breaks
- Ordering: service lead’s responsibility
- Inventory management: service lead’s responsibility
- Case preparation: service lead’s responsibility
- Communication: paging, email, etc…
- Education: service specialist’s responsibility (1 service specialist; service specialist knows what is going on; covers for service lead if they are on vacation)
- Equipment management: service lead’s responsibility
- Locating missing items: shared between PT/service lead; but service lead is ultimately responsible
- Pick-list maintenance: service lead’s responsibility
- Meetings: once a month team meetings
- Vendor management: service lead’s responsibility; extremely important/prevalent