IDENTIFYING AND RESPONDING TO CUSTOMER NEEDS
AT THE KENNEDY SPACE CENTER

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All of us have become well educated in the tenets and essentials of total quality management. It is not my intention today to review those basics, but rather to present one of our approaches to identifying customer perceived needs and responding to them.

Our Patient Questionnaire Program at the Kennedy Space Center (KSC) has been in place for several years. It has helped to identify customer perceptions and needs. Shown in Exhibit 1 are the elements of information requested on the Patient Service Questionnaire.

Exhibit 1. Patient Questionnaire

1. Medical Facility (check one)
   ___Occupational Health Facility  ___ CCAFS Clinic
   ___Launch Area Clinic

2. Date Visited

3. ___Physical Exam  ___Treatment  ___Other

4. Please rate the following areas. If excellent or poor rating is because of an employee's personal service or action, please identify that person by name if possible.

   o Courtesy
   o Quality of treatment/service
   o Timeliness
   o Attitude of Personnel
   o Info/Instructions provided
   o Overall

5. We are constantly trying to improve patient care and solicit your comments/suggestions.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Please provide the following information if you desire a response to your comments.

Name ___________________________ Organization ___________________________
Mail Code ________________________
Exhibit 2 shows the results from 1,507 questionnaires received during the first eight months of 1990.

Exhibit 2. Results of Patient Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Satisfactory</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courtesy</td>
<td>1436 95%</td>
<td>71 05%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Treatment Quality</td>
<td>1374 91%</td>
<td>133 09%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Timeliness</td>
<td>1322 88%</td>
<td>178 12%</td>
<td>7 0%</td>
</tr>
<tr>
<td>Attitude</td>
<td>1427 95%</td>
<td>79 05%</td>
<td>1 0%</td>
</tr>
<tr>
<td>Information/Instruction</td>
<td>1342 89%</td>
<td>161 11%</td>
<td>4 0%</td>
</tr>
<tr>
<td>Overall</td>
<td>1349 92%</td>
<td>113 08%</td>
<td>0 0%</td>
</tr>
</tbody>
</table>

A total of 2,660 questionnaires were returned in 1990. The results indicated that 93 percent rated the medical services to be excellent overall, 96 percent rated medical services attitude to be excellent, and 96 percent indicated courtesy to be excellent. Remember that about 80 percent of our health services are for other contractor and government agencies and that an average of seven Medical Department employees have direct interaction with each of the patients during a visit.
It is interesting for benchmarking purposes to compare this with the results of a survey from a national publication, shown in Exhibit 3.

### Exhibit 3. Percent Patient Satisfaction With Most Recent Doctor Visit

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Not Very Satisfied</th>
<th>Not At All Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>The way the doctor’s staff treated you</td>
<td>71</td>
<td>23</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>The way the doctor explained things to you</td>
<td>66</td>
<td>23</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>The amount of time you had to wait before seeing a doctor</td>
<td>49</td>
<td>30</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>The fee the doctor charged</td>
<td>39</td>
<td>36</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Overall, how satisfied were you?</td>
<td>60</td>
<td>32</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Office of Issue and Communications Research

I would like to focus now on the fact that 11 percent considered timeliness of service to be less than excellent, and 10 percent considered the amount of information received in relation to their health program to be less than excellent.

Timeliness is often subjective, so in response to this perceived concern, our patient data cards were changed based on a suggestion submitted by one of our clerical employees in order to more specifically identify time spent in various components of the visit. These changes are shown in Exhibit 4.
This gave us the opportunity to dissect the specifics and work out any related problems. Our studies over a period of four months indicated that there was a 7-minute average wait before seeing a nurse, and a 16-minute average wait to see a physician. We shared this information with the members of our health care team and developed an approach to improving these services.
All agreed about the importance of perceptions. They recognized the need to tell the patient of any anticipated delay in service, and use communications to demonstrate responsiveness to the patient's needs.

The second area of concern, patient information, led us to develop what has sometimes been called "Discharge Summaries." We have labeled them "Health Tips." These take the 45 most frequently seen health problems and provide information on the condition, treatment, and self-care. A list of available topics is given in Exhibit 5.

**Exhibit 5. Index of Topics in Kennedy Space Center's "Health Tips"

- Abrasions
- Abscesses
- Allergies
- Antibiotics
- Anti-inflammatory Drugs (Non-Steroidal)
- Back Pain
- Blood Pressure Readings
- Breast Lumps
- Carpal Tunnel Syndrome
- Cholesterol/Triglycerides (Elevated)
- Contact Dermatitis
- Contusions
- Crutch
- Dizziness and Vertigo
- Ear Infections (Swimmer's Ear)
- Eye (Inflammatory Problems)
- Fainting
- Flu
- Gastritis and Peptic Ulcers
- Head Injuries
- Headaches
- Hemorrhoids
- Oral Herpes (Cold Sores)
- Immunization
- Inhalations of Toxic Agents
- Insect Stings
- Knee Injuries
- Lacerations (Cuts)
- Lung (Spot)
- Muscle Spasms
- Muscle Strains
- Neck Pain
- Non-Occupational Illness/Injury
- Pap Smear
- Prostate Cancer
- Puncture Wounds
- Sprains
- Sunburn
- Tachycardia and Palpitations
- Throat and Tonsils (Infections)
- Upper Respiratory Infections
- Visual Acuity Problems
- Vomiting and Diarrhea (Gastroenteritis)
- Wound Infections
These are given out in all of our medical facilities by the nurse or the physician based on a condition which is discovered at the time of treatment or physical examination. We have found them to be very well received. The health tips can also be published in a variety of Center-wide publications and through our Health Education Program to provide public information on medical topics.

Our perception was that through a team approach we had effectively addressed these two areas of concern. Our re-survey in 1992, shown in Exhibit 6, was somewhat surprising. The results were almost identical to those a year earlier.

**Exhibit 6. Results of Patient Questionnaire**

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Satisfactory</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courtesy</strong></td>
<td>2545 96%</td>
<td>115  04%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Quality of Treatment/Service</strong></td>
<td>2449 92%</td>
<td>211  08%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Timeliness</strong></td>
<td>2351 88%</td>
<td>293  11%</td>
<td>16</td>
</tr>
<tr>
<td><strong>Attitude of Personnel</strong></td>
<td>2528 95%</td>
<td>131  05%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Information/Instructions Provided</strong></td>
<td>2390 90%</td>
<td>263  10%</td>
<td>7</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>2479 93%</td>
<td>181  07%</td>
<td>0</td>
</tr>
</tbody>
</table>

We do not accept the suggestion that these evaluations of our services are the best we can achieve. We believe that the lesson to be learned is that customer satisfaction takes continuous daily effort to sustain and improve. You cannot let down after initial successes. We are committed to an ongoing team effort to identify customer needs as well as perceptions and use the results in a continuous improvement process.