ANALYSIS OF THE
DIETARY DEPARTMENT

# 359 - 67

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COMMUNITY SYSTEMS FOUNDATION
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SUBJECT: Analysis of the Dietary Department

Introduction

The purpose of this study was to survey all of the operations and procedures of the Dietary Department. The principal tool employed to accomplish this was the Dietary Methodology, produced by the University of Michigan's Research Group. This Methodology was compiled by observations taken in many hospitals throughout the country, both large and small, with centralized and decentralized kitchens. The Methodology has been successfully used in many hospitals, including the Public Health hospitals and several general hospitals in Maryland.

Phase I - General

The first step in this analysis was to determine the present dietary methods. This was done through observations of these present methods and interviews with the Dietary Supervisor. Listed below are the important conclusions:

1. No improvement in the layout of the area is necessary. The present layout has very little "travel distance" and a very good relative location for food preparation and assembly, which is critical for a good layout.

2. No changes in the method of food production are recommended. The present method utilizes a "centralized dietary" with delivery by carts. This is regarded as the most efficient way for a dietary to operate.
3. The present method of utilizing most of the employees for all operations is regarded as a good practice since it allows the employees to perform other duties when some are at a temporary standstill.

4. A change is required in the working habits of the chief cook. Since his arrival time is unpredictable, wasted time results when the other employees await his arrival in the morning. Also, because of this, breakfast is served at varying times to the patients.

5. A system for food production, whereby time for activities is allotted by time of day, is needed so that meal service is not dependent on the varying production rates of the cook and others.

6. According to the working schedule, the number of employees per hour varies greatly from day to day.

In general, then, the Dietary Department is operating very well. The scheduling of personnel and the workload will be discussed in the next section.

**Phase II - Methodology**

To utilize the Dietary Methodology, it was necessary to collect seven days' data of the type and quantities of food produced. Other data, such as the number of trays per day, was also obtained. Standards from the Methodology were then used to determine the length of time of activities. These activities are Administrative and Clerical, Food Production, Patient Food Service, and Cleaning and Sanitation. The times for these are shown in Appendix A. The next step was to determine the total number of people needed which is also shown in Appendix A.

Allowing for lunches and normal "slack time," the results are that 12 full-time employees are needed, including the supervisor. This is a net savings of two full-time personnel, since the present staff is 14 employees.

In the following section, it will be shown how these 12 positions can be scheduled to improve work distribution throughout the day and effect the reduction of required personnel.
Phase III - Positional Scheduling

The attached Gantt chart gives a daily routine for the Dietary Department. Each line on the chart shows the activities of one person throughout the day. Thus, it requires seven full-time people every day plus one part-time person every day.

The following remarks seem pertinent in understanding the use and advantages of this staffing pattern.

1. The dietitian, the supervisor, and her replacement are not shown on this chart. However, the assistant would be expected to cover a position on the chart on the three days that she is not replacing the supervisor.

2. Although breaks for meals are not shown, the times allowed for activities prior to tray assembly include an allowance for the meal break. It is left to the discretion of the individual to select the most advantageous time.

3. The fourth and fifth positions call for nine and one-half working hours per day, while the sixth position is five working hours long. Thus, the people covering these positions should be rotated, spending two days on the long shifts for each day on the short shift. (It should be noted that employees will no longer be required to work a 12-hour shift, as they do occasionally at present.)

4. Since tray delivery begins 15 minutes after the tray assembly, the carts will go out one at a time as they are filled. This will not only provide warmer food to the patients, it will tend to level the peak workloads in the Dietary Department.

In conclusion, it must be stated that, as part of the dietary implementation, the "positional schedule" (Appendix B) would be converted to a cyclical schedule which would place the personnel in the specified positions. Another part of the follow-up would be to put into effect the new work schedule and other recommended changes. And finally, areas such as "last-minute menu changes" and tray presetting would be examined for possible improvement.
# Appendix A

## MAN-TIME REQUIRED

<table>
<thead>
<tr>
<th></th>
<th><em>Conversion</em></th>
<th>Man-hours</th>
<th>Full-time Equivalent</th>
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<tbody>
<tr>
<td></td>
<td>Man-minutes Per Day</td>
<td>Factor From Methodology</td>
<td>Per Week</td>
</tr>
</tbody>
</table>

### Administrative & Clerical

|                     | x | = 92 | 2.3 |

### Food Production

|                     | x | = 46 | 1.2 |

#### Cooking

- 151.6
- 6.6
- 40.8
- 4.8
- 46.4
- 79.6
- 3.8
- 333.6

#### Breads, Cereals

- 46.4

#### Preparing Drinks

- 79.6

#### Salad Making

- 4.8

#### Miscellaneous

- 3.8

### Patient Food Service

|                     | x | = 111 | 2.8 |

#### Food Assembly

- 612.3

#### Tray Delivery

- 102.4

#### Tray Return

- 96.2
- 810.9

### Cleaning & Sanitation

|                     | x | = 158 | 4.0 |

#### Dishwashing

- 476.0

#### Potwashing

- 241.9

#### Dietary Janitorial

- 436.3
- 1154.2

### TOTAL STAFFING REQUIREMENTS (without lunch)

- 407

### *The "conversion factor" converts the man-minutes per day to man-hours per week and adds a 17 percent personal, fatigue, and delay factor.*
## Proposed Daily Staff

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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>1 p.m.</th>
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<th>3</th>
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