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**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

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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.

	<u>Excellent</u>	<u>Satisfactory</u>	<u>Poor</u>
<input type="checkbox"/> Courtesy	_____	_____	_____
<input type="checkbox"/> Quality of treatment/service	_____	_____	_____
<input type="checkbox"/> Timeliness	_____	_____	_____
<input type="checkbox"/> Attitude of Personnel	_____	_____	_____
<input type="checkbox"/> Info/Instructions provided	_____	_____	_____
<input type="checkbox"/> 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

Reporting Period: 01/01/90-08/31/90

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

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

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

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.

Exhibit 4. 1990 Patient Info Data Worksheet
(Please Print)

Arrival Time	First Name	Initial	Last Name
Social Security Number		Present Employer	
Job Phone		Supv. Name & Phone	
Sex	Race	Date of Birth	Date of Hire at KSC
Bldg. No		Job Title	Mail Code
Out To			Date

KSC Form 28-211 (PA) (Rev. 1/88)

1991 Patient Info Data Worksheet
(Please Print)

Arrival Time	First Name	Initial	Last Name
Social Security Number		Present Employer	
Job Phone		Supv. Name & Phone	
Sex	Race	Date of Birth	Date of Hire at KSC
Bldg. No.		Job Title	Mail Code
ADDED:	ROUTE TIME	TRIAGE TIME	DOCTOR'S TIME

KSC Form 28-211 (PA) (Rev. 1/88)

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	Oral Herpes (Cold Sores)
Abcesses	Immunization
Allergies	Inhalations of Toxic Agents
Antibiotics	Insect Stings
Anti-inflammatory Drugs (Non-Steroidal)	Knee Injuries
Back Pain	Lacerations (Cuts)
Blood Pressure Readings	Lung (Spot)
Breast Lumps	Muscle Spasms
Carpal Tunnel Syndrome	Muscle Strains
Cholesterol/Triglycerides (Elevated)	Neck Pain
Contact Dermatitis	Non-Occupational Illness/Injury
Contusions	Pap Smear
Crutch	Prostate Cancer
Dizziness and Vertigo	Puncture Wounds
Ear Infections (Swimmer's Ear)	Sprains
Eye (Inflammatory Problems)	Sunburn
Fainting	Tachycardia and Palpitations
Flu	Throat and Tonsils (Infections)
Gastritis and Peptic Ulcers	Upper Respiratory Infections
Head Injuries	Visual Acuity Problems
Headaches	Vomiting and Diarrhea (Gastroenteritis)
Hemorrhoids	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

Reporting Period: 01/01/90-08/31/90					
	<u>Excellent</u>	<u>Satisfactory</u>	<u>Poor</u>		
Courtesy	2545 96%	115 04%	0	0%	
Quality of Treatment/Service	2449 92%	211 08%	0	0%	
Timeliness	2351 88%	293 11%	16	0%	
Attitude of Personnel	2528 95%	131 05%	1	0%	
Information/Instructions Provided	2390 90%	263 10%	7	0%	
Overall	2479 93%	181 07%	0	0%	

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.